

2015 – 2016 Bulletin

College of Arts & Sciences

Berrien Springs, Michigan 49104 www.andrews.edu 800–253–2874

Admission to Andrews University is available to any student who meets the academic and character requirements of the university and who expresses willingness to cooperate with its policies. Because Andrews University is operated by the Seventh—day Adventist Church, the majority of its students are Seventh—day Adventists. However, no particular religious commitment is required for admission; any qualified student who will be comfortable within its religious, social, and cultural atmosphere may be admitted. The university does not discriminate on the grounds of race, color, creed, disability, national or ethnic origin, sex, marital status, or handicap. On request it makes available to the public its annual financial report. To obtain a copy, contact the Office of the Vice President for Financial Administration at the address below

Every effort has been made to assure the accuracy of information in this bulletin. Students are advised, however, that bulletin provisions do not constitute a contract between a student and Andrews University and that attendance at Andrews University is a privilege and not a right. The university faculty and administration reserve the right to make and give public notice of such changes as deemed necessary during the period for which this bulletin is in effect.

Please contact the appropriate personnel for information pertaining to schools, departments, programs, and courses. For all other bulletin inquiries you may contact the Publications & Communication Specialist in the Office of Academic Records by email at bulletin@andrews.edu or by phone at (269) 471–3233.

#### Volume 104

Andrews University Bulletin is published by Andrews University, Berrien Springs, Michigan 49104. Postage paid at Berrien Springs, Michigan 49103.

POSTMASTER: Send change of address P.S. 3579 to Andrews University Bulletin, Andrews University, Office of Admissions, Berrien Springs, Michigan 491

# **Table of Contents**

Program & Degree Index	5
College of Arts & Science	7

# **Course Prefixes and Numbers**

Courses are listed by course prefix and course number. Course prefixes are listed below in alphabetical order. At the end of each prefix designation is an abbreviated symbol in parentheses for the school in which the prefix occurs. Symbols are as follows:

College o	f Arts and Sciences (CAS)	School o	f Business Administration (SBA)	School o	of Health Professions (SHP)
School of	Architecture, Art & Design (SAAD)	School o	f Education (SED)	Seventh	-day Adventist Theological Seminary (SEM)
ACCT	Accounting (SBA)	ENGL	English (CAS)	MUCT	Music Composition & Theory (CAS)
AFLT	Aeronautical Flight	ENGR	Engineering (CAS)	MUED	Music Education (CAS)
AGRI	Agriculture	ENSL	Intensive English (CAS)	MUHL	Music History & Literature (CAS)
ALHE	Allied Health (CAS)	FDNT	Nutrition (SHP)	MUPF	Music Performance (CAS)
ANEA	Ancient Near Eastern Archaeology (SEM)	FILM	Film (SAAD)	MURE	Music—Religious (CAS)
ANSI	Animal Science	FMST	Family Studies (CAS)	NRSG	Nursing (SHP)
ANTH	Anthropology (CAS)	FNCE	Finance (SBA)	NTST	New Testament Studies (SEM)
ARCH	Architecture (SAAD)	FREN	French (CAS)	OTST	Old Testament Studies (SEM)
ART	Art Studio (SAAD)	FTES	Fitness & Exercise Studies (SHP)	PBHL	Public Health (SHP)
ARTH	Art History (SAAD)	GDPC	Graduate Psychology &	PHIL	Philosophy (CAS)
AVIA	Aviation		Counseling (SED)	PHTH	Physical Therapy (SHP)
AVMT	Aviation Maintenance	GEOG	Geography (CAS)	PHTO	Photography (SAAD)
BCHM	Biochemistry (CAS)	GNST	General Studies (CAS)	PHYS	Physics (CAS)
BHSC	Behavioral Sciences (CAS)	GRMN	German (CAS)	PLSC	Political Science (CAS)
BIBL	Biblical Languages (CAS)	GSEM	General Theological Seminary (SEM)	PORT	Portuguese (CAS)
BIOL	Biology (CAS)	HIST	History (CAS)	PREL	Public Relations (CAS)
BSAD	Business Administration (SBA)	HLED	Health Education (SHP)	PSYC	Psychology (CAS)
CHEM	Chemistry (CAS)	HONS	Honors (all undergraduate)	PTH	Physical Therapy – Professional
CHIS	Church History (SEM)	HORT	Horticulture (CAS)		& Post–Professional (SHP)
CHMN	Christian Ministry (SEM)	IDAS	International Development Admin St (CAS)	RELB	Religion—Biblical Studies (CAS)
CIDS	Comm & Intl Development (CAS)	IDSC	Interdisciplinary Studies (CAS)	RELG	Religion—General (CAS)
COMM	Communication (CAS)	INFS	Information Systems (SBA)	RELH	Religion—History (CAS)
CPTR	Computing & Software	INLS	International Language	RELP	Religion—Professional &
	Engineering (CAS)		Studies (CAS)		Applied Studies (CAS)
DSGN	Design (SAAD)	INT	Interiors (SAAD)	RELT	Religion—Theology (CAS)
DSRE	Discipleship & Religious	ITLN	Italian (CAS)	SOCI	Sociology (CAS)
	Education (SEM)	JOUR	Journalism (CAS)	SOWK	Social Work (CAS)
ECON	Economics (SBA)	LEAD	Leadership (SED)	SPAN	Spanish (CAS)
EDAL	Educational Administration & Leadership	MAED	Mathematics Education (CAS)	SPED	Special Education (SED)
	(SED)	MATH	Mathematics (CAS)	SPPA	Speech–Language Pathology
EDCI	Educational Curriculum & Instruction (SED)	MDIA	Media (SAAD)		& Audiology (SHP)
EDFN	Educational Foundations (SED)	MKTG	Marketing (SBA)	STAT	Statistics (CAS)
EDRM	Research & Measurement (SED)	MLSC	Medical Laboratory Sciences (SHP)	THST	Theology & Christian
EDTE	Teacher Education (SED)	MSCI	Mathematics and Science (CAS)		Philosophy (SEM)
EDUC	Education—General (SED)	MSSN	World Mission (SEM)		

# **COURSE NUMBERS**

Non Credit	Below 100	Courses enabling the student to qualify for freshman standing
Undergraduate Lower Division	100–199	Courses usually taken during the freshman year
	200–299	Courses usually taken during the sophomore year
Undergraduate Upper Division	300-399	Courses usually taken during the junior year
	400–499	Courses usually taken during the senior year
Graduate Level	500-699	Courses for graduate students only
	700–999	Courses for post–masters students

# Program & Degree Index

	_
College of Arts & Science	/
Pre-Professional Program in Dental Assistant and Dental Hygiene 7	
Pre-Professional Program in Dentistry	
Pre-Professional Program in Law8	
Pre-Professional Program in Medicine8	
Pre-Professional Program in Occupational Therapy8	
Pre-Professional Program in Optometry9	
Pre-Professional Program in Pharmacy9	
Pre-Professional Program in Physician Assistant9	
Pre-Professional Program in Public History10	
Pre-Professional Program in Respiratory Care	
Agriculture1	1
Agriculture, Crop Production Emphasis AT	
Agriculture, Dairy Herd Management Emphasis AT	
Horticulture, Landscape Design Emphasis AT	
Horticulture, Landscape Management Emphasis AT	
Agriculture BS	
Agriculture, Agribusiness Emphasis BT	
Agriculture, Animal Husbandry Emphasis BT	
Agriculture, Crop Production Emphasis BT	
Animal Science, Equine Science Emphasis BS	
Animal Science, Equine Science Emphasis BS	
Animal Science, Pre-Veterinary Medicine Emphasis BS	
Horticulture, Horticultural Crop Production Emphasis BT	
Horticulture, Landscape Construction Management Emphasis BT	
Horticulture, Landscape Design Emphasis BS	
Horticulture, Landscape Design Emphasis BT	
Horticulture, Landscape Management Emphasis BS	
International Agriculture Development BT	
Agriculture Minor	
Animal Science Minor	
Horticulture Minor	
Pre-Professional Program in Veterinary Medicine	
Behavioral Neuroscience	
Behavioral Sciences	2
Behavioral Sciences BS23	
Behavioral Sciences, Anthropological Archaeology BS24	
Behavioral Sciences, Anthropology BS24	
Behavioral Sciences, Public Health BS25	
Behavioral Sciences, Student Development BS26	
Family Studies BS - 39	
Psychology, Behavioral Neuroscience Emphasis BS27	
Psychology, General BA27	
Psychology, General Program BS28	
Psychology, Health Psychology BS29	
Psychology, Pre-Professional BA30	
Psychology, Pre-Professional Program BS31	
Sociology BA31	
Sociology BS32	
Sociology, Emphasis in Community and International Development BS.33	
Sociology, Emphasis in Deviant Behavior BS	
Sociology, Emphasis in Emergency Preparedness BS34	
Sociology, Emphasis in Sociology of the Family BS34	
Anthropology Minor35	
Behavioral Sciences Minor35	
Community and International Development Minor35	
Family Studies Minor	
Psychology Minor	
Sociology Minor	
Community and International Development, One-Year Advanced-	
Standing Program MSCID - On Campus	
Community and International Development, Two-Year Regular Program	
MSCID - On-Campus	
International Development Major, MIDA - Off-Campus	
Organizational Leadership Major, MIDA - Off-Campus	
Master of Science in Community & International Development/Master of	
Youth & Young Adult Ministry Dual Degree CIDP/MAYYAM41	
Master of Science in Community and International Development/Master	
of Social Work Dual Degree MSCID/MSW43	
International Development Graduate Certificate	
()rganizational Leadership Graduate Certificate	
Organizational Leadership Graduate Certificate	5
Organizational Leadership Graduate Certificate	5

Biology, Biomedical Science Emphasis BS	
Biology, Customized Emphasis BS	
Biology, Molecular Biology Emphasis BS	
Biology, Neuroscience Emphasis BS	
Biology, Secondary Education Emphasis BS	
Biology, Zoology Emphasis BS	
Biotechnology, Biology Emphasis BS	
Biology Minor	
Environmental Science Minor	
Chemistry & Biochemistry	
Biochemistry BS	
Biochemistry BS (ACS Approved)	
Biotechnology, Chemistry Emphasis BS	
Chemistry BS (ACS approved)	
Chemistry BS (Secondary Education Emphasis)	
Chemistry Minor	
Chemistry Minor (Secondary Education Emphasis)	70
Communication	
Communication Arts, Secondary Education BS	
Communication BA  Communication, Communication Management Emphasis BA	
Communication, International Communication Emphasis BA	
Journalism and Communication Media, BA	
Communication and the Family Minor	
Communication Arts, Secondary Education Minor	
Communication Studies Minor	
Journalism and Media Studies Minor	
Public Relations Minor	
Communication, MA	
Master of Arts in Communication/Master of Divinity Track 1 Dual	
MA/MDiv Master of Arts in Communication/Master of Divinity Track 2 Dual	
· · · · · · · · · · · · · · · · · · ·	Degree
MA/MDiv	-
MA/MDiv  Communication Graduate Certificate	79
•	79 81
Communication Graduate Certificate	79 81 8 85
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS	79 81 85 86
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS	79 81 85 86 87
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS  Engineering, Chemical Engineering Emphasis BS	79 81 85 86 87
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS	79 81 85 86 87 88
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS  Engineering, Chemical Engineering Emphasis BS  Engineering, Electrical and Computer Engineering Emphasis BS  Engineering, Mechanical Engineering Emphasis BS  Computing Minor	79818586878889
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	798185868788899091
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	798185868789909191919191
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	79818586878889909191
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS  Engineering, Chemical Engineering Emphasis BS  Engineering, Electrical and Computer Engineering Emphasis BS  Engineering, Mechanical Engineering Emphasis BS  Computing Minor  Englishering Minor  English, English Education Emphasis BA  English, Viting Emphasis BA  English, Writing Emphasis BA  English Minor	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS  Engineering, Chemical Engineering Emphasis BS  Engineering, Electrical and Computer Engineering Emphasis BS  Computing Minor  Engineering Minor  English.  English, English Education Emphasis BA  English, Vitierature Emphasis BA  English Writing Emphasis BA  English Minor  Teaching English to Speakers of Other Languages Minor  English, General Emphasis MA	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS  Computing, Computer Science Emphasis BS  Computing, Software Systems Emphasis BS  Engineering, Chemical Engineering Emphasis BS  Engineering, Electrical and Computer Engineering Emphasis BS  Computing Minor  Engineering Minor  English.  English, English Education Emphasis BA  English, Vitierature Emphasis BA  English Writing Emphasis BA  English Minor  Teaching English to Speakers of Other Languages Minor  English, General Emphasis MA	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	
Communication Graduate Certificate  Engineering & Computer Science  Computer Science BS	

Spanish for International Trade BA	
Spanish for K-12 Education BASpanish for Translation BA	
Spanish Studies BA	
Spanish Studies/Speech-Language Pathology & Audiology BA/BS	
French for Education Minor	
French Minor	
Portuguese Minor	120
Spanish for Education Minor	
Spanish Minor	
Business French Certificate	
Business Spanish Certificate	
Spanish Translation/Interpretation Certificate	
Liberal Arts, General Studies & Interdisciplinary Studies	121
General Studies AA	
General Studies AS	
General Studies BA	128
General Studies BS	128
Liberal Arts BA, Humanities Concentration	
Liberal Arts BA/BS, Interdisciplinary Concentration	
Liberal Arts BS, Sciences Concentration	
Liberal Arts BS, Social Sciences Concentration	
General Studies Minor	
Mathematics BS	
Mathematics Education BS	
Mathematical Studies Major	
Mathematics Education Minor	133
Mathematics Minor	
Minor in Mathematics of Economics and Finance	
Music	
Music BSM	
Music Education, Teacher Certification BMus	
Performance BMus	
Music Minor	
Conducting MMus	1/11
Conducting iviivids	141
Music Education MMus	142
Music Education MMus Music MA	142 144
Music Education MMus	142 144 145
Music Education MMus  Music MA  Music Ministry MMus  Performance MMus	142 144 145 146
Music Education MMus	142 144 145 146 <b>154</b>
Music Education MMus Music MA Music Ministry MMus Performance MMus Physics Biophysics BS Physics BS	142 144 145 146 <b>154</b> 154
Music Education MMus Music MA Music Ministry MMus Performance MMus Physics Biophysics BS Physics BS Physics Education BS	142 144 145 146 <b>154</b> 154 154 155
Music Education MMus Music MA Music Ministry MMus Performance MMus Physics Biophysics BS Physics BS Physics Education BS Physics Studies Major	142 144 145 146 <b>154</b> 154 155 156
Music Education MMus Music MA Music Ministry MMus Performance MMus Physics Biophysics BS Physics BS Physics Education BS Physics Studies Major Physics Minor	142 144 145 146 <b>154</b> 154 155 156 156
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159
Music Education MMus Music MA Music Ministry MMus Performance MMus Physics Biophysics BS Physics BS Physics Education BS Physics Studies Major Physics Studies Major Physics Minor Religion & Biblical Languages Christian Discipleship AA (Distance Ed)	142 144 145 146 154 154 155 156 156 159
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162 162 163
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162 162 163 163
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162 162 163 163 163
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162 162 163 163 163 163
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162 163 163 163 163 163 164
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 160 160 161 162 163 163 163 163 163 164 169
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 161 162 163 163 163 163 164 169
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 160 161 162 163 163 163 163 164 169 170 171
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 161 162 163 163 163 163 164 169 170 171
Music Education MMus Music MA	142 144 145 146 154 155 156 156 159 159 160 161 162 163 163 163 163 164 169 170 171 171
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 161 162 163 163 163 163 164 169 170 171 171 172 173
Music Education MMus Music MA	142 144 145 146 154 154 155 156 156 159 159 160 161 162 163 163 163 163 164 169 170 171 171 172 173 ife
Music Education MMus Music MA	142 144 145 146 154 155 156 156 159 160 161 162 163 163 163 163 164 169 170 171 171 172 173 ife 175
Music Education MMus Music MA	142 144 145 146 154 155 156 156 159 160 161 162 163 163 163 163 164 169 170 171 171 172 173 ife 175 y
Music Education MMus Music MA	142 144 145 146 154 155 156 156 159 160 161 162 163 163 163 163 164 169 170 171 171 172 173 ife 175 y 176
Music Education MMus Music MA	142 144 145 146 154 155 156 156 159 160 161 162 163 163 163 163 164 169 170 171 171 172 173 ife 175 y 176
Music Education MMus Music MA	142 144 145 146 154 155 156 156 159 159 160 161 162 163 163 163 163 163 164 169 170 171 172 173 ife 175 176

Master of Social Work/Master of Science in Community and International Development, Dual Degree MSW/MSCID......182

# College of Arts & Science

Keith E. Mattingly, Dean
Donald L. May, Associate Dean
Gary W. Burdick, Assistant Dean for Graduate Programs
Lisa Rollins, Assistant to the Dean

Nethery Hall, Room 135 Phone: 269-471-3411 Fax: 269-471-6236 cas-info@andrews.edu www.andrews.edu/cas/

#### Mission

To empower students for academic, professional, and service excellence in the liberal arts and sciences with distinctive Seventh-day Adventist perspective and purpose.

# Pre-Professional

# Pre-Professional Program in Dental Assistant and Dental Hygiene

James Hayward, *Coordinator* 269-471-3241
Price Hall (Science Complex)

Students interested in a dental assistant career should obtain information concerning the program from the school to which they wish to apply.

Students planning a career in dental hygiene should complete two years of college work before entering a professional school.

Upon completion of an additional two years of prescribed college work at a professional school, the student will earn a bachelors degree in dental hygiene. For more information about dental hygiene, contact the American Dental Hygienists' Association: www.adha.org.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Pre-dental Hygiene Curriculum—64

#### Loma Linda University admission requirements

- At least 64 semester units of accredited college coursework
- GPA of 3.0 or higher in science courses is recommended
- Courses must be a C or higher to meet LLUSD requirements
- Science courses must be completed within five (5) years of admission
- Proficiency in verbal and written English
- 20 hours minimum of observation/shadowing
- Dental assisting experience is strongly recommended
- Three letters of reference, including: spiritual leader, science professor, and employer
- A formal interview (by invitation only)
- Official transcripts from all schools attended

The following courses are recommended for the first two years before entering Loma Linda University. Students interested in applying to other professional schools should obtain specific entrance requirements for those schools.

Specifically required courses are signified with an \*.

# Cultural and Spiritual Heritage—17-20

#### (must include both areas)

- Religion—3 semester units per year of attendance at an SDA college
- Humanities—14 semester units from three of the content areas listed helow
  - History & Civilization
  - O Art History & Art Appreciation
  - O Music History & Music Appreciation
  - O Performing Arts (4 units max)
  - Literature
  - O Foreign Language
  - Philosophy & Ethics

# Scientific Inquiry and Analysis—32

Physical & Natural Sciences—23

- BIOL 221\* & BIOL 222\*
- BIOL 260\*
- BCHM 120\* and CHEM 110\*—one academic year covering inorganic, organic, and biochemistry with lab
- MATH 145\*

Social Sciences - 9

- SOCI 119\*
- PSYC 101\*
- ANTH 200\*

## Communication Skills—9

- ENGL 115\* and ENGL 215\*
- COMM 104\*

## Health and Wellness—5

- 1 course covering Personal Health or Nutrition
- Physical education (2 activity courses)

# Pre-Professional Program in Dentistry

Students from Departments within The College of Arts & Sciences

James Hayward, *Coordinator*, 269-471-3241, Price Hall (Science Complex) David Randall, 269-471-3259, Halenz Hall (Science Complex)

Preference is given to applicants who have a broad academic background with a baccalaureate degree. The minimum entrance requirement is 96 semester credits with a 2.70 GPA (C=2.00) in both science and non-science courses, although it is recommended that students should maintain an A/B average in science as well as overall. The Dental Aptitude Test (DAT) must be taken not later than October of the year preceding admission. Minimum entrance requirements for most dental schools follow. For more information, contact the American Association of Dental Schools: www.aads.jhu.edu and the American Dental Association www.ada.org.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Required courses for applicants to Loma Linda University:

English Composition—6 Foundations of Biology—10 General Chemistry—8 Organic Chemistry—8 General Physics—8 Biochemistry—4

# Recommended:

Human anatomy, biochemistry, histology, computer science, systems physiology, management and organization, fundamentals of accounting, a survey of calculus, machine shop, and religion.

# Total pre-dental credits: 96

# Pre-Professional Program in Law

Brent Geraty, Coordinator 269-471-6530, bgeraty@andrews.edu Buller Hall, Room 135

Law schools prescribe no particular college program. Therefore, a pre-law student may select her major(s) and minor(s) according to interest and aptitude without adversely affecting admission to law school. The prospective lawyer's education should be as broad as possible, including the development of writing and reading skills, logical and analytical thinking, and understanding of legal, political, social and economic issues and institutions. Because competition for admission to reputable law schools is intense, it is important to maintain a high level of academic achievement.

Students who want to go on to law school should consult frequently with the pre-law advisor, certainly at least once per year and preferably more often. The Pre-Law Society, a student-led and student-run organization, provides additional opportunities and resources for the pre-law student.

The web site for the Law School Admission Counci: www.lsac.org provides a great deal of helpful information and is a good resource for students who are interested in preparing for, and getting into, law school.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Pre-Professional Program in Medicine

Students from Departments within The College of Arts & Sciences

Lisa Ahlberg: 269-471-6287
H. Thomas Goodwin: 269-471-3242
Ryan Hayes: 269-471-3248
Aileen Hyde: 269-471-3277
Marcia A. Kilsby: 269-471-6294
Pamela Litvak: 269-471-3240
Kanya Long: 269-471-3263
Peter Lyons: 269-471-6168
David N. Mbungu: 269-471-6399
Marlene N. Murray: 269-471-6243
Timothy Newkirk: 269-471-3605

D. David Nowack: 269-471-6065 David Randall: 269-471-3259 Karen Reiner: 269-471-3622 Robert Zdor: 269-471-6696

Science Complex

Although allopathic (MD) and osteopathic (DO) medicine represent different philosophies of patient care, a physician in either branch of medicine is required to pass the same national board examination to practice.

Students seeking admission to medical schools are encouraged to plan a baccalaureate degree that includes courses which meet the stated entrance requirements of the medical school of their choice as listed in Medical School Admissions Requirements or the websites of the Association of American Medical Colleges: www.aamc.org and the American Association of Colleges of Osteopathic Medicine: www.aacom.org. The premedical student may choose any major or minor and is encouraged to become acquainted with the main bodies of knowledge as represented by the various academic disciplines.

In light of adequate preparation for the Medical College Admissions Test (MCAT) and changes in medical school requirements, students should incorporate classwork in the following areas into their curriculum:

- Biochemistry
- Sociology

- Psychology
- Statistics

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# **Required Courses**

For Applicants to Loma Linda University School of Medicine

English Composition—6 Foundations of Biology—10 General Chemistry—8 General Physics—8 Organic Chemistry—8 Religion—9

Students should maintain an A/B average in science as well as overall.

# Pre-Professional Program in Occupational Therapy

Students from Departments within The College of Arts & Sciences
Bill Chobotar, Coordinator, 269-471-3262, Price Hall (Science Complex)

The occupational therapist helps people cope with psychological or physiological dysfunction.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Prerequisites for Loma Linda University Admission

To be eligible for admission, the applicant must have completed a minimum of 96 quarter units (64 semester units) at an accredited college or university. The following prerequisites are required and must be completed successfully with a grade of C or better. Upon successful completion of didactic and fieldwork requirements, students will graduate from LLU with a bachelor's degree in health science and a master's in occupational therapy. Students are then eligible to take the NBCOT's National OT board exam.

# Prerequisites: Domain 1: Spiritual and Cultural Heritage

**Religious studies**, 4 quarter units per year of full-time study. (Applies only to students attending Seventh-day Adventist colleges.)

Minimum 20 quarter units, or 14 semester units. Choose from three subject areas: fine arts, history, civilization, literature, modern language, or philosophy. English as a second language may not be included. A maximum of 4 quarter units will be accepted in applied or performing art/music.

# Prerequisites: Domain 2: Scientific Inquiry and Analysis: Natural Sciences

**Human Anatomy with lab** 

Human Physiology with lab: 2 semesters or quarters of A&P are required.

Select one additional science course from chemistry, physics or physical science.

**Mathematics:** Two years of HS mathematics or equivalent. Accepted courses include algebra I&II, geometry, with grades of C or better. (These credits do not transfer although they meet the math requirement.)

Completed Need Social Sciences:

Sociology

**General Psychology** 

**Human Growth & Development.** (Other acceptable equivalents are Developmental Psychology, Life Cycle, or Child Psychology and Adolescent Psychology.)

# Prerequisites: Domain 3: Communication (9–13 quarter units, or 6–9 semester units)

**Freshman English Composition**, complete sequence, as required by the college you attended or are currently attending.

Note: If you test out of any Freshman English courses, you are still required to meet the minimum number of units for this Domain.

Speech, public speaking

#### Domain 4:

Health education (personal health or nutrition)
Two physical activities courses

# **Electives**

Minimum requirement for entry is 96 quarter units, or 64 semester units.

Computer knowledge in the following areas is required: creating college level papers and assignments, Internet-based research, e-mail usage, PowerPoint presentations, online learning components.

# Observation/Volunteer Service

**40** hours of observation in occupational therapy settings. Documentation of community service performed is permissible as partial fulfillment of this requirement. Documentation of observation and/or community service must be submitted prior to admission consideration.

**CPR—infant, child and adult.** BLS health care provider. We only accept CPR from American Heart Association. This certification is not needed for the admissions process, but will be required upon acceptance to the program.

#### Note:

A minimum grade of C is required for transfer credit. C- and D grades are not transferable.

# Pre-Professional Program in Optometry

James L. Hayward, Coordinator 269-471-3241 Price Hall (Science Complex)

As a general rule, a minimum of two years of college work is required by optometry school. However, most students entering optometry schools have completed three or four years of college. The following courses with minor variations meet the entrance requirements of most optometry schools. For more information, contact the American Optometric Association: www.aoanet.org and the Association of Schools and Colleges of Optometry: www.opted.org.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# **Pre-optometry Suggested Courses**

English Composition, Writing Seminars — 8
Foundations of Biology — 10
General Chemistry — 8
General Physics — 8
Introduction to Psychology — 3
Mathematics — 6
Microbiology or Bacteriology — 3
Organic Chemistry — 8
Physical Education — 2
Religion — 6
Social Sciences — 8
Statistics — 3

# Pre-Professional Program in Pharmacy

D. David Nowack, *Coordinator* 269-471-6065 Halenz Hall (Science Complex)

Entrance requirements to colleges of pharmacy vary; therefore, it is imperative that students familiarize themselves with the requirements of the school of their choice. (Ferris State University [FSU], Wayne State University, and University of Michigan operate accredited colleges of pharmacy in the state of Michigan.) Information about the various schools of pharmacy can be found on the American Associate of Colleges of Pharmacy website: www.aacp.org. The doctor of pharmacy curriculum requires 2 years of pre-pharmacy and 4 years of professional pharmacy education.

The following prepharmacy courses are those required by FSU. FSU offers a calculus course in the summer that satisfies the prepharmacy requirements and require the PCAT for admission. Science courses with a grade of D are not transferable.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# **Pre-pharmacy Curriculum**

General Chemistry -8 English Composition -6 Foundations of Biology -10 Communication (COMM 104 or COMM 320) -2 or 3 Introduction to Psychology or Principles of Sociology -3 Elementary Statistics (STAT 340 or STAT 285) -3 General Microbiology -4 Organic Chemistry -8 Calculus (MATH 191) -4 Macroeconomics -3 Cultural Enrichment (one at 200-level) -9

# Pre-Professional Program in Physician Assistant

#### Students from Departments within The College of Arts & Sciences

For students within the College of Arts & Science

Bill Chobotar: 269-471-3262 H. Thomas Goodwin: 269-471-3242 David N. Mbungu: 269-471-6399 Marlene N. Murray: 269-471-6243 Price Hall (Science Complex)

D. David Nowack: 269-471-6065, Halenz Hall (Science Complex)

Physician assistants (PAs), members of a health-care team, practice medicine with supervision of licensed physicians. PAs perform a wide range of medical duties from basic primary care to high-technology specialty procedures. Professional PA education offered at any one of more than 100 accredited schools is an intensive 2–3 year program. Most PA programs are moving toward requiring a bachelors degree including courses in biology, chemistry, English, humanities/social science, mathematics, and psychology. The level of the science courses varies from program to program; consequently, each school should be consulted about its prerequisite requirements. Acceptance to a professional program typically requires an extensive health-care experience such as nurse assistant, medical/X-ray lab technician, respiratory therapist, paramedic, hospital aide, and emergency medical technician.

The National Directory of PA Programs may be ordered from APAP at 950 N. Washington St., Alexandria, VA 22314 or phone: 800-708-7581. PA programs and education can be accessed via the web: www.aapa.org.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Pre-Professional Program in Public History

John J. Markovic, *Coordinator* 269-471-3511 Buller Hall, Room 135

Public or applied history refers to careers in history-related fields other than teaching, including museum management, archival management, and historic preservation, as well as the production of historical media programs. In most cases, a master's degree in a public or applied history program or certification upon completion of certain graduate courses are needed prior to employment. The Department of History & Political Science recommends as curricula a major in history with a second major or minor and electives as the most advantageous undergraduate basis for a publichistory career. Curriculum recommendations are available from the department chair.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Pre-Professional Program in Respiratory Care

Bill Chobotar, *Coordinator* 269-471-3262 Price Hall (Science Complex)

Andrews University offers prerequisite course work to prepare students who wish to enter a 2-year Associate of Science degree program or a 4-year Bachelor of Science degree program in Respiratory Care. Admission requirements vary among professional respiratory care programs. Not all professional programs accept transfer credits. Therefore, as soon as possible, interested students should contact the programs of choice for the most current prerequisite requirements. A list of accredited respiratory care programs may be obtained from the American Association for Respiratory Care, 11030 Ables Lane, Dallas, TX 75229 (phone 972-243-2272 and ask for the Education Department) or explore the web at: www.aarc.org/patient\_resources/schools.html.

# **Pre-Professional Programs**

Although essentially a liberal arts college, the College of Arts & Sciences offers certain pre-professional curricula for students who plan to enter professional schools. For medical and paramedical curricula, Andrews University maintains a special relationship with Loma Linda University.

# Loma Linda University:

Interested students may complete the prerequisites for Loma Linda University's Respiratory Care Education Program while attending Andrews University. Check with the above listed coordinator for the required course work. The Pre-LLU/RC student may then apply and transfer to LLU through its selective admissions process as a second-year student in their program.

# Agriculture

Smith Hall, Room 109 269-471-6006 Fax: 269-471-3009 agri@andrews.edu www.andrews.edu/agriculture/

#### Faculty

Clive W. Holland, Chair Jerry D. Harris Katherine Koudele Garth B. Woodruff

#### **Emeritus**

Thomas N. Chittick

#### **Adjunct Faculty**

Jessica Balsis Stanley H. Beikmann Dayle Birney Jolene Birney Holly D. Shaffer

#### Mission

The mission of the Agriculture Department at Andrews University is to transform our students as they are educated to:

- Seek Knowledge
  - Learn current, sustainable, practices and procedures in their chosen area of agriculture based on a strong scientific foundation and hands-on experience
- Affirm Faith
  - Realize our sacred obligation as the caretakers of this planet to preserve and improve it
- Change the World
  - Put the knowledge and experience gained into practice to improve:
    - the production and quality of life of animals and the humans who interact with them
    - the quality of the soil and water in agriculture areas
    - the beauty of living spaces with plants

food security for those in need now and for all of us in the future.

#### **Programs**

Bachelor of Science. The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

Bachelor of Technology. The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as crops or dairy herd management, horticulture or the landscape industry.

Associate of Technology. The two-year AT degree programs provide students with adequate skills and working knowledge to apply for entry-level positions in their area of specialization.

# **Associates**

# Agriculture, Crop Production **Emphasis AT**

# Associate of Technology

The two-year AT degree programs provide students with adequate skills and working knowledge to apply for entry-level positions in their area of specialization.

# AT: Agriculture - 35

# Major Requirements

ANSI 114 - Introduction to Animal Science Credits: 3

- ANSI 205 Animal Feeds and Feeding Credits: 3
- Or ANSI 305 Animal Nutrition Credits: 3
- ANSI 340 Production/Management of \_\_\_\_
- Plus 0-4 credits in a special area of emphasis (see below) and 2-5 major elective credits chosen in consultation with advisor.

# Crop Production — 19

- AGRI 118 Soil Science Credits: 4
- AGRI 206 Farm Machinery Credits: 3
- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 300 Field Crop Production Credits: 3
- AGRI 395 Internship in
- HORT 105 Plant Science Credits: 5

# **Andrews Core Experience**

Choose one course from Life Science, Physical Science - 4

- CHEM 100 Consumer Chemistry Credits: 4
- Or CHEM 110 Introduction to Inorganic Chemistry Credits: 4

# Agriculture, Dairy Herd Management Emphasis AT

# Associate of Technology

The two-year AT degree programs provide students with adequate skills and working knowledge to apply for entry-level positions in their area of specialization.

# AT: Agriculture - 35

# Major Requirements

- ANSI 114 Introduction to Animal Science Credits: 3
- ANSI 340 Production/Management of \_\_\_\_ Credits: 3
- Plus 0-7 major elective credits chosen in consultation with advisor.
- ANSI 205 Animal Feeds and Feeding Credits: 3
- Or ANSI 305 Animal Nutrition Credits: 3

# Dairy Herd Management — 19

- AGRI 270 Management of Agriculture Enterprises Credits: 3
- AGRI 304 Forage Crop Production Credits: 3
- AGRI 395 Internship in
- ANSI 245 Animal Breeding and Genetics Credits: 3
- ANSI 250 Dairy Facilities Credits: 3
- ANSI 278 Dairy Health and Disease Credits: 3

Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 35 required.

# Andrews Core Experience - 4

- CHEM 100 Consumer Chemistry Credits: 4
- Or CHEM 110 Introduction to Inorganic Chemistry Credits: 4

# Horticulture, Landscape Design **Emphasis AT**

# Associate of Technology

The two-year AT degree programs provide students with adequate skills and working knowledge to apply for entry-level positions in their area of specialization.

# AT: Horticulture - 35

# Major Requirements - 24

AGRI 118 - Soil Science Credits: 4

AGRI 395 - Internship in Credits: 1 (Minimum of 2 Credits)

HORT 105 - Plant Science Credits: 5

HORT 226 - Woody Plant Identification I Credits: 3

HORT 227 - Woody Plant Identification II Credits: 3

HORT 228 - Herbaceous Plant Identification Credits: 3

Plus 4 major elective credits chosen in consultation with an advisor.

# Landscape Design — 11

HORT 136 - Landscape Drafting and Graphics Credits: 4

HORT 137 - Fundamentals of Landscape Design Credits: 4

HORT 350 - History of Landscape Architecture Credits: 3

Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 35 required.

# **Andrews Core Experience - 4**

CHEM 100 - Consumer Chemistry Credits: 4

Or CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Horticulture, Landscape Management Emphasis AT

# **Associate of Technology**

The two-year AT degree programs provide students with adequate skills and working knowledge to apply for entry-level positions in their area of specialization.

#### AT: Horticulture - 35

# Major Requirements

AGRI 118 - Soil Science Credits: 4

AGRI 395 - Internship in \_\_\_\_\_ Credits: 1

HORT 105 - Plant Science Credits: 5

HORT 226 - Woody Plant Identification I Credits: 3

HORT 227 - Woody Plant Identification II Credits: 3

• HORT 228 - Herbaceous Plant Identification Credits: 3

 Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 35 required.

# Landscape Management — 5

HORT 208 - Propagation of Horticultural Plants Credits: 3

HORT 211 - Landscape Equipment Credits: 2

# Andrews Core Experience

Choose one course from Life Science, Physical Science - 4

CHEM 100 - Consumer Chemistry Credits: 4

Or CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# **Bachelors**

# Agriculture BS

# **Bachelor of Science**

The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

# **BS: Agriculture**

# Major Requirements — 40

AGRI 118 - Soil Science Credits: 4

AGRI 206 - Farm Machinery Credits: 3

AGRI 300 - Field Crop Production Credits: 3

AGRI 304 - Forage Crop Production Credits: 3

AGRI 308 - Principles of Weed Control Credits: 3

AGRI 415 - Senior Seminar Credits: 1

ANSI 114 - Introduction to Animal Science Credits: 3

HORT 105 - Plant Science Credits: 5

• plus 15 major elective credits chosen in consultation with advisor.

# Cognate Requirements — 18

BIOL 165 - Foundations of Biology Credits: 5 or 4

BIOL 166 - Foundations of Biology Credits: 5 or 4

CHEM 131 - General Chemistry I Credits: 4

CHEM 132 - General Chemistry II Credits: 4

# **Andrews Core Experience**

Students must take all courses designated in the BA/BS Degree Requirements of the Andrews Core Experience.

#### Service

40 hours of service or alternative field service for majors in:

HORT 365 - Urban Landscape Design Credits: 3

ANSI 425 - Issues in Animal Agriculture, Research and Medicine Credits: 3

# Agriculture, Agribusiness Emphasis BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

# BT: Agriculture - 60

# Major Requirements

AGRI 137 - Practicum in\_\_\_\_\_ Credits: 1 (2 credits needed)

AGRI 270 - Management of Agriculture Enterprises Credits: 3

AGRI 395 - Internship in \_\_\_\_\_ Credits: 1 (3 credits needed)

AGRI 415 - Senior Seminar Credits: 1

# Agribusiness Emphasis — 33

ACCT 121 - Fundamentals of Accounting Credits: 3

ACCT 122 - Fundamentals of Accounting Credits: 3

BSAD 341 - Business Law Credits: 3

BSAD 355 - Management and Organization Credits: 3

- ECON 226 Principles of Microeconomics Credits: 3
- FNCE 317 Business Finance Credits: 3

Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Agriculture, Animal Husbandry Emphasis BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

# BT: Agriculture - 60

# Major Requirements

- AGRI 137 Practicum in \_\_\_\_\_ Credits: 1 (2 credits needed)
- AGRI 270 Management of Agriculture Enterprises Credits: 3
- AGRI 395 Internship in \_\_\_\_\_\_ Credits: 1 (3 credits needed)
- AGRI 415 Senior Seminar Credits: 1
- Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

# Animal Husbandry — 18

- ANSI 114 Introduction to Animal Science Credits: 3
- ANSI 205 Animal Feeds and Feeding Credits: 3
- Or ANSI 305 Animal Nutrition Credits: 3
- ANSI 245 Animal Breeding and Genetics Credits: 3
- Or ANSI 440 Animal Reproduction Credits: 3
- ANSI 325 Domestic Animal Behavior Credits: 3
- ANSI 340 Production/Management of \_\_\_\_\_ Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Agriculture, Crop Production Emphasis BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

# BT: Agriculture - 60

# Major Requirements

- AGRI 137 Practicum in \_\_\_\_\_ Credits: 1 (2 credits needed)
- AGRI 270 Management of Agriculture Enterprises Credits: 3
- AGRI 395 Internship in \_\_\_\_\_ Credits: 1 (3 credits needed)
- AGRI 415 Senior Seminar Credits: 1
- Agriculture Major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

# Crop Production Emphasis — 28

- AGRI 118 Soil Science Credits: 4
- AGRI 206 Farm Machinery Credits: 3
- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 300 Field Crop Production Credits: 3
- AGRI 304 Forage Crop Production Credits: 3
- AGRI 308 Principles of Weed Control Credits: 3
- HORT 105 Plant Science Credits: 5
- HORT 378 Integrated Insect/Disease Management Credits: 4

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Animal Science, Equine Science Emphasis BS

#### **Bachelor of Science**

The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

# BS: Animal Science - 40

# Major Requirements

- AGRI 415 Senior Seminar Credits: 1
- ANSI 114 Introduction to Animal Science Credits: 3
- ANSI 305 Animal Nutrition Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3
- Plus 0-9 major electives chosen in consultation with an advisor.

#### Equine Science — 21

- ANSI 340 Production/Management of \_\_\_\_\_\_ Credits: 3 (Equine Management)
- ANSI 440 Animal Reproduction Credits: 3
- ANSI 445 Physiology of Farm Animals Credits: 4
- ANSI 450 Equine Exercise Anatomy & Physiology Credits: 3
- ANSI 455 Equine Health and Disease Credits: 3
- AGRI 137 Practicum in \_\_\_\_\_ Credits: 1 (1–2 credits needed)
- AGRI 395 Internship in \_\_\_\_\_ Credits: 1 (1–2 credits needed)

# **Cognate Requirements - 18**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4

CHEM 132 - General Chemistry II Credits: 4

# **Andrews Core Experience**

Students must take all courses designated in the BA/BS Degree Requirements of the Andrews Core Experience.

#### Service

40 hours of service or alternative field service for majors in:

- HORT 365 Urban Landscape Design Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3

# Animal Science, Management Emphasis BS

### **Bachelor of Science**

The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

## BS: Animal Science - 40

# Major Requirements

- AGRI 415 Senior Seminar Credits: 1
- ANSI 114 Introduction to Animal Science Credits: 3
- ANSI 305 Animal Nutrition Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3
- Plus 0-11 major electives chosen in consultation with an advisor.

# Management — 19

- AGRI 137 Practicum in\_\_\_\_\_ Credits: 1 (2)
- AGRI 395 Internship in \_\_\_\_\_ Credits: 1
- ANSI 340 Production/Management of \_\_\_\_\_\_ Credits: 3 (2 species)
- ACCT 121 Fundamentals of Accounting Credits: 3
- AGRI 270 Management of Agriculture Enterprises Credits: 3

# Cognate Requirements - 18

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4

# **Andrews Core Experience**

Students must take all courses designated in the BA/BS Degree Requirements of the Andrews Core Experience.

#### Service

40 hours of service or alternative field service for majors in:

- HORT 365 Urban Landscape Design Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3

# Animal Science, Pre-Veterinary Medicine Emphasis BS

# **Bachelor of Science**

The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

# BS: Animal Science - 40

# Major Requirements

- AGRI 415 Senior Seminar Credits: 1
- ANSI 114 Introduction to Animal Science Credits: 3
- ANSI 305 Animal Nutrition Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3
- Plus 0-9 major electives chosen in consultation with an advisor.

# Pre-Veterinary Medicine — 21

- AGRI 137 Practicum in\_\_\_\_\_ Credits: 1
- ANSI 340 Production/Management of \_\_\_\_\_\_ Credits: 3 (1 species)
- ANSI 379 Small Animal Health and Disease Credits: 3
- ANSI 420 Canine Gross Anatomy Credits: 4
- ANSI 435 Animal Genetics Credits: 3
- ANSI 440 Animal Reproduction Credits: 3
- ANSI 445 Physiology of Farm Animals Credits: 4

# **Cognate Requirements - 18**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4

# **Recommended Pre-Veterinary Courses**

Courses may vary depending on entrance requirements of the veterinary college of choice.

- BCHM 421 Biochemistry I Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- MATH 166 College Algebra for Business Credits: 3
- MATH 167 Precalculus Trigonometry Credits: 1
- Or MATH 168 Precalculus Credits: 4
- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

# **Andrews Core Experience**

Students must take all courses designated in the BA/BS Degree Requirements of the Andrews Core Experience.

#### Service

40 hours of service or alternative field service for majors in:

- HORT 365 Urban Landscape Design Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3

# Horticulture, Horticultural Crop Production Emphasis BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

### BT: Horticulture - 60

# Major Requirements

- AGRI 118 Soil Science Credits: 4
- AGRI 395 Internship in \_\_\_\_\_ Credits: 1
- AGRI 415 Senior Seminar Credits: 1
- AGRI 499 Project in \_\_\_\_\_ Credits: 1
- HORT 105 Plant Science Credits: 5
- HORT 226 Woody Plant Identification I Credits: 3
- HORT 227 Woody Plant Identification II Credits: 3
- HORT 228 Herbaceous Plant Identification Credits: 3
- HORT 350 History of Landscape Architecture Credits: 3
- Agriculture Major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

# Horticultural Crop Production — 33

- AGRI 206 Farm Machinery Credits: 3
- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 270 Management of Agriculture Enterprises Credits: 3
- AGRI 308 Principles of Weed Control Credits: 3
- AGRI 345 Topics in Credits: 1
- HORT 208 Propagation of Horticultural Plants Credits: 3
- HORT 211 Landscape Equipment Credits: 2
- HORT 360 Arboriculture Credits: 3
- HORT 369 Greenhouse Environment and Production Credits: 3
- HORT 378 Integrated Insect/Disease Management Credits: 4
   The horticultural crop production emphasis prepares students for careers in the greenhouse/nursery industry or vegetable/fruit production industry.

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Horticulture, Landscape Construction Management Emphasis BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

\_ Credits: 1

# BT: Horticulture - 60

# Major Requirements

- AGRI 499 Project in \_\_\_\_\_ Credits: 1
   AGRI 415 Senior Seminar Credits: 1
- HORT 105 Plant Science Credits: 5
- HORT 226 Woody Plant Identification I Credits: 3
- HORT 227 Woody Plant Identification II Credits: 3
- HORT 228 Herbaceous Plant Identification Credits: 3
- HORT 350 History of Landscape Architecture Credits: 3
- Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

# Landscape Construction Management - 36

- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 270 Management of Agriculture Enterprises Credits: 3
- HORT 136 Landscape Drafting and Graphics Credits: 4
- HORT 137 Fundamentals of Landscape Design Credits: 4
- HORT 208 Propagation of Horticultural Plants Credits: 3
- HORT 211 Landscape Equipment Credits: 2
- HORT 315 Landscape Structures and Materials Credits: 4
- HORT 340 Land Surveying Credits: 2
- HORT 375 Landscape Estimating Credits: 3
- HORT 378 Integrated Insect/Disease Management Credits: 4
- HORT 429 Computer Landscape Design Credits: 3

The landscape construction and management emphasis features proper horticultural practice, identification of landscape plants, selection of appropriate equipment, and the concept of total maintenance.

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Horticulture, Landscape Design Emphasis BS

# **Bachelor of Science**

The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

## **BS: Horticulture - 40**

## Major Requirements

- AGRI 118 Soil Science Credits: 4
- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 308 Principles of Weed Control Credits: 3
- AGRI 415 Senior Seminar Credits: 1
- HORT 105 Plant Science Credits: 5
- HORT 378 Integrated Insect/Disease Management Credits: 4
- Plus 20 credits in a special area of emphasis.
- Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaning 40 required.

# Landscape Design — 20

Select from the following:

- AGRI 395 Internship in \_\_\_\_\_ Credits: 1
- HORT 136 Landscape Drafting and Graphics Credits: 4
- HORT 137 Fundamentals of Landscape Design Credits: 4
- HORT 226 Woody Plant Identification I Credits: 3
- HORT 227 Woody Plant Identification II Credits: 3
- HORT 228 Herbaceous Plant Identification Credits: 3
- HORT 315 Landscape Structures and Materials Credits: 4
- HORT 350 History of Landscape Architecture Credits: 3
- HORT 365 Urban Landscape Design Credits: 3
- HORT 375 Landscape Estimating Credits: 3
- HORT 429 Computer Landscape Design Credits: 3

- HORT 441 Advanced Landscape Graphics Credits: 4
- HORT 442 Advanced Site Design Credits: 4

# Cognate Requirements - 18

Select credits from the following

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 208 Environmental Science Credits: 4
- BIOL 475 Biology of Bacteria Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- FDNT 230 Nutrition Credits: 3
- FDNT 240 Nutrition Laboratory Credits: 1

# **Andrews Core Experience**

Students must take all courses designated in the BA/BS Degree Requirements of the Andrews Core Experience.

#### Service

40 hours of service or alternative field service for majors in:

- HORT 365 Urban Landscape Design Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3

# Horticulture, Landscape Design Emphasis BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

#### BT: Horticulture - 60

# Major Requirements

- AGRI 118 Soil Science Credits: 4
- AGRI 395 Internship in \_\_\_\_\_\_ Credits: 1 (3 credits needed)
- AGRI 415 Senior Seminar Credits: 1
- AGRI 499 Project in \_\_\_\_\_ Credits: 1
- HORT 105 Plant Science Credits: 5
- HORT 226 Woody Plant Identification I Credits: 3
- HORT 227 Woody Plant Identification II Credits: 3
- HORT 228 Herbaceous Plant Identification Credits: 3
- HORT 350 History of Landscape Architecture Credits: 3
- Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

### Landscape Design Emphasis - 31

The landscape design program emphasizes the development of technical drawing skills, CAD application, an understanding of the principles of design and knowledge of plants.

- HORT 136 Landscape Drafting and Graphics Credits: 4
- HORT 137 Fundamentals of Landscape Design Credits: 4
- HORT 315 Landscape Structures and Materials Credits: 4
- HORT 340 Land Surveying Credits: 2
- HORT 365 Urban Landscape Design Credits: 3
- HORT 375 Landscape Estimating Credits: 3
- HORT 429 Computer Landscape Design Credits: 3

- HORT 441 Advanced Landscape Graphics Credits: 4
- HORT 442 Advanced Site Design Credits: 4

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

# Horticulture, Landscape Management Emphasis BS

# **Bachelor of Science**

The BS degree prepares individuals to pursue advanced degrees for careers in teaching or research. Students may major in agriculture, animal science, horticulture or landscape design with a minor to complement their intended purpose.

# BS: Horticulture - 40

# Major Requirements

- AGRI 118 Soil Science Credits: 4
- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 308 Principles of Weed Control Credits: 3
- AGRI 415 Senior Seminar Credits: 1
- HORT 105 Plant Science Credits: 5
- HORT 378 Integrated Insect/Disease Management Credits: 4
- Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 40 required.

# Landscape Management — 20

Select from the following:

- AGRI 395 Internship in \_\_\_\_\_ Credits: 1
- HORT 136 Landscape Drafting and Graphics Credits: 4
- HORT 137 Fundamentals of Landscape Design Credits: 4
- HORT 208 Propagation of Horticultural Plants Credits: 3
- HORT 211 Landscape Equipment Credits: 2
- HORT 226 Woody Plant Identification I Credits: 3
- HORT 227 Woody Plant Identification II Credits: 3
- HORT 228 Herbaceous Plant Identification Credits: 3
- HORT 315 Landscape Structures and Materials Credits: 4
- HORT 350 History of Landscape Architecture Credits: 3
- HORT 360 Arboriculture Credits: 3

# **Cognate Requirements - 18**

Select credits from

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 208 Environmental Science Credits: 4
- BIOL 475 Biology of Bacteria Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- FDNT 230 Nutrition Credits: 3
- FDNT 240 Nutrition Laboratory Credits: 1

# **Andrews Core Experience**

Students must take all courses designated in the BA/BS Degree Requirements of the Andrews Core Experience.

#### Service

40 hours of service or alternative field service for majors in:

- HORT 365 Urban Landscape Design Credits: 3
- ANSI 425 Issues in Animal Agriculture, Research and Medicine Credits: 3

# International Agriculture Development BT

# **Bachelor of Technology**

The BT degree is a professional degree. Graduates are prepared for supervisory and management positions in production agriculture such as Agribusiness, crops, dairy herd management, horticulture or the landscape industry.

# BT: International Agriculture Development

The Bachelor of Technology in International Agriculture Development is designed to provide students with knowledge, skills and experience to prepare them for entry-level positions in agriculture or international development or to pursue an advanced degree. Students who complete this degree will be eligible to enter the MS Community & International Development program at Andrews University with Advanced Standing.

# Major requirements — 60

- ANSI 114 Introduction to Animal Science Credits: 3
- AGRI 118 Soil Science Credits: 4
- AGRI 240 Fundamentals of Irrigation Credits: 3
- AGRI 270 Management of Agriculture Enterprises Credits: 3
- AGRI 390 Agriculture Study Tour Credits: 0
- AGRI 395 Internship in \_\_\_\_\_ Credits: 1
- AGRI 415 Senior Seminar Credits: 1
- AGRI 498 International Internship in Credits: 1
- HORT 105 Plant Science Credits: 5
- HORT 208 Propagation of Horticultural Plants Credits: 3
- ACCT 121 Fundamentals of Accounting Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- SOCI 160 Introduction to International Development Credits: 3
- SOCI 350 Social Policy Credits: 2
- SOCI 408 Emergency Preparedness Credits: 2
- SOCI 421 Development Theory & Practice Credits: 3
- SOCI 431 Needs Assessment and Social Policy Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- Agriculture major credits selected in consultation with an advisor from AGRI, ANSI, and HORT courses to fulfill the remaining 60 required.

# Major Electives - 9

#### Select 9 Credits from the following courses:

- ANSI 305 Animal Nutrition Credits: 3
- ANSI 340 Production/Management of \_\_\_\_\_ Credits: 3
- ANSI 440 Animal Reproduction Credits: 3
- AGRI 300 Field Crop Production Credits: 3
- AGRI 308 Principles of Weed Control Credits: 3
- HORT 150 Home Horticulture Credits: 3
- HORT 310 Commercial Vegetable Production Credits: 3
- AGRI 345 Topics in \_\_\_\_\_ Credits: 1
- AGRI 467 Concepts of International Agriculture Credits: 3
- AGRI 468 International Agricultural Implementation Credits: 3

# **Andrews Core Experience**

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

CHEM 110 - Introduction to Inorganic Chemistry Credits: 4

#### Social Sciences

• ECON 225 - Principles of Macroeconomics Credits: 3

#### AGRI 118 - Soil Science

# **Undergraduate Minors**

# Agriculture Minor

### **Total Credits: 20**

Selected from AGRI, ANSI or HORT courses in consultation with advisor.

# Animal Science Minor

# **Total Credits: 20**

Selected from AGRI, ANSI or HORT courses in consultation with advisor.

# Horticulture Minor

# **Total Credits: 20**

Selected from AGRI, ANSI or HORT courses in consultation with advisor.

# Pre-Professional

# Pre-Professional Program in Veterinary Medicine

Katherine Koudele, Coordinator | 269-471-6299 | Smith Hall 112

Entrance requirements vary among veterinary medical colleges. Students should check the websites of their choice for the most current requirements. Accredited veterinary schools are listed on the website of the American Veterinary Medical Association (www.avma.org). Students, in consultation with their departmental advisor, can develop individualized programs to meet the entrance requirements for their preferred veterinary schools.

# **Agriculture**

#### AGRI 118 - Soil Science

Credits: 4 | Factors affecting soil formation, soil texture, particle size, pore space and their impact on soil air/water relations, and chemical characteristics of soils, including pH, ion exchange, and maintenance of soil fertility. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Alternate years | College Code: CAS

# AGRI 137 - Practicum in\_\_\_\_\_

Credits: 1 | Fifty hours per credit of supervised practical experience in one area of concentration. May be repeated in different areas for a maximum of 6 credits. Topics to be chosen in consultation with an advisor. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | Offering: Fall, Spring | College Code: CAS

## AGRI 206 - Farm Machinery

Credits: 3 | Selection and operation of farm equipment, based on the initial cost and economic performance, including factors governing the site and type of farm machines, their capacity, efficient use, adjustment and repair. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Alternate years | College Code: CAS

#### AGRI 240 - Fundamentals of Irrigation

Credits: 3 | Design, installation, drawing, interpretation and maintenance of plastic or metal irrigation systems and control devices for proper sprinkler coverage. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

## AGRI 270 - Management of Agriculture Enterprises

Credits: 3 | An introduction to acquiring and analysis of management information for decision making; an understanding of basic economic principles that impact biological production systems and implementation of the principles for total quality management for increased productivity. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | Offering: Alternate years - interactive online | College Code: CAS

#### AGRI 300 - Field Crop Production

Credits: 3 | Importance, distribution, economic adaptation, and botany of leading farm crops, emphasizing rotation, seedbed preparation, and economic production. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### AGRI 304 - Forage Crop Production

**Credits:** 3 | Basic principles of forage crop production, emphasizing choice of crop, establishment, growth, maintenance, harvesting, storage and feeding. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Alternate years | **College Code:** CAS

#### AGRI 308 - Principles of Weed Control

Credits: 3 | Control of weeds in horticultural and field crops, utilizing biological, cultural, mechanical, and chemical practices. Class study also involves preparation and testing for pesticide applicator's license. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Alternate years | College Code: CAS

#### AGRI 345 - Topics in \_\_\_\_\_\_

Credits: 1 | A class based on selected topics of current interest in agriculture. |
Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics |
Schedule Type: Lecture, Blended Learning | College Code: CAS

#### AGRI 390 - Agriculture Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department offerings. Fee may be required. | \$ - Course or lab fee | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### AGRI 395 - Internship in \_\_\_\_\_

Credits: 1 | Supervised internship of on-the-job work experience in some field of agriculture under the direction of the employer and evaluated by a departmental faculty member. Students submit a report of their experience and must complete a minimum of 120 hours of work experience for each credit earned. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | College Code: CAS

#### AGRI 415 - Senior Seminar

Credits: 1 | A capstone course required of all bachelor degree students, in which each student assembles a portfolio, conducts career research and prepares for job or graduate school interviews. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Fall | College Code: CAS

#### AGRI 467 - Concepts of International Agriculture

Credits: 3 | A study of the relative significance of the role of external institutions and agency, financial programs for agricultural development, human resource development and agricultural education as a means of fostering worldwide agricultural development to counter-balance the threat to global food security and to overcome food deficits. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### AGRI 468 - International Agricultural Implementation

Credits: 3 | The application of scientific agricultural principles of food production, utilizing cultural practices based on appropriate agricultural technologies that support a philosophy of sustainability for future generations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### AGRI 498 - International Internship in\_\_\_\_\_

Credits: 1 | Supervised internship of on the job international work experience in agriculture/horticulture. Students submit a report of their experience to be evaluated by a departmental faculty member and must complete 120 hours of work experience for each credit earned. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | College Code: CAS

#### AGRI 499 - Project in \_\_\_\_\_

Credits: 1 | Individual research in some field of agriculture under the direction of the faculty. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): AGRI 405 or permission of the instructor. | Repeatable: Repeatable up to 10 credits | Schedule Type: Independent | College Code: CAS

# **Animal Science**

#### ANSI 114 - Introduction to Animal Science

**Credits:** 3 | Farm animal anatomy, reproductive and digestive physiology, nutrition, genetics, housing, health management and production of animal products. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Fall | **College Code:** CAS

## ANSI 125 - Livestock Handling Methods

Credits: 3 | Principles and practices of handling livestock including proper catching, restraint, injections, tagging, grooming and hoof trimming. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

# ANSI 150 - Companion Animal Care

Credits: 3 | Principles and practices on how to choose the right pet, keep it healthy, pet grooming, training and correcting behavioral problems. Animal species covered are dogs, cats, small caged pets, birds, fish, reptiles and amphibians. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall, alternate years | College Code: CAS

#### ANSI 205 - Animal Feeds and Feeding

Credits: 3 | Classification and function of nutrients, deficiency symptoms, digestive processes, characterization of feedstuffs, and formulation of diets for domestic animals. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: Recommended CHEM100. | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

## ANSI 245 - Animal Breeding and Genetics

Credits: 3 | Basic anatomy and physiology of the reproductive systems of domestic animals, basic principles of genetics in order to make sound genetics and breeding decisions, including the manipulation of reproductive cycle, artificial insemination. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ANSI 250 - Dairy Facilities

Credits: 3 | A study of various types of milking systems, housing and manure handling systems of dairy cattle of all ages and production levels. Ventilation, stall and barn dimensions, and bedding will be some of the topics covered. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ANSI 278 - Dairy Health and Disease

Credits: 3 | Principles and practice of physical examination of dairy cattle and the causes, preventions and treatment of infectious and metabolic diseases by system. Also included are dairy cattle breeding and genetics. | Weekly: one 2-hour lecture and one 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Spring | College Code: CAS

#### **ANSI 305 - Animal Nutrition**

Credits: 3 | Principles of feed chemistry and nutrient utilization, digestive tract anatomy and physiology including digestion, absorption, metabolism of feeds by domestic species, nutrition related diseases/ deficiencies and ration formulation. | Weekly: 3 lectures | Grade Mode: Normal (A-F,I,W) | Recommended: CHEM 131 or higher. | Schedule Type: Lecture, Lab | Offering: Fall, alternate years | College Code: CAS

#### ANSI 325 - Domestic Animal Behavior

Credits: 3 | Physiological basis for each type of behavior and its development, communication methods, normal and aberrant behavior in each domestic animal species as well as treatments for problem situations. | Weekly: 2 lectures and 1 lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall, alternate years | College Code: CAS

#### ANSI 340 - Production/Management of \_\_\_\_\_

Credits: 3 | Production methods and management practices of domesticated livestock species including nutrition, reproduction, housing, health and specialized care of a particular species. Course is repeatable for study of dairy cattle, equine, poultry and small livestock. | Weekly: 2 lectures and 1 lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall, Spring | College Code: CAS

#### ANSI 379 - Small Animal Health and Disease

Credits: 3 | Proper handling and care, nutritional needs, and common health problems of companion animals such as dogs, cats, birds, pocket pets, reptiles. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

#### ANSI 420 - Canine Gross Anatomy

Credits: 4 | Study of macroscopic skeleton, muscles, internal organs, blood vessels and nerves using preserved, latex-injected specimens. Comparisons made with the live dog through palpation. | Weekly: 2 lectures and two 3-hour labs | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: BIOL166. | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall, alternate years | College Code: CAS

#### ANSI 425 - Issues in Animal Agriculture, Research and Medicine

Credits: 3 | Study of the ethical issues that challenge animal researchers, producers, caretakers, and veterinarians to treat and raise animals humanely yet effectively. | \$ - Course or lab fee | Course Attribute: Service Course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ANSI 430 - Lactation Physiology

Credits: 3 | Anatomy and physiology of the udder, milk secretion, disease prevention and treatment, milking management and milking systems. | Weekly: 2 lectures and 1 lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: BIOL166. | Schedule Type: Lecture, Lecture/Lab | Offering: Spring | College Code: CAS

#### ANSI 435 - Animal Genetics

Credits: 3 | Basic genetics principles, cytogenetics, immunogenetics, population genetics and quantitative genetics, biotechnology, gene mapping and the use of molecular tools to research inherited disorders using examples of veterinary medicine. | Grade Mode: Normal (A-F,I,W) | Recommended: BIOL166. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

## ANSI 440 - Animal Reproduction

Credits: 3 | Anatomy and physiology of farm animal reproduction including the cellular and endocrine components as well as management aspects. | Weekly: 2 lectures and 1 lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: BIOL166. | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring | College Code: CAS

### ANSI 445 - Physiology of Farm Animals

Credits: 4 | Physiology of digestive, cardiovascular, pulmonary, excretory, nervous, and skeletomuscular systems in domesticated ruminants and monogastrics. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: BIOL166. | Schedule Type: Lecture/Lab | Offering: Fall, alternate years | College Code: CAS

## ANSI 450 - Equine Exercise Anatomy & Physiology

Credits: 3 | The anatomy and physiology of the limbs (shoulder and pelvic girdles, legs, feet) as well as the respiratory tract, all of which are vital to a horse's usefulness. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

# ANSI 455 - Equine Health and Disease

Credits: 3 | Topics covered in depth are: the causes of infectious (e.g. tetanus, strangles) and non-infectious (e.g. laminitis, colic, injury), diseases of horses, their prevention, diagnosis and treatment. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

# Horticulture

#### HORT 105 - Plant Science

Credits: 5 | Introduces students to the requirements of plant growth and development. Understanding of these processes is gained by studying topics such as plant cells, tissue, and organ structure; photosynthesis, cellular respiration, plant reproduction, including flowering, fruit development, seed set, the role of hormones, and plant nutrition. | Weekly: 4 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### HORT 136 - Landscape Drafting and Graphics

Credits: 4 | Introduces and develops proficiency in technical drafting for landscape design including symbols, 2-D and 3-D drawings, sections and elevations, title blocks, legends and plan organization. Studio puts graphics to work with a broad range of landscape projects represented. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Studio | Offering: Fall | College Code: CAS

## HORT 137 - Fundamentals of Landscape Design

Credits: 4 | Introduces and develops the principles of design, design theory, site analysis, functional diagramming, circulation, spatial planes and design schematics. Course will explore both hardscape and softscape principles. Class integrates the design process in drawing plans of all sizes. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: HORT136 | Schedule Type: Studio | Offering: Spring | College Code: CAS

#### **HORT 150 - Home Horticulture**

Credits: 3 | An introduction to the horticultural and landscape field for majors and homeowners alike, this class offers basic care of the home landscape. Landscaping with ornamental trees and shrubs, perennials and annuals or growing fruits and vegetables for the garden are included. Become skilled at pruning and training plants, diagnosing and treating insect and disease problems, fertilizing techniques, and more. Course prepares you for home ownership and teaches life skills for creating a productive and beautiful home environment. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### HORT 208 - Propagation of Horticultural Plants

Credits: 3 | Intended to acquaint students with the processes of asexual reproduction, especially as it applies to the horticultural industry. Asexual reproduction investigates methods of clonal reproduction utilizing non-flowering plant parts such as cutting, grafting, layering, and micro propagation (tissue culture). | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: HORT105. | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring | College Code: CAS

#### **HORT 211 - Landscape Equipment**

Credits: 2 | Assessment of and exposure to current equipment needed to run a landscape installation and maintenance business. Experience in physical operation of equipment, preventative maintenance and minor repair is practiced. | Weekly: 1-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Fall, alternate years | College Code: CAS

# HORT 226 - Woody Plant Identification I

Credits: 3 | Introduction to the identification and recognition of deciduous and evergreen trees. Focus will be on shape, size, color, texture, environmental requirements and the landscape value ofnative and cultivated trees of the northern temperate zone. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

#### HORT 227 - Woody Plant Identification II

Credits: 3 | Introduction to the identification and recognition of the deciduous, evergreen and broad leafed evergreen shrubs and vines of the northern. Focus will be on shape, color, size, texture, environmental requirements and the landscape value of native and cultivated shrubs and vines of the northern temperate zone. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### HORT 228 - Herbaceous Plant Identification

Credits: 3 | Identification and recognition of shape, size, color, texture, and environmental requirements of the nonwoody plants providing color and ground cover in the landscape. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

#### HORT 310 - Commercial Vegetable Production

**Credits:** 3 | Production and management of commercial vegetable crops; includes planting, cultural care, harvesting and post-harvesting procedures and marketing. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### **HORT 315 - Landscape Structures and Materials**

Credits: 4 | Course combines lecture, drawing and hands-on labs covering an array of hardscape materials including retaining walls, decks and arbors, patios, fencing, edging, pools and more. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### HORT 340 - Land Surveying

**Credits:** 2 | Course introduces the principles of land surveying such as measurements of distance, elevation and angles, instrumentation and mapping, and GIS. | Weekly: 1

lecture and a 2-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### HORT 350 - History of Landscape Architecture

Credits: 3 | A study of landscape history throughout civilization and its impact upon society and the environment. Course will look at the origin of landscape architectural styles and characteristics, and explore the influence of historical landscape design personalities upon the American landscape. | Course Attribute: Art History course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | Offering: Spring | College Code: CAS

#### HORT 360 - Arboriculture

Credits: 3 | Care of shade and ornamental trees living under environmental stress of urbanization, their legal protection and value. Includes tree anatomy and physiology, soils, nutrition and water relationships, transplanting, disease and insect control, mechanical injury and pruning to develop a healthy tree. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall, alternate years | College Code: CAS

#### HORT 365 - Urban Landscape Design

Credits: 3 | Designing landscapes to meet the environmental challenges and conditions of urban spaces. Circulation patterns for conducting business, aesthetic and functional aspects of design for corporate/institutional, governmental agencies and municipal areas. | \$ - Course or lab fee | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Recommended: HORT136, 137. | Schedule Type: Lecture/Lab | Offering: Spring, alternate years | College Code: CAS

#### HORT 369 - Greenhouse Environment and Production

Credits: 3 | Concepts and principles of commercial plant production in the greenhouse environment. Topics include structure and environment of the greenhouse, production of bedding and potting plants and cut flowers. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Alternate years | College Code: CAS

#### HORT 375 - Landscape Estimating

Credits: 3 | An introduction to the estimating process for landscape design, construction and maintenance work. Various schedules and forms are used to assign costs of equipment, plants, hardscape materials, labor and overhead. The many variables from project to project are explored and then formulas are applied to arrive at making landscape installations an efficient and profitable business. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### HORT 378 - Integrated Insect/Disease Management

Credits: 4 | Study of significant diseases and insects of agricultural and horticultural plant materials, including life cycles and influence of environmental conditions; determination of effective control methods for crop, ornamental and turfgrass production. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lecture/Lab | Offering: Spring, alternate years | College Code: CAS

#### HORT 429 - Computer Landscape Design

Credits: 3 | Principles and practices of computer-aided landscape design, including creating scale perimeter plot plans, using drawing tools, plant/site relationships, and graphic imaging leading to a computer- generated landscape drawing. Laboratory emphasizes skill development and proficiency in integrating software and hardware to create CAD-generated landscape designs. Prior landscape drawing course work is recommended. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Studio | Offering: Spring | College Code: CAS

#### **HORT 441 - Advanced Landscape Graphics**

Credits: 4 | Advanced exploration and application of graphics applying to all aspects of landscape architecture. Working in multiple environments and media. Work will include plan view, 2D and 3D hand graphics. Products will be professional quality presentations including both artistic and verbal communication skills. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: HORT136 and 137 | Schedule Type: Studio | Offering: Fall | College Code: CAS

#### HORT 442 - Advanced Site Design

Credits: 4 | Landscape Architecture concepts relating to the challenging problems of design. Field application through live projects encompassing all aspects of landscape architecture and presentation. This class is focused on synthesizing significant previous class work and applying it to a real customer setting. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Recommended: HORT136, 137, 226, 227, 228 and 441 | Schedule Type: Studio | Offering: Spring | College Code: CAS

# Behavioral Neuroscience

Buller Hall, Room 211, Price Hall, Room 216, 269-471-3152, 269-471-3243, kgbailey@andrews.edu biology@andrews.edu, bhsc@andrews.edu

#### Faculty

Karl Bailey, *Director*, Psychology
Harvey Burnett, Psychology
Pamela Coburn-Litvak, Biology
Tom Goodwin, Biology
James Hayward, Biology
Herbert Helm, Advisor, Psychology
Shandelle Henson, Advisor, Mathematics
David Mbungu, Advisor, Biology
Duane McBride, Advisor, Behavioral Sciences
Benjamin Navia, Biology
Melissa Ponce-Rodas, Advisor, Psychology
Gordon Atkins, Adjunct, Biology

#### Mission

As a program at a Seventh-day Adventist University, the behavioral neuroscience program aims to help students integrate their study of the mind and brain into their faith development and Christian walk by encouraging the careful study of, and faithful response to, their area of study and scholarship as both Christians and developing scholars.

Behavioral Neuroscience is an interdisciplinary program at Andrews University that is based in the Departments of Behavioral Sciences, Biology and Mathematics. Its purpose is to provide opportunities for undergraduates to prepare for exciting careers in the fascinating, rapidly growing scientific fields which involve the study of the brain and its control of behavior. In addition to helping students learn basic information about neurobiology, cognitive neuroscience, behavioral neuroscience, and mathematical modeling, the Behavioral Neuroscience program involves students in hands-on, laboratory experiences, using research-quality equipment, and prepares students to not only learn from their field of study but to actively contribute to that field as well. Indeed, research with a faculty mentor is an integral part of the program, with the goal of student presentation and publication of research in professional venues. The interdisciplinary nature of Behavioral Neuroscience is reflected in a common core of classes taken by all students, whether they are majoring in Psychology, Biology or Mathematics, and in the flexibility afforded by each of the three emphases within the program for interdisciplinary study and original research.

As an interdisciplinary program that exists across three departments, the Behavioral Neurosciences Program also aims to develop and reflect a spirit of collaboration and integration on the campus, as exemplified in the interdisciplinary interests and work of faculty and students.

# Programs

#### Bachelors

- Biology, Behavior/Mathematics Emphasis BS
- Biology, Neuroscience Emphasis BS
- Psychology, Behavioral Neuroscience Emphasis BS

# Behavioral Sciences

Buller Hall, Room 211 Phone: 269-471-3152 Fax: 269-471-3108 bhsc-info@andrews.edu www.andrews.edu/bhsc/

#### **Faculty**

Duane C. McBride, *Chair* Karl G. Bailey Harvey J. Burnett Romulus Chelbegean

Dawn Dulhunty, Director of off-campus International Development Program (IDP)

Herbert W. Helm Øystein S. LaBianca Lionel N. A. Matthews Melissa Ponce-Rodas

Joel Raveloharimisy, Director of on-campus Community & International Development

Program (CIDP) Larry S. Ulery

#### **Adjunct Faculty**

Alina M. Baltazar Robert Bates Dawn Dulhunty Adam Fenner Edwin Hernandez Gary L. Hopkins Harold James Fredrick Kosinski Arian Timoti Kristen Witzel Penelope Webster

#### Mission

The Department of Behavioral Sciences is concerned with the study of how human beings think and behave, both as individuals and in social, spiritual and cultural settings. By providing students with the discoveries and procedures accumulated from this versatile field of study, our goal is to empower students to utilize their knowledge to further the mission of the Seventh-day Adventist Church and to restore men and women to the image of our Maker.

The Department of Behavioral Sciences is organized as a consortium where faculty share expertise and research endeavors in related disciplines. The behavioral sciences are concerned with the study of how human beings think and behave as individuals, and in sociocultural and ecological systems.

#### Undergraduate Program Policies/Administration

#### **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

#### **Department Aims**

This department aims (1) to introduce students to the salient discoveries and procedures accumulated from research in behavioral sciences disciplines and (2) to empower students to utilize this knowledge in furthering the mission of Seventh-day Adventists: restoring men and women to the image of their Maker. The department fulfills these aims by three principal means: (1) instruction by Christian professors; (2) course work which develops a strong liberal-arts foundation and interdisciplinary preparation leading to many different fields of Christian service; and (3) extracurricular participation by students in voluntary religious activities, community service, and research.

### Minors, Cognates and Electives

Majors should take advantage of the variety of undergraduate courses available at Andrews to acquire a broad education. Combining behavioral science courses with other areas such as business, health, and language provides avenues for reaching individual professional goals. Students should counsel with advisors in selecting cognates and electives. Volunteer work is most beneficial and majors are urged to seek opportunities through the Service Learning Program. Those planning to pursue graduate studies should seek opportunities in research.

#### Research Sequence

It is strongly recommended that all BS majors take the Research Methods Sequence during their junior year.

#### **Research Application Process**

This section describes the competitive application process for undergraduate research beyond the undergraduate research methods sequence in the Behavioral Sciences Department. Students wishing to be considered as undergraduate researchers will need to write a cover letter with a statement of research interests (based on either current faculty interests or the students' own interests or prior in-class assignments), and attach a resume to an application (which has a section that includes the research classes and experience) to be considered as an undergraduate researcher. Applications will be reviewed at Spring faculty meetings for the next academic year, and each faculty member may select up to three projects to mentor for the following year (depending on other load considerations) from these applications. Students will receive an acceptance or rejection letter following the decision of the faculty. Faculty may also select students to mentor by direct invitation of the faculty member. A goal of this requirement is to set clear expectations for a specific end goal for the research project (such as conference poster, presentation, or research article).

#### Graduate Program Policies/Administration: On-Campus

The following details are related to the on-campus Community and International Development Program.

#### Contact Info

Buller Hall, Room 203
Phone: 269-471-6538; 269-471-6675
Fax: 269-471-3108
E-mail: cidp@andrews.edu
www.andrews.edu/cidp

#### **Administration**

Joel Raveloharimisy, Director

#### **Program Description**

The Department of Behavioral Sciences offers master's-level education leading to a Master of Science in Community & International Development (MSCID). The competencies graduates are expected to acquire include social-science foundations of community and international development, especially with regard to understanding the causes of poverty and the meaning of people-centered development; skills related to planning, implementing, and evaluating development projects including grantsmanship; knowledge of basic principles of organizational behavior; leadership and management as they relate to not-forprofit organizations; understanding of ethical principles and financial analysis for assuring individual and organizational accountability; competency in at least one concentration area of development emphasis to meet the student's career goals; mastery of social research methods appropriate to the chosen field of concentration, and the ability to communicate effectively to stakeholders about community development program and plans. Courses are taught on the campus of Andrews University: students who are interested may attend up to one off-campus intensive session with the MS in International Development.

Depending in part on previous work experience, graduates who pursue the Master of Science in Community and International Development may find employment working for inner-city development agencies, education based service-learning organizations, faith-based community service organizations, grass-roots community advocacy groups, national and international faith-based NGOs, United Nations organizations, government organizations, and other development and relief agencies. Graduates are not limited by their concentration to opportunities in the humanitarian industry as the MSCID training make students viable candidates for a host of consultancy positions requiring persons with skills in grant writing, not-forprofit administration, education and philanthropy.

#### Graduate Program Policies/Administration: On-Campus

The following details are related to the on-campus Community and International Development Program.

#### Contact Info

Buller Hall, Room 203

Phone: 269-471-6538; 269-471-6675

Fax: 269-471-3108 E-mail: cidp@andrews.edu www.andrews.edu/cidp

#### **Administration**

Joel Raveloharimisy, Director

#### **Program Description**

The Department of Behavioral Sciences offers master's-level education leading to a Master of Science in Community & International Development (MSCID). The competencies graduates are expected to acquire include social-science foundations of community and international development, especially with regard to understanding the causes of poverty and the meaning of people-centered development; skills related to planning, implementing, and evaluating development projects including grantsmanship; knowledge of basic principles of organizational behavior; leadership and management as they relate to not-forprofit organizations; understanding of ethical principles and financial analysis for assuring individual and organizational accountability; competency in at least one concentration area of development emphasis to meet the student's career goals; mastery of social research methods appropriate to the chosen field of concentration, and the ability to communicate effectively to stakeholders about community development program and plans. Courses are taught on the campus of Andrews University: students who are interested may attend up to one off-campus intensive session with the MS in International Development.

Depending in part on previous work experience, graduates who pursue the Master of Science in Community and International Development may find employment working for inner-city development agencies, education based service-learning organizations, faith-based community service organizations, grass-roots community advocacy groups, national and international faith-based NGOs, United Nations organizations, government organizations, and other development and relief agencies. Graduates are not limited by their concentration to opportunities in the humanitarian industry as the MSCID training make students viable candidates for a host of consultancy positions requiring persons with skills in grant writing, not-forprofit administration, education and philanthropy.

#### Graduate Program Policies/Administration: Off-Campus

The following details are related to the off-campus International Development Program.

## **Contact Info**

Buller Hall, Room 226 Phone: 269-471-3668 Fax: 269-471-3108 E-mail: idp@andrews.edu www.andrews.edu/idp

#### **Administration**

Dawn Dulhunty, Director
Romulus Chelbegean, Concentration Advisor
Lilianne Doukhan, Concentration Advisor
Tevni Grajales Guerra, Concentration Advisor
Herbert Helm, Concentration Advisor
Clive Holland, Concentration Advisor
Darius Jankiewicz, Concentration Advisor
Thomas Lowing, Concentration Advisor
Marcella Myers, Concentration Advisor
Lucile Sabas, Concentration Advisor
David Steen, Concentration Advisor

## **Program Description**

Education at Andrews University has always been rooted in the concept of Christian service. Educators, administrators, nurses, agronomists, and various technicians have developed schools, hospitals, agricultural programs, and a host of other institutions and facilities that can improve the quality of life for people everywhere. Through its Off-Campus Programs, Andrews University has made it possible for students to earn degrees at off-campus locations around the world. The International Development Program is one such option. The principal purpose of this program is to provide a venue for leadership training of professionals whose work responsibilities and life situation do not permit a return to full-time study at a university campus. The interdisciplinary program takes three to five years to complete and it draws on the strength of all six schools of the university. Students attend 2-3 week intensive sessions at extension sites in various locations around the world. The goal of the program is to strengthen organizations in project management skills and administration. The ultimate goal is to enable graduates to acquire whatever capacities they need to be effective agents in assisting communities to attain wellbeing for its present members and their future generations.

#### Administration of the Program

The Master of International Development Administration degree follows an off-campus format and is known as the International Development Program (IDP). This program is administered by a number of committees. The IDP Coordinating Committee includes program administrators and faculty (current and emeritus) of Andrews University who regularly attend the off-campus sessions to advise students, provide guidance on curricula, selection of teachers, and student learning outcomes. Program recommendations are also sent to the following committees for appropriate action: IDP Council, Department of Behavioral Sciences, Off-campus Programs, CAS Graduate Council, and the University Graduate Council. Further, these committees receive council from the IDP Advisory Board, which consists of academics, representatives of NGO organizations, and church administrators.

The day-to-day administration of the program is the responsibility of the International Development Program office headed by the Director of the International Development Program.

#### **Teaching Sites**

The International Development Program offers its classes in multiple regions and languages around the world. Venues and languages are subject to change but currently include Chile (Spanish), Ghana (English), Italy (English), Kenya (English), Rwanda (French and English), South Africa (English), South Sudan (English), and Togo (French). A university campus is the preferred venue in each region for the teaching sessions.

# **Bachelors**

# Behavioral Sciences BS

# Behavioral Sciences Core Courses - 15

- SOCI 432 Research Methods II: Introduction Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3

#### Choose one of these three courses

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### Choose one of these two courses

- SOCI 474 Social Thought and Theory Credits: 3
- PSYC 269 History and Systems of Psychology Credits: 3

# **Suggested Andrews Core Experience Courses**

PHIL 224 - Introduction to Philosophy Credits: 3

#### Choose one of the following two courses

- BHSC 220 An Interdisciplinary Approach to Contemporary Social Issues Credits: 3
- BHSC 235 Culture, Place and Interdependence Credits: 3

# Cognate

BHSC 230 - Research Methods I: Statistics for the Behavioral Sciences Credits: 3

## **Electives - 24**

The remaining credits are to be selected from at least two of the areas offered in the department or as specified in an area of emphasis below. Those with specific vocational goals may wish to consider one of the following areas of emphasis.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first

research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Behavioral Sciences, Anthropological Archaeology BS

# Anthropological Archaeology — 39

(27 credits must be selected from courses numbered 300 or above)

# Behavioral Sciences Core Courses — 15

#### Choose one of these

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### Choose one of these

- SOCI 474 Social Thought and Theory Credits: 3
- PSYC 269 History and Systems of Psychology Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3

# Anthropological Archaeology Core — 15

#### Choose one of these

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- ANTH 205 Introduction to Archaeology Credits: 3
- ANTH 435 Museum and Lab Methods Credits: 3
- ANTH 478 Archaeological and Ethnographical Credits: 3
- ANTH 496 Supervised Fieldwork in Anthropology or Archaeology Credits: 1

# Select at least 9 credits from the following choices:

- ANTH 440 Topics in Anthropology Credits: 1 (ANEA 510)
- ANTH440 Topics: Bible Lands Explorations (ANEA 514)
- ANTH440 Topics: Archaeology of Palestine (ANEA 614)
- BIOL 330 History of Earth and Life Credits: 4
- RELB 111 Introduction to the Old Testament Credits: 3

# Suggested Andrews Core Experience Courses

- BHSC 235 Culture, Place and Interdependence Credits: 3
- BIOL 100 Human Biology Credits: 4
- PHIL 224 Introduction to Philosophy Credits: 3
- RELT 348 Christians and the Environment Credits: 3

# Cognate — 3

BHSC 230 - Research Methods I: Statistics for the Behavioral Sciences Credits: 3

#### Recommended:

For students planning graduate-level training in Anthropology, a foreign language is highly recommended.

# Note:

\*Students pursuing this major who are interested in a career in International Development may qualify for advanced standing (one year) in the Master of Science in Community and International Development (MSCID) Program if they take at least five of the following: ACCT 121, SOCI 408, SOCI 421, SOCI 431, SOCI 433, SOCI 434. For more information regarding the MSCID, see Behavioral Sciences Graduate Program section.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Behavioral Sciences, Anthropology BS

# Anthropology — 39

(27 credits must be selected from courses numbered 300 or above)

# Behavioral Sciences Core Courses — 15

- SOCI 432 Research Methods II: Introduction Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3

#### Choose one of the following courses

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### Choose one of the following courses

- SOCI 474 Social Thought and Theory Credits: 3
- PSYC 269 History and Systems of Psychology Credits: 3

# Anthropological Core — 15

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- ANTH 205 Introduction to Archaeology Credits: 3
- ANTH 455 Ethnography Credits: 3

## Choose one of the following courses

ENGL 440 - Language and Culture Credits: 3

# Select at least 9 credits from the following choices:

- ANTH 415 Urban Anthropology Credits: 3
- ANTH 417 Cultural and Developmental Anthropology Credits: 3
- ANTH 478 Archaeological and Ethnographical Credits: 3
- ANTH 496 Supervised Fieldwork in Anthropology or Archaeology Credits: 1
- BHSC 440 Topics in \_\_\_\_\_ Credits: 1 \*

- BIOL 330 History of Earth and Life Credits: 4
- HIST 468 Multi-cultural America Credits: 3
- FMST 350 Family Cultural Perspectives Credits: 3
- PLSC 460 Area Study: Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3

#### Choose one of thes following courses

- RELG 360 Topics in Religion Credits: 1
- SOCI 160 Introduction to International Development Credits: 3

# **Suggested Andrews Core Experience Courses**

- BHSC 235 Culture, Place and Interdependence Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- RELT 348 Christians and the Environment Credits: 3

#### Choose one of the following courses

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 208 Environmental Science Credits: 4

# Cognate — 3

BHSC 230 - Research Methods I: Statistics for the Behavioral Sciences Credits: 3

## Recommended:

For students planning graduate-level training in Anthropology, a foreign language is highly recommended.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Behavioral Sciences, Public Health BS

# Public Health — 38-39

(27 credits must be selected from courses numbered 300 or above).

Because of the breadth of the public health emphasis, courses should be selected from each category in consultation with an advisor.

# Behavioral Sciences Core Courses — 18

- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3

#### Choose one of these three courses

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### Choose one of these three courses

- PSYC 269 History and Systems of Psychology Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3
- SOCI 455 Development Policy and Analysis Credits: 3

## Public Health Core — 14/15

- BHSC 405 Introduction to Public Health Credits: 3
- SOCI 350 Social Policy Credits: 2

#### Choose one of these two courses

SOCI 420 - Medical Sociology Credits: 3

#### Choose one of these three courses

- PSYC 420 Human Sexuality Credits: 3
- SOCI 408 Emergency Preparedness Credits: 2
- SOCI 415 Substance Abuse in American Society Credits: 2
- HLED 445 Consumer Health Credits: 2

#### Choose one of these three courses

- PSYC 319 Stress Management Credits: 3
- PSYC 455 Treatment of Substance Abuse Credits: 2
- PSYC 471 Behavior Modification Credits: 3

# Select at least 6 credits from the following choices:

- ECON 225 Principles of Macroeconomics Credits: 3
- EMST 310 Parent-Child Relationships Credits: 3
- SOCI 160 Introduction to International Development Credits: 3

# **Suggested Andrews Core Experience Courses**

- BIOL 221 Anatomy and Physiology I Credits: 4 \*
- And BIOL 222 Anatomy and Physiology II Credits: 4 \*
   Or
- BIOL 165 Foundations of Biology Credits: 5 or 4 \*
- And BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 208 Environmental Science Credits: 4
- CHEM 110 Introduction to Inorganic Chemistry Credits: 4 \*

  Or
- CHEM 131 General Chemistry I Credits: 4 \*
- And CHEM 132 General Chemistry II Credits: 4
- FDNT 230 Nutrition Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- RELT 348 Christians and the Environment Credits: 3

# Required Cognates — 8

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 480 Field Experience Credits: 1

#### Note:

<sup>\*</sup>These classes are required for graduate school admission.

<sup>\*</sup>Students pursuing a BS in Behavioral Sciences with an emphasis in Public Health who are interested in a career in International Development may qualify for advanced standing (one year) in the Master of Science in Community and International

Development Program (MSCID) if they take at least two of the following: ACCT 121, SOCI 408, SOCI 421, SOCI 431. For more information regarding the MSCID, see Behavioral Sciences Graduate Program section.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Behavioral Sciences, Student Development BS

# Student Development — 41

(27 credits must be selected from courses numbered 300 or above)

#### Core Courses — 21

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- PSYC 210 Introduction to Health Psychology Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- PSYC 450 Social Psychology Credits: 3

#### Choose one of these two courses

- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### Choose one of these two courses

- PSYC 269 History and Systems of Psychology Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3

#### Choose one of these acronyms - the courses are the same

- PSYC 432 Research Methods II: Introduction Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3

# **Emphasis Courses**

FMST 201 - Personal Relationships Credits: 3

- PSYC 204 Personal, Social and Career Development Credits: 3
- PSYC 252 The Psychology of Adolescence, Youth, and Aging Credits: 3
- PSYC 420 Human Sexuality Credits: 3
- PSYC 466 Psychology of the Exceptional Child Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3
- SOCI 480 Field Experience Credits: 1

# Required Andrews Core Experience Course — 3

PSYC 101 - Introduction to Psychology Credits: 3

# Cognate — 2+

GDPC 430 - Introduction to Residence-hall Administration Credits: 2

# Recommended:

GDPC 438 - Workshop Credits: 1–4

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Family Studies BS - 39

(27 credits must be selected from courses numbered 300 or above)

## Core Courses — 33

- BHSC 440 Topics in \_\_\_\_\_ Credits: 1
- FMST 115 Introduction to Family Studies Credits: 3
- FMST 201 Personal Relationships Credits: 3
- FMST 310 Parent-Child Relationships Credits: 3
- FMST 350 Family Cultural Perspectives Credits: 3
- FMST 454 Family Violence Across the Lifespan Credits: 3
- FMST 460 Family Resource Management Credits: 3
- FMST 470 Field Experience Credits: 1–8
- PSYC 301 Human Development Credits: 3
- PSYC 420 Human Sexuality Credits: 3
- SOCI 440 Sociology of the Family Credits: 3

# Family Studies Electives — 6

- ANTH 420 Food and Culture Credits: 3
- COMM 320 Interpersonal Communication Credits: 3
- PSYC 319 Stress Management Credits: 3
- PSYC 410 Introduction to Theories in Counseling & Psychotherapy Credits: 3
- PSYC 466 Psychology of the Exceptional Child Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3
- SOCI 350 Social Policy Credits: 2
- SOCI 430 Gender Roles in Contemporary Society Credits: 3
- SOCI 460 Death and Grief in Contemporary Society Credits: 2
- SOWK 315 Values, Ethics and Diversity Credits: 2 and as authorized by advisor. \*

# Required General Education Course — 3

PSYC 101 - Introduction to Psychology Credits: 3

# Cognates — 15

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- COMM 445 Family Communication Credits: 3
- FDNT 230 Nutrition Credits: 3
- PSYC 432 Research Methods II: Introduction Credits: 3

Choose one of the following three courses

- FNCE 206 Personal Finance Credits: 2,3
- BSAD 104 Introduction to Business Credits: 1
- BSAD 210 Small Business Management Credits: 3

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Psychology, Behavioral Neuroscience Emphasis BS

Everyone in the Behavioral Neurosciences Program will take the BNS Core (41-43 credits). They will also choose the BS in Biology with a Neuroscience Emphasis (26 credits); or BS in Biology with an emphasis in Behavioral/Mathematics (28 credits); or a BS in Psychology with an emphasis in Behavioral Neuroscience (27 credits)

# Major: Core Requirements — 41-43

#### Behavioral Neuroscience Core

- PSYC 180 Dealing with Your Mind Credits: 3
- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4

#### Choose one of the following sets:

- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

#### **Upper Division Core Courses:**

- BIOL 477 Neurobiology Credits: 3
- PSYC 364 Learning and Behavior Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- Or BIOL 450 Neuropsychopharmacology Credits: 3

# Andrews Core Experience — 43-46\*

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements.

\*46 credits for standard ACE packack; 43 credits for Honors.

Note: Completing the Behavioral Neuroscience core meets general education requirements for Interdisciplinary Social Science and both Physical and Life Sciences. If a student changes to another degree program, however, this substitutions will no longer apply even if already completed.

#### Religion

• RELT 385 - Bioethics and Christian Faith Credits: 3

#### Social Sciences

SOCI 119 - Principles of Sociology Credits: 3

# **BS: Psychology**

# Behavioral Neuroscience — 27

- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3
- PSYC 465 Physiological Psychology Credits: 3
- two upper division electives from biology, mathematics, biochemistry or psychology

#### Research Methods:

- PSYC 432 Research Methods II: Introduction Credits: 3
- PSYC 433 Research Methods III: Advanced Research Design Credits: 3
- PSYC 434 Research Methods IV: Advanced Statistical Analysis and SPSS Credits: 3

#### Research Project:

1 Credit of PSYC 438 - Workshop Credits: 1–3

#### Select one of the following options:

#### Option 1\*

- 2 Credits of PSYC 498 Research Project in Psychology Credits: 1–3
- Or HONS 497H Senior Honors Project Credits: 1

\*Application Requirements for Option 1: Acceptance as an undergraduate researcher by a specific faculty member through a competitive process or direct faculty invitation is required prior to enrolling in either of these project courses. Please see the Reasearch Application Process for more information.

#### Option 2

• 1 Upper Division Psychology Elective Credits: 3

# Cognates:

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- SOCI 119 Principles of Sociology Credits: 3
- RELT 385 Bioethics and Christian Faith Credits: 3

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Psychology, General BA

Two options are available -- General and Pre-Professional Program. The PPP is for students planning a graduate degree. Whichever program students choose they should consult with their advisors and classes should be chosen with occupational goals in mind. Students planning on graduate school should choose classes related to that area of specialization.

For both options, 21 credits must be selected from courses numbered 300 or above

## Introduction — 3

PSYC 101 - Introduction to Psychology Credits: 3

# Developmental — 3

PSYC 301 - Human Development Credits: 3 (or other developmental course)

# Professional Convention — 1

PSYC 438 - Workshop Credits: 1–3 (or an equivalent professional convention) 1-2
 Credits required

Or

PSYC 480 - Field Experience Credits: 1 (2 credits required)

# Methodology - 3

PSYC 432 - Research Methods II: Introduction Credits: 3

# **Content Courses - 18**

Select a minimum of five courses from Groups A and B.

#### Group A

Select a minimum of two courses from this group.

- PSYC 210 Introduction to Health Psychology Credits: 3
- PSYC 364 Learning and Behavior Credits: 3
- PSYC 425 Psycholinguistics Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- PSYC 465 Physiological Psychology Credits: 3
- PSYC 471 Behavior Modification Credits: 3

#### Group B

Select a minimum of two courses from this group.

- PSYC 269 History and Systems of Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3
- PSYC 454 Theories of Personality Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3

#### Group C

- PSYC 366 Drugs and Behavior Credits: 3
- PSYC 410 Introduction to Theories in Counseling & Psychotherapy Credits: 3
- PSYC 420 Human Sexuality Credits: 3
- PSYC 486 Psychological Assessment Credits: 3

# Cognates — 19-25

- RELT 340 Religion and Ethics in Modern Society Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3

#### Choose two from group A, B or C

#### Group A:

- BIOL 221 Anatomy and Physiology I Credits: 4
- BIOL 222 Anatomy and Physiology II Credits: 4

## Group B:

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4

#### Group C

- PSYC 465 Physiological Psychology Credits: 3
- BIOL 221 Anatomy and Physiology I Credits: 4

#### Choose one of these two courses

- SOCI 119 Principles of Sociology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3

Choose one sociocultural awareness class or experience.

- BHSC 235 Culture, Place and Interdependence Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- BHSC 440 Topics in Credits:
- ANTH 200 Cultural Anthropology Credits: 3
- An international tour via Andrews University, a student missionary experience OR Adventist Colleges Abroad.

### **Electives - 3**

Electives may be chosen from Content Courses not taken to meet minimum requirement. Other PSYC courses in the undergraduate program, or those approved by the advisor/chair.

### **Recommended:**

Field Experience

# **Major Field Test:**

Majors are required to take the Major Field Test in Psychology. The exam assesses the following areas: memory and thinking, sensory and physiology, developmental, clinical and abnormal, social, and measurement and methodology

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Psychology, General Program BS

# **BS: Psychology**

Four options are available—the General Program, the Pre-Professional Program, Health Psychology Emphasis, and Behavioral Neuroscience. The Pre-Professional Program is for students planning a graduate degree. Whichever program students choose, they should consult their advisor in regard to their psychology classes, general or elective classes, and an elective minor. Classes should be chosen with occupational goals in mind. Students planning on graduate school should choose classes related to that area of specialization.

# General Program — 40

(27 credits must be selected from courses numbered 300 or above)

## Introduction — 3

PSYC 101 - Introduction to Psychology Credits: 3

# Developmental — 3

PSYC 301 - Human Development Credits: 3 (or other developmental course)

## Professional Convention or Field Experience — 1-2

- PSYC 438 Workshop Credits: 1–3
- (or an equivalent professional convention) Credits: 1-2 or
- PSYC 480 Field Experience Credits: 1

# Methodology — 3

PSYC 432 - Research Methods II: Introduction Credits: 3

# Content Courses (Groups A, B, C) — 18

A minimum of five courses from Groups A & B

#### Group A

(a minimum of two courses from this group)

- PSYC 210 Introduction to Health Psychology Credits: 3
- PSYC 364 Learning and Behavior Credits: 3
- PSYC 425 Psycholinguistics Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- PSYC 465 Physiological Psychology Credits: 3
- PSYC 471 Behavior Modification Credits: 3

#### Group B

(a minimum of two courses from this group)

- PSYC 269 History and Systems of Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3
- PSYC 454 Theories of Personality Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3

## Group C

(a minimum of one course)

- PSYC 410 Introduction to Theories in Counseling & Psychotherapy Credits: 3
- PSYC 420 Human Sexuality Credits: 3
- PSYC 486 Psychological Assessment Credits: 3
- PSYC 366 Drugs and Behavior Credits: 3

# Electives — 11-12

Electives may be chosen from Content Courses not taken to meet minimum requirements. Other PSYC courses in the undergraduate program, or those approved by the advisor/chair.

# Cognates — 16-22

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
   (Honors students who take HONS105H, HONS106H and HONS415H, will meet the requirements of RELT340)

Choose (BIOL221 & BIOL222) or (BIOL221 & PSYC465) or (BIOL165 & BIOL166)

- BIOL 221 Anatomy and Physiology I Credits: 4
- BIOL 222 Anatomy and Physiology II Credits: 4
- PSYC 465 Physiological Psychology Credits: 3
- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4

Choose one of the following two courses

- SOCI 119 Principles of Sociology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3

One Sociocultural awareness class or experience may be met by taking one of the following:

- BHSC 235 Culture, Place and Interdependence Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- BHSC 440 Topics in Credits: 1

This topics course is Cultural Psychology taught in conjunction with an international tour via Andrews; or a student missionary experience, or attending Advcentist Colleges Abroad.

# Recommended:

Field Experience and a reading knowledge of a foreign language are strongly recommended, particularly for students who plan to take graduate studies in Psychology.

# **Major Field Test:**

Majors are required to take the Major Field Test in Psychology. The exam assesses the following areas: memory and thinking, sensory and physiology, developmental, clinical and abnormal, social, and measurement and methodology.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Psychology, Health Psychology BS

# **BS: Psychology**

Four options are available—the General Program, the Pre-Professional Program, Health Psychology Emphasis, and Behavioral Neuroscience. The Pre-Professional Program is for students planning a graduate degree. Whichever program students choose, they should consult their advisor in regard to their psychology classes, general or elective classes, and an elective minor. Classes should be chosen with occupational goals in mind. Students planning on graduate school should choose classes related to that area of specialization.

# Health Psychology — 40

(27 credits must be selected from courses numbered 300 or above)

# Core courses—19

- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 210 Introduction to Health Psychology Credits: 3
- PSYC 301 Human Development Credits: 3
- PSYC 432 Research Methods II: Introduction Credits: 3
- PSYC 433 Research Methods III: Advanced Research Design Credits: 3
- PSYC 434 Research Methods IV: Advanced Statistical Analysis and SPSS Credits: 3
- PSYC 438 Workshop Credits: 1–3

# Emphasis — 12

- PSYC 465 Physiological Psychology Credits: 3
- PSYC 366 Drugs and Behavior Credits: 3

#### Choose one of the following courses:

- PSYC 364 Learning and Behavior Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 471 Behavior Modification Credits: 3

#### Choose one of the following courses:

- PSYC 450 Social Psychology Credits: 3
- PSYC 454 Theories of Personality Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3

#### Electives - 9

#### Choose three of the following courses

Or you may substitute with other classes out of the emphasis which were not counted in the emphasis.

- PSYC 319 Stress Management Credits: 3
- PSYC 420 Human Sexuality Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- PSYC 486 Psychological Assessment Credits: 3

SOCI 420 - Medical Sociology Credits: 3

# Cognates — 21-23

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- PSYC 180 Dealing with Your Mind Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
   (Honors students who take HONS105H, HONS106H and HONS415H, will meet the requirements of RELT340)

#### Choose one set of Anatomy courses or Biology courses

- BIOL 221 Anatomy and Physiology I Credits: 4
- BIOL 222 Anatomy and Physiology II Credits: 4

  Or
  - BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4

#### Choose one of the following courses

- CHEM 110 Introduction to Inorganic Chemistry Credits: 4
   Or
- CHEM 131 General Chemistry I Credits: 4

# **Major Field Test:**

Majors are required to take the Major Field Test in Psychology. The exam assesses the following areas: memory and thinking, sensory and physiology, developmental, clinical and abnormal, social, and measurement and methodology.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Psychology, Pre-Professional BA

(21 credits must be selected from courses numbered 300 or above)

# Introduction - 3

PSYC 101 - Introduction to Psychology Credits: 3

# Developmental - 3

PSYC 301 - Human Development Credits: 3

# **Professional Convention - 1**

PSYC 438 - Workshop Credits: 1–3

# Methodology - 9

- PSYC 432 Research Methods II: Introduction Credits: 3
- PSYC 433 Research Methods III: Advanced Research Design Credits: 3
- PSYC 434 Research Methods IV: Advanced Statistical Analysis and SPSS Credits: 3

# Content Courses (Groups A & B) - 15

A minimum of five courses from Groups A & B and/or C

(a minimum of two courses from this group)

- PSYC 364 Learning and Behavior Credits: 3
- PSYC 425 Psycholinguistics Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- PSYC 465 Physiological Psychology Credits: 3
- PSYC 471 Behavior Modification Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3

#### Group B

(a minimum of two courses from this group)

- PSYC 269 History and Systems of Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3
- PSYC 454 Theories of Personality Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3
- (The 5th course can be chosen from either Group A, B or C)

#### Group C

- PSYC 410 Introduction to Theories in Counseling & Psychotherapy Credits: 3
- PSYC 486 Psychological Assessment Credits: 3

# Cognates: 19-25

- PHIL 224 Introduction to Philosophy Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3

#### Choose two from group A or B

#### Group A

- BIOL 221 Anatomy and Physiology I Credits: 4
- BIOL 222 Anatomy and Physiology II Credits: 4

#### Group B

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4

#### Choose one of the following two courses:

- SOCI 119 Principles of Sociology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3

#### Choose one sociocultural awareness class or experience

- BHSC 235 Culture, Place and Interdependence Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- BHSC 440 Topics in \_\_\_\_\_ Credits:
- ANTH 200 Cultural Anthropology Credits: 3
- An international tour via Andrews University, a student missionary experience OR Adventist Colleges Abroad.

# Recommended:

Field Experience

# Major Field Test:

Majors are required to take the Major Field Test in Psychology. The exam assesses the following areas: memory and thinking, sensory and physiology, developmental, clinical and abnormal, social, and measurement and methodology.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be

purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Psychology, Pre-Professional Program BS

# **BS: Psychology**

Four options are available—the General Program, the Pre-Professional Program, Health Psychology Emphasis, and Behavioral Neuroscience. The Pre-Professional Program is for students planning a graduate degree. Whichever program students choose, they should consult their advisor in regard to their psychology classes, general or elective classes, and an elective minor. Classes should be chosen with occupational goals in mind. Students planning on graduate school should choose classes related to that area of specialization.

# Pre-Professional Program — 40

(27 credits must be selected from courses numbered 300 or above)

#### Introduction — 3

PSYC 101 - Introduction to Psychology Credits: 3

# Developmental — 3

PSYC 301 - Human Development Credits: 3 (or other developmental course)

#### Professional Convention — 1-2

PSYC 438 - Workshop Credits: 1–3 (or an equivalent professional convention)
 This workshop is Midwestern Psychological Convention (or an equivalent professional convention)

# Methodology — 9

- PSYC 432 Research Methods II: Introduction Credits: 3
- PSYC 433 Research Methods III: Advanced Research Design Credits: 3
- PSYC 434 Research Methods IV: Advanced Statistical Analysis and SPSS Credits: 3

# Content Courses (Groups A, B, C) — 18

A minimum of five courses from Groups A & B

#### Group A

(a minimum of two courses from this group)

- PSYC 364 Learning and Behavior Credits: 3
- PSYC 425 Psycholinguistics Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- PSYC 465 Physiological Psychology Credits: 3
- PSYC 471 Behavior Modification Credits: 3

#### Group E

(a minimum of two courses from this group)

- PSYC 269 History and Systems of Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3
- PSYC 454 Theories of Personality Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3

# Group C

(a minimum of one course)

- PSYC 410 Introduction to Theories in Counseling & Psychotherapy Credits: 3
- PSYC 486 Psychological Assessment Credits: 3

- PSYC 490 Practicum in Psychology Credits: 3
- PSYC 366 Drugs and Behavior Credits: 3

#### Electives — 5-6

Electives may be chosen from Content Courses not taken to meet minimum requirements, other PSYC courses in the undergraduate program, or those approved by the advisor/chair.

# Cognates — 19–25

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
   (Honors students who take HONS105H, HONS106H and HONS415H, will meet the requirements of RELT340)

Choose (BIOL221 & BIOL222) or (BIOL221 & PSYC465) or (BIOL165 & BIOL166)

- BIOL 221 Anatomy and Physiology I Credits: 4
- BIOL 222 Anatomy and Physiology II Credits: 4
- PSYC 465 Physiological Psychology Credits: 3
- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4

Choose one of these two courses

- SOCI 119 Principles of Sociology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3

Choose one sociocultural awareness class or experience. This may be met by taking one of the following courses.

- BHSC 235 Culture, Place and Interdependence Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3

Advcentist Colleges Abroad.

BHSC 440 - Topics in \_\_\_\_\_ Credits: 1
 This topics course is Cultural Psychology taught in conjunction with an international tour via Andrews; or a student missionary experience, or attending

#### Recommended:

**Field Experience** and a reading knowledge of a foreign language are strongly recommended, particularly for students who plan to take graduate studies in Psychology

# Major Field Test:

Majors are required to take the Major Field Test in Psychology. The exam assesses the following areas: memory and thinking, sensory and physiology, developmental, clinical and abnormal, social, and measurement and methodology.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Sociology BA

# BA: Sociology - 30

(24 Credits must be selected from courses numbered 300 and above)

Core Courses - 15

#### Introduction:

SOCI 119 - Principles of Sociology Credits: 3

#### Methods:

- SOCI 432 Research Methods II: Introduction Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3

# Theory:

SOCI 474 - Social Thought and Theory Credits: 3

# Substantive Areas — 15

# Family:

• FMST 201 - Personal Relationships Credits: 3

#### Criminal Justice:

Choose one of these two courses

- SOCI 315 Criminology Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3

#### Health:

Choose one of these two courses

- SOCI 420 Medical Sociology Credits: 3
- SOCI 415 Substance Abuse in American Society Credits: 2

#### Race & Gender:

Choose one of these two courses

- SOCI 425 Racial and Ethnic Relations Credits: 3
- SOCI 430 Gender Roles in Contemporary Society Credits: 3

## Policy:

Choose one of these two courses

- SOCI 350 Social Policy Credits: 2
- SOCI 455 Development Policy and Analysis Credits: 3

# Required General Education Courses — 9

- BHSC 220 An Interdisciplinary Approach to Contemporary Social Issues Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3

# Cognates — 18

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- PSYC 180 Dealing with Your Mind Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- PSYC 450 Social Psychology Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3

#### Note:

Major field test is required. It is expected that all majors will attend at least one professional conference before graduation.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be 32

purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Sociology BS

# BS: Sociology 38-39

(27 credits must be selected from courses numbered 300 or above)

#### Core Courses — 29-30

- SOCI 119 Principles of Sociology Credits: 3
- SOCI 420 Medical Sociology Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- SOCI 430 Gender Roles in Contemporary Society Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3

#### Choose one of these two courses

- FMST 201 Personal Relationships Credits: 3
- SOCI 415 Substance Abuse in American Society Credits: 2

#### Choose one of these two courses

- SOCI 315 Criminology Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3

#### Electives — 9

(Choose three of the following five classes)

- FMST 310 Parent-Child Relationships Credits: 3
- SOCI 350 Social Policy Credits: 2
- SOCI 410 Social Gerontology Credits: 3
- SOCI 440 Sociology of the Family Credits: 3
- SOCI 460 Death and Grief in Contemporary Society Credits: 2

# Required General Education Courses — 9

- BHSC 220 An Interdisciplinary Approach to Contemporary Social Issues Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3

# Cognates — 15

(The following courses are required choices in your general education or elective program)

- ANTH 200 Cultural Anthropology Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- PSYC 450 Social Psychology Credits: 3

## Recommended:

A reading knowledge of a foreign language is strongly recommended for those planning on graduate work in Sociology.

## Major Field Test:

Majors are required to take the Major Field Test in Sociology

## Note:

It is expected that all majors will attend at least one professional conference before graduation

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Sociology, Emphasis in Community and International Development BS

# Community & International Development — 45

(27 credits must be selected from courses numbered 300 or above)

Community development workers perform a wide array of tasks that enable communities at the local or international level to change and improve various aspects in the lives of their residents. They work in different settings such as inner city agencies, service-learning organizations, community service organizations, community advocacy groups, etc. Additionally community development workers could work overseas in international relief and development agencies as well as for church-based mission

Students qualify for entry into the BS CID when they:

• Earn a minimum GPA of 2.00

programs.

 Receive grades of C or better in all required program prerequisite and cognate courses

# Sociology Core Courses — 15

- SOCI 119 Principles of Sociology Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3

#### Emphasis Courses — 30

- SOCI 160 Introduction to International Development Credits: 3
- SOCI 350 Social Policy Credits: 2
- SOCI 408 Emergency Preparedness Credits: 2
- SOCI 421 Development Theory & Practice Credits: 3
- SOCI 431 Needs Assessment and Social Policy Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 497 Internship Credits: 1,2
- ACCT 121 Fundamentals of Accounting Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3

# Choose one of these two courses

- PSYC 315 Organization and Human Resources Credits: 3
- BSAD 355 Management and Organization Credits: 3

# Cognate — 3

BHSC 230 - Research Methods I: Statistics for the Behavioral Sciences Credits: 3

## Internship

Students are required to complete a 200-hour internship: 2 credits of SOCI 486 or, for double majors with the BSW, SOWK 435 plus 1 credit of SOCI 486 (to the BSW internship add 100 hours of CID activities). Internships are normally completed during the senior year.

#### Recommended:

A reading knowledge of a foreign language is strongly recommended for those planning on graduate work. It is expected that all majors will attend at least one professional conference before graduation.

# **Electives As needed**

Add electives as needed to arrive at 124 credits needed to graduate.

### Note:

Completion of this emphasis prepares a student for Advanced Standing in the Master of Science in Community & International Development (MSCID) program, which allows students to finish the degree in one year instead of the usual two.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Sociology, Emphasis in Deviant Behavior BS

# Deviant Behavior — 38-39

(27 credits must be selected from courses numbered 300 or above)

# Core Courses — 29-30

- SOCI 119 Principles of Sociology Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3
- SOCI 420 Medical Sociology Credits: 3
- SOCI 430 Gender Roles in Contemporary Society Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3

#### Choose one of these three courses:

- PSYC 366 Drugs and Behavior Credits: 3
- SOCI 415 Substance Abuse in American Society Credits: 2
- FMST 201 Personal Relationships Credits: 3

# Emphasis Courses — 9

- FMST 454 Family Violence Across the Lifespan Credits: 3
- PSYC 460 Psychology of Abnormal Behavior Credits: 3
- SOCI 315 Criminology Credits: 3

# Required General Education Courses — 9

BHSC 220 - An Interdisciplinary Approach to Contemporary Social Issues Credits: 3

- PSYC 101 Introduction to Psychology Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3

# Cognates — 15

The following courses are required choices in your Andrews Core Experience or elective program.

- ANTH 200 Cultural Anthropology Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- PSYC 450 Social Psychology Credits: 3
- PSYC 454 Theories of Personality Credits: 3

# Required Cognates for Emphasis — 6

PSYC 420 - Human Sexuality Credits: 3

#### Recommended:

A reading knowledge of a foreign language for those planning on graduate work in Sociology.

### Major Field Test:

Majors are required to take the Major Field Test in Sociology.

#### Note:

\*It is expected that all majors will attend at least one professional conference before graduation.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Sociology, Emphasis in Emergency Preparedness BS

# Emergency Preparedness — 49

(27 credits must be selected from courses numbered 300 or above)

#### Foundation Courses — 39

SOCI 420 - Medical Sociology Credits: 3

Choose one of these two courses

- SOCI 425 Racial and Ethnic Relations Credits: 3
- SOWK 315 Values, Ethics and Diversity Credits: 2
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- FDNT 469 International Nutrition Credits: 2,3
- PLSC 260 Introduction to American Law Credits: 3
- PSYC 315 Organization and Human Resources Credits: 3
- PSYC 319 Stress Management Credits: 3
- SOCI 160 Introduction to International Development Credits: 3
- SOCI 350 Social Policy Credits: 2
- SOCI 432 Research Methods II: Introduction Credits: 3

- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 470 Demography Credits: 3
- SOWK 460 Death and Grief in Contemporary Society Credits: 2

# Emphasis Courses — 10

- SOCI 408 Emergency Preparedness Credits: 2
- SOCI 478 Principles and Practice of Hazards Mitigation Credits: 3
- SOCI 490 Capstone in Emergency Preparedness (Practicum) Credits: 1
- BSAD 355 Management and Organization Credits: 3

# Required General Education Courses — 15

- BHSC 235 Culture, Place and Interdependence Credits: 3
- BIOL 208 Environmental Science Credits: 4
- BIOL 260 General Microbiology Credits: 4
- CHEM 100 Consumer Chemistry Credits: 4

## Cognates — 6

- ACCT 121 Fundamentals of Accounting Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3

## **Electives**

- ANTH 417 Cultural and Developmental Anthropology Credits: 3
- SOCI 445 Emergency Planning Credits: 2
- SOCI 449 Disaster Response and Emergency Operations Credits: 2
- SOWK 477 Community Assessment and Capacity Mapping Credits: 2
- COMM 435 Crisis Communications Credits: 3

# Major Field Test:

Majors are required to take the Major Field Test in Sociology.

#### Note:

It is expected that all majors will attend at least one professional conference before graduation.

#### Note:

Completion of this emphasis prepares a student for Advanced Standing in the Master of Science in Community and International Development (MSCID) Program.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# Sociology, Emphasis in Sociology of the Family BS

# Sociology of the Family — 39

(27 credits must be selected from courses numbered 300 or above)

# Core Courses — 24

SOCI 119 - Principles of Sociology Credits: 3

- SOCI 420 Medical Sociology Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3

Choose one of these two courses

- SOCI 315 Criminology Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3

# Emphasis Courses — 12

- BHSC 440 Topics in \_\_\_\_\_ Credits: 1
- FMST 201 Personal Relationships Credits: 3
- FMST 350 Family Cultural Perspectives Credits: 3
- SOCI 430 Gender Roles in Contemporary Society Credits: 3

### Required General Education Courses — 9

- BHSC 220 An Interdisciplinary Approach to Contemporary Social Issues Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3

### Cognates — 27

(The following courses are required choices in your general education or elective program)

- ANTH 200 Cultural Anthropology Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- FMST 310 Parent-Child Relationships Credits: 3
- FMST 454 Family Violence Across the Lifespan Credits: 3
- FMST 460 Family Resource Management Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- PSYC 420 Human Sexuality Credits: 3
- PSYC 450 Social Psychology Credits: 3

# Electives — 3

# Recommended:

A reading knowledge of a foreign language for those planning on graduate work in Sociology.

## Major Field Test:

Majors are required to take the Major Field Test in Sociology.

#### Note:

It is expected that all majors will attend at least one professional conference before graduation.

# **Computer Policy**

In the behavioral sciences, the computer is an indispensible tool for collecting and working with data, accessing scientific reports, and for writing and critical thinking. As a result, the Department of Behavioral Sciences requires students to have a laptop computer in order to meet the requirements of the curriculum; this computer must be purchased by the student's second year in the program or the semester of the first research class, whichever is earlier. Students are responsible for maintaining their computer with the required software appropriate for the courses that they are enrolled in as they progress through the curriculum. A list of required software and minimum specifications that a laptop must meet is available in the Department of Behavioral Sciences office; use of the computer varies by course.

# **Undergraduate Minors**

# Anthropology Minor

## **Minors**

All minors require that students earn at least 14 credits in courses numbered 300 and above.

# Minor in Anthropology (20)

- ANTH 124 Introduction to Anthropology Credits: 3
- ANTH 200 Cultural Anthropology Credits: 3

Choose one of these two courses

- ANTH 455 Ethnography Credits: 3
- ANTH 496 Supervised Fieldwork in Anthropology or Archaeology Credits: 1

#### Note:

Students interested in emphasizing archaeology should also select:

- ANTH 205 Introduction to Archaeology Credits: 3
- ANTH 435 Museum and Lab Methods Credits: 3

# Cognates

Recommended cognates for students interested in archaeology include:

- BHSC 235 Culture, Place and Interdependence Credits: 3
- SOCI 160 Introduction to International Development Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3

# Behavioral Sciences Minor

#### Minors

All minors require that students earn at least 14 credits in courses numbered 300 and

# Minor in Behavioral Sciences (20)

Selected from at least three of the following five areas: anthropology, family studies, geography, psychology or sociology. Students choosing this minor should consult with the chair of the department.

# Community and International Development Minor

#### Minors

All minors require that students earn at least 14 credits in courses numbered 300 and above.

# Minor in Community and International Development (20)

- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- SOCI 160 Introduction to International Development Credits: 3
- SOCI 408 Emergency Preparedness Credits: 2
- SOCI 421 Development Theory & Practice Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3

In Addition, 3 credits of upper division BHSC, PSYC, or ANTH credits, subject to advisor approval.

add 3 credits of upper division BHSC, PSYC, or ANTH credits, subject to advisor approval.

Choose one of these two courses

- PSYC 315 Organization and Human Resources Credits: 3
- BSAD 355 Management and Organization Credits: 3

# Andrews Core Experience requirement:

ANTH 200 - Cultural Anthropology Credits: 3

## Other recommended course:

SOCI 480 - Field Experience Credits: 1 (2)
 (Students will complete a minimum 200-hr internship.)

# Advanced Standing:

A minor in Community and International Development progresses toward advanced study. Students with this minor who wish to pursue the Master of Science in Community and International Development (MSCID) will qualify for advanced standing (one-year degree) if they also take at least one of the following:

- SOCI 350 Social Policy Credits: 2
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- SOCI 455 Development Policy and Analysis Credits: 3

# Family Studies Minor

# **Minors**

All minors require that students earn at least 14 credits in courses numbered 300 and above.

# Minor in Family Studies (20)

- FDNT 230 Nutrition Credits: 3
- FMST 115 Introduction to Family Studies Credits: 3
- FMST 201 Personal Relationships Credits: 3
- FMST 310 Parent-Child Relationships Credits: 3
- FMST 460 Family Resource Management Credits: 3
- Additional credits chosen in consultation with program advisor.

# Psychology Minor

# **Minors**

All minors require that students earn at least 14 credits in courses numbered 300 and

# Minor in Psychology (20)

PSYC 101 - Introduction to Psychology Credits: 3

# At least one of:

- PSYC 364 Learning and Behavior Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- PSYC 465 Physiological Psychology Credits: 3
- PSYC 471 Behavior Modification Credits: 3

## And at least one of:

- PSYC 269 History and Systems of Psychology Credits: 3
- PSYC 450 Social Psychology Credits: 3

- PSYC 454 Theories of Personality Credits: 3
  - PSYC 460 Psychology of Abnormal Behavior Credits: 3

    Remaining 11 credits to be chosen from the other PSYC courses.

# Sociology Minor

### **Minors**

All minors require that students earn at least 14 credits in courses numbered 300 and above.

# Minor in Sociology: 20

- SOCI 119 Principles of Sociology Credits: 3
- SOCI 440 Sociology of the Family Credits: 3
- SOCI 474 Social Thought and Theory Credits: 3

#### Choose one of these four courses:

- BHSC 220 An Interdisciplinary Approach to Contemporary Social Issues Credits: 3
- FMST 201 Personal Relationships Credits: 3
- SOCI 425 Racial and Ethnic Relations Credits: 3
- SOCI 430 Gender Roles in Contemporary Society Credits: 3

#### Choose one of these three courses:

- SOCI 315 Criminology Credits: 3
- SOCI 345 Juvenile Delinquency Credits: 3
- PSYC 366 Drugs and Behavior Credits: 3

#### Choose one of these three courses:

- SOCI 160 Introduction to International Development Credits: 3
- SOCI 420 Medical Sociology Credits: 3
- SOCI 470 Demography Credits: 3
- Take one more 3 credit course from sociology acronyms or from any of the classes in the groups above.

# **Masters**

# Community and International Development, One-Year Advanced-Standing Program MSCID - On Campus

The advanced standing one-year program requires 30–35 credits of coursework and at least 300 hours of internship.

This alternative will allow students to finish their MSCID in one year, provided they have taken certain courses or courses of similar content during their undergraduate years in college. Students will be admitted into the advanced standing program if they have taken at least 7 of the following courses or their equivalents: ACCT 121 - Fundamentals of Accounting, Research Methods I, II, III, IV (BHSC 230, SOCI 432, SOCI 433, SOCI 434), SOCI 408 - Emergency Preparedness, BSAD 355 - Management and Organization or PSYC 315 - Organization and Human Resources, SOCI 421 - Development Theory & Practice, SOCI 431 - Needs Assessment and Social Policy, and Social Policy.

Advanced Standing curriculum is based on Regular Standing requirements, with course requirements taken prior to admission as prerequisites waived and credits reduced to no fewer than 30. Students who have taken at least 5 of these prerequisites may be accepted provisionally into the advanced standing program. Provisional status will remain in effect until the prerequisites are completed.

Students majoring in Anthropology, Psychology or Sociology with an emphasis in Emergency Preparedness or Public Health may refer to those sections of the bulletin for specific information on how these prerequisites can be integrated into their major.

In addition to having completed the prerequisites listed above and meeting the general admission requirements of the Andrews University School of Graduate Studies & Research, applicants to the one-year Advanced Standing program should also have the following:

- A bachelor's degree from an accredited college or university;
- An overall undergraduate GPA of 3.00 or higher, 3.50 or higher in 8 or more
  credits of previously taken graduate courses graded A–F. Students may be
  admitted provisionally with a GPA of 2.6 or higher. Such students must maintain
  a GPA of 3.0 or higher during their first 12 graduate credits to continue in the
  program:
- Completed Graduate Application packet.

The director of the program may request a personal interview or a third reference and/or other information.

Students who apply for admission to the MSCID program have two options related to the Graduate Record Exam (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. Scholarship amounts are based on the score achieved on the exam. For students who do not seek a graduate scholarship based on the GRE score, the GRE is not required.

Incoming graduate students who have finished their undergraduate degree in a relevant field or at a different university, but lack some courses with similar content required for advanced standing in the MSCID program, may take the CLEP test (College-Level Examination Program) so that they may qualify for advanced standing. Decisions regarding what classes could be accepted through CLEP will be taken on an individual basis.

**Recommended:** A reading knowledge of a foreign language is strongly recommended for those planning on graduate work.

### Advanced Standing—30-35

Students must complete at least 7 of the following classes to be eligible for Advanced Standing. Those with at least 5 classes may be accepted provisionally into Advanced Standing, and the missing prerequisites will be taken in addition to the regular requirements for the MSCID. These courses must have been taken at Andrews University.

- ACCT 121 Fundamentals of Accounting Credits: 3
- Or ACCT 501 Survey of Accounting Credits: 2
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3
- SOCI 432 Research Methods II: Introduction Credits: 3
- Or SOCI 532 Research Methods II: Introduction Credits: 2
- SOCI 433 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 3
- Or SOCI 533 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 2
- SOCI 434 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 3
- Or SOCI 534 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 2
- SOCI 421 Development Theory & Practice Credits: 3
- Or CIDS 520 Development Theory and Practice Credits: 3
- SOCI 408 Emergency Preparedness Credits: 2
- Or SOCI 508 Emergency Preparedness Credits: 2
- SOCI 455 Development Policy and Analysis Credits: 3
- Or CIDS 555 Development Policy and Analysis Credits: 3
- PSYC 315 Organization and Human Resources Credits: 3
- Or CIDS 515 Organization and Human Resources Credits: 3
- Or BSAD 515 Organizational Behavior & Leadership Credits: 3
- Or BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3

- SOCI 431 Needs Assessment and Social Policy Credits: 3
- Or CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3

#### **Concentration Areas**

The concentration area is selected by individual choice and will draw on Behavioral Sciences faculty strengths and utilize courses offered throughout the university. The program director/advisor, in consultation with the student, will select a minimum of four courses for 12 credits of elective courses related to the chosen concentration to meet the student's career goals. Students interested in international exposure but who cannot afford an overseas internship may elect to take a Study Tour and use applicable credits toward those required for the concentration. The number of tour credits applied to the degree must not exceed what is allowed by university policy (see Graduate Academic Information section for details). The tour should be relevant to the student's area of concentration. The student will submit a plan and rationale for the concentration requirements to the program director/advisor for approval.

Students, in consultation with the program director, may choose area of concentration that aligns with their research and career interests. Concentration areas are listed below, along with courses a student may take in each area. Students may, in consultation with their advisor, substitute courses within a concentration area. Additionally, students may choose a different area of concentration, provided they provide documentation that they are able to meet the general concentration requirements (adequate credits, appropriate field practicum, and research projects are available).

Choose 12 credits from classes listed in the concentration of choice.

### **Advocacy**

- CIDS 560 Political Economy of Development Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6
- CIDS 580 Organizational & Community Leadership Credits: 1,2
- PREL 510 Advancement and Communication Credits: 2
- PLSC 585 Seminar in International Relations Credits: 3
- SOCI 515 Racial and Ethnic Relations Credits: 3

### **Development Communication**

- CIDS 575 Topics in Community & International Development Credits: 1–6
- COMM 536 Issues in Intercultural Communication Credits: 2,3
- COMM 540 Communication in Development Practice Credits: 2,3
- COMM 590 Graduate Seminar in Video Advocacy Credits: 2,3
- JOUR 450 Multimedia Journalism Credits: 3
- PREL 510 Advancement and Communication Credits: 2

#### **Development Education**

- EDCI 650 Curriculum Design and Development Credits: 3
- EDCI 696 Project Implementation Credits: 1–3
- CIDS 550 Education for Sustainable Development Credits: 3
- SOCI 565 Demography Credits: 3
- EDCI 684 International Perspectives on Curriculum Credits: 3
- 3 Credits of CIDS 575 Topics in Community & International Development Credits:
   1–6

### Emergency Preparedness & Management\*

- COMM 535 Crisis Communications Credits: 2
- CIDS 575 Topics in Community & International Development Credits: 1–6
- SOCI 514 Migrant & Refugee Issues Credits: 2,3
- SOCI 549 Disaster Response and Emergency Operations Credits: 2
- SOCI 555 Emergency Planning Credits: 2
- SOCI 578 Principles and Practice of Hazards Mitigation Credits: 3
- CIDS 690 Independent Study Credits: 1

#### Choose one of the following courses:

- SOCI 460 Death and Grief in Contemporary Society Credits: 2
- SOWK 559 Death & Grief in Contemporary Society Credits: 2
- CIDS 559 Death and Grief in Contemporary Society Credits: 2

\*Students who take this concentration are required to obtain the Michigan Professional Emergency Manager Designation (PEM) certification. Students have the option between obtaining certification without registering for a course and registering for CIDS690 Independent Study (3 cr). Crefits will apply to degree completion. Both options require proof of completion. The Certification fee is administered by PEM at the student's expense.

### Gender and Development

- CIDS 575 Topics in Community & International Development Credits: 1–6
- CIDS 585 Gender, Economic Development, and Poverty Reduction Credits: 3
- CIDS 590 Issues in Gender and Development Credits: 3
- SOCI 510 Gender Roles in Contemporary Society Credits: 3
- SOCI 560 Family Resource Management Credits: 3
- SOCI 486 Gender, Ethnicity and Family in Development Credits: 3
- Or CIDS 586 Gender, Ethnicity and Family in Development Credits: 2

#### Global Health

- CIDS 575 Topics in Community & International Development Credits: 1–6
- FDNT 545 Nutrition and Wellness Programs Credits: 2
- FDNT 570 Maternal and Child Health Credits: 3
- SOCI 554 Community Health & Human Disease Credits: 2
- SOWK 660 Advanced Practice Evaluation Credits: 3

#### NGO Development and Operations

- ACCT 455 Accounting for Not-for-Profit Organizations Credits: 3
- BSAD 556 Topics in \_\_\_\_\_ Credits: 1
- BSAD 560 Intercultural Business Relations Credits: 3
- BSAD 670 Management of Human Resources Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6
- COMM 536 Issues in Intercultural Communication Credits: 2,3
- MKTG 540 Marketing Management in Not-for-Profit Organizations Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3

#### Choose one of the following courses:

- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3 (Concentration area selection must not also apply toward core.)

#### Peace Studies

This concentration is offered in cooperation with Anabaptist Mennonite Biblical Seminary (AMBS) for the purpose of establishing a limited articulation of graduate courses as part of an academic exchange program between the Master of Science in Community and International Development program at Andrews University and the Master of Arts: Peace Studies program at Anabaptist Mennonite Biblical Seminary. Students will work with the Director of CIDP to choose appropriate courses and steps to take to get registered. Students will not register for these courses through Andrews. They will take the courses from AMBS and register through the AMBS system and be transferred to AU.

#### Peace Studies core courses: (12)

- HTE550 Introduction to Peace Studies and Nonviolence, Credits: 3
- HTE644- Christian Attitudes Toward War, Peace, & Revolution, Credits: 3
- CHM542 Education for Peace and Justice, Credits: 2
- CHM633 Conflict, Communication, and Conciliation, Credits: 3
- HTE641- Economic Justice and Christian, Credits: 3
- HTE643 International Politics in Christian Perspective, Credits: 3
- CHM608 Christian Spirituality for Peace- and Justice-Making, Credits: 3

#### Youth and Sustainable Development

- CHMN 553 The Church and Social Issues Credits: 2,3
- CHMN 574 Perspectives in Church Marketing Credits: 2,3

- CHMN 623 Innovative Evangelism Credits: 2,3
- CHMN 656 Holistic Small Groups Credits: 2,3
- CIDS 550 Education for Sustainable Development Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6
- CIDS 580 Organizational & Community Leadership Credits: 1,2
- CIDS 590 Issues in Gender and Development Credits: 3
- DSRE 608 Youth and Young Adults in Contemporary Culture Credits: 2,3
- DSRE 626 Ministry to At-Risk Youth Credits: 2,3
- DSRE 564 Advanced Youth and Young Adult Ministry Leadership Credits: 2,3
- DSRE 636 Seminar in Youth Ministry Credits: 2,3
- DSRE 678 Spiritual Nurture of Children Credits: 2,3
- SOCI 510 Gender Roles in Contemporary Society Credits: 3
- SOCI 515 Racial and Ethnic Relations Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3

### **Assistantships**

Students have the opportunity to apply for graduate assistantships—administrative, teaching or research.

#### **Additional Information**

The schools and departments regulate policies that govern the elective courses offered as part of the concentration package and some may not be available. Some elective courses may require prerequisites and should be discussed in advance with the program director/advisor for guidance in completing the concentration.

The Field Practicum and Research Project/Thesis will necessarily be related to the area of concentration in order to provide students with an in-depth understanding of the chosen area, and with the possibility of applying course work in practice. Students are required to undertake a 300-hour internship through a field placement with a domestic, national, or international organization/project. Internships are based on prior approval and advice from the program director. Arrangements for the internship will be made by the program director/advisor pending availability and feasibility of the placement proposed by the student.

## Community and International Development, Two-Year Regular Program MSCID - On-Campus

The regular standing two-year program requires 39–40 credits of coursework and internship.

Applicants to the regular two-year program must meet the following criteria, in addition to other general admission requirements of the Andrews University School of Graduate Studies & Research:

- A bachelor's degree from an accredited college or university;
- An overall undergraduate GPA of 3.00 or 3.50 in 8 or more credits of previously taken graduate courses graded A–F. Students may be admitted provisionally with a GPA of 2.6 or higher. Such students must maintain a GPA of 3.0 or higher during their first 12 graduate credits to continue in the program;
- Completed Graduate Application packet.
- Completed coursework in Accounting, Statistics and Research II. Provisional
  acceptance may be granted without these courses, and the student would be
  expected to take them during the first year of enrollment. Credits for
  prerequisites do not apply toward the MSCID.

The director of the program may request a personal interview or a third reference and/or other information.

Students who apply for admission to the MSCID program have two options related to the Graduate Record Exam (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. Scholarship amounts are based on the score achieved on the exam. For students who do not seek a graduate scholarship based on the GRE score, the GRE is not required.

**Recommended:** A reading knowledge of a foreign language is strongly recommended for those planning on graduate work.

### **Degree Requirements**

### Regular Standing—39–40

#### CIDP Core Courses—11

- CIDS 520 Development Theory and Practice Credits: 3
- CIDS 555 Development Policy and Analysis Credits: 3
- ANTH 517 Cultural and Developmental Anthropology Credits: 2
- CIDS 524 Humanitarian Studies: Theory and Practice Credits: 3

#### Development Management—10

- CIDS 538 Needs Assessment, Project Design and Evaluation Credits: 3
- CIDS 535 Budgeting, Fundraising & Grantsmanship Credits: 2
- SOCI 508 Emergency Preparedness Credits: 2

#### Choose one of the following two courses:

- CIDS 515 Organization and Human Resources Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3

#### Research Tools & Skills-6-7

- SOCI 533 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 2
- SOCI 534 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 2
- CIDS 670 Comprehensive Exam Credits: 0

#### Choose one of the following two courses:

- CIDS 698 Research Project Credits: 2,3
- CIDS 699 Master's Thesis Credits: 3,4

#### Practicum—1

CIDS 680 - Field Practicum Credits: 1,2

#### Concentration Electives—12

#### **Concentration Areas**

The concentration area is selected by individual choice and will draw on Behavioral Sciences faculty strengths and utilize courses offered throughout the university. The program director/advisor, in consultation with the student, will select a minimum of four courses for 12 credits of elective courses related to the chosen concentration to meet the student's career goals. Students interested in international exposure but who cannot afford an overseas internship may elect to take a Study Tour and use applicable credits toward those required for the concentration. The number of tour credits applied to the degree must not exceed what is allowed by university policy (see Graduate Academic Information section for details). The tour should be relevant to the student's area of concentration. The student will submit a plan and rationale for the concentration requirements to the program director/advisor for approval.

Students, in consultation with the program director, may choose area of concentration that aligns with their research and career interests. Concentration areas are listed below, along with courses a student may take in each area. Students may, in consultation with their advisor, substitute courses within a concentration area. Additionally, students may choose a different area of concentration, provided they provide documentation that they are able to meet the general concentration requirements (adequate credits, appropriate field practicum, and research projects are available).

#### Choose 12 credits from classes listed in the concentration of choice.

#### Advocacy

- CIDS 560 Political Economy of Development Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6
- CIDS 580 Organizational & Community Leadership Credits: 1,2
- PREL 510 Advancement and Communication Credits: 2
- PLSC 585 Seminar in International Relations Credits: 3
- SOCI 515 Racial and Ethnic Relations Credits: 3

**Development Communication** 

- CIDS 575 Topics in Community & International Development Credits: 1–6
- COMM 536 Issues in Intercultural Communication Credits: 2.3
- COMM 540 Communication in Development Practice Credits: 2.3
- COMM 590 Graduate Seminar in Video Advocacy Credits: 2,3
- JOUR 450 Multimedia Journalism Credits: 3
- PREL 510 Advancement and Communication Credits: 2

### Development Education

- EDCI 650 Curriculum Design and Development Credits: 3
- EDCI 696 Project Implementation Credits: 1-3
- CIDS 550 Education for Sustainable Development Credits: 3
- SOCI 565 Demography Credits: 3
- EDCI 684 International Perspectives on Curriculum Credits: 3
- 3 Credits of CIDS 575 Topics in Community & International Development Credits:
   1–6

### Emergency Preparedness & Management\*

- COMM 535 Crisis Communications Credits: 2
- CIDS 575 Topics in Community & International Development Credits: 1–6
- SOCI 514 Migrant & Refugee Issues Credits: 2,3
- SOCI 549 Disaster Response and Emergency Operations Credits: 2
- SOCI 555 Emergency Planning Credits: 2
- SOCI 578 Principles and Practice of Hazards Mitigation Credits: 3
- CIDS 690 Independent Study Credits: 1

#### Choose one of the following courses:

- SOCI 460 Death and Grief in Contemporary Society Credits: 2
- SOWK 559 Death & Grief in Contemporary Society Credits: 2
- CIDS 559 Death and Grief in Contemporary Society Credits: 2

\*Students who take this concentration are required to obtain the Michigan Professional Emergency Manager Designation (PEM) certification. Students have the option between obtaining certification without registering for a course and registering for CIDS690 Independent Study (3 cr). Crefits will apply to degree completion. Both options require proof of completion. The Certification fee is administered by PEM at the student's expense.

#### Gender and Development

- CIDS 575 Topics in Community & International Development Credits: 1–6
- CIDS 585 Gender, Economic Development, and Poverty Reduction Credits: 3
- CIDS 590 Issues in Gender and Development Credits: 3
- SOCI 510 Gender Roles in Contemporary Society Credits: 3
- SOCI 560 Family Resource Management Credits: 3
- SOCI 486 Gender, Ethnicity and Family in Development Credits: 3
- Or CIDS 586 Gender, Ethnicity and Family in Development Credits: 2

### Global Health

- CIDS 575 Topics in Community & International Development Credits: 1–6
- FDNT 545 Nutrition and Wellness Programs Credits: 2
- FDNT 570 Maternal and Child Health Credits: 3
- SOCI 554 Community Health & Human Disease Credits: 2
- SOWK 660 Advanced Practice Evaluation Credits: 3

### NGO Development and Operations

- ACCT 455 Accounting for Not-for-Profit Organizations Credits: 3
- BSAD 556 Topics in \_\_\_\_\_ Credits: :
- BSAD 560 Intercultural Business Relations Credits: 3
- BSAD 670 Management of Human Resources Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6

- COMM 536 Issues in Intercultural Communication Credits: 2,3
- MKTG 540 Marketing Management in Not-for-Profit Organizations Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3

#### Choose one of the following courses:

- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3 (Concentration area selection must not also apply toward core.)

#### Peace Studies

This concentration is offered in cooperation with Anabaptist Mennonite Biblical Seminary (AMBS) for the purpose of establishing a limited articulation of graduate courses as part of an academic exchange program between the Master of Science in Community and International Development program at Andrews University and the Master of Arts: Peace Studies program at Anabaptist Mennonite Biblical Seminary. Students will work with the Director of CIDP to choose appropriate courses and steps to take to get registered. Students will not register for these courses through Andrews. They will take the courses from AMBS and register through the AMBS system and be transferred to AU.

#### Peace Studies core courses: (12)

- HTE550 Introduction to Peace Studies and Nonviolence, Credits: 3
- HTE644- Christian Attitudes Toward War, Peace, & Revolution, Credits: 3
- CHM542 Education for Peace and Justice, Credits: 2
- CHM633 Conflict, Communication, and Conciliation, Credits: 3
- HTE641- Economic Justice and Christian, Credits: 3
- HTE643 International Politics in Christian Perspective, Credits: 3
- CHM608 Christian Spirituality for Peace- and Justice-Making, Credits: 3

### Youth and Sustainable Development

- CHMN 553 The Church and Social Issues Credits: 2,3
- CHMN 574 Perspectives in Church Marketing Credits: 2,3
- CHMN 623 Innovative Evangelism Credits: 2,3
- CHMN 656 Holistic Small Groups Credits: 2,3
- CIDS 550 Education for Sustainable Development Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6
- CIDS 580 Organizational & Community Leadership Credits: 1,2
- CIDS 590 Issues in Gender and Development Credits: 3
- DSRE 608 Youth and Young Adults in Contemporary Culture Credits: 2,3
- DSRE 626 Ministry to At-Risk Youth Credits: 2,3
- DSRE 564 Advanced Youth and Young Adult Ministry Leadership Credits: 2,3
- DSRE 636 Seminar in Youth Ministry Credits: 2.3
- DSRE 678 Spiritual Nurture of Children Credits: 2,3
- SOCI 510 Gender Roles in Contemporary Society Credits: 3
- SOCI 515 Racial and Ethnic Relations Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3

### Assistantships

Students have the opportunity to apply for graduate assistantships—administrative, teaching or research.

#### Additional Information

The schools and departments regulate policies that govern the elective courses offered as part of the concentration package and some may not be available. Some elective courses may require prerequisites and should be discussed in advance with the program director/advisor for guidance in completing the concentration.

The Field Practicum and Research Project/Thesis will necessarily be related to the area of concentration in order to provide students with an in-depth understanding of the chosen area, and with the possibility of applying course work in practice. Students are required to undertake a 300-hour internship through a field placement with a domestic, national, or international organization/project. Internships are based on prior approval and advice from the program director. Arrangements for the internship will be made by the program director/advisor pending availability and feasibility of the placement proposed by the student.

## International Development Major, MIDA - Off-Campus

The purpose of the International Development major is to meet the evolving needs of professionals to advance their field of interest, whether it is humanitarian work, economic development, international business, public service, health, or other professions involved with social, cultural, and political challenges within communities. It is a program to build capacity in project management based on principles of excellence, justice, and advocacy to embrace sustainable partnerships.

### **Degree Requirements—39 Credits**

#### Core Courses—26

#### Social Science Foundations-5

- ANTH 517 Cultural and Developmental Anthropology Credits: 2
- CIDS 520 Development Theory and Practice Credits: 3

#### Planning/Evaluation—6

- CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3
- CIDS 536 Development Design & Evaluation Credits: 3

#### Management—8

- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- COMM 540 Communication in Development Practice Credits: 2,3

#### Individual and Organizational Accountability—7

- ACCT 625 Financial Analysis and Reporting Credits: 3
- IDAS 610 Ethics in Development Credits: 2
- PLSC 525 Public Policy, Civil Society and Development Credits: 2,3

#### Focus Area Courses—13

Students are required to complete a focus area involving 13 semester credits in a selected specialization area. The majority of these courses are completed in a directed study format. This allows the student's specialization area to be uniquely tailored to suit his/her personal and professional goals. A focus area is selected in the first year of study.

- IDAS 597 Portfolio Credits: 1
- IDAS 613 Applied Statistical Methods Credits: 2
- IDAS 623 Development Research Methods Credits: 2
- IDAS 635 Professional Training: Focus Area Credits: 2
- IDAS 680 Field Practicum: Focus Area Credits: 2
- IDAS 696 Specialization Essay: Focus Area Credits: 1
- IDAS 697 Research Project Credits: 3

#### International Development Focus Areas

Focus area topics include, but are not limited to: Advocacy, Agro Forestry, Child Advocacy, Civil Society, Cross Cultural Relations, Development Policies of Government, Disaster Preparedness, Education, Environmental Studies, Food Security, Gender and Development, Microenterprise, NPO Policies and Operations, Peace and Conflict Resolution, Poverty Mitigation, and Public Health.

The student may choose other focus areas which are not listed and as recommended by the program director for approval by the Faculty of the Department of Behavioral Sciences

#### Comprehensive Exam

IDAS 670 - Comprehensive Examinations Credits: 0

#### Total Credits—39

### **IDP Admission Requirements**

To be admitted to regular standing into the International Development Program, students must

- Qualify for general admission into graduate studies at Andrews University
- Hold a four-year baccalaureate degree from an accredited American university or senior college, or its equivalent from a comparable institution outside the U.S.
- Demonstrate adequate undergraduate preparation in the proposed field of graduate study and in general education.
- Indicate ability to handle master's-level work in the language of instruction.

#### Note:

- Access to email communication is compulsory for participation in this program.
- The Graduate Record Examination (GRE) transcript requirement is waived for students in the overseas program.
- TOFEL is waived for students in this program.

#### For More Information

For contact information, program administration details, & site locations, please click here.

## Organizational Leadership Major, MIDA - Off-Campus

The purpose of the Organizational Leadership major is to develop trained leadership to meet the significant needs of growing not-for-profit organizations. Such leaders will develop skills based on the concepts of servant leadership, will understand and practice leadership as a collaborative process, and will demonstrate appropriate administrative skills in research, strategic approaches to program planning and evaluation, finance, communication, and ethics along with skills in a specific area of leadership.

### Degree Requirements—39 Credits

### Core Courses—26

### Social Science Foundations—5

- ANTH 517 Cultural and Developmental Anthropology Credits: 2
- CIDS 520 Development Theory and Practice Credits: 3

#### Planning/Evaluation—6

- CHMN 526 Conflict Management Credits: 2,3
- IDAS 630 Program Design and Evaluation Credits: 3

#### Management—8

- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- COMM 540 Communication in Development Practice Credits: 2,3

#### Individual and Organizational Accountability—7

- ACCT 625 Financial Analysis and Reporting Credits: 3
- IDAS 610 Ethics in Development Credits: 2
- PLSC 525 Public Policy, Civil Society and Development Credits: 2,3

#### Focus Area Courses—13

Students are required to complete a focus area involving 13 semester credits in a selected specialization area. The majority of these courses are completed in a directed study format. This allows the student's specialization area to be uniquely tailored to suit his/her personal and professional goals. A focus area is selected in the first year of study.

- IDAS 597 Portfolio Credits: 1
- IDAS 613 Applied Statistical Methods Credits: 2
- IDAS 623 Development Research Methods Credits: 2
- IDAS 635 Professional Training: Focus Area Credits: 2

- IDAS 680 Field Practicum: Focus Area Credits: 2
- IDAS 696 Specialization Essay: Focus Area Credits: 1
- IDAS 697 Research Project Credits: 3

#### Organizational Leadership Focus Areas

Focus area topics include, but are not limited to: Church Administration; Community and International Development; Community Mobilization; Development Policies of Government and Religion; and Leadership Models.

The student may choose other focus areas which are not listed and as recommended by the program director for approval by the Faculty of the Department of Behavioral Sciences.

### Comprehensive Exam

IDAS 670 - Comprehensive Examinations Credits: 0

#### Total Credits—39

### **IDP Admission Requirements**

To be admitted to regular standing into the International Development Program, students must

- Qualify for general admission into graduate studies at Andrews University
- Hold a four-year baccalaureate degree from an accredited American university or senior college, or its equivalent from a comparable institution outside the U.S.
- Demonstrate adequate undergraduate preparation in the proposed field of graduate study and in general education.
- Indicate ability to handle master's-level work in the language of instruction.

#### Note:

- Access to email communication is compulsory for participation in this program.
- The Graduate Record Examination (GRE) transcript requirement is waived for students in the overseas program.
- TOFEL is waived for students in this program.

#### For More Information

For contact information, program administration details, & site locations, please click

### **Masters Dual Degrees**

**Note:** Because each dual degree is listed in two schools you will find duplicates. The content is identical except for order of information.

Master of Science in Community & International

Development/Master of Youth & Young Adult Ministry Dual Degree CIDP/MAYYAM

### **Dual Degree Program Description**

The Dual Degree Program in Community and International Development (CIDP) and Youth and Young Adult Ministry (MAYYAM) allows students to complete two degrees in three years. To facilitate this objective, the two programs will reduce the total number of required credits and will share a practicum and a limited number of elective courses. This amounts to a total of 69 credits to fulfill the Dual Degree.

- The MAYYAM program is a 48-credit degree but it will share (use) six elective credits with the CIDP program thereby reducing MAYYAM credits to 42.
- The CIDP program will reduce the required number of credits from 39 to 30 by removing the concentration requirement. In addition, up to two CIDP elective credits can be fulfilled through MAYYAM courses reducing the CIDP credits to

28. Finally, CIDP's 1-credit Practicum requirement will be fulfilled through MAYYAM's required practicum. Reducing the CIDP credits to 27.

Since both the CIDP and MAYYAM programs reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree.

### Combined Total Credits - 69

#### CIDP Total Credits - 27

### CIDP Program Requirements - 30

#### Core Requirements - 10

- CIDS 520 Development Theory and Practice Credits: 3
- CIDS 555 Development Policy and Analysis Credits: 3
- SOCI 508 Emergency Preparedness Credits: 2
- ANTH 517 Cultural and Developmental Anthropology Credits: 2

#### Development Management - 11

- CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3
- CIDS 535 Budgeting, Fundraising & Grantsmanship Credits: 2
- CIDS 536 Development Design & Evaluation Credits: 3

#### Choose one of the following courses:

- CIDS 515 Organization and Human Resources Credits: 3
- Or BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3

#### Research - 6

- SOCI 533 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 2
- SOCI 534 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 2
- CIDS 670 Comprehensive Exam Credits: 0

#### Choose one of the following courses:

- CIDS 698 Research Project Credits: 2,3
- Or CIDS 699 Master's Thesis Credits: 3,4

#### Practicum - 1

This course is fulfilled through the MAYYAM degree practicum course DSRE 660

#### Electives - 2

These electives are fulfilled through MAYYAM degree courses.

### **CIDP Admission Requirements**

#### Acceptance Criteria

Applicants to the regular two-year standing program must meet the following creteria, in addition to other general admission requirements of the Andrews University School of Graduate Studies & Research.

- A bachelor's degree from an accredited college or university.
- An overall undergraduate GPA of 3.00 or 3.50 in 8 or more credits of previously taken graduate courses graded A-F. Students may be admitted provisionally with a GPA of 2.6 or higher. Such students must maintain a GPA of 3.0 or higher during their first 12 graduate credits to continue in the program;
- Completed Graduate Application packet.
- Completed coursework in Accounting, Statistics and Research II. Provisional
  acceptance may be granted without these courses, and the student would be
  expected to take them during the first year of enrollment. Credits for
  prerequisites do not apply toward the MSCID.

The director of the program may request a personal interview or a third reference and/or other information.

#### GRE

Students who apply for admission to the MSCID program have two options related to the Graduate Record Exam (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. Scholarship amounts are based on the score achieved on the exam. For students who do not seek a graduate scholarship based on the GRE score, the GRE is not required.

#### Language Requirements

A reading knowledge of a foreign language is strongly recommended for those planning on graduate work.

#### **CIDP Additional Information**

### **Assistantships**

Students have the opportunity to apply for graduate assistantships - administrative, teaching or research.

### MAYYAM Total Credits - 42

### **MAYYAM Program Requirements - 48**

### Core Requirements - 18

- 2 Credits of DSRE 541 Foundations of Biblical Spirituality Credits: 2,3
- CHIS 574 History of Seventh-day Adventist Theology Credits: 2
- Two courses in Old Testament and/or New Testament (4 cr reg)
- Two courses in Theology. One ethics course recommended. (4 cr req)
- 2 Credits of CHMN 523 Worship: Word and Music Credits: 2,3
- One course in Conflict Resolution or Church Leadership from Christian Ministry (2 cr req)
- One course in World Missions (2 cr req)

### Youth Ministry Emphasis - 12

- 2 Credits of DSRE 534 Ministry to Youth and Young Adults Credits: 2,3
- 2 Credits of DSRE 564 Advanced Youth and Young Adult Ministry Leadership Credits: 2,3
- 2 Credits of DSRE 608 Youth and Young Adults in Contemporary Culture Credits: 2,3
- 2 Credits of DSRE 656 Counseling Youth and Young Adults Credits: 2,3
- 2 Credits of CHMN 632 Contextualized Preaching Credits: 2,3
- 2 Credits of DSRE 605 Contemporary Topics in Religious Education and Discipling Credits: 2.3
- Or 2 Credits of DSRE 610 Teaching for Discipleship Credits: 2,3

#### Youth Ministry Electives - 6

#### Choose 3 courses (6 credits) from the following:

- DSRE 546 Marriage and Family Credits: 2,3
- DSRE 619 Religious Experience in Adolescence Credits: 2,3
- DSRE 626 Ministry to At-Risk Youth Credits: 2,3
- DSRE 636 Seminar in Youth Ministry Credits: 2,3 (Choose no more than two topics from Campus Chaplaincy, Children's Ministry, Adolescent Ministry, Young Adult Ministry, Youth Evangelism, Visionary Leadership, African-American Youth Ministry, Hispanic Youth Ministry)
- DSRE 678 Spiritual Nurture of Children Credits: 2,3
- CHMN 553 The Church and Social Issues Credits: 2,3
- CHMN 555 Pastoral Counseling Credits: 2,3
- CHMN 574 Perspectives in Church Marketing Credits: 2,3
- CHMN 616 Spirituality in Ministry Credits: 2,3
- CHMN 623 Innovative Evangelism Credits: 2,3
- CHMN 656 Holistic Small Groups Credits: 2,3

#### Practicum - 6

6 Credits of DSRE 660 - Field Practicum: Youth and Young Adult Ministry Credits: 1
 \*Registration is normally allowed only after the student has earned 24 credits or more

#### Electives - 6

These electives are fulfilled through the CIDP course requirements.

#### **MAYYAM Denominational Certification**

The Basic Teaching Certificate for denominational certification may be issued to the candidate presenting a Verification of Eligibility form from Andrews University. The certificate is issued by the union conference where the candidate takes his/her first teaching position.

Requirements for this certificate may be completed by taking additional courses along with the MA in Youth and Young Adult Ministry. More information about preparing to teach religion in Adventist schools is available from the University Certification Registrar in the School of Education.

### **MAYYAM Graduation Requirements**

The MA in Youth and Young Adult Ministry degree is awarded upon successful completion of a minimum of 48 semester credits with a cumulative GPA of 2.5 or better. A minimum of 24 semester credits are to be taken at the Theological Seminary or at an authorized extension center. The course work for the MA in Youth and Young Adult Ministry normally should be completed within seven years.

#### **MAYYAM Additional Information**

#### **Transfer Credits**

A maximum of 24 transfer graduate credits, when applicable, may be accepted from approved seminaries or universities upon approval of the dean. Credits approved under the Credit Through Learning in Professional Experience provision (see below) are considered part of the maximum of 24 transfer credits.

## Master of Science in Community and International Development/Master of Social Work Dual Degree MSCID/MSW

### **Dual Degree Program Description**

Andrews University has chosen to explore a collaborative between the Community & International Development Program (CIDP) and the Department of Social Work in the College of Arts & Sciences to prepare students for service in occupations where social work and international development intersect. Social Workers, particularly those in the areas of Administration and Development and International Social Work, may have an interest in international work. In such situations, the MSCID could equip them with a complementary skill set. Likewise, development and relief workers often find themselves in situations where social work skills in counseling and therapy would be useful. In addition, the MSCID/MSW collaborative allows for a greater breadth of employment opportunities for students.

Since both the MSW and MSCID programs reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree. In the event that one degree was completed prior to enrollment for the dual degree program, the requirements for the second degree would be met through completion of the requirements shown below.

### MSCID Degree Requirements - 39-40 Credits

#### CIDP Core Courses - 11 Credits

- CIDS 520 Development Theory and Practice Credits: 3
- SOCI 508 Emergency Preparedness Credits: 2
- ANTH 517 Cultural and Developmental Anthropology Credits: 2

Remaining 3 credit hours satisfied by SOWK 630 - Policy for Social Change

### Development Management - 10 Credits

- CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3
- CIDS 536 Development Design & Evaluation Credits: 3
- CIDS 535 Budgeting, Fundraising & Grantsmanship Credits: 2

Choose one of the following three courses:

- CIDS 515 Organization and Human Resources Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- BSAD 515 Organizational Behavior & Leadership Credits: 3

#### Research Tools & Skills - 6-7 Credits

- SOCI 533 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 2
- SOCI 534 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 2
- CIDS 670 Comprehensive Exam Credits: 0
- CIDS 698 Research Project Credits: 2,3 OR CIDS 699 Master's Thesis Credits: 3,4

#### Practicum - 1 Credit

Field experience must be planned in consultation with both programs in order to satisfy all requirements.

Satisfied by: SOWK 635 - Advanced Field Experience Credits: 1

#### Concentration Electives - 12 Credits

- SOWK 660 Advanced Practice Evaluation
- SOWK core credits may be applied to a CIDP concentration at the discretion of the CIDP Program Director.

### MSW Degree Requirements

#### **Basic Courses**

- SOWK 501 Foundations of Practice I Credits: 4
- SOWK 502 Foundations of Practice II Credits: 4
- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 531 Human Behavior and the Social Environment I Credits: 2
- SOWK 532 Human Behavior and the Social Environment II Credits: 2
- SOWK 550 Social Policy Credits: 2,3
- SOWK 561 Social Work Research I Credits: 2
- SOWK 562 Social Work Research II Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5

#### Field Experience

- SOWK 535 Generalist Field Experience Credits: 4 = 400 hours
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 5 = 500 hours
- SOWK 610 Advanced Field Seminar Credits: .5, .5

#### Electives - 10 Credits

### **MSW Emphasis Options**

#### Administration & Development Emphasis

CIDS 520 - Development Theory and Practice Credits: 3

#### Choose one of the following courses

CIDS 515 - Organization and Human Resources Credits: 3 OR BSAD 515 Organizational Behavior & Leadership Credits: 3 OR BSAD 530 - Leadership &
 Management of Not-for-Profit Organizations Credits: 3

### International Social Work Emphasis

- CIDS 536 Development Design & Evaluation Credits: 3 (Satisfies SOWK 675 Topics: Grantwriting Credits: 1)
- SOWK 537 International Social Work Credits: 2

### **Collaborative Program Objectives**

- To prepare students for various forms of work in which clinical and administrative skills in development and social work are needed:
- To enable students to integrate development and social work knowledge, values, and skills into a multifaceted approach to service, thereby enhancing their value in the world.

### Distinctive Features of the Program

The program is designed to give students an integrated approach to both international development and social work. Students who take a social work emphasis in Administration and Development and International Social Work can choose a dual degree with CIDP.

### Admission Requirements

Applicants to the MSCID/MSW dual degree program typically will have received a bachelor's degree (BA, BS, BSW) from an accredited four-year college or university in the U.S., or hold an equivalent educational credential from another country. Application must be made separately to both the MSDIC and MSW programs. Acceptance into one program does not guarantee acceptance into the other. Applicants must meet the admissions requirements for each program, including all required prerequisites for each degree. Students in both programs must meet the following minimum requirements:

- 1. Students must maintain a minimum cumulative GPA of 3.0;
- 2. No grade of D or F (or U) may count toward either degree.

### Credits for Each Program

MSCID students are required to complete 39-40 credit hours for the two-year regular program, which includes 12 elective credits (minimum of 4 courses). Students with certain prerequisites may qualify for the 30-credit advanced standing program. The two-year regular MSW degree requires 46 core credit hours, plus 10 elective hours. Due to the strict requirements of the Council on Social Work Education's accrediting mandates, these core courses must all be taught or co-taught within the department by faculty holding an MSW degree. Occasionally, a student who has already earned a BSW from an accredited program may apply to this program. In this case, the student would be placed in the Advanced Standing program, and take either 33 credits (Advanced Standing) or 39 credits (Advanced Standing Plus). Students with an undergraduate GPA of 3.0 or higher are eligible to complete the Advanced Standing Plus requirements.

These program models create a curriculum that allows for the integration of 21–24 Social Work and CIDP credits, giving students the advantage of being able to reduce their total credit load. Since both MSCID and MSW programs already share courses in order to reduce costs and achieve a more streamlined and efficient program, the course work for both degrees must be taken either simultaneously or within one academic year of completion of one of the degrees in order to fulfill the requirements of either degree.

Because of CSWE requirements, students in the MSCID/MSW SOCIAL WORK COURSES 215 dual degree program would register for social work core classes in lieu of certain CIDP courses and would take an emphasis in either Administration & Development or International Social Work. Students will take shared courses as outlined below.

### MSW Requirements

#### Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### **English Language Requirement**

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years prior to enrollment.
- TOEFL ITP (paper-based) A minimum score of 550
- TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
- MELAB 80 with a minimum of 80 on each section
- IELTS (Academic version) 6.5
- PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designee.

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required. A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

### Certificates

## International Development Graduate Certificate

To qualify for a graduate level certificate, prospective students must already hold a terminal undergraduate degree (a bachelor's degree). The purpose of a graduate certificate is to provide specialized knowledge without completing a full master's degree. The certificate program represents a collection of courses (15 credits) and when completed affords the student a record of academic accomplishment at the graduate level in international development or organizational leadership.

# Graduate Certificate in International Development

#### Required courses — 6

- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- CIDS 520 Development Theory and Practice Credits: 3

#### Elective courses — 9

- ACCT 625 Financial Analysis and Reporting Credits: 3
- ANTH 517 Cultural and Developmental Anthropology Credits: 2
- BSAD 515 Organizational Behavior & Leadership Credits: 3

- CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3
- CIDS 536 Development Design & Evaluation Credits: 3
- COMM 540 Communication in Development Practice Credits: 2.3
- IDAS 610 Ethics in Development Credits: 2
- PLSC 525 Public Policy, Civil Society and Development Credits: 2,3

Total Credits: 15

### **IDP Admission Requirements**

To be admitted to regular standing into the International Development Program, students must

- Qualify for general admission into graduate studies at Andrews University
- Hold a four-year baccalaureate degree from an accredited American university or senior college, or its equivalent from a comparable institution outside the U.S.
- Demonstrate adequate undergraduate preparation in the proposed field of graduate study and in general education.
- Indicate ability to handle master's-level work in the language of instruction.

Note:

- Access to email communication is compulsory for participation in this program.
- The Graduate Record Examination (GRE) transcript requirement is waived for students in the overseas program.
- TOFEL is waived for students in this program.

#### For More Information

For contact information, program administration details, & site locations, please click here.

## Organizational Leadership Graduate Certificate

To qualify for a graduate level certificate, prospective students must already hold a terminal undergraduate degree (a bachelor's degree). The purpose of a graduate certificate is to provide specialized knowledge without completing a full master's degree. The certificate program represents a collection of courses (15 credits) and when completed affords the student a record of academic accomplishment at the graduate level in international development or organizational leadership.

### Graduate Certificate in Organizational Leadership

#### Required courses — 6

- CHMN 526 Conflict Management Credits: 2,3
   Choose one of the following two courses:
- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3

#### Elective courses — 9

- ACCT 625 Financial Analysis and Reporting Credits: 3
- ANTH 517 Cultural and Developmental Anthropology Credits: 2
- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- CIDS 520 Development Theory and Practice Credits: 3
- COMM 540 Communication in Development Practice Credits: 2,3
- IDAS 610 Ethics in Development Credits: 2
- IDAS 630 Program Design and Evaluation Credits: 3
- PLSC 525 Public Policy, Civil Society and Development Credits: 2,3

Total Credits: 15

### **IDP Admission Requirements**

To be admitted to regular standing into the International Development Program, students must

- Qualify for general admission into graduate studies at Andrews University
- Hold a four-year baccalaureate degree from an accredited American university or senior college, or its equivalent from a comparable institution outside the U.S.
- Demonstrate adequate undergraduate preparation in the proposed field of graduate study and in general education.
- Indicate ability to handle master's-level work in the language of instruction.

#### Note:

- Access to email communication is compulsory for participation in this program.
- The Graduate Record Examination (GRE) transcript requirement is waived for students in the overseas program.
- TOFEL is waived for students in this program.

#### For More Information

For contact information, program administration details, & site locations, please click here.

### **Anthropology**

#### ANTH 124 - Introduction to Anthropology

Credits: 3 | An introduction to the anthropological perspective. Topics include cognitive and social aspects of language, biology and the study of culture, origins of culture, archaeology and cultural beginnings, introduction to the study of cultural variation, and models of culture. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Even years | College Code: CAS

#### ANTH 200 - Cultural Anthropology

Credits: 3 | Comparative study of human diversity and of ways of being human. The concept of culture and ethnography as the primary tool of cultural anthropological research. Salient features of tribal communities, state level policies and modern network society. Globalization and its social, economic and environmental consequences. Understanding "ourselves" and those we call "others." | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ANTH 205 - Introduction to Archaeology

Credits: 3 | An introduction to some of the discoveries made by archaeologists and to some of the methods whereby their discoveries are made. Advances in archaeological method and theory over the past 100 years are explained and illustrated. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### ANTH 415 - Urban Anthropology

Credits: 3 | An introduction to ethnographic approaches to understanding urban populations and problems. Special emphasis placed on examining the uses of quantitative methods in the design of urban community initiatives. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ANTH 417 - Cultural and Developmental Anthropology

Credits: 3 | Introduction to the basic concepts, methods and theories of cultural anthropology. Anthropological perspectives on culture change, globalization, global and local world-making, indigenous knowledge, sustainable community development, and project management. Special emphasis on anthropological principles and techniques that inform development work including application of anthropological knowledge and research to real-world problems. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### ANTH 420 - Food and Culture

Credits: 3 | Understanding who is well fed and who is hungry among the world's peoples and why such huge differences exist in the level of food security among the world's people. | Swing course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ANTH 435 - Museum and Lab Methods

Credits: 3 | Methods for preparation and preservation of archaeological finds.

Conservation, cleaning, cataloguing, and classification. Analysis of lithics, ceramics, faunal and floral remains, metals, and glass. | Swing course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### ANTH 440 - Topics in Anthropology

Credits: 1 | Topics in cross-cultural anthropology. | Swing course | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### ANTH 455 - Ethnography

Credits: 3 | An introduction to ethnography as a method for gathering data about human social interactions and communities. Overview of various ways of doing ethnographic fieldwork within and beyond the discipline of anthropology. Examples of ethnography in international development, business, industry and government will also be discussed. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | Offering: Alternate years | College Code: CAS

#### ANTH 478 - Archaeological and Ethnographical

Credits: 3 | Perspectives on the Middle East History of exploration. Beginnings of sedentary food production and pastoralism. Rise of Egyptian and Mesopotamian civilization. Israel, Ammon, Moab, and Edom. Rome and Christianity. History of the Arabs and Islamic civilization. Ethnographical perspectives on women, families, tribes, and states. Islam and the modern world. Offered as credit on summer tours. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### ANTH 495 - Independent Studies/Readings in Anthropology

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Blended Learning, Independent | College Code: CAS

#### ANTH 496 - Supervised Fieldwork in Anthropology or Archaeology

Credits: 1 | Students may apply to participate as trainees on research projects sponsored either by the Department of Behavioral Sciences or the Institute of Archaeology. | Swing course | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 8 credits | Schedule Type: Blended Learning, Practicum | College Code: CAS

#### ANTH 517 - Cultural and Developmental Anthropology

Credits: 2 | Introduction to the basic concepts, methods and theories of cultural anthropology. Anthropological perspectives on culture change, globalization, global and local world-making, indigenous knowledge, sustainable community development, and project management. Special emphasis on anthropological principles and techniques that inform development work including application of anthropological knowledge and research to real-world problems. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ANTH 555 - Ethnography

Credits: 2,3 | Introduction to ethnography as a method for gathering data about human social interactions and communities. Overview of various ways of doing ethnography fieldwork within and beyond the discipline of anthropology. Examples of ethnography in international development, business, industry and government will also be discussed. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ANTH 600 - Seminar in Cultural Anthropology

Credits: 2,3 | The study of culture and cultural variation. The contemporary beliefs, values, institutions and material way of life of people in North America are contrasted with those of people living in other regions of the world today and in the past. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | College Code: CAS

#### **Behavioral Sciences**

### BHSC 100 - Philosophy of Service

Credits: 2 | Provides a theoretical and practical basis for understanding and meeting needs of communities and individuals. Course materials include works from Christian and secular sources. Students develop an individualized practical plan to understand and meet needs. Does not apply to a major or minor. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

## BHSC 220 - An Interdisciplinary Approach to Contemporary Social Issues

Credits: 3 | Issues may include drug abuse, the family, crime/violence and punishment, AIDS, poverty, and health care. Integrates foundational social science with a Christian perspective to help students understand the origins of current societal issues and strategies for addressing those issues. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### BHSC 230 - Research Methods I: Statistics for the Behavioral Sciences

Credits: 3 | Probability concepts, frequency distributions, measures of central tendency, measures of variation, using frequency distributions, point-estimation and confidence intervals, sampling distribution, levels of significance in hypothesis testing, t and z tests, correlation, chi-square and ANOVA. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### BHSC 235 - Culture, Place and Interdependence

Credits: 3 | Uses and integrates concepts from anthropology, geography and other sciences to help students understand how human culture and natural habitat create regional, ethnic, religious and other social groups. Examines origins of group conflict and considers avenues of responsible action for resolution. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### BHSC 300 - Philosophy of Service Fieldwork

Credits: 1,2 | Provides an opportunity for the practical application of the theories, principles and concepts learned in BHSC 100. | \$ - Course or lab fee | Course Attribute: Service course | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): BHSC 100 or permission of Service Learning Coordinator. 20 hours of service is required for each credit registered for. Does not apply to a major or minor. | Schedule Type: Blended Learning, Practicum | College Code: CAS

#### BHSC 300V - Philosophy of Service Fieldwork

Credits: 1,2 | Provides an opportunity for the practical application of the theories, principles and concepts learned in BHSC 100. | \$ - Course or lab fee | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): BHSC 100 or permission of Service Learning Coordinator. 20 hours of service is required for each credit registered for. Does not apply to a major or minor. | Schedule Type: Self-Paced | College Code: CAS

#### BHSC 378 - Study Tour

**Credits:** 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | **Grade Mode:** Normal (A-F,I,W) | **Repeatable:** Repeatable up to 6 credits | **Schedule Type:** Blended Learning | **College Code:** CAS

#### BHSC 405 - Introduction to Public Health

Credits: 3 | An overview of some of the important content areas and disciplines that make up Public Health, including Health Promotion and Education and Education, Environmental Health, Epidemiology, Disease Prevention, Global or International Health issues and other aspects of our environment that effect the Public Health. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### BHSC 438 - Workshop

Credits: 1 | Provides an opportunity to study in a focused area within the behavioral sciences. A paper is required for more than one credit and may be required for one credit. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### BHSC 440 - Topics in \_\_\_\_\_\_

Credits: 1 | Examines emerging issues in the behavioral sciences. | Swing course | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### BHSC 495 - Independent Study/Readings in Behavioral Sciences

Credits: 1 | Individual assignments and/or reports and/or individualized research in behavioral sciences are set up on a contract basis with no more than 3 credits per semester. Students may repeat or take any combination of departmental independent study courses for up to 6 credits. Consult staff before registering. | Grade Mode:

Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule

Type: Independent | College Code: CAS

#### BHSC 498 - Research Project in Behavioral Sciences

Credits: 1–3 | An independent research project in behavioral sciences typically supervised by a faculty member and resulting in a technical report summarizing findings or a submission to a professional conference. Students may repeat or take any combination of departmental independent study or research project courses up to 6 credits with no more than 3 credits per semester. Consult staff before registering. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### BHSC 575 - Topics in Behavioral Sciences

Credits: 1–5 | This topic course could be used to register for a Study Tour. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### BHSC 578 - Study Tour

**Credits:** 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or

lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Blended Learning | College Code: CAS

#### BHSC 590 - Internship

Credits: 1 | To be arranged in cooperation with the student's advisor. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Blended Learning, Practicum | College Code: CAS

#### BHSC 648 - Workshop

Credits: 1,2 | Provides an opportunity to study in a focused area within the behavioral sciences. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### BHSC 690 - Independent Study/Readings/Research Project in Behavioral Sciences

Credits: 1–3 | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CIDS 559 - Death and Grief in Contemporary Society

**Credits:** 2 | The study of cultural and societal perspectives on death and personal and interpersonal dynamics of death and dying. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

### Comm & Intl Development

#### CIDS 515 - Organization and Human Resources

Credits: 3 | This course teaches students to apply psychological theories and principles to the inner workings of organizations. The following topics are discussed in detail: employee selection and training, small group behavior, leadership, attitudes and motivation, power and politics, and strategies for fostering organizational change. Students will learn to interpret research findings accurately and responsibly, and there will be a special emphasis on learning to conduct empirical research in organizational settings. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 520 - Development Theory and Practice

Credits: 3 | Provide an introduction to different theoretical perspectives of development. Review of the history of development which provides a critical and ethical understanding of the social, economic, and political dimension of development in practice. This course addresses a range of processes to address the needs of diverse communities in multiple and complex contexts. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 524 - Humanitarian Studies: Theory and Practice

Credits: 3 | This course will offer a practical and in-depth analysis of the complex issues and skills needed to engage in humanitarian work. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 525 - Ethics in Development

Credits: 2 | An ethical framework for the understanding of social transformation. Ethical paradigms are explored, as well as historical examples of how development interventions have generated social change. Focus on contemporary approaches to development, revolution and liberation. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | College Code: CAS

## CIDS 530 - Needs Assessment, Capacity Mapping & Program Planning

**Credits:** 3 | Introduction to concepts and methods of conducting a community needs assessment and mapping community capacity to address those needs. Development of skills in selecting, analyzing, understanding, and interpreting assessment outcomes to inform policy and practice. Consider complex interactions between community and international development stakeholders and other factors affecting accountability, project planning, and outcomes. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture, Blended Learning | **College Code:** CAS

#### CIDS 535 - Budgeting, Fundraising & Grantsmanship

Credits: 2 | Program planning based on need and capacity will be used to develop grant proposals to address the need. Hands-on experience is sought, linking classroom instruction and real community situations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

### CIDS 536 - Development Design & Evaluation

**Credits:** 3 | Exploration of various perspectives and approaches to project design, implementation, and evaluation. Understand the context and interdependence of each element of the project management cycle. Building on assessment results, the theory and application of program planning techniques and processes, and the

objectives of monitoring and evaluation are introduced. Hands-on experience provides opportunities to exercise skills needed for project design, grant writing, and evaluation techniques. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### CIDS 538 - Needs Assessment, Project Design and Evaluation

Credits: 3 | This course provides theoretical and practial applications to project and program development. It includes the following topics: Needs assessment, capacity mapping, planning, monitoring and evaluation | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

## CIDS 540 - International Development:Strategy Design & Implementation

Credits: 3 | Evolution of international development theory across disciplines.

Changing conceptualizations, measurements, processes and effects of development and poverty. Ethnicity, social class, gender, and community influences on socioeconomic processes. Current issues, concerns, and strategic alternatives.

Development policy design, strategy, programs, and projects. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 544 - International Development: Cases and Application

Credits: 3 | This course examines community and international development theory and practice through field study and fieldwork. Issues to be covered may include development and humanitarian aid and response. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### CIDS 550 - Education for Sustainable Development

**Credits:** 3 | Provides an overview of education for sustainability. Focuses on international projects and organizations that address education for sustainable development. Explores education as a means to address development issues such as social justice, poverty, food security, globalization, etc. Covers different educational approaches and models that ensure a healthy environment, vibrant community, and equitable society. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### CIDS 554 - Poverty Seminar

Credits: 3 | This seminar will examine the nature, extent and measures of rural and urban poverty, its causes and consequences, and the antipoverty programs proposed by government, activists, anti-poverty organizations such as NGOs, academic community and international and bilateral aid organizations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### CIDS 555 - Development Policy and Analysis

Credits: 3 | Examine the processes that lead to the formulation, adoption, implementation, and evaluation of development policies and programs across countries. Study types of policies, policy design, and policy tools. Develop skills of political and bureaucratic analysis that can improve policy analysis, policy decision-making, and policy implementation for sustainable development. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 560 - Political Economy of Development

Credits: 3 | Overview of the political economy of developing countries and the complex interplay of international system, international economic and political economy factors that influence development initiatives and outcomes. Discuss the relation of globalization, trade, aid, and international economic and development institutions on development activity. Specific topics include development and economic policy, civil society, alternative development models, democracy, authoritarianism, sustainable development and gender. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 565 - Institutions in Development

Credits: 3 | Overview of the effect of formal and informal institutions on development, combining in-depth case studies of a variety of domestic and international institutions with theoretical and empirical insights from development disciplines (comparative politics, political economy, international relations, and economics). | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 570 - Governance in Developing Countries

Credits: 3 | Discusses basic theories and concepts of governance and its relation to development. Examines how domestic institutions, historic legacies, socioeconomic factors, non-state actors, conflict, and democratization process affect the quality of government and level of development. Addresses the challenges of development from a governance perspective. Special attention will be given to developing countries. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 575 - Topics in Community & International Development

Credits: 1–6 | This topic course could be used to register for a study tour. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### CIDS 578 - Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### CIDS 580 - Organizational & Community Leadership

Credits: 1,2 | Focus on leadership theories and strategies. Students develop the capacity to apply these theories and strategies adaptively in leadership situations within organizational and community context. Students explore how leadership styles, communication, planning, organizing, decision making, and marketing impact organizational and community change. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 585 - Gender, Economic Development, and Poverty Reduction

Credits: 3 | Introduces the linkages between gender equality and growth & poverty-reduction, and enhances students' ability to participate in the design and implementation of poverty-reduction strategies. Explores the concepts of gender inequality as it relates to poverty; discusses the importance of gender issues in economic development and how they relate to attaining the Millennium Development Goals. Other concepts to be covered: Access to education, health, labor markets, employment opportunities, and productive resources as they affect growth. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 586 - Gender, Ethnicity and Family in Development

Credits: 2 | This course provides an overview of the role of and issues surrounding gender and ethnicity in society. Particular attention will focus on how ethnic and gender roles impact family structure, function and interaction patterns, as well as how these patterns impact community and international development. | Grade Mode:

Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 590 - Issues in Gender and Development

Credits: 3 | Familiarizes students with the main analytic debates in the field of gender and development. Institutional domains (households, family and kinship, the market, the community and the state) through which gender relations are both defined and transformed receive separate attention. An introductory survey of conceptual approaches to gender is followed by a treatment of central topics which include: the move from WID (women in development) to GAD (gender and development) as critical perspectives in development studies, conceptual approaches to households, men and masculinities in development, globalization and women's employment, gender, state and governance, women's movements and state-civil society relations, gender, conflict and post-conflict, and an appraisal of prospects for gender-aware planning and empowerment. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### CIDS 631 - Professional Development Seminar

Credits: 0.5,1 | An overview of salient issues and problems related to the topic; an orientation to communities of researchers and professionals working on the topic; an inventory of baseline competencies of persons professing expertise on the topic; and a survey of the opportunities for professional involvement related to the concentration. To be taken during the first fall semester a student is in the program. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 1 credit | Schedule Type: Seminar | College Code: CAS

#### CIDS 632 - Portfolio Development Seminar

Credits: 1 | ring a student's final year in the program. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Spring | College Code: CAS

#### CIDS 650 - Project Continuation

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approvals only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

### CIDS 655 - Program Continuation

Credits: 0 | Students may register for this non-credit continuation course to maintain active status. For additional information on active status, please refer to p. 56 in the bulletin. Registration does not indicate full-time status. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CIDS 660 - Thesis Continuation

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approvals only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CIDS 665 - Preparation for Comprehensive Exams

Credits: 0 | Advisor approval required. Registration for this title indicates fulltime status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CIDS 670 - Comprehensive Exam

Credits: 0 | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CIDS 677 - Colloquium

Credits: 1 | The course provides a forum for development and peer review of research projects by CIDP graduate students. It is required for all students to submit at least one paper for presentation at a professional conference or at least one article for publication in a professional journal before graduation. The course is to be taken during the student's first Spring semester in the program. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

#### CIDS 680 - Field Practicum

Credits: 1,2 | Students integrate course content and theory into practice during a 300-hour field practicum coordinated with each student's research project and/or concentration that is the concluding requirement for the concentration. 260 hours may be done with the student's primary employer, but all students must complete one week (40 hours) in an external organization. Students must submit a practicum proposal indicating approval from a sponsoring organization and learning objectives. Upon completion, the student submits a practicum portfolio. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): CIDS 520, CIDS 530, and 2 courses in concentration. | Repeatable: Repeatable up to 2 credits | Schedule Type: Practicum | College Code: CAS

#### CIDS 689 - Seminar

Credits: 1–3 | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

#### CIDS 690 - Independent Study

Credits: 1 | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CIDS 697 - Portfolio Project

Credits: 2 | Students prepare and defend their portfolios. Each student reviews and documents his/her learning and personal goal attainment, and explores issues related to career development and life-long learning. Students will include at least one significant research project. Registration for this title indicates full-time status. |

Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) |

Schedule Type: Independent | College Code: CAS

#### CIDS 698 - Research Project

Credits: 2,3 | A research project is carried out by a master's degree candidate in which the student's mastery of the research process is demonstrated. Students can submit one of the following: 1) Grant proposal and application, 2) Research for publication, 3) Project design and implementation paper, or 4) Research Paper. Registration for this title indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Independent | College Code: CAS

#### CIDS 699 - Master's Thesis

Credits: 3,4 | Registration for this title indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Independent | College Code: CAS

## **Family Studies**

### FMST 115 - Introduction to Family Studies

Credits: 3 | Study of the conceptual framework for the discipline and exploration of contemporary issues and trends in society as related to families. | Grade Mode:

Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### FMST 201 - Personal Relationships

**Credits:** 3 | The interdisciplinary study of personal relationships including intimate relationships, marriage and family living. The course will focus on the processes and

skills necessary to build, maintain and enjoy important relationships across the lifespan. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code:

#### FMST 310 - Parent-Child Relationships

**Credits:** 3 | Study of the concepts, challenges, and changes in the parent/child relationship including contemporary strategies, parenting in diverse family types, and changing parenting roles throughout the life cycle. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Odd years | **College Code:** CAS

#### FMST 350 - Family Cultural Perspectives

**Credits:** 3 | Study of the family as a social institution, its biological and cultural foundations, and its historic development and changing structure and function. Crosscultural uniqueness is examined. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Even years | **College Code:** CAS

#### FMST 454 - Family Violence Across the Lifespan

Credits: 3 | Study of factors contributing to abuse in the family with emphasis on prevention of domestic violence. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### FMST 460 - Family Resource Management

**Credits:** 3 | Principles of sound management of resources including time, money, and energy as they relate to individuals and groups throughout the lifespan, with emphasis on the family. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Odd years | **College Code:** CAS

#### FMST 470 - Field Experience

Credits: 1–8 | Supervised experience in observing, planning, directing, and/or assisting families in various home or organizational environments. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 8 credits | Schedule Type: Practicum | College Code: CAS

### Geography

#### GEOG 110 - Survey of Geography

Credits: 3 | A survey of major geographic perspectives: physical, human, and regional. Applies toward General Education social science requirements. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### GEOG 240 - Physical Geography

Credits: 3 | The physical environment in which human societies exist; the earth's crust, its water systems, land systems, and climatic features. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Even years | College Code: CAS

#### GEOG 245 - Introduction to Meteorology and Climatology

Credits: 3 | Emphasis on atmospheric processes and regional distribution and classification of the world's climate. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### GEOG 260 - Cultural Geography

Credits: 3 | The geographic viewpoint of the human occupancy of the earth in relation to the environment; including aspects of population, settlement, language, religion, and economy; a generalized survey of major world cultural areas to integrate course elements. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### GEOG 260V - Cultural Geography

Credits: 3 | The geographic viewpoint of the human occupancy of the earth in relation to the environment; including aspects of population, settlement, language, religion, and economy; a generalized survey of major world cultural areas to integrate course elements. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### GEOG 335 - Introduction to Geographic Information Systems

Credits: 3 | The study of the fundamentals of Geographic Information Systems (GIS). Emphasis on the foundations of these systems, their components and capabilities. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### GEOG 430 - Urban Geography

**Credits:** 3 | Examination of spatial patterns and processes associated with urbanization within the framework of economy, culture and politics. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate

students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **GEOG 455 - Environmental Disasters**

Credits: 3 | An integrated study of the causes and geography of natural and manmade disasters. Understanding of extreme event prediction, early warning, and disaster mitigation. Organizations involved in disaster response. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### GEOG 460 - Topics in \_\_\_\_\_\_

Credits: 1–3 | Study of selected topics in geography. Topic and credit to be announced in advance. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 9 credits with different topics (to 3 credits for graduate students) | Schedule Type: Lecture | College Code: CAS

#### GEOG 475 - Regional Geography: \_\_\_\_\_

Credits: 3 | Regional study of physical, economic, and cultural characteristics of major regions of the world. Areas selected for analysis vary from semester to semester. Direct inquires to the department chair. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### GEOG 485 - Geography Field Experience

Credits: 1–6 | Observation and evaluation of geographical phenomena in the U.S. or foreign countries. May be based upon individual research, organized tours, or expeditions. A formal report is expected. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Practicum | College Code: CAS

#### GEOG 495 - Independent Study/Rdgs/Res

Credits: 1–3 | Independent work on a specified topic under the guidance of department advisor. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 9 credits with department chair permission | Schedule Type: Independent | College Code: CAS

# International Development Administration Studies

### IDAS 597 - Portfolio

Credits: 1 | An organized collection of educational and professional accomplishments is produced. This will include basic personal and background information, a profile of the Focus area, outstanding academic work, and other artifacts acquired to demonstrate achievements and competencies related to international development. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDAS 610 - Ethics in Development

Credits: 2 | Examination of theoretical foundations of ethics in community and international development. Ethical dimensions of policies and practices of major development players are investigated. Focus on contemporary approaches to development ethics in terms of purposes, roles, participants and audiences. Introduction of frameworks for ethical decision-making. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Schedule Type: Lecture | College Code: CAS

#### IDAS 613 - Applied Statistical Methods

Credits: 2 | Analysis of data using descriptive and basic inferential statistics, frequency distribution, measures of central tendency, sampling, distribution, levels of significance in hypothesis testing, correlation, t-tests, one way analysis of variance, simple linear regression, and chi-square. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Interactive Online | College Code: CAS

#### IDAS 620 - Strategic Planning in Global Leadership

**Credits:** 3 | A multi-disciplinary course which focuses on current and emerging issues of organizational leadership. The course will teach the role of creating a meaningful strategic plan for an effective administrative system for organizations to survive intensifying globalization. Components include the strategic planning process, roles of board and staff, critical importance of a stakeholder analysis, the purpose of mission and vision, and the difference between goals, strategies and objectives. | **Grade Mode:** Normal with DG (A-F,I,W,DG,DN) | **Schedule Type:** Lecture | **College Code:** CAS

#### IDAS 623 - Development Research Methods

**Credits:** 2 | Background and experience in understanding quantitative and qualitative research designs as they relate to the student's Focus area. Topics include the

research process, defining variables, formulating and stating the problem, planning and designing the research, conducting literature review, instrumentation, data collection procedures, researchers ethical and legal responsibilities and basic data analysis. Students are expected to develop a research proposal. Pre- or co-requisite IDAS613. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite/Corequisite: IDAS613 | Schedule Type: Interactive Online | College Code: CAS

#### IDAS 630 - Program Design and Evaluation

Credits: 3 | Introduction to concepts and methods of conducting community needs assessment and capacity mapping. Development of skills in selecting, analyzing, interpreting and presenting data affecting program planning and implementation. Considers complex interactions affecting program accountability and outcomes. Provides practical opportunity to exercise skills needed for project design and grantmanship. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Schedule Type: Lecture | College Code: CAS

#### IDAS 635 - Professional Training: Focus Area

Credits: 2 | Students are required to participate in Professional Training related to the selected Focus area, culminating in a synthesis paper on best practices learned during the training. In addition, the student will design and implement a Colloquium to present best practices in the Focus area. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDAS 640 - Topics: \_\_\_\_\_

Credits: 1 | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

#### **IDAS 650 - Project Continuation**

Credits: 0 | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDAS 655 - Program Continuation

Credits: 0 | Registration for this title indicates part-time status. | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDAS 670 - Comprehensive Examinations

Credits: 0 | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDAS 680 - Field Practicum: Focus Area

**Credits:** 2 | The Field Practicum integrates International Development theory into practice. There are two options to fulfill the Field Practicum. Students will complete either; (1) a baseline and benchmarking study to understand best practices in the focus area; or (2) complete an internship of 300 hours in a sponsoring organization. The course culminates with an oral presentation of the students' findings and experiences. | **Grade Mode:** Satisfactory w/DG (S,U,I,W,DG) | **Repeatable:** Repeatable | **Schedule Type:** Practicum | **College Code:** CAS

#### IDAS 690 - Independent Study

Credits: 1–3 | Individualized reading or research in a specified area under the guidance of an instructor. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) |
Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### IDAS 696 - Specialization Essay: Focus Area

Credits: 1 | Students are required to broaden knowledge in their Focus area through synthesizing and critiquing scholarly journal articles, professional association publications, publications of multi-government organizations such as the United Nations or the World Bank, publications by various international non-government organizations, or internet resources. The outcome of this literature review will be a "Specialization Essay." | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDAS 697 - Research Project

Credits: 3 | A research project is carried out by a master's degree candidate in which mastery of the research process is demonstrated. The student is expected to choose a research topic related to his/her Focus area. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 4 credits | Schedule Type: Independent | College Code: CAS

### **Psychology**

#### PSYC 101 - Introduction to Psychology

Credits: 3 | Principles of psychology including the study of growth, perception, learning, thinking, motivation, emotion, personality, and mental health. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PSYC 101V - Introduction to Psychology

**Credits:** 3 | Principles of psychology including the study of growth, perception, learning, thinking, motivation, emotion, personality, and mental health. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### PSYC 180 - Dealing with Your Mind

Credits: 3 | An introduction to the brain and how it works, with an emphasis on processes used in everyday life: perception of our surroundings, memory and other facets of general cognition, and links to addictive behavior. The labs will give hands-on experience with these topics. Students will be exposed to research opportunities. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PSYC 204 - Personal, Social and Career Development

**Credits:** 3 | Application of psychological principles of behavior as they influence optimal personal, social and career development, with an emphasis on effective strategies for self-management and self-improvement. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### PSYC 210 - Introduction to Health Psychology

Credits: 3 | Study of causes for the rise of health psychology; interrelationships between psychology and health-related disciplines; models of disease and health care; interrelationships between stressful life events, social support, and wellness; illness behavior; psychology of addictive behavior; and behavioral health. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | College Code: CAS

#### PSYC 252 - The Psychology of Adolescence, Youth, and Aging

Credits: 3 | Current psychological theories relating to psychological development, maturity, and decline as evidenced during the adolescent, youth, middle age, and retirement years. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | College Code: CAS

#### PSYC 269 - History and Systems of Psychology

Credits: 3 | A study of significant schools, individuals and theories in the field of psychology, together with their contributions to present knowledge of behavior. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC101. | Schedule Type: Lecture | College Code: CAS

#### **PSYC 301 - Human Development**

Credits: 3 | Lifespan is an integrative approach to psychological development which emphasizes the inter-dependency of physical, cognitive, emotional and social development. The interrelatedness of theory, research, and application are seen throughout the entire sequence of human development from conception to death. | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: PSYC 101 or written permission of the teacher. | Schedule Type: Lecture | College Code: CAS

#### PSYC 315 - Organization and Human Resources

Credits: 3 | This course teaches students to apply psychological theories and principles to the inner workings of organizations. The following topics are discussed in detail: employee selection and training, small group behavior, leadership, attitudes and motivation, power and politics, and strategies for fostering organizational change. Students will learn to interpret research findings accurately and responsibly as well as how to conduct empirical research in organizational settings. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PSYC 319 - Stress Management

**Credits:** 3 | An introduction to stress along with signs and symptoms of stress and identification of stressors in a person's life. Students learn how to increase stress tolerance and implement change. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### PSYC 364 - Learning and Behavior

Credits: 3 | A study of theories of learning which evaluates connections between learning and behavioral processes within and between humans and animals. A lab fee may be required. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | College Code: CAS

#### PSYC 366 - Drugs and Behavior

**Credits:** 3 | An introduction to how drugs affect mood, sensation, consciousness, and other psychological and biological functions. We will look at concepts such as the short and long term effects of use and abuse of drugs, classification and laws regulating the use of drugs, the relationship of drug use on societal issues, different approaches to drug treatment as well as debates on controversial topics in the field of drugs. |

Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 | Schedule Type: Lecture | College Code: CAS

#### PSYC 410 - Introduction to Theories in Counseling & Psychotherapy

Credits: 3 | An introduction to the major theoretical models and concepts for counseling and psychotherapy. Concepts such as the philosophical assumptions, the therapeutic process, and the client/therapist relationship are discussed. Limited to psychology majors and minors, or permission of the instructor. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101, and one of the following: PSYC 454, PSYC 269 or PSYC 460. | Schedule Type: Lecture | College Code: CAS

#### PSYC 420 - Human Sexuality

Credits: 3 | A study of the multiple aspects of sexuality within a framework of Christian values. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PSYC 425 - Psycholinguistics

Credits: 3 | A survey of the psychological processes involved in human language use, including comprehension, acquisition, or language. The relationship of language to other thought processes and its neural correlates will also be discussed. Integrated lab activities and projects will introduce common experimental methodologies in psycholinguistics. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 or PSYC 180. | Schedule Type: Lecture, Lab | College Code: CAS

#### PSYC 432 - Research Methods II: Introduction

Credits: 3 | Asking researchable questions. Reviewing the literature. Hypothesis formulation. Research methodology emphasizes qualitative approaches but includes discussion of instrumentation, subject selection, and data collection procedures. Andrews' human subject research review process. Informed consent. Writing assignments include theoretical essay, pilot study, second pilot study, research journal. Lab schedule will be arranged. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: BHSC 230 or STAT 285. | Schedule Type: Lecture | College Code: CAS

#### PSYC 433 - Research Methods III: Advanced Research Design

Credits: 3 | The principles of designing, administrating, interpreting, and writing experimental research, questionnaires and interview schedules. Survey also focuses on coding procedures and scale construction. Structured around a research project, and the interpretation of scientific reports and professional journals. Lab schedule will be arranged. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PSYC 434/SOCI 434. | Prerequisite(s): BHSC 230 or STAT 285 and PSYC 432. | Schedule Type: Lecture | College Code: CAS

## PSYC 434 - Research Methods IV: Advanced Statistical Analysis and SPSS

Credits: 3 | A study on advanced parametric and non-parametric techniques such as two-way ANOVA, regression and power. The utilization of SPSS in the analysis and interpretation of statistical data. An analysis of professional journals and reports with an emphasis on the statistical reasoning. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PSYC 433/SOCI 433. | Prerequisite(s): BHSC 230 or STAT 285 and PSYC 432/SOCI 432. Must have achieved a grade of "C" (not C-) in either BHSC230 or STAT285. | Schedule Type: Lecture | College Code: CAS

#### PSYC 438 - Workshop

Credits: 1–3 | Provides an opportunity to study in a focused area within the Behavioral Sciences. A paper is required for more than one credit and may be required for one credit. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### PSYC 445 - Cognitive Psychology

Credits: 3 | A study of how people use and acquire knowledge with emphasis on how people perceive, think, remember, store information, solve problems, and acquire and use language. A weekly lab focuses on experimental techniques that have been used to examine mental processing. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 or PSYC 180. | Schedule Type: Lecture, Lecture/Lab | College Code: CAS

#### PSYC 449 - Neuropsychopharmacology

**Credits:** 3 | A study of the mechanisms of actions of psychotropic agents and how they affect human perception and behavior. Emphasis is placed on the organization and function of the nervous system and the molecular and biochemical basis of drugs used to treat behavioral and clinical disorders. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | **Grade Mode:** Normal (A-F,I,W) |

Prerequisite(s): PSYC 101 or PSYC 180; BIOL 221, BIOL 222 or BIOL 165, BIOL 166. | Schedule Type: Lecture/Lab | College Code: CAS

### PSYC 450 - Social Psychology

Credits: 3 | A study of human behavior within a group context. Included are attitudes, social roles, collective behavior, and the dynamic aspects of human interaction. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 and two other behavioral science courses. | Schedule Type: Lecture/Lab | College Code: CAS

#### PSYC 454 - Theories of Personality

Credits: 3 | Integrates subfields of psychology to enhance understanding of the individual personality. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | College Code: CAS

#### PSYC 455 - Treatment of Substance Abuse

Credits: 2 | An overview of treatment techniques and basic prevention strategies including specific training in assessment and therapeutic techniques, examining the relationship between etiology and treatment. Treatment evaluation discussed. At-risk, vulnerable populations receive special consideration. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101; | Prerequisite/Corequisite: SOCI 415. | Schedule Type: Lecture | College Code: CAS

#### PSYC 458 - Advanced Theories of Addiction and Treatment

Credits: 3 | Surveys, critiques and integrates the primary theories currently used to explain the process, outcome and treatment of addictions. Covers biological, psychological, social and anthropological addiction theories. Primary substance-abuse prevention theories are surveyed. Implications for at-risk, vulnerable populations considered. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101; | Prerequisite/Corequisite: SOCI 415. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PSYC 460 - Psychology of Abnormal Behavior

Credits: 3 | A study of deviant human behavior and theories of causation and remediation. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | College Code: CAS

#### PSYC 465 - Physiological Psychology

Credits: 3 | Introduces the biological bases of behavior. Examination of the neuroanatomical and physiological foundations of such topics as the mind/body problem, the development of language and learning, sexual behavior, recovery from brain damage, and psychopathology. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. Normally offered odd years. | Schedule Type: Lecture | College Code: CAS

### PSYC 466 - Psychology of the Exceptional Child

Credits: 3 | A survey of assessment, remediation, and adjustment for exceptional children and youth who require special education and related services. Various types of exceptionality are explored such as mental retardation, learning disabilities, emotional or behavioral disorders, giftedness, disorders of communication, and impairment of hearing or sight. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### PSYC 471 - Behavior Modification

Credits: 3 | The theory and techniques of behavior change utilizing principles of conditioning. Applications relevant to health-centered and educational settings are emphasized. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101. | Schedule Type: Lecture | Offering: Even years | College Code: CAS

#### PSYC 480 - Field Experience

Credits: 1 | Supervised field placement in a human services setting is approved in advance by the department chair. A minimum of 45 hours of fieldwork activity is required for each credit. Consult staff before registering. Open only to departmental majors. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 8 credits | Schedule Type: Practicum | College Code: CAS

#### PSYC 486 - Psychological Assessment

Credits: 3 | Theory and practice in individual and group testing in the areas of intelligence, aptitude, achievement, personality, and interest. Evaluation of tests and other instruments for measurement with a focus on their worth and limitations. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101, BHSC 230 or STAT 285. | Schedule Type: Lecture | College Code: CAS

#### PSYC 490 - Practicum in Psychology

**Credits:** 3 | This course is designed to build on psychological knowledge gained in previous coursework, explore different theories outlining how to work with agencies, and apply this knowledge to working in a community agency. The course requires

students to spend 90 hours at the agency field site during the semester, and meet weekly as a class to discuss theories of intervention and their field experiences. Student's final grade in this course will be based on feedback from the site supervisor as well as the instructor's evaluation of classwork and fieldwork. It is recommended that students meet with the instructor the semester beforehand to discuss class requirements and placement options. Enrollment in this class is limited to psychology majors and minors of junior or senior status, or permission of the instructor. | Course Attribute: Service Course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 and six additional credits of psychology courses | Schedule Type: Practicum | College Code: CAS

#### PSYC 495 - Independent Study/Readings in Psychology

Credits: 1–3 | Individual assignments and/or reports and/or individualized research in psychology on a contract basis with no more than 3 credits per semester. Students may repeat or take any combination of departmental independent study courses up to 6 credits. Consult staff before registering. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### PSYC 498 - Research Project in Psychology

Credits: 1–3 | An independent research project in psychology typically supervised by a faculty member and resulting in a technical report summarizing findings or a submission to a professional conference. Students may repeat or take any combination of departmental independent study or research project courses up to 6 credits with no more than 3 credits per semester. Consult staff before registering. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### PSYC 515 - Organization and Human Resources

Credits: 2 | This course teaches students to apply psychological theories and principles to the inner workings of organizations. The following topics are discussed in detail: employee selection and training, small group behavior, leadership, attitudes and motivation, power and politics, and strategies for fostering organizational change. Students will learn to interpret research findings accurately and responsibly, and there will be a special emphasis on learning to conduct empirical research in organizational settings. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PSYC 566 - Drugs and Behavior

Credits: 3 | An introduction to how drugs affect mood, sensation, consciousness, and other psychological and biological functions. We will look at concepts such as the short and long term effects of use and abuse of drugs, classification, laws regulating the use of drugs, the relationship of drug use on societal issues, different approaches to drug treatment as well as debates on controversial topics in the field of drugs. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 | Schedule Type: Lecture | College Code: CAS

#### PSYC 575 - Topics in Psychology

Credits: 1–4 | This topic course could be used to register for a Study Tour. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### PSYC 648 - Workshop

Credits: 1–3 | Provides an opportunity to study in a focused area within the Behavioral Sciences. A paper is required for more than one credit. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

### Sociology

#### SOCI 119 - Principles of Sociology

Credits: 3 | A study of the development of sociology as a social science, some concepts and ideas associated with the study of human behavior, and an overview of the principles, terms, and concepts in the discipline. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 119V - Principles of Sociology

**Credits:** 3 | A study of the development of sociology as a social science, some concepts and ideas associated with the study of human behavior, and an overview of the principles, terms, and concepts in the discipline. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### SOCI 160 - Introduction to International Development

Credits: 3 | Focuses on the dilemmas facing industrialized nations and developing nations in coping with severe global inequalities and poverty. Analyzes the popular strategies and explanations used by governments and non-governmental organizations (NGOs) to deal with these challenges. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 314 - Migrant & Refugee Issues

Credits: 2,3 | This course will study fundamental theories and concepts regarding voluntary migration (migrant issues) and forced migration (refugee issues). It will also address the main political, social, economic, and environmental push-and-pull factors that influence immigration and emigration within the framework of globalization. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 315 - Criminology

Credits: 3 | Theories and techniques associated with apprehension, conviction, and detention of individuals who infringe criminal law in this society. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Even years | College Code: CAS

#### SOCI 345 - Juvenile Delinquency

Credits: 3 | Topics related to modern youth in trouble, sociological analysis of the problems of youth, legal and societal factors involved in delinquency, and some of the remedial measures now being used. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### SOCI 350 - Social Policy

Credits: 2 | Develops basic knowledge and skills for policy analysis, formulation and critical challenge within local and international contexts. Examines the determining factors affecting public policy in the United States as compared with other systems. Provides framework for analysis of social problems and policies, as they impact development and practice in human services. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 408 - Emergency Preparedness

Credits: 2 | Provides an introduction to basic philosophy and concepts of Emergency Preparedness as required by FEMA (Federal Emergency Management Agency) and most states which certify staff. Includes use of FEMA—provided modules in the Professional Development Series which are accepted prerequisites for advanced classroom courses. A passing grade is required on each module for a Satisfactory grade and receipt of a Professional Development Series Certificate of Completion. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 410 - Social Gerontology

Credits: 3 | A study of aging and ageism in the United States, including demographic trends, societal attitudes, problems of the elderly, and national policies relating to senior citizens in the cultural context of American society. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Even years | College Code: CAS

#### SOCI 415 - Substance Abuse in American Society

Credits: 2 | An overview of substance-use terminology, historical issues, definitions, epidemiology, consequences and drugs of abuse within an American cultural and historical framework. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### SOCI 420 - Medical Sociology

Credits: 3 | Analysis of the relationship between social characteristics and the incidence and prevalence of disease, as well as geographical determinants of health and medical systems. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Even years | College Code: CAS

#### SOCI 421 - Development Theory & Practice

Credits: 3 | Provide an introduction to different theoretical perspectives of development. Review of the history of development which provides a critical and ethical understanding of the social, economic, and political dimension of development in practice. This course addresses a range of processes to address the needs of diverse communities in multiple and complex contexts. Open to seniors only. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 425 - Racial and Ethnic Relations

**Credits:** 3 | A study of the distinctive racial and cultural minorities in American society with an emphasis on problems and adjustments within the larger society. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### SOCI 430 - Gender Roles in Contemporary Society

Credits: 3 | Significant issues related primarily to the concerns of women as members of American society, but also in cross-cultural perspective. Includes such topics as socialization in sex roles, women in the professions, women in minority groups, the feminization of poverty, and women and substance abuse and crime. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 431 - Needs Assessment and Social Policy

Credits: 3 | Introduction to concepts and methods of conducting a Community needs assessment and mapping community capacity to address those needs. Development of skills in selecting, analyzing, understanding, and interpreting assessment outcomes to inform policy and practice. Consider complex interactions between community and international development stakeholders and other factors affecting accountability, project planning, and outcomes. Open to seniors only. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 432 - Research Methods II: Introduction

Credits: 3 | Asking researchable questions. Reviewing the literature. Hypothesis formulation. Research methodology emphasizes qualitative approaches but includes discussion of instrumentation, subject selection, and data collection procedures. Andrews' human subject research review process. Informed consent. Writing assignments include theoretical essay, pilot study, second pilot study, research journal. Lab schedule will be arranged. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: BHSC 230 or STAT 285. | Schedule Type: Lecture | College Code: CAS

### SOCI 433 - Research Methods III: Advanced Research Design-Experimental and Survey

Credits: 3 | The principles of designing, administrating, interpreting, and writing experimental research, questionnaires and interview schedules. Survey also focuses on coding procedures and scale construction. Structured around a research project, and the interpretation of scientific reports and professional journals. Lab schedule will be arranged. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PSYC 434. | Prerequisite(s): BHSC 230 or STAT 285 and PSYC 432. | Schedule Type: Lecture | College Code: CAS

## SOCI 434 - Research Methods IV: Advanced Statistical Analysis & SPSS

Credits: 3 | A study on advanced parametric and non-parametric techniques such as two-way ANOVA, regression and power. The utilization of SPSS in the analysis and interpretation of statistical data. An analysis of professional journals and reports with an emphasis on the statistical reasoning. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PSYC 433/SOCI 433. | Prerequisite(s): BHSC 230 or STAT 285 and PSYC 432/SOCI 432. | Schedule Type: Lecture | College Code: CAS

#### SOCI 440 - Sociology of the Family

Credits: 3 | This course focuses on theoretical understandings of family relationships in diverse settings and the various contexts that shape and sustain such relationships. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 444 - International Development: Cases and Application

Credits: 3 | This course examines community and international development theory and practice through field study and fieldwork. Issues to be covered may include development and humanitarian aid and response. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### SOCI 445 - Emergency Planning

Credits: 2 | Principles of emergency planning used in any type of disaster. Includes working with volunteers, handling special events, evacuation, mass fatalities, planning for schools, and homeland security planning. Includes satisfactory completion of FEMA-provided modules in Professional Development Series. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOCI 408 or SOCI 508; SOWK 408. | Schedule Type: Lecture | College Code: CAS

#### SOCI 449 - Disaster Response and Emergency Operations

Credits: 2 | Study of the phases of disaster response and recovery with attention to local, state and national roles and expectations. Models of emergency management operations including communication, coordination, and chief executive decision making under conditions of disaster response will be emphasized. Attention will be given to the problems and concerns of recovery of victims and communities and the implications of disaster recovery efforts. | Grade Mode: Normal (A-F,I,W) |

Prerequisite(s): BSAD426/BSAD 526; Evidence of Satisfactory completion of PDService course. modules, IS244 Developing and Managing Volunteers, and IS700 National Incident Management System. | Schedule Type: Lecture | College Code: CAS

#### SOCI 454 - Poverty Seminar

Credits: 3 | This seminar will examine the nature, extent and measures of rural and urban poverty, its causes and consequences, and the antipoverty programs proposed by government, activists, anti-poverty organizations such as NGOs, academic community, international and bilateral aid organizations. | Course Attribute: Poverty Seminar | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### SOCI 455 - Development Policy and Analysis

Credits: 3 | Examine the processes that lead to the formulation, adoption, implementation, and evaluation of development policies and programs across countries. Study types of policies, policy design, and policy tools. Develop skills of political and bureaucratic analysis that can improve policy analysis, policy decision-making, and policy implementation for sustainable development. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 460 - Death and Grief in Contemporary Society

Credits: 2 | The study of cultural and societal perspectives on death and personal and interpersonal dynamics of death and dying. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 470 - Demography

Credits: 3 | Overview of the world's population; spatial dimensions of human populations; fertility concepts, measurements, trends, levels, and explanations; mortality and migration; population structures, life chances; population growth, economic development, and the environment. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

### SOCI 474 - Social Thought and Theory

Credits: 3 | The roots of self-conscious social thought and the rise of sociology and anthropology as scientific disciplines in the 19th century. Major theoretical orientations in their fields, proponents, and impact on present-day sociology and anthropology are reviewed. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Odd years | College Code: CAS

#### SOCI 478 - Principles and Practice of Hazards Mitigation

Credits: 3 | Study of preparedness as related to hazards in the local community with attention to means of mitigation as well as planning measures. Includes IS modules IS 271 Anticipating Hazardous Weather & Community Risk and IS 240 Hazardous Materials Prevention. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 208 and evidence of satisfactory completion of SOCI 408/SOWK 408. | Schedule Type: Lecture | College Code: CAS

#### SOCI 480 - Field Experience

Credits: 1 | Supervised field placement in a human services setting is approved in advance by the department chair. A minimum of 45 hours of fieldwork is required for each credit. Open only to departmental majors. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 8 credits | Schedule Type: Blended Learning, Practicum | College Code: CAS

#### SOCI 486 - Gender, Ethnicity and Family in Development

Credits: 3 | This course provides an overview of the role of and issues surrounding gender and ethnicity in society. Particular attention will focus on how ethnic and gender roles impact family structure, function and interaction patterns as well as how these patterns impact community and international development. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

### SOCI 490 - Capstone in Emergency Preparedness (Practicum)

Credits: 1 | Experience in Disaster Preparedness exercises. Individually planned with the student by the instructor in consultation with local campus and community Emergency Coordinators. Briefing and reflections with the instructor will be expected of students enrolled in this course. Permission of instructor required. | Course Attribute: Service course | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Prerequisite(s): SOCI 408/SOWK 408 or equivalent and one other core course in Emergency Preparedness. | Repeatable: Repeatable up to 3 credits | Schedule Type: Practicum | College Code: CAS

#### SOCI 495 - Independent Study/Readings in Sociology

Credits: 1–3 | Individual assignments and/or reports and/or individualized research in sociology are set up on a contract basis with no more than 3 credits per semester. Students may repeat or take any combination of departmental independent study courses for up to 6 credits. Consult staff before registering. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### SOCI 497 - Internship

Credits: 1,2 | Supervised internship in a human services setting is approved in advance by department chair or program director. A minimum of 100 hours of internship is required for each credit. Open only to departmental majors. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 2 credits | Schedule Type: Practicum | College Code: CAS

### SOCI 498 - Research Project in Sociology

Credits: 1–3 | An independent research project in sociology typically supervised by a faculty member and resulting in a technical report summarizing findings or a submission to a professional conference. Students may repeat or take any combination of departmental independent study or research project courses up to 6 credits with no more than 3 credits per semester. Consult staff before registering. |

Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### SOCI 508 - Emergency Preparedness

Credits: 2 | Provides an introduction to basic philosophy and concepts of Emergency Preparedness as required by FEMA (Federal Emergency Management Agency) and most states which certify staff. Includes use of FEMA-provided modules in the Professional Development Series which are accepted prerequisites for advanced classroom courses. A passing grade is required on each module for satisfactory grade and receipt of a Professional Development Series Certificate of Completion. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 510 - Gender Roles in Contemporary Society

**Credits:** 3 | Significant issues related primarily to the concerns of women as members of American society, but also in cross-cultural perspective. Includes such topics as socialization in sex roles, women in the professions, women in minority groups, the feminization of poverty, and women and substance abuse and crime. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### SOCI 514 - Migrant & Refugee Issues

Credits: 2,3 | This course will study fundamental theories and concepts regarding voluntary migration (migrant issues) and forced migration (refugee issues). It will also address the main political, social, economic and environmental push and pull factors that influence immigration and emigration within the framework of globalization. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 515 - Racial and Ethnic Relations

Credits: 3 | A study of the distinctive racial and cultural minorities in American society with an emphasis on problems and adjustments within the larger society. |
Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 532 - Research Methods II: Introduction

Credits: 2 | Asking researchable questions. Reviewing the literature. Hypothesis formulation. Research methodology emphasizes qualitative approaches but includes discussion of instrumentation, subject selection and data collection procedures. Andrews' human-subject-research review process. Informed consent. Writing assignments include theoretical essay, pilot study, second pilot study, research journal. Lab schedule will be arranged. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: BHSC 230 or STAT 285. | Schedule Type: Lecture | College Code: CAS

### SOCI 533 - Research Methods III: Advanced Research Design-Experimental and Survey

Credits: 2 | The principles of designing, administrating, interpreting, and writing experimental research, questionnaires and interview schedules. Survey also focuses on coding procedures and scale construction. Structured around a research project, and the interpretation of scientific reports and professional journals. Lab schedule will be arranged. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOCI 534. | Prerequisite(s): BHSC 230 or STAT 285 and SOCI 532. | Schedule Type: Lecture | College Code: CAS

## SOCI 534 - Research Methods IV: Advanced Statistical Analysis & SPSS

Credits: 2 | A study on advanced parametric and non-parametric techniques such as two-way ANOVA, regression and power. The utilization of SPSS in the analysis and interpretation of statistical data. An analysis of professional journals and reports with an emphasis on the statistical reasoning. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOCI 533. | Prerequisite(s): BHSC 230 or STAT 285 and SOCI 532. | Schedule Type: Lecture | College Code: CAS

#### SOCI 549 - Disaster Response and Emergency Operations

Credits: 2 | Study of the phases of disaster response and recovery with attention to local, state and national roles and expectations. Models of emergency management operations including communication, coordination, and chief executive decision making under conditions of disaster response will be emphasized. Attention will be given to the problems and concerns of recovery of victims and communities and the implications of disaster recovery efforts. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BSAD426/BSAD 526; Evidence of Satisfactory completion of PDService course. modules, IS244 Developing and Managing Volunteers, and IS700 National Incident Management System. | Schedule Type: Lecture | College Code: CAS

#### SOCI 550 - Social Policy

Credits: 2 | Develops basic knowledge and skills for policy analysis, formulation and critical challenge within local and international contexts. Examines the determining factors affecting public policy in the United States as compared with other systems. Provides framework for analysis of social problems and policies, as they impact development and practice in human services. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 554 - Community Health & Human Disease

Credits: 2 | Examines in-depth emerging issues in the behavioral sciences. May be repeated in different specialized areas. | Grade Mode: Normal (A-F,I,W) |

Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

#### SOCI 555 - Emergency Planning

Credits: 2 | Principles of emergency planning used in any type of disaster. Includes working with volunteers, handling special events, evacuation, mass fatalities, planning for schools, and homeland security planning. Includes satisfactory completion of FEMA provided modules in Professional Development Series. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOCI 408 or SOCI 508; SOWK 408. | Schedule Type: Lecture | College Code: CAS

#### SOCI 560 - Family Resource Management

**Credits:** 3 | Principles of sound management of resources including time, money, and energy as they relate to individuals and groups throughout the lifespan, with emphasis on the family. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Odd years | **College Code:** CAS

#### SOCI 565 - Demography

Credits: 3 | Overview of the world's population; spatial dimensions of human populations; fertility concepts, measurements, trends, levels, and explanations; mortality and migration; population structures, life chances; population growth, economic development, and the environment. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOCI 575 - Topics in Sociology

Credits: 1–5 | This topic course could be used to register for a study tour. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### SOCI 578 - Principles and Practice of Hazards Mitigation

Credits: 3 | Study of preparedness as related to hazards in the local community with attention to means of mitigation as well as planning measures. Includes IS modules IS 271 Anticipating Hazardous Weather & Community Risk and IS 240 Hazardous Materials Prevention. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 208 and evidence of satisfactory completion of SOCI 408/SOWK 408. | Schedule Type: Lecture | College Code: CAS

## Biology

Price Hall, Room 216 269-471-3243 biology@andrews.edu www.andrews.edu/biology/

#### Faculty

H. Thomas Goodwin, *Chair* Pamela S. Coburn-Litvak, *Graduate Program Coordinator* Daniel Gonzalez-Socoloske

Daniel Gonzalez-Socoloske James L. Hayward Peter J. Lyons Kanya C. Long David N. Mbungu Marlene N. Murray-Nseula Benjamin A. Navia Denise L. Smith Robert F. 7dor

#### Emeriti

Bill Chobotar David A. Steen John F. Stout Dennis W. Woodland

#### Mission

The Department of Biology provides transformational education in the biological sciences for a diverse student population, set in the context of a Seventh-day Adventist Christian worldview. To achieve this mission we:

- Seek knowledge and develop skills for lifelong learning through rigorous research, teaching and learning in the biological sciences;
- Affirm faith, engender integrity and honor the Creator through personal mentoring, intentional study of life as God's creation, and the ethical practice of science: and
- Change the world by active service, promoting responsible living as stewards of creation, and preparing students for meaningful careers in church and society.

Each degree offered by the Department of Biology includes a common core curriculum and additional courses tailored to students' special needs.

Highly motivated students may compete for the Biology Undergraduate Research Traineeship (BURT) program. For full details, consult your academic advisor.

### **Bachelors**

## Biology, Behavior/Mathematics Emphasis BS

**Total Credits: 124** 

### Major: Core Requirements — 41-43

#### Behavioral Neuroscience Core

- PSYC 180 Dealing with Your Mind Credits: 3
- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4

#### Choose one of the following sets:

- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1

Or

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

Or

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

#### **Upper Division Core Courses:**

- BIOL 477 Neurobiology Credits: 3
- PSYC 364 Learning and Behavior Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- Or BIOL 450 Neuropsychopharmacology Credits: 3

### Major: Concentration Requirements - 28

### Behavior/Mathematics

- MATH 191 Calculus I Credits: 4
- Or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- BIOL 371 Genetics Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3
- BIOL 484 Animal Behavior Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- Or BIOL 348 General Ecology Credits: 3

#### Mathematical Methods

- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0 (taken repeatedly see course description)
- MATH 426 Mathematical Modeling in Biology Credits: 3

### Research Project

• MATH 495 - Independent Study Credits: 1

### Andrews Core Experience — 43-46\*

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements.

\*46 credits for standard ACE packack; 43 credits for Honors.

Note: Completing the Behavioral Neuroscience core meets general education requirements for Interdisciplinary Social Science and both Physical and Life Sciences. If a student changes to another degree program, however, this substitutions will no longer apply even if already completed.

#### Religion

RELT 385 - Bioethics and Christian Faith Credits: 3

#### Social Sciences

SOCI 119 - Principles of Sociology Credits: 3

### Undergraduate Electives — 9-12

Students must take 9-12 elective credits from any college level courses.

### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with

a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biology, Biomedical Science Emphasis BS

**Total Credits: 124** 

### Major: Core Requirements — 27

### **Biology Core**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2
- BIOL 348 General Ecology Credits: 3
- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3

### Major: Concentration Requirements — 12-14

#### Biomedical Science

#### Select three of the following courses:

- BIOL 315 Developmental Biology Credits: 3
- BIOL 464 Systems Physiology Credits: 4
- BIOL 465 Histology Credits: 3
- BIOL 475 Biology of Bacteria Credits: 3
- PHTH 417 Human Anatomy Credits: 3 (must be taken with lab)
- PHTH 427 Human Anatomy Laboratory Credits: 1

#### Additional three credits from:

Any three credits of upper-division biology. (excluding BIOL 495 and BIOL 496)

### **Cognates** — 28-30

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- BCHM 421 Biochemistry I Credits: 4

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### **Andrews Core Experience 43-49\***

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### **Social Sciences**

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### Undergraduate Electives — 6-12

Students must take 6-12 elective credits from any college level courses.

### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biology, Customized Emphasis BS

**Total Credits: 124** 

### Major: Core Requirements — 27

### **Biology Core**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2
- BIOL 348 General Ecology Credits: 3
- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3

### Major: Concentration Requirements — 16

#### Customized

In situations where students are preparing for a specific job opportunity or a graduate or professional program, the customized emphasis may be considered if other degree programs are not adequate. Courses are to be selected from biology or other disciplines in consultation with a Department of Biology advisor. Credits must include coursework in at least two of three course groups—Group A: Cell and Molecular Biology, Group B: Structural and Functional Biology of Organisms, and Group C: Biodiversity and Environmental Biology; representation of all three groups is recommended. Departmental approval must be received before the beginning of the spring semester of the student's junior year.

### **Cognates** — 24-26

CHEM 131 - General Chemistry I Credits: 4

- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

#### Or

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### **Andrews Core Experience 43-49\***

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### **Social Sciences**

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### **Undergraduate Electives — 8-14**

Students must take 8-14 elective credits from any college level courses.

### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biology, Molecular Biology Emphasis BS

#### **Total Credits: 124**

### Major: Core Requirements — 27

#### Biology Core

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2

- BIOL 348 General Ecology Credits: 3
- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3

### Major: Concentration Requirements — 12-13

### Molecular Biology

#### Choose two of the following courses:

BIOL 415 - Genomics, Proteomics, and Bioinformatics Credits: 3

#### Choose one of the following courses:

- BIOL 417 Virology Credits: 3
- BIOL 450 Neuropsychopharmacology Credits: 3
- BIOL 464 Systems Physiology Credits: 4
- BIOL 465 Histology Credits: 3
- BIOL 475 Biology of Bacteria Credits: 3
- BIOL 477 Neurobiology Credits: 3

### **Cognates** — 28-30

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- BCHM 421 Biochemistry I Credits: 4

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

#### 0

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### **Andrews Core Experience 43-49\***

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Mati

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### Social Sciences

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### Undergraduate Electives — 8-14

Students must take 8-14 elective credits from any college level courses.

#### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biology, Neurobiology Emphasis BS

**Total Credits: 124** 

### Major: Core Requirements — 27

### **Biology Core**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2
- BIOL 348 General Ecology Credits: 3
- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3

### Major: Concentration Requirements — 12

### Neurobiology

- BIOL 477 Neurobiology Credits: 3
- BIOL 450 Neuropsychopharmacology Credits: 3
- Or BIOL 486 Neurobiology of Mental Illness Credits: 3

#### Group A: Cell and Molecular Biology - 3

Select three credits from this group:

- BIOL 415 Genomics, Proteomics, and Bioinformatics Credits: 3
  - Group C: Biodiversity and Environmental Biology 3

Select three credits from this group:

- BIOL 208 Environmental Science Credits: 4
- BIOL 417 Virology Credits: 3
- BIOL 425 Parasitology Credits: 3
- BIOL 428 Paleobiology Credits: 3
- BIOL 454 Vertebrate Zoology Credits: 3
- BIOL 455 Medical Botany Credits: 3
- BIOL 456 Marine Botany Credits: 3.5
- BIOL 458 Marine Invertebrates Credits: 3.5
- BIOL 459 Entomology Credits: 3
- BIOL 475 Biology of Bacteria Credits: 3
- BIOL 476 Biodiversity of Vascular Plants Credits: 4
- BIOL 479 Marine Ecology Credits: 3.5
- BIOL 484 Animal Behavior Credits: 3 (highly recommended)
- BIOL 487 Biogeography Credits: 3

### **Cognates** — 28-30

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3

- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- BCHM 421 Biochemistry I Credits: 4

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### **Andrews Core Experience 43-49\***

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### **Social Sciences**

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### Undergraduate Electives — 8-14

Students must take 8-14 elective credits from any college level courses.

### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biology, Neuroscience Emphasis BS

Total Credits: 124

### Major: Core Requirements — 41-43

#### Behavioral Neuroscience Core

- PSYC 180 Dealing with Your Mind Credits: 3
- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4

#### Choose one of the following sets:

- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
  -
- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
  - О
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

#### **Upper Division Core Courses:**

- BIOL 477 Neurobiology Credits: 3
- PSYC 364 Learning and Behavior Credits: 3
- PSYC 445 Cognitive Psychology Credits: 3
- PSYC 449 Neuropsychopharmacology Credits: 3
- Or BIOL 450 Neuropsychopharmacology Credits: 3

### Major: Concentration Requirements — 28

#### Neuroscience

- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3
- BIOL 464 Systems Physiology Credits: 4
- BIOL 484 Animal Behavior Credits: 3
- two upper division electives from biology, biochemistry or psychology

#### Research

#### Research Methods

- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0 (Taken repeatedly see course description)
- BIOL 305 Scientific Communication Credits: 2

#### Research Project

• 2 Credits of BIOL 495 - Independent Research in Biology Credits: 0–4

### Andrews Core Experience — 43-46\*

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements.

\*46 credits for standard ACE packack; 43 credits for Honors.

Note: Completing the Behavioral Neuroscience core meets general education requirements for Interdisciplinary Social Science and both Physical and Life Sciences. If a student changes to another degree program, however, this substitutions will no longer apply even if already completed.

#### Religior

RELT 385 - Bioethics and Christian Faith Credits: 3

#### Social Sciences

SOCI 119 - Principles of Sociology Credits: 3

### **Undergraduate Electives — 9-12**

Students must take 9-12 elective credits from any college level courses.

### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biology, Secondary Education Emphasis BS

### **Total Credits: 1000000**

### Major: Core Requirements — 27

### **Biology Core**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2
- BIOL 348 General Ecology Credits: 3
- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3

### Major: Concentration Requirements — 17

### Secondary Education

Available only to those students obtaining secondary teacher certification. For more information regarding General Education Requirements or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum

- BIOL 208 Environmental Science Credits: 4
- BIOL 428 Paleobiology Credits: 3
- BIOL 454 Vertebrate Zoology Credits: 3
- BIOL 476 Biodiversity of Vascular Plants Credits: 4
- BIOL 484 Animal Behavior Credits: 3

### **Cognates** — 24-26

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

#### Or

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### Andrews Core Experience 43-49\*

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### **Social Sciences**

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

## Biology, Zoology Emphasis BS

### **Total Credits: 124**

### Major: Core Requirements — 27

#### Biology Core

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2
- BIOL 348 General Ecology Credits: 3
- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- BIOL 449 Historical and Philosophical Biology Credits: 3

### Major: Concentration Requirements — 16

### Zoology

### Group B: Structural and Functional Biology of Organisms

Select at least one of the following:

- BIOL 315 Developmental Biology Credits: 3
- BIOL 464 Systems Physiology Credits: 4
- BIOL 465 Histology Credits: 3
- BIOL 477 Neurobiology Credits: 3
- PHTH 417 Human Anatomy Credits: 3 (must be taken with lab)
- PHTH 427 Human Anatomy Laboratory Credits: 1

#### **Group C: Biodiversity and Environmental Biology**

Select at least one of the following plant biology courses:

- BIOL 455 Medical Botany Credits: 3
- BIOL 456 Marine Botany Credits: 3.5
- BIOL 476 Biodiversity of Vascular Plants Credits: 4

#### **Group C: Biodiversity and Environmental Biology**

Select at least one of the following zoology courses:

- BIOL 428 Paleobiology Credits: 3
- BIOL 454 Vertebrate Zoology Credits: 3
- BIOL 458 Marine Invertebrates Credits: 3.5

- BIOL 459 Entomology Credits: 3
- BIOL 479 Marine Ecology Credits: 3.5
- BIOL 484 Animal Behavior Credits: 3
- BIOL 487 Biogeography Credits: 3

### **Cognates** — 24-26

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
   Or
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### **Andrews Core Experience 43-49\***

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### Social Sciences

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### Undergraduate Electives — 8-14

Students must take 8-14 elective credits from any college level courses.

### Thesis (Optional)

A minimum of 3 credits of BIOL 495 or HONS 497H. Biology majors may elect to complete a minimum of 3 credits of original research in a topic of mutual interest with a Department of Biology faculty member and present this original work in the form of a senior thesis. This research experience may be supported by a research scholarship.

## Biotechnology, Biology Emphasis BS

### **Program Description**

Biotechnology is an industry that is growing by leaps and bounds. The biotechnology program at Andrews University aims to transform students into scientists of the highest caliber and ethical standard that can contribute to this industry in many

capacities. Through a broad and interdisciplinary training in the biosciences, students will develop the practical scientific and communication skills necessary for employment in biotechnology. They will also develop in their knowledge of the ethical issues that frequently arise in this discipline. Areas of study include genetics, genomics and proteomics, biochemistry, and techniques in molecular cloning and analysis. Students specialize in either biological or chemical aspects of biotechnology. An internship requirement will introduce students to the biotechnology workforce and help them to make connections that may lead to future employment.

**Total Credits: 124** 

### Major: Core Requirements: 41 - 43

### Core Requirements

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- BIOL 371 Genetics Credits: 3
- BIOL 415 Genomics, Proteomics, and Bioinformatics Credits: 3
- BCHM 421 Biochemistry I Credits: 4
- BCHM 430 Biochemistry Lab Credits: 1
- BIOL 430 Molecular Laboratory Techniques Credits: 3
- BIOL 120 Introduction to Biotechnology Credits: 1
- Or CHEM 120 Introduction to Biotechnology Credits: 1
- 2 Credits of BIOL 497 Internship in Biotechnology Credits: 1
- Or 2 Credits of CHEM 497 Internship in Biotechnology Credits: 1

### Major: Concentration Requirements: 13-15

### **Biology Concentration**

- BIOL 280 Biostatistics and Research Design Credits: 3
- BIOL 285 Research Seminar in Biology Credits: 0
- BIOL 305 Scientific Communication Credits: 2
- BIOL 372 Cell and Molecular Biology Credits: 3
- One additional upper division BIOL/BCHM/CHEM course to be selected with your advisor. Credits: 2-4

#### Choose one of the following courses:

- BIOL 440 Electron Microscopy in Biological Investigations Credits: 3
- BIOL 447 Cell and Tissue Culture Credits: 3

### Cognates: 8-10

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
   Or
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### **Social Sciences**

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### **Undergraduate Electives: 7-19**

Students must take 10-17 credits from any college level courses.

### **Program Objectives**

### **Program Outcomes**

- Knowledge: Students will demonstrate a comprehensive knowledge and understanding of the properties and interrelationships of materials relevant to biological and chemical analysis.
- Communication Skills: Students will effectively communicate biotechnical information to a diversity of audiences using a variety of formats. Students will obtain relevant biotechnical information from web-accessible databases.
- Technical Skills, Safety, and Environmental Stewardship: Students will demonstrate competency in common biotechnology lab activities and instrumentation.
   Students will demonstrate commonly accepted laboratory safety and waste management practices.
- Interdisciplinary Teamwork: Students will utilize positive team behaviors to accomplish interdisciplinary tasks.
- Ethical Use of Biotechnical Information and Techniques: Students will execute the highest standards of integrity and ethics during their professional training activities.

#### Mission

To transform the student of science into a scientist of the highest caliber and ethical standard.

### Goals

The biotechnology program aims to

- 1. provide a broad and interdisciplinary training in the biosciences,
- educate students in the communication of science and the ethical use of scientific knowledge and skills,
- foster the development of practical scientific skills necessary for employment in the biotechnology sector,
- 4. introduce students to the workforce through internship opportunities.

### **Undergraduate Minors**

## Biology Minor

### **Minor Requirements**

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4

 Choose any additional BIOL courses which count toward major or minor for total of 20 credits.

### **Total Credits: 20**

### **Environmental Science Minor**

#### **Electives**

Suggested electives chosen in consultation with the advisor include:

- BIOL 454 Vertebrate Zoology Credits: 3
- BIOL 456 Marine Botany Credits: 3.5
- BIOL 458 Marine Invertebrates Credits: 3.5
- BIOL 459 Entomology Credits: 3
- BIOL 476 Biodiversity of Vascular Plants Credits: 4
- BIOL 479 Marine Ecology Credits: 3.5
- BIOL 484 Animal Behavior Credits: 3
- BIOL 487 Biogeography Credits: 3
- CHEM 340 Environmental Chemistry Credits: 4
- GEOG 240 Physical Geography Credits: 3
- PLSC 435 Public Policy Credits: 3

**Total Credits: 28** 

### **Masters**

## Biology MS

### Admission Requirements

In addition to the general admission requirements under the School of Graduate Studies & Research, students must meet the following departmental requirements.

- A bachelor's degree with major in biology or an approved, related discipline, with appropriate upper division courses. The following courses are recommended: cell/molecular biology, organismal physiology, developmental biology, genetics, and ecology.
- A minimum GPA of 3.00 (B) in the undergraduate major.
- GRE scores are required in order to review the application for admission (see required tests under the School of Graduate Studies and Research).
- Cognate sciences, including full-year courses in general chemistry, organic chemistry, and physics. Mathematics through calculus and a course in statistics are strongly recommended.

### Degree Requirements

- The inclusion of BIOL 550, BIOL 681, BIOL 682.
- A written comprehensive examination (BIOL 670) completed before the end of the third semester in residence.
- A thesis earning 6 credits (two registrations for BIOL 699).
- A final oral examination in defense of the thesis.
- A minimum of 30 credits of approved course work and thesis.

### Group A: Cell and Molecular Biology

- BIOL 415 Genomics, Proteomics, and Bioinformatics Credits: 3
- BIOL 416 Cell Signaling Mechanisms in Human Disease Credits: 3
- BIOL 418 Immunology Credits: 3
- BIOL 419 Immunology Lab Credits: 1
- BIOL 445 Molecular Genetics Credits: 3

# **Group B: Structural and Functional Biology of Organisms**

- BIOL 315 Developmental Biology Credits: 3
- BIOL 316 Human Embryology Credits: 1
- BIOL 444 Electron Microscopy in Biological Investigations Credits: 3
- BIOL 446 Electron Microscopy Laboratory Credits: 2
- BIOL 464 Systems Physiology Credits: 4
- BIOL 465 Histology Credits: 3
- BIOL 468 Systems Physiology: Organismal Maintenance Credits: 3
- BIOL 477 Neurobiology Credits: 3
- BIOL 486 Neurobiology of Mental Illness Credits: 3
- BIOL 477 Neurobiology Credits: 3

# Group C: Biodiversity and Environmental Biology

- BIOL 208 Environmental Science Credits: 4
- BIOL 417 Virology Credits: 3
- BIOL 425 Parasitology Credits: 3
- BIOL 428 Paleobiology Credits: 3
- BIOL 454 Vertebrate Zoology Credits: 3
- BIOL 455 Medical Botany Credits: 3
- BIOL 456 Marine Botany Credits: 3.5
- BIOL 458 Marine Invertebrates Credits: 3.5
- BIOL 459 Entomology Credits: 3
- BIOL 475 Biology of Bacteria Credits: 3
- BIOL 476 Biodiversity of Vascular Plants Credits: 4
- BIOL 479 Marine Ecology Credits: 3.5
   BIOL 484 Animal Behavior Credits: 3
- BIOL 487 Biogeography Credits: 3

### **Biology**

#### **BIOL 100 - Human Biology**

Credits: 4 | This course is designed to provide students with a basic understanding of the structure and function of the human body. Emphasis is placed on the practical application of principles learned in the areas of nutrition, anatomy and physiology. Meets the life science general education requirement. Does not apply to major or minor. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 105 - Techniques of Molecular Biology

Credits: 3 | Lab-based introduction to techniques in molecular biology and their application to forensics. Does not apply to major or minor. | Weekly: 1 lecture and a 3-hour lab | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Special Approval: Only available for RESA students. | Offering: Fall | College Code: CAS

#### **BIOL 110 - Principles of Biology**

Credits: 4 | A one-semester survey of the principles of biology as they apply to the study of biological molecules, cells, multicellular organisms, and ecosystems. The course will introduce key concepts of biological function, inheritance, adaptation, and diversity. Does not apply to major or minor. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall | College Code: CAS

#### **BIOL 120 - Introduction to Biotechnology**

Credits: 1 | Introduces students to the field of biotechnology through lecture and guest presentations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **BIOL 165 - Foundations of Biology**

Credits: 5 or 4 | First semester of a full-year sequence addressing the foundational principles in biology. Explores the cellular and molecular basis of life, principles of heredity, biodiversity and classification of organisms excluding animals, and plant form and function. 5 credits when offered during the academic year, 4 credits when taken at the Rosario Beach Marine Laboratory during the summer. | Weekly: 5 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### BIOL 166 - Foundations of Biology

Credits: 5 or 4 | Second semester of a full-year sequence addressing the foundational principles in biology. Explores biodiversity and classification of animals, animal form and function, history of life on earth, and ecology. Five credits when offered during the academic year, 4 credits when taken at the Rosario Beach Marine Laboratory during the summer. | Weekly: 5 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### BIOL 208 - Environmental Science

Credits: 4 | Study of basic ecological principles as applied to human activities. Discussions deal with contemporary environmental issues. Lab includes field trips, guest speakers, and experiments. Meets the life science general education requirement and certain state educational certification requirements. May apply to biology major or minor. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 221 - Anatomy and Physiology I

Credits: 4 | First semester of a full-year sequence addressing the structure and function of the human organism. Surveys introductory biological chemistry, cell biology, histology, and the structure, function, and control of the integumentary, skeletal, muscular, nervous, and sensory systems. Does not apply to a major or minor. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Fall | College Code: CAS

#### BIOL 222 - Anatomy and Physiology II

Credits: 4 | Second semester of a full-year sequence addressing the structure and function of the human organism. Surveys the structure, function, and control of the endocrine, cardiovascular, circulatory, respiratory, urinary, digestive and reproductive systems. Does not apply to a major or minor. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 221 | Schedule Type: Lecture, Lab | Offering: Spring | College Code: CAS

#### BIOL 251 - Research Methods I

Credits: 1 | An introduction to scientific research with a focus on data analysis. Topics include scientific epistemology, hypothesis formation, probability, normal distributions, sampling, descriptive statistics, graphing, statistical inference, t-tests, analysis of variance, correlation, linear regression, and chi-square. | Weekly: 1 lecture/discussion | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 165, BIOL 166, MATH 145 or higher. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### BIOL 252 - Research Methods II

Credits: 1 | Background and experience in understanding and reporting scientific information. Topics include scientific writing, the nature of scientific literature, literature searches, critique of scientific papers, oral and poster presentations, ethics in scientific reporting, preparing manuscripts for journal submission, and writing grant proposals. | Weekly: 1 lecture/discussion | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 251, COMM 104, ENGL 215. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **BIOL 260 - General Microbiology**

Credits: 4 | Includes history, morphology, classification, control, growth, transmission, and pathogenicity of selected bacteria, viruses, rickettsia, fungi, and parasites. Covers the nature of host defenses against pathogens, including the acquisition of specific immunity and immune disorders. Does not apply to major or minor. | Weekly: 3 lectures and two 1.5-hour labs | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Spring | College Code: CAS

#### **BIOL 280 - Biostatistics and Research Design**

Credits: 3 | An introduction to research design and statistical methods in quantitative biology. Topics include probability, basic study design, descriptive statistics, sampling, contingency tables, t-tests, one- and two-way analysis of variance, correlation, and simple linear regression. Both parametric and non-parametric techniques are explored. Computational exercises will use the R and SPSS packages. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 165, BIOL 166, MATH 145 or higher or MPE ? 3 | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring | College Code: CAS

#### BIOL 285 - Research Seminar in Biology

Credits: 0 | Required for at least 5 semesters for biology majors (or each semester for students who transfer into biology with less than 5 semesters remaining). Each registration will require students to attend and report on at least 3 departmentally approved research seminars during that semester. | For semester: Attend and report on at least 3 approved research seminars. | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Seminar | Offering: Fall, Spring | College Code: CAS

#### **BIOL 305 - Scientific Communication**

Credits: 2 | A practical introduction to scientific communication. This course will focus on developing the fundamental skills required to convey information in the form of grant proposals, oral and poster presentations and research articles. | Weekly: 2 lectures | Grade Mode: Normal (A-F,I,W) | Corequisite(s): BIOL 280 | Prerequisite(s): COMM 104 and ENGL 215. Honors students: HONS 115H. | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### **BIOL 315 - Developmental Biology**

Credits: 3 | A study of the cellular and tissue-level events that result in the development of integrated organisms. Vertebrate and invertebrate model systems will be examined and compared with plants. Lab activities include vertebrate developmental anatomy and experimental approaches to understanding basic developmental processes. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166. | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### BIOL 316 - Human Embryology

Credits: 1 | Acquaints students with the process of human development and embryology. | Weekly: 1 lecture | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Prior or concurrent registration in BIOL 315 is recommended. | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### BIOL 330 - History of Earth and Life

Credits: 4 | Survey of fundamental concepts of geology and paleontology with application to a study of the history of the earth and of life. Consideration is given to interactions of religious, philosophical, and geological ideas, within a biblical worldview. Meets the life science general education requirement. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall, odd years | College Code: CAS

#### **BIOL 348 - General Ecology**

Credits: 3 | Ecological principles as applied to individual, population, community, and ecosystem levels of organization. Labs feature the characterization of ecological systems using standard field and lab techniques. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 165, BIOL 166 or BIOL 208 | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### **BIOL 371 - Genetics**

Credits: 3 | Mechanisms of heredity are considered in light of classical population and molecular genetics. Labs feature experience in Drosophila genetics, chromosome analysis, statistical techniques, and recombinant DNA technology. | Weekly: 2 lectures, a recitation and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166, and completion of or simultaneous enrollment in CHEM 131. | Schedule Type: Lecture, Lab | Offering: Fall | College Code: CAS

#### BIOL 372 - Cell and Molecular Biology

Credits: 3 | Information from molecular biology, biochemistry, biophysics, physical chemistry, and electron microscopy are integrated to present the cell as a functional unit. Labs provide experience in the collection and analysis of quantitative data about cells. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166, and completion of or simultaneous enrollment in CHEM 132. | Schedule Type: Lecture, Lab | Offering: Spring | College Code: CAS

#### BIOL 405 - Topics in\_\_\_\_\_

Credits: 1 | Investigates various specialties of biology. | One lecture or lab for each credit | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | Offering: Fall, Spring, Summer | College Code: CAS

#### BIOL 415 - Genomics, Proteomics, and Bioinformatics

Credits: 3 | An examination of the wealth of information to be found in our genomes and proteomes, the techniques used to produce and analyze these data, and its implications for biomedicine and related fields. Online databases and bioinformatics tools will be used extensively. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 165 and BIOL 166. Laptop required. | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring, even years | College Code: CAS

### BIOL 417 - Virology

Credits: 3 | An introduction to virus classification, structure and function. This course will present a survey of viruses that highlights species of human or animal health significance. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 165 and BIOL 166 |

Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring, as scheduled | College Code: CAS

#### BIOL 420 - Immunology

Credits: 3 | This course introduces principles of immunology, including cells and organs comprising the immune system, innate and adaptive immune responses, generation of lymphocyte receptor diversity, antibody structure and function, and cell mediated immunity, as well as clinical applications such as autoimmune disease, tumor immunology and vaccination. Integrated into the course is a laboratory offering practical experience with basic techniques used in immunology. | Weekly: 2 lectures and 1 lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 165, BIOL 166. | Schedule Type: Lecture/Lab | Offering: Fall, even years | College Code: CAS

#### **BIOL 425 - Parasitology**

Credits: 3 | Study of parasites, with emphasis on better known parasites of humans and animals. Attention given to ecological factors concerned with host-parasite contact, pathogenicity and pathology, and treatment and effect on parasitized populations. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166. | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 428 - Paleobiology

Credits: 3 | Covers various specialities including general and vertebrate paleontology. Surveys the origins, history, adaptations, diversity and paleoecology of ancient organisms as documented by the fossil record. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) |

Prerequisite(s): BIOL 166. | Repeatable: Repeatable with different topics | Schedule
Type: Lecture, Lab, Lecture/Lab | Offering: Fall, even years | College Code: CAS

#### BIOL 430 - Molecular Laboratory Techniques

Credits: 3 | Acquaints students with modern lab techniques of molecular biology. The manipulation and study of nucleic acids and proteins using model systems. | Weekly: 1 lecture and 2 labs | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 440 - Electron Microscopy in Biological Investigations

Credits: 3 | Lectures cover the theory, functions, and use of the transmission and scanning electron microscopes. Two 3-hour labs per week provide hands-on experience in the techniques involved in scanning and transmission electron microscopy, including use of the ultramicrotome. | Weekly: 1 lecture and two 3-hour labs | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### BIOL 447 - Cell and Tissue Culture

**Credits:** 3 | A study of the methods and applications of animal cell culture. Topics will include laboratory safety and equipment, primary and established cell lines, culture contamination, cell transformation and differentiation, and cell transfection.

| Weekly: 2 lectures and 1 lab | \$ - Course or lab fee | Swing course

| Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166. | Schedule Type: Lecture/Lab | Offering: Spring, odd years | College Code: CAS

#### BIOL 449 - Historical and Philosophical Biology

Credits: 3 | Examination of biological, paleontological, and geological concepts central to the study of historical events in biological systems. Considers the interactions of data, theories, and extra scientific concepts in historical biology, within the particular context of a biblical worldview. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166. | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

### BIOL 450 - Neuropsychopharmacology

Credits: 3 | A study of the mechanisms of actions of psychotropic agents and how they affect human perception and behavior. Emphasis is placed on the organization and function of the nervous system and the molecular and biochemical basis of drugs used to treat behavioral and clinical disorders. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 or PSYC 180; BIOL 221, BIOL 222 or BIOL 165, BIOL 166. | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### BIOL 453 - Biology Seminar

Credits: 1 | This course provides a capstone experience for senior biology majors. Guest speakers and readings focus on ethical dilemmas in science, medicine, dentistry, and science-related public policy issues. The course also serves as a venue for senior biology majors to report results of research projects completed under BIOL495. |
Weekly: 1 lecture/discussion | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 252, senior status. | Schedule Type: Seminar | Offering: Spring | College Code: CAS

#### **BIOL 454 - Vertebrate Zoology**

Credits: 3 | Covers the various specialties of vertebrate biology, including herpetology, ornithology, and mammalogy. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Special Approval: Open to non-science majors. | Offering: Vertebrate Zoology: Mammalogy (Fall, even years), Vertebrate Zoology: Ornithology (Spring, even years) | College Code: CAS

#### **BIOL 455 - Medical Botany**

Credits: 3 | Designed as an interface between botany, medicine, anthropology and pharmacology to define the impact plants have with the remedial, harmful or psychoactive health of humans. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring, as scheduled | College Code: CAS

#### BIOL 456 - Marine Botany

Credits: 3.5 | A systematic study of the marine plants found in Puget Sound, with a survey of marine plants from other areas. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Summer, as scheduled, only at the Rosario Beach Marine Laboratory | College Code: CAS

#### **BIOL 458 - Marine Invertebrates**

Credits: 3.5 | Biology of invertebrates studied in the marine environment of Puget Sound. A survey of the various phyla is conducted by studying the living animals in the field, and by tide pool observation, dredging, and scuba diving. A project on a specific group or species is required. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Summer, as scheduled, only at the Rosario Beach Marine Laboratory | College Code: CAS

### BIOL 459 - Entomology

Credits: 3 | Study of the fundamental aspects of insect biology. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall, odd years | College Code: CAS

#### BIOL 464 - Systems Physiology

Credits: 4 | Functional processes used by animals in adjusting to their external environment and controlling their internal environment. Labs involve the firsthand analysis of selected aspects of the major functional systems. | Weekly: 3 lectures and a 3.5-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166, CHEM 131. | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 465 - Histology

Credits: 3 | Microscopic anatomy, cytology, ultrastructure of tissues and organ systems are correlated with function. Emphasis on normal tissues of vertebrates. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### BIOL 475 - Biology of Bacteria

Credits: 3 | Study of the properties of bacteria that illustrate their function and relationship to other living systems. Topics include structure and function, classification, and interaction with the environment. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166; Organic Chemistry recommended (CHEM 231,CHEM 232, CHEM 241,CHEM 242). | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 476 - Biodiversity of Vascular Plants

Credits: 4 | A taxonomic and morphological study of vascular plants emphasizing the plants found in the Great Lakes area. Field trips. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course—Approved 400—499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Special Approval: Open to non-science majors. | Offering: Fall, even years | College Code: CAS

#### BIOL 477 - Neurobiology

**Credits:** 3 | The neural basis of behavior, with some emphasis on the human nervous system, including cellular and molecular approaches to neuron function, development of neurons and circuits, and neuro-endocrine mechanisms. Labs develop skills in electrophysiology and neuroanatomy. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | **Grade Mode:** Normal (A-F,I,W) | **Prerequisite(s):** 

BIOL 166 | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall | College Code: CAS

#### BIOL 478 - Study Tour:

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Blended Learning | College Code: CAS

#### **BIOL 479 - Marine Ecology**

Credits: 3.5 | A study of interspecific, intraspecific, and community relationships demonstrated by marine organisms. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Summer, as scheduled, only at the Rosario Beach Marine Laboratory | College Code: CAS

#### **BIOL 484 - Animal Behavior**

Credits: 3 | Behavior of animals including considerations of social interactions, learning processes, instinct, motivation, experimental methods, and the analysis of behavior patterns characteristic of various species. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166 | Schedule Type: Lecture/Lab | Offering: Fall, odd years | College Code: CAS

#### BIOL 486 - Neurobiology of Mental Illness

Credits: 3 | An exploration of the neurobiological basis of mental disorders, with emphasis on those of special concern in society today (such as aging- and stress-related disorders). Current therapeutic approaches will be discussed. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 450 or BIOL 464 or BIOL 477 or PSYC 449 | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring, even years | College Code: CAS

#### BIOL 487 - Biogeography

Credits: 3 | The distribution of plants and animals in relation to their environment, including consideration of major biogeographic regions of the world and the role of distribution in adaptive change and diversification of life in the past and present. | Weekly: 2 lectures and a 3-hour conference period | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring, as scheduled | College Code: CAS

#### BIOL 495 - Independent Research in Biology

Credits: 0–4 | An independent research project in biology under the direction of a biology instructor. A minimum of 4 hours work per week is required for each credit earned (and for the 0-credit option), and a written paper is required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | Special Approval: Instructor permission required. | Offering: Fall, Spring, Summer | College Code: CAS

#### BIOL 496 - Independent Study in Biology

Credits: 1–4 | Independent study of a selected field in biology under the direction of a biology instructor. A minimum of 4 hours work per week is required for each credit earned and a written paper is required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Schedule Type: Independent | Special Approval: Instructor permission required. | Offering: Fall, Spring, Summer | College Code: CAS

#### BIOL 497 - Internship in Biotechnology

Credits: 1 | An internship where students apply course and lab preparation in an extended hands-on laboratory experience in either on- or off-campus setting. 50 hours of work per semester credit hour. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Permission of biotechnology faculty. | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | College Code: CAS

#### BIOL 516 - Behavior of Marine Organisms

Credits: 3.5 | Study of inter- and intra-specific behavior of marine animals and their behavioral response to the physical environment. Involves lab experience, field observation, and a research project. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Special Approval: Instructor permission required. | Offering: Summer, as scheduled, only at the Rosario Beach Marine Laboratory | College Code: CAS

#### BIOL 520 - Molecular and Developmental Neurobiology

**Credits:** 2 | A seminar course that deals in depth with current and relevant issues in the areas of molecular and developmental neurobiology. | Weekly: 2 lectures |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall, as scheduled | College Code: CAS

#### **BIOL 530 - Molecular Laboratory Techniques**

Credits: 3 | Acquaints students with modern lab techniques of molecular biology. The manipulation and study of nucleic acids and proteins using model systems involving plant-microbe interactions. | Weekly: 1 lecture and 2 labs | \$ - Course or lab fee |
Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### BIOL 550 - Issues in Origins and Speciation

Credits: 3 | A comparative survey of the assumptions, attitudes, methods, and conclusions of science and religion in the handling of data. Attention is given to current scientific data and their relationship to an understanding of earth history and the present diversity of life. | Weekly: 3 lectures | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### BIOL 590 - Topics in \_\_\_\_\_

Credits: 1 | Investigates various specialties of biology. | One-hour lecture or a 3-hour lab for each credit | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | Offering: As scheduled | College Code: CAS

#### BIOL 648 - Workshop

Credits: 1–4 | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### **BIOL 655 - Program Continuation**

Credits: 0 | Students may register for this non-credit continuation course to maintain active status. For additional information on active status, refer to the Graduate Academic Policies. Registration does not indicate full-time status. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **BIOL 660 - Thesis Continuation**

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approval only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **BIOL 670 - Comprehensive Exam**

Credits: 0 | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### BIOL 681 - Research Methods and Biology Seminar I

Credits: 2 | An introduction to graduate studies in biology, the nature and methods of science, principles of research ethics, and exploration of research opportunities in the Department of Biology. Attendance to all biology department seminars is required. | Weekly: 2 lectures | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Seminar | Offering: Fall | College Code: CAS

#### BIOL 682 - Research Methods and Biology Seminar II

Credits: 2 | In this second semester of Research Methods and Biology Seminar, graduate students survey current literature and prepare a formal research proposal. Students give an oral presentation of the research proposal at the end of the semester. Attendance to all biology department seminars is required. | Weekly: 2 lectures | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Seminar | Offering: Spring | College Code: CAS

#### BIOL 690 - Independent Study

Credits: 1–4 | Independent study in biology under the direction of the instructor. Consent of instructor required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | Offering: Fall, Spring, Summer | College Code: CAS

#### BIOL 697 - Research in Biology

Credits: 1–4 | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 4 credits | Schedule Type: Independent | Offering: Arranged | College Code: CAS

#### BIOL 699 - Master's Thesis

Credits: 3 | Registration for this title indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | Offering: Arranged | College Code: CAS

# Chemistry & Biochemistry

Halenz Hall, Room 225 269-471-324 chemistry@andrews.edu www.andrews.edu/chem/

#### Faculty

D. David Nowack, Chair Lisa Ahlberg Ryan Hayes Getahun Merga Desmond H. Murray David W. Randall John Rorabeck

Academic Programs	
BS: Biochemistry	
BS: Biochemistry (Approved by the American Chemical Society Committee on Professional Training)	
BS: Chemistry	38
BS: Chemistry (Approved by the American Chemical Society Committee on Professional Training)	44
BS: Chemistry (Secondary Education Emphasis)	
Minor in Chemistry	20
Minor in Chemistry (Secondary Education Emphasis)	

#### Mission

The mission of the Department of Chemistry & Biochemistry within the context of a Seventh-day Adventist Christian worldview is to assist all students to excel in developing their analytical and critical reasoning skills, using fundamental chemical principles and computational methods; prepare our chemistry and biochemistry majors to enter graduate school, professional school, the chemical industry, or the teaching profession, in a diverse world; develop in our students an understanding of responsible, environmentally sensitive use of global resources; engage students and faculty in the process of discovery and creativity in the research lab and the classroom to model a life of personal and professional integrity.

Students who plan to major in chemistry or biochemistry are expected to have entrance credit in the preparatory subjects of chemistry and mathematics (including algebra and trigonometry); a background in physics is desirable. Those who do not have entrance credit or equivalent training in these subjects, particularly mathematics, may not fulfill the department graduation requirements in four years.

Students are encouraged to plan early for an on-campus or off-campus research experience required of all students in the Bachelor of Science degree programs in chemistry and biochemistry (ACS) and strongly recommended for those in the Bachelor of Science degree program in biochemistry. This experience may take the form of a cooperative educational research experience or research in an academic, industrial, or governmental laboratory setting. Interested students should consult the department chair.

#### American Chemical Society Certification

Students desiring American Chemical Society certification must

- Complete the required courses for the (ACS) Bachelor of Science degree in chemistry or biochemistry as spelled out in this bulletin.
- Achieve a minimum GPA of 3.00 in all chemistry courses taken at Andrews
- Satisfactorily complete a research or cooperative educational experience in chemistry.

A complete statement of certification requirements is available from the department

### **Bachelors**

## Biochemistry BS

Go to: Chemistry & Biochemistry

### Major Requirements: 38

#### Core Requirements

\*CHEM 210 is required every semester for students of freshman and sophomore class standing.

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 200 Quantitative Analysis Credits: 4
- CHEM 210 Current Chemistry Topics Credits: 0
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- CHEM 311 Seminar in Chemistry Credits: 0.5
- CHEM 312 Seminar in Chemistry Credits: 0.5
- CHEM 400 Chemical Separations and Analysis Credits: 2
- CHEM 411 Seminar in Chemistry Credits: 0.5
- CHEM 412 Seminar in Chemistry Credits: 0.5
- CHEM 430 Instrumental Analysis Credits: 2
- CHEM 431 Physical Chemistry I Credits: 3
- CHEM 441 Physical Chemistry Laboratory I Credits: 1
- BCHM 421 Biochemistry I Credits: 4

#### **Additional Major Requirements**

- BCHM 422 Biochemistry II Credits: 3
- BCHM 430 Biochemistry Lab Credits: 1

### Cognates: 30

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- MATH 191 Calculus I Credits: 4
- Or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4

#### Choose one of the following sets

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
   Or
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

#### Choose two courses from the following

- BIOL 371 Genetics Credits: 3
- BIOL 372 Cell and Molecular Biology Credits: 3
- FDNT 485 Nutrition and Metabolism Credits: 3
- BIOL 315 Developmental Biology Credits: 3
- BIOL 464 Systems Physiology Credits: 4

BIOL 465 - Histology Credits: 3

#### Note:

Students desiring a career in biochemistry might be better served by pursuing the ACS Bachelor of Science degree in biochemistry, but the Bachelor of Science degree in biochemistry can be strengthened by the addition of CHEM 415 - Advanced Inorganic Chemistry and CHEM 495 - Advanced Independent Research.

## Biochemistry BS (ACS Approved)

### (American Chemical Society approved)

Go to: Chemistry & Biochemistry

### Major Requirements: 45

### Core Requirements

\*CHEM 210 is required every semester for students of freshman and sophomore class standing.

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 200 Quantitative Analysis Credits: 4
- CHEM 210 Current Chemistry Topics Credits: 0
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- CHEM 311 Seminar in Chemistry Credits: 0.5
- CHEM 312 Seminar in Chemistry Credits: 0.5
- CHEM 400 Chemical Separations and Analysis Credits: 2
- CHEM 411 Seminar in Chemistry Credits: 0.5
- CHEM 412 Seminar in Chemistry Credits: 0.5
- CHEM 430 Instrumental Analysis Credits: 2
- CHEM 431 Physical Chemistry I Credits: 3
- CHEM 441 Physical Chemistry Laboratory I Credits: 1
- BCHM 421 Biochemistry I Credits: 4

#### **Additional Major Requirements**

- BCHM 422 Biochemistry II Credits: 3
- BCHM 430 Biochemistry Lab Credits: 1
- CHEM 415 Advanced Inorganic Chemistry Credits: 4
- CHEM 432 Physical Chemistry II Credits: 3

### **Experiential Component:**

#### Research/Cooperative Experience

An on-campus or off-campus research or cooperative educational experience. The student may satisfy this requirement by matriculating in:

- CHEM 495 Advanced Independent Research Credits: 0
- Or HONS 497H Senior Honors Project Credits: 1

#### Cognates: 35

- MATH 286 Differential Equations Credits: 3
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- BIOL 165 Foundations of Biology Credits: 5 or 4

- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 371 Genetics Credits: 3
- Or BIOL 420 Immunology Credits: 3
- MATH 191 Calculus I Credits: 4
- Or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- CPTR 151 Computer Science I Credits: 3

#### Note

Courses in economics and marketing are strongly recommended.

Students desiring American Chemical Society certification must achieve a minimum GPA of 3.00 in all chemistry courses taken at Andrews University.

## Biotechnology, Chemistry Emphasis BS

### **Program Description**

Biotechnology is an industry that is growing by leaps and bounds. The biotechnology program at Andrews University aims to transform students into scientists of the highest caliber and ethical standard that can contribute to this industry in many capacities. Through a broad and interdisciplinary training in the biosciences, students will develop the practical scientific and communication skills necessary for employment in biotechnology. They will also develop in their knowledge of the ethical issues that frequently arise in this discipline. Areas of study include genetics, genomics and proteomics, biochemistry, and techniques in molecular cloning and analysis. Students specialize in either biological or chemical aspects of biotechnology. An internship requirement will introduce students to the biotechnology workforce and help them to make connections that may lead to future employment.

#### **Total Credits: 124**

### Major: Core Requirements: 41 - 43

### Core Requirements

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- BIOL 371 Genetics Credits: 3
- BIOL 415 Genomics, Proteomics, and Bioinformatics Credits: 3
- BCHM 421 Biochemistry I Credits: 4
- BCHM 430 Biochemistry Lab Credits: 1
- BIOL 430 Molecular Laboratory Techniques Credits: 3
- BIOL 120 Introduction to Biotechnology Credits: 1
- Or CHEM 120 Introduction to Biotechnology Credits: 1
- 2 Credits of BIOL 497 Internship in Biotechnology Credits: 1
- Or 2 Credits of CHEM 497 Internship in Biotechnology Credits: 1

### **Major: Concentration Requirements**

### **Chemistry Concentration**

- CHEM 200 Quantitative Analysis Credits: 4
- CHEM 210 Current Chemistry Topics Credits: 0
- CHEM 311 Seminar in Chemistry Credits: 0.5
- CHEM 312 Seminar in Chemistry Credits: 0.5
- CHEM 411 Seminar in Chemistry Credits: 0.5
- CHEM 412 Seminar in Chemistry Credits: 0.5
- CHEM 400 Chemical Separations and Analysis Credits: 2
- CHEM 430 Instrumental Analysis Credits: 2
- One additional upper division BIOL/BCHM/CHEM course to be selected with your advisor. Credits: 3-4

### Cognates: 8-10

#### Choose one of the following sets:

- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

Oı

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

### **Andrews Core Experience 43-49\***

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience or the Honors Andrews Core Experience (SAGES) while noting the following requirements and recommendations.

\*49 credits for standard GE package; 41 credits for Honors.

#### Religion

- RELT 385 Bioethics and Christian Faith Credits: 3
- Or HONS 380 Topic in Bioethics & Christian Faith Credits: 3 (for SAGES students)

#### Math

Choose one of the following courses:

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 (recommended)
- MATH 195 Calculus I for Biology Credits: 4 (recommended)

#### Social Sciences

Pre Med Students will need to take the following courses:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

### **Undergraduate Electives: 7-19**

Students must take 10-17 credits from any college level courses.

### **Program Objectives**

### Program Outcomes

- Knowledge: Students will demonstrate a comprehensive knowledge and understanding of the properties and interrelationships of materials relevant to biological and chemical analysis.
- Communication Skills: Students will effectively communicate biotechnical information to a diversity of audiences using a variety of formats. Students will obtain relevant biotechnical information from web-accessible databases.
- Technical Skills, Safety, and Environmental Stewardship: Students will demonstrate competency in common biotechnology lab activities and instrumentation.
   Students will demonstrate commonly accepted laboratory safety and waste management practices.
- Interdisciplinary Teamwork: Students will utilize positive team behaviors to accomplish interdisciplinary tasks.

Ethical Use of Biotechnical Information and Techniques: Students will execute the highest standards of integrity and ethics during their professional training activities.

#### Mission

To transform the student of science into a scientist of the highest caliber and ethical standard.

#### Goals

The biotechnology program aims to

- 1. provide a broad and interdisciplinary training in the biosciences,
- educate students in the communication of science and the ethical use of scientific knowledge and skills,
- foster the development of practical scientific skills necessary for employment in the biotechnology sector,
- 4. introduce students to the workforce through internship opportunities.

## Chemistry BS

Go to: Chemistry & Biochemistry

### Total Credits: TBD

### **Major Requirements: 38**

### Core Requirements

\*CHEM 210 is required every semester for students of freshman and sophomore class standing.

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 200 Quantitative Analysis Credits: 4
- CHEM 210 Current Chemistry Topics Credits: 0
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- CHEM 311 Seminar in Chemistry Credits: 0.5
- CHEM 312 Seminar in Chemistry Credits: 0.5
- CHEM 400 Chemical Separations and Analysis Credits: 2
- CHEM 411 Seminar in Chemistry Credits: 0.5
- CHEM 412 Seminar in Chemistry Credits: 0.5
   CHEM 430 Instrumental Analysis Credits: 2
- CHEM 431 Physical Chemistry I Credits: 3
- CHEM 441 Physical Chemistry Laboratory I Credits: 1
- BCHM 421 Biochemistry I Credits: 4

#### **Additional Major Requirements**

CHEM 415 - Advanced Inorganic Chemistry Credits: 4

### **Experiential Component:**

### Research/Cooperative Experience

An on-campus or off-campus research or cooperative educational experience. The student may satisfy this requirement by matriculating in:

- CHEM 495 Advanced Independent Research Credits: 0
- HONS 497H Senior Honors Project Credits: 1
- IDSC 380 Cooperative Education in\_\_\_\_\_(subject area) Credits: 0.5,1

### Cognates: 21

- MATH 191 Calculus I Credits: 4
- Or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- CPTR 151 Computer Science I Credits: 3

## Chemistry BS (ACS approved)

### (American Chemical Society approved)

Return to: Chemistry & Biochemistry

### Major Requirements: 44

### Core Requirements

\*CHEM 210 is required every semester for students of freshman and sophomore class standing.

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 200 Quantitative Analysis Credits: 4
- CHEM 210 Current Chemistry Topics Credits: 0
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- CHEM 311 Seminar in Chemistry Credits: 0.5
- CHEM 312 Seminar in Chemistry Credits: 0.5
- CHEM 400 Chemical Separations and Analysis Credits: 2
- CHEM 411 Seminar in Chemistry Credits: 0.5
- CHEM 412 Seminar in Chemistry Credits: 0.5
- CHEM 430 Instrumental Analysis Credits: 2
- CHEM 431 Physical Chemistry I Credits: 3
- CHEM 441 Physical Chemistry Laboratory I Credits: 1
- BCHM 421 Biochemistry I Credits: 4

### **Additional Major Requirements**

- CHEM 415 Advanced Inorganic Chemistry Credits: 4
- CHEM 432 Physical Chemistry II Credits: 3
- CHEM 442 Physical Chemistry Laboratory II Credits: 1

#### Choose one of the following courses

- CHEM 470 Modern Synthetic Techniques Credits: 2
- CHEM 474 Advanced Topics in Organic Chemistry Credits: 2
- CHEM 475 Advanced Topics in Physical Chemistry Credits: 2

### **Experiential Component:**

#### Research/Cooperative Experience

An on-campus or off-campus research or cooperative educational experience. The student may satisfy this requirement by matriculating in:

- CHEM 495 Advanced Independent Research Credits: 0
- Or HONS 497H Senior Honors Project Credits: 1

### Cognates: 24

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- MATH 191 Calculus I Credits: 4
- Or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 286 Differential Equations Credits: 3
- CPTR 151 Computer Science | Credits: 3

#### Note:

Courses in economics and marketing are strongly recommended.

A reading knowledge of German or French, although not requried for professional undergraduate education in chemistry, is strongly recommended for students planning advanced study.

Students desiring American Chemical Society certification must acheive a minimum GPA of 3.00 in all chemistry courses taken at Andrews University.

# Chemistry BS (Secondary Education Emphasis)

Go to: Chemistry & Biochemistry

Students majoring in chemistry or biochemistry in preparation for teaching in secondary schools must complete the degree requirements for Chemistry BS, Chemistry BS (ACS approved), Biochemistry BS or Biochemistry BS (ACS Approved), and the Andrews Core Experience listed below. They must also consult with an advisor in the department of Teaching, Learning & Curriculum who can guide them through the teacher preparation program successfully. In order for Andrews University to recommend a student for certification, the Michigan Test for Teacher Certification (MTTC) subject area exams must be passed in both the major and minor chosen by the student.

Students minoring in chemistry in preparation for teaching in secondary schools must complete the degree requirements for Chemistry Minor, Secondary Education Emphasis.

### **Andrews Core Experience**

For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum.

### **Undergraduate Minors**

## Chemistry Minor

Go to: Chemistry & Biochemistry

### Requirements

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1

Plus 4 credits of CHEM/BCHM courses that apply to a major in chemistry or biochemistry

Note: CHEM 195, CHEM 295, and CHEM 495 do not meet this requirement.

### **Total Credits: 20**

# Chemistry Minor (Secondary Education Emphasis)

Go to: Chemistry & Biochemistry

Students minoring in chemistry in preparation for teaching in secondary schools must consult with an advisor in the department of Teaching, Learning & Curriculum who can guide them through the teacher preparation program successfully. In order for Andews University to recommend a student for certification, the Michigan Test for Teacher Certification (MTTC) subject area exams must be passed in both the major and minor chosen by the student.

For more information regarding Secondary Certification with a minor see the department of Teaching, Learning & Curriculum

### Requirements

- CHEM 131 General Chemistry I
- CHEM 132 General Chemistry II
- CHEM 200 Quantitative Analysis
- CHEM 231 Organic Chemistry I
- CHEM 232 Organic Chemistry II
- CHEM 241 Organic Chemistry Laboratory I
- CHEM 242 Organic Chemistry Laboratory II
- BCHM 421 Biochemistry I

#### **Total Credits: 24**

### **Biochemistry**

#### BCHM 120 - Introduction to Organic and Biological Chemistry

Credits: 4 | A survey of major concepts in organic chemistry and biochemistry. Organic foundation of structures and basic reactions of organic molecules emphasizing functional groups and establishing foundation for understanding structure and function of biological molecules, regulation of biochemical pathways. For nursing, dietetics, and allied health students. Not applicable toward a major or minor in chemistry or biochemistry. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 110 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

### BCHM 421 - Biochemistry I

Credits: 4 | Study of the fundamental principles of enzyme kinetics and mechanisms based on the structure and chemistry of biomolecules including amino acids, carbohydrates, lipids, proteins, nucleotides, nucleic acids, and biological membranes. | Weekly: 4 lectures | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 232 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### BCHM 422 - Biochemistry II

Credits: 3 | Continuation of BCHM 421 including selected topics of hormone and regulatory biochemistry, the study of the four primary neurotransmitter systems and an overview of selected human pathologies emphasizing cancer biochemistry and biology. | Weekly: 3 lectures | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BCHM 421 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### BCHM 430 - Biochemistry Lab

Credits: 1 | Introduction to quantitative and qualitative methods for the isolation, purification and identification of biological materials and applications of enzyme kinetics. | Weekly: 4-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BCHM 421 | Prerequisite/Corequisite: BCHM 422 | Schedule Type: Lab | Offering: Spring | College Code: CAS

### Chemistry

#### **CHEM 100 - Consumer Chemistry**

**Credits:** 4 | A one-semester course primarily for non-science majors presenting an introduction to fundamental concepts of chemistry to convey an appreciative understanding of the nature of chemistry and how it is applied to our daily lives.

Topics of consumer chemistry to be studied will be selected from fuels, energy, polymers, fertilizers, pesticides, food and food additives, household cleaners, cosmetics and personal care chemicals, pharmaceuticals, and air and water pollution. Not applicable toward a major or minor in chemistry or biochemistry. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Course Attribute: Fulfills the General Education Physical Science requirement | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### CHEM 110 - Introduction to Inorganic Chemistry

Credits: 4 | An introduction to the principles and applications of inorganic chemistry; for nursing, dietetics, and allied health students. Not applicable toward a major or minor in chemistry or biochemistry. | Weekly: 3 lectures and a 3-hour lab | \$ - Course or lab fee | Course Attribute: Fulfills the General Education Natural/Physical Science requirement | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Fall | College Code: CAS

#### CHEM 120 - Introduction to Biotechnology

Credits: 1 | Introduces students to the field of biotechnology through lecture and guest presentations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CHEM 131 - General Chemistry I

Credits: 4 | This first course in chemistry is for students planning to major in science and engineering. Topics include stoichiometry, atomic and molecular structure, bonding, states of matter, solutions, chemical kinetics, and chemical equilibrium. | Weekly: 3 lectures, 2 recitations and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE greater than or equal to P3, or passing grade in MATH 165/MATH 166/MATH 168 or above, or MATH 191/MATH 195 | Recommended: High school chemistry or physics strongly recommended. | Schedule Type: Lecture, Lab | Offering: Fall | College Code: CAS

#### CHEM 132 - General Chemistry II

Credits: 4 | A continuation of CHEM 131 with topics including thermodynamics, acid and base chemistry, descriptive and nuclear chemistry. | Weekly: 3 lectures, 2 recitations and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): a grade of C- or better in CHEM 131 | Schedule Type: Lecture, Lab | Offering: Spring | College Code: CAS

#### CHEM 175 - Topics in \_\_\_\_\_\_

Credits: 1–4 | Investigates various subdisciplines of chemistry or biochemistry. This course does not contribute to a major or minor in chemistry. | Weekly: 1 lecture and/or lab for each lower-division credit taken | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Permission of instructor and chair. | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Lab | Offering: Fall, Spring, Summer | College Code: CAS

#### CHEM 195 - Independent Research I

Credits: 0–3 | Students will either assist a faculty member in an ongoing research project or develop a project of their own with the help and approval of the faculty member in their areas of interest or study. This course is for students who are beginning to establish their knowledge of chemistry and biochemistry. | Weekly: a minimum of 4 hours of work per credit | \$ - Course or lab fee | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | Special Approval: Permission of faculty member required. | Offering: Arranged. Fall, Spring, Summer | College Code: CAS

#### CHEM 200 - Quantitative Analysis

Credits: 4 | Lecture topics include statistics, chemical equilibrium, titrimetric procedures, gravimetric procedures, and electrochemistry. Laboratory experiments include gravimetric procedures and titrimetric procedures of acid and base systems and redox systems, electrochemistry, and an introduction to instrumental methods. | Weekly: 2 lectures and two 4-hour labs | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 132 | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

### **CHEM 210 - Current Chemistry Topics**

Credits: 0 | Attendance at departmental seminar series devoted to topics in current chemical research as presented by students, faculty, and guest speakers. | Weekly: 1 seminar | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable and required each semester of all freshman and sophomore chemistry and biochemistry majors | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

### CHEM 231 - Organic Chemistry I

Credits: 3 | The chemistry of carbon-containing compounds with emphasis on nomenclature, molecular structure, spectra-structure relationships, and a mechanistic approach to organic reactions. | Weekly: 3 lectures and 2 recitations | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 132 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CHEM 232 - Organic Chemistry II

Credits: 3 | This course is a continuation of CHEM 231 | Weekly: 3 lectures and 2 recitations | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): a grade of C- or better in CHEM 231 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CHEM 241 - Organic Chemistry Laboratory I

Credits: 1 | Experiments related to the course content of CHEM 231. | Weekly: one 4-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 231 or concurrent enrollment in CHEM 231 | Schedule Type: Lab | Offering: Fall | College Code: CAS

#### CHEM 242 - Organic Chemistry Laboratory II

Credits: 1 | Experiments related to the course content of CHEM 232. | Weekly: one 4-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 232 or concurrent enrollment in CHEM 232 | Schedule Type: Lab | Offering: Spring | College Code: CAS

#### CHEM 295 - Independent Research II

Credits: 0 | Students will either assist a faculty member in an ongoing research project or develop a project of their own with the help and approval of the faculty member in their areas of interest or study. This course is for students who are establishing their knowledge of chemistry and biochemistry at the college level. | Weekly: a minimum of 4 hours of work per credit | \$ - Course or lab fee | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Apassing grade in CHEM132 required | Repeatable: Repeatable | Schedule Type: Independent | Special Approval: Permission of faculty member required. | Offering: Arranged. Fall, Spring, Summer | College Code: CAS

#### CHEM 300 - Laboratory Glassblowing

Credits: 2 | Practice of fundamental glassblowing skills common to both scientific and creative glassblowing. Two projects are required. The student may choose between scientific and creative projects. Not applicable toward a major or minor in chemistry or biochemistry. Does not meet the general education requirement in natural science. | Weekly: 1 lecture demonstration and a 4-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Fall, even years | College Code: CAS

#### CHEM 311 - Seminar in Chemistry

Credits: 0.5 | First half of semester consists of two meetings per week: one is an introduction to chemical literature and computer searching of Chemical Abstracts and chemical databases, the other meeting is the regular seminar series presented by students, faculty, and invited speakers. This course is required of, and open only to, junior chemistry and biochemistry majors, and attendance for both semesters is required for one credit. | Weekly: two meetings during first half of semester, one meeting during remainder of semester | Grade Mode: Satisfactory (S,U,I,W) | Prerequisite(s): CHEM 232 | Schedule Type: Seminar | Offering: Fall | College Code: CAS

#### CHEM 312 - Seminar in Chemistry

Credits: 0.5 | Continuation of CHEM 311. This course is required of, and open only to, junior chemistry and biochemistry majors. | Weekly: 1 seminar | Grade Mode: Satisfactory (S,U,I,W) | Prerequisite(s): CHEM 311 | Schedule Type: Seminar | Offering: Spring | College Code: CAS

#### CHEM 340 - Environmental Chemistry

Credits: 4 | A survey of environmental and energy-related problems. Topics include air, soil, and water pollution, energy and other resources, solid wastes and recycling, and toxic chemicals. Not applicable toward a major in chemistry or biochemistry. | Weekly: 3 lectures and a 4-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 132 | Recommended: CHEM 200 or CHEM 232 strongly recommended | Schedule Type: Lecture, Lab | Offering: Spring, odd years | College Code: CAS

#### CHEM 375 - Topics in \_\_\_\_\_\_

Credits: 1–4 | Investigates various subdisciplines of chemistry or biochemistry. Each individual topics course will be evaluated to determine whether it contributes to a major or minor. | Weekly: 1 one lecture and/or lab for each upper-division credit | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Permission of instructor and chair, and appropriate foundational courses. | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Lab | Offering: Fall, Spring, Summer | College Code: CAS

#### CHEM 400 - Chemical Separations and Analysis

**Credits:** 2 | Theory and practice of analytical separations by extraction and chromatographic methods including flash column, thin layer, high pressure liquid, gas, and affinity chromatography. After separation, the components of mixtures are analyzed by a variety of spectroscopic techniques that may include nuclear magnetic resonance, infrared spectroscopy and/or mass spectrometry. | Weekly: 1 lecture and

a 4-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 200, CHEM 231, and CHEM 241 | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring | College Code: CAS

#### CHEM 405 - Medicinal Chemistry

Credits: 2 | Medicinal Chemistry is an interdisciplinary subject incorporating basic principles of organic chemistry, biology, biochemistry, toxicology, pharmacology, and molecular biology to understand how biologically active compounds (pharmaceuticals) operate in living systems. Selected topics in medicinal and pharmaceutical chemistry including the design and synthesis of new drugs as well as their pharmacodynamic and pharmacokinetic properties will be covered. We will also examine the path of pharmaceuticals from inception to clinical use by studeying specific classes of drugs. | Weekly: 2 lectures | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 232 | Recommended: BCHM 421is recommended either as a prerequisite or corequisite. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CHEM 410 - Forensic Chemistry

Credits: 2 | Principles of chemistry as applied to the methods of analysis and identification of drugs. Rules of evidence as they apply to testimony in court.

Observation of drug-related court procedures. | Weekly: 1 lecture and two 3-hour labs | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) |

Prerequisite(s): CHEM 200, CHEM 232 | Schedule Type: Lecture/Lab | Special Approval: Participation must be arranged with the instructor at least 2 months prior to beginning of course. | Offering: Spring | College Code: CAS

#### CHEM 411 - Seminar in Chemistry

Credits: 0.5 | Departmental seminar series devoted to topics in current chemical research as presented by students, faculty, and guest speakers. During the semester, each student prepares and presents a seminar. This course is required of, and open only to, senior chemistry and biochemistry majors, and attendance for both semesters is required for one credit. | Weekly: one seminar | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 312 | Schedule Type: Seminar | Offering: Fall | College Code:

#### CHEM 412 - Seminar in Chemistry

Credits: 0.5 | Continuation of CHEM 411. During the semester, each student prepares and presents a seminar. This course is required of, and open only to, senior chemistry and biochemistry majors. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 411 | Schedule Type: Seminar | Offering: Spring | College Code: CAS

#### CHEM 415 - Advanced Inorganic Chemistry

Credits: 4 | Atomic and molecular structure, symmetry, group theory, solid state, acids and bases; structure, bonding, spectra, and reaction mechanisms of d-metal complexes, systematic chemistry of non-metals; organometallic chemistry and catalysis. | Weekly: 4 lectures | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 232, CHEM 431 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CHEM 430 - Instrumental Analysis

Credits: 2 | Theory and practice of chemical analysis by spectroscopic and electrochemical methods. Introduction to automated data collection and computer control of instruments. Operational theory that emphasizes hands-on student learning for a broad range of analytical instruments commonly used by industry and academia including: UV-Vis-NIR, fluorescence, atomic, and laser spectrophotometers; potentiostats; and analog and digital electronics. | Weekly: 1 lecture and a 4-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 200, MATH 192 | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Spring | College Code: CAS

#### CHEM 431 - Physical Chemistry I

Credits: 3 | Fundamental concepts in chemical thermodynamics, free energy, chemical equilibria, phase changes, solutions, molecular transport, chemical dynamics, and electrochemistry. | Weekly: 3 lectures | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 200, MATH 192, PHYS 142 (or PHYS 242, PHYS 272) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CHEM 432 - Physical Chemistry II

Credits: 3 | Wave mechanics, atomic and molecular structure, chemical bonding, atomic and molecular spectroscopies, and applications to chemical dynamics and statistical thermodynamics. | Weekly: 3 lectures | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 431, MATH 286 | Recommended: MATH 240 strongly recommended | Schedule Type: Lecture | Offering: Spring | College Code: CAS

### CHEM 441 - Physical Chemistry Laboratory I

Credits: 1 | Experiments related to the course content of CHEM 431. | Weekly: one 4-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): concurrent enrollment in CHEM 431 | Schedule Type: Lab | Offering: Fall | College Code: CAS

#### CHEM 442 - Physical Chemistry Laboratory II

Credits: 1 | Experiments related to the course content of CHEM 432. | Weekly: one 4-hour lab | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): concurrent enrollment in CHEM 432 | Schedule Type: Lab | Offering: Spring | College Code: CAS

#### CHEM 470 - Modern Synthetic Techniques

Credits: 2 | An advanced laboratory course designed to incorporate a wide variety of modern synthetic techniques of organic, organometallic, and inorganic chemistry. | Weekly: two 4-hour labs | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 474, CHEM 415 or concurrent enrollment in CHEM 415 | Schedule Type: Lab | Offering: Spring | College Code: CAS

#### CHEM 474 - Advanced Topics in Organic Chemistry

Credits: 2 | Study of the principles of modern synthetic organic chemistry with applications from one or more of the following areas: natural product, medicinal, or polymer chemistry. | Weekly: 2 lectures | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 232 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CHEM 475 - Advanced Topics in Physical Chemistry

Credits: 2 | Advanced study of molecular spectroscopy, statistical thermodynamics, chemical dynamics, or the application of quantum mechanics. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 432 or CHEM 431 and permission of the instructor | Schedule Type: Lecture | College Code: CAS

#### CHEM 495 - Advanced Independent Research

Credits: 0 | Students will either assist a faculty member in an ongoing research project or develop a project of their own with the help and approval of the faculty member in their areas of interest or study. This course is for students who have a reasonably established knowledge of chemistry and biochemistry at the college level. | Weekly: a minimum of 4 hours of work per credit | \$ - Course or lab fee | Swing course | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Apassing grade in CHEM 232/CHEM 242 or (CHEM 200 and CHEM 231 /CHEM 241) required | Repeatable: Repeatable | Schedule Type: Independent | Special Approval: Permission of faculty member required. | Offering: Arranged. Fall, Spring, Summer | College Code: CAS

#### CHEM 497 - Internship in Biotechnology

Credits: 1 | An internship where students apply course and lab preparation in an extended hands-on laboratory experience in either on- or off-campus setting. 50 hours of work per semester credit hour. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | Offering: Fall, Spring, Summer | College Code: CAS

#### CHEM 530 - Topics in Teaching Chemistry

Credits: 2 | Each time the course is offered, it treats one of the following areas: Concepts in Chemistry; Fundamental ideas of chemistry Demonstrations; Simple experiments which illustrate chemical principles Problem-Solving Strategies; Exploration into the mental processes and logic behind problem-solving; None of the above areas are to occur twice in one student's program. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 232 | Repeatable: Repeatable up to 6 credits | Schedule Type: Lecture | College Code: CAS

#### CHEM 540 - Topics in Chemistry

Credits: 2 | Independent readings to be chosen in consultation with the instructor. A written report and an oral presentation covering the materials read are required. A minimum of 60 hours of work is required for each credit. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 431 | Repeatable: Repeatable up to 6 credits | Schedule Type: Lecture | College Code: CAS

# Communication

Nethery Hall, Room 224 269-471-6314; Fax 269-471-3125 commdept@andrews.edu www.andrews.edu/communication https://www.facebook.com/aucomm

#### Faculty

Rachel Williams-Smith, Chair Patrice Jones Beverly J. Matiko Debbie Michel Desrene L. Vernon-Brebnor

Adjunct Faculty

Delyse Steyn

#### **Programs**

	Credits	
Communication, MA		
Communication Arts, Secondary Education BS		
Communication BA		
Communication Managment emphasis	60	
International Communication emphasis	60	
Journalism and Communication Media, BA		
Broadcast Journalism emphasis	49	
Media Writing and Technology emphasis	49	
Public Relations emphasis	49	
Minor in Secondary Education		
Minor in Communication and the Family 21		
Minor in Communication Arts, Secondary Education		
Minor in Communication Studies 2:		
Minor in Health Communication	21	
Minor in Journalism	21	
Minor in Public Relations	21	

#### Mission

The goal of the department is to prepare students to become scholars, market-ready practitioners, and/or future Communication professors who are able to effectively develop, shape, and deliver uplifting messaging through communication channels. Our purpose is to mold students' minds to think critically, discern clearly, and communicate creatively and constructively, and to do so with a Christ-like mindset for service.

Communication is all about connection—shaping, sending, sharing, and receiving messages and meaning through a variety of channels including interpersonal, small group, public, or mediated one. A bachelor's degree in Communication is very useful for preparing you for a wide range of career options, including to being a political aide, public relations manager, talk show host, sales representative, graphic designer, photojournalist, market researcher, camera operator, corporate communication manager, copy editor, producer, magazine editor, and marketing/advertising manager to name just a few. A master's degree in Communication can position you as an expert in your chosen area of concentration, further expand your career options, and open higher-level opportunities to you for professional advancement—as well as also prepare you to pursue a terminal degree.

The Department of Communication offers three undergraduate degree programs that have a variety of emphasis areas as well as two master degree programs and a graduate certificate program.

#### Lambda Pi Eta

Lambda Pi Eta is the National Communication Association (NCA) affiliated honor society.

#### Public Relations Student Society of America (PRSSA) Chapter

The Andrews University PRSSA chapter is affiliated with the Western Michigan Public Relations Society of America. At the national level students are eligible for PRSA's publications, scholarships, award programs, leadership training and a national conference.

#### Communication Club

The Department of Communication has an active Communication Club that you are encouraged to actively participate. The club provides you with opportunities to gain meaningful extracurricular experience, engage in enjoyable and professional social activities, and have access to privileges (such as special tours or workshops, or opportunities) only granted to club members.

#### Computer Policy

The Department of Communication regards the computer as a tool integral to the success of students in their professional development. It is required that all students purchase a laptop computer and software to meet the department guidelines. Because computer technology is continually changing, a revised policy is drafted in the fall semester. A list of software is available in the department. Specific requirements change so it is important to make sure the software listed is compatible with the laptop you choose to purchase. Use of the computer in the curriculum varies by course.

#### Internships

Communication Management emphasis and Journalism and Communication Media majors must submit applications for required internships during the sophomore and/or junior year. Students must fulfill the required number of clock hours to meet the requirements for their degree. All Communication majors are encouraged to participate in the internship program and must then submit applications for internships during the junior or senior year. Department approval must be obtained prior to the start of an internship.

#### **Practicum**

Practicum refers to the out-of-class opportunities on campus and in the immediate area for developing skills valuable to the communication professional. Students are encouraged to apply to the department for such opportunities. These experiences will be documented in a Portfolio as evidence of the student's involvement in the practical application of theory.

### **Bachelors**

# Communication Arts, Secondary Education BS

Return to: Communication Programs

This degree, granted by the College of Arts & Sciences in cooperation with the Department of Teaching, Learning & Curriculum, prepares students to teach communication arts at the secondary level. For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree, see the department of Teaching, Learning & Curriculum

#### Core-10

- COMM 215 Introduction to Communication Theory Credits: 3
- COMM 480 Communication Capstone Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3

#### Foundational courses— 26-28

- COMM 280 Voice and Diction Credits: 3
- COMM 320 Interpersonal Communication Credits: 3
- COMM 450 Communication in the Classroom Credits: 3
- JOUR 330 Advanced Media Writing Credits: 3
- JOUR 445 Publication Production Credits: 3
- JOUR 455 Media Law and Ethics Credits: 3
- JOUR 465 Advanced Topics in Journalism:\_\_\_\_\_ Credits: 3

### Note:

Students seeking Michigan State certification for elementary- or secondary-school teaching must take COMM 450.

# Andrews Core Experience—Communication Arts with Secondary Certification

Note the following specific requirements:

# Religion: 12\*

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- Plus a 3-credit elective chosen in consultation with your SED advisor

# Language/Communication:

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### History:

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3

#### Fine Arts/Humanities:

Choose one course from:

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art Credits: 3
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3
- Ensemble Music Credits: 3

## Life/Physical Sciences:

 Take one course from Life Science and one from Physical Science. Choose from Andrews Core Experience (ACE) Program requirements.

#### Mathematics:

See professional degree requirements

#### Service:

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### Social Sciences:

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### Fitness Education:

- HLED 120 Fit for Life Credits: 1
- plus two Fitness Education courses

#### Total: 36-38 Credits

# Communication BA

# Major: Core Requirements - 34

# **Communication Core - 10**

Required for each of the five majors and interdisciplinary emphases offered:

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 215 Introduction to Communication Theory Credits: 3
- JOUR 140 Media, Culture and Society Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3

# Major Requirements - 24

A minor or a second major is required for this major.

- COMM 320 Interpersonal Communication Credits: 3
- COMM 336 Intercultural Communication Credits: 3
- COMM 356 Group Dynamics and Leadership Credits: 3
- COMM 432 Research Methods in Communication Credits: 3
- COMM 480 Communication Capstone Credits: 3

#### Choose one course from each of the following sets:

- COMM 405 Persuasion Credits: 3
- Or COMM 435 Crisis Communications Credits: 3
- COMM 445 Family Communication Credits: 3
- Or COMM 446 Gender Communication Credits: 3
- COMM 280 Voice and Diction Credits: 3
- Or COMM 375 Professional Presentations Credits: 3

# Communication, Communication Management Emphasis BA

# **Total Credits: 47**

#### **Communication Core - 10**

Required for each of the five majors and interdisciplinary emphases offered:

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 215 Introduction to Communication Theory Credits: 3
- JOUR 140 Media, Culture and Society Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3

# Major: Core Requirements

A second major or minor is not required.

- COMM 320 Interpersonal Communication Credits: 3
- COMM 325 Media Literacy Credits: 3
- COMM 336 Intercultural Communication Credits: 3
- COMM 356 Group Dynamics and Leadership Credits: 3
- COMM 375 Professional Presentations Credits: 3
- COMM 389 Internship in Communication Credits: 1–3
- COMM 405 Persuasion Credits: 3
- COMM 432 Research Methods in Communication Credits: 3
- COMM 480 Communication Capstone Credits: 3

# **Major: Concentration Requirements**

- BSAD 355 Management and Organization Credits: 3
- PREL 460 Development Credits: 3
- 3 Credits of COMM 454 Topics in Communication: \_\_\_\_\_ Credits: Organizational Communication
- BSAD 384 Human Resource Management Credits: 3
- Or BSAD 436 Motivation and Work Behavior Credits: 3

# Communication, International Communication Emphasis BA

# **Total Credits: 43**

### Communication Core - 10

Required for each of the five majors and interdisciplinary emphases offered:

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 215 Introduction to Communication Theory Credits: 3
- JOUR 140 Media, Culture and Society Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3

# Major: Core requirements

A second major or minor is not required.

- COMM 320 Interpersonal Communication Credits: 3
- COMM 336 Intercultural Communication Credits: 3
- COMM 356 Group Dynamics and Leadership Credits: 3
- COMM 375 Professional Presentations Credits: 3
- COMM 405 Persuasion Credits: 3
- COMM 432 Research Methods in Communication Credits: 3
- COMM 480 Communication Capstone Credits: 3
- COMM 445 Family Communication Credits: 3
- Or COMM 446 Gender Communication Credits: 3

# **Major: Concentration Requirements**

- ANTH 200 Cultural Anthropology Credits: 3
- PLSC 230 International Relations Credits: 3
- PLSC 420 Human Rights, Violations, and Reconciliations Credits: 3

# Major: Additional Requirements

The Adventist Colleges Abroad Program (full year or summer) or participation in the Student Missionary program or a comparable international experience is required.

# Journalism and Communication Media. BA

#### Communication Core - 10

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 215 Introduction to Communication Theory Credits: 3
- JOUR 140 Media, Culture and Society Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3

# Major: Core Requirements - 33

- ART 130 Introduction to Digital Media Credits: 3
- COMM 290 Practicum Credits: 1–3
- COMM 325 Media Literacy Credits: 3
- JOUR 330 Advanced Media Writing Credits: 3
- JOUR 350 News Editing for Electronic Media Credits: 3
- JOUR 375 Photojournalism Credits: 3
- JOUR 389 Internship in Journalism Credits: 1–3

- JOUR 455 Media Law and Ethics Credits: 3
- JOUR 496 Portfolio and Journalism Capstone Credits: 3

# **Major: Concentration Requirements - 15**

#### **Broadcast Journalism**

- JOUR 241 Intro to News Production Credits: 3
- JOUR 342 Advanced News Production Credits: 3
- JOUR 436 Electronic News Magazine Production Credits: 3
- JOUR 450 Multimedia Journalism Credits: 3
- JOUR 465 Advanced Topics in Journalism: \_\_\_\_\_ Credits: 3

# Media Writing and Technology

- JOUR 330 Advanced Media Writing Credits: 3
- JOUR 436 Electronic News Magazine Production Credits: 3
- JOUR 440 Magazine and Feature Writing Credits: 3
- JOUR 445 Publication Production Credits: 3
- JOUR 450 Multimedia Journalism Credits: 3

#### **Public Relations**

- PREL 255 Introduction to Public Relations Credits: 3
- PREL 320 Managing PR Campaigns and Special Events Credits: 3
- PREL 454 Advanced Public Relations Credits: 3
- PREL 460 Development Credits: 3
- PREL 465 Advanced Topics in Public Relations: Credits: 3

# **Undergraduate Minors**

# Communication and the Family Minor

**Return to: Communication Programs** 

All minors require that students earn at least 12 credits in courses numbered 300 and

# Requirements

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 215 Introduction to Communication Theory Credits: 3
- COMM 320 Interpersonal Communication Credits: 3
- COMM 445 Family Communication Credits: 3
- Remainder selected from Communication or Journalism-related courses -Credits: 11

# **Total Credits: 21**

# Communication Arts, Secondary Education Minor

### (Secondary Education)

Available only to those students obtaining secondary teacher certification. For more information regarding Secondary Certification with a minor see the department of Teaching, Learning & Curriculum

# Requirements

COMM 215 - Introduction to Communication Theory Credits: 3

- COMM 480 Communication Capstone Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3
- and 10 credits of electives selected from foundational courses of the major.

## **Total Credits: 20**

# Communication Studies Minor

All minors require that students earn at least 12 credits in courses numbered 300 and above.

# Requirements

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 215 Introduction to Communication Theory Credits: 3
- Choose 17 credits of electives from Communication-related courses.

## **Total Credits: 21**

# Health Communication Minor

All minors require that students earn at least 12 credits in courses numbered 300 and above.

# Requirements

- COMM 130 Introduction to Communication Studies Credits: 1
- COMM 434 Healthcare Communication Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3
- PREL 255 Introduction to Public Relations Credits: 3
- Remainder selected from Communication or Journalism-related courses -Credits: 11

#### **Total Credits: 21**

# Journalism and Media Studies Minor

All minors require that students earn at least 12 credits in courses numbered 300 and above

# Requirements

- COMM 130 Introduction to Communication Studies Credits: 1
- JOUR 140 Media, Culture and Society Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3
- Remainder selected from Journalism or Media Studies-related courses Credits:
   14

#### **Total Credits: 21**

# Public Relations Minor

All minors require that students earn at least 12 credits in courses numbered 300 and above

# Requirements

• COMM 130 - Introduction to Communication Studies Credits: 1

- JOUR 230 Beginning Media Writing Credits: 3
- PREL 255 Introduction to Public Relations Credits: 3
- Remainder selected from Communication or Journalism-related courses -Credits: 14

# **Total Credits: 21**

## **Masters**

# Communication, MA

The Master of Arts program is designed for students who wish to develop advanced-level skills and an expanded knowledge base in Communication. Additionally, it also give them the option of selecting a specific concentration area in which it focus their studies and connect a specific area of interest to the broader field of Communication. For information about requirements for admission, progression through the program, and completion, please see Department's Graduate Student Manual at www.andrews.edu/communication and under the "Graduate" tab.

# **MA Degree Requirements**

## Degree Core - 12

- COMM 500 Graduate Colloquium Credits: 0
- COMM 510 Communication Theory Credits: 3
- COMM 520 Communication Research Credits: 3
- COMM 525 Christian Communication Worldview & Ethics Credits: 3
- COMM 650 Advanced Communication Research Credits: 3

#### Communication electives - 6

- COMM 589 Internship/Practicum in Communication Credits: 2,3
- COMM 600 Leadership Communication Credits: 2,3
- COMM 610 Advanced Persuasion Credits: 2,3
- COMM 615 Media Law Credits: 2,3

#### Concentration area courses - 12

Courses may be selected from one or more areas of interest within Communication (no concentration declaration required). Alternatively, a student may declare one of the following concentrations:

- Communication Management
- Interdisciplinary Communication
- International Communication Development
- Media Studies

## Culminating Experience - 3

- COMM 670 Comprehensive Examination Credits: 0
- COMM 695 Production Project Credits: 3
- Or COMM 699 Master's Thesis Credits: 3

#### **Concentration Areas**

#### Communication Management

- COMM 590 Graduate Seminar in \_\_\_\_\_\_ Credits: 2,3 Organizational Communication
- COMM 600 Leadership Communication Credits: 2,3

#### Choose 6-8 credits of the following courses:

- BSAD 500 Survey of Management Credits: 2
- BSAD 505 Survey of Operations Management Credits: 2
- BSAD 506 Survey of Business Law Credits: 2

- BSAD 515 Organizational Behavior & Leadership Credits: 3
- BSAD 526 Emergency Management Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- BSAD 545 International Business Management Credits: 3
   Additional course options may be considered by the supervising committee.

# Interdisciplinary Communication

Course options are selected with the approval of the other department (s) and the advisor or coordinator of graduate program; however, the student must establish competency in two of the following three areas:

- Writing
- Speaking
- Visual communication

#### International Communication Development

- COMM 540 Communication in Development Practice Credits: 2,3
- COMM 590 Graduate Seminar in \_\_\_\_\_ Credits: 2,3 International Communication
- Or COMM 536 Issues in Intercultural Communication Credits: 2,3

#### Choose 6-8 credits of the following courses:

- BSAD 545 International Business Management Credits: 3
- CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3
- CIDS 540 International Development:Strategy Design & Implementation Credits: 3
- CIDS 544 International Development: Cases and Application Credits: 3
- CIDS 550 Education for Sustainable Development Credits: 3
- CIDS 565 Institutions in Development Credits: 3
- CIDS 575 Topics in Community & International Development Credits: 1–6
- PLSC 585 Seminar in International Relations Credits: 3

#### Media Studies

COMM 615 - Media Law Credits: 2,3

#### Choose 9-10 credits of the following courses:

- COMM 554 Topics in \_\_\_\_\_ Credits: 1 Media Management
- COMM 590 Graduate Seminar in \_\_\_\_\_ Credits: 2,3 Magazine Writing and/or Media Literacy
- COMM 620 Christian Mass Media Development Credits: 3
- COMM 630 Media Production Credits: 3
- COMM 648 Communication Workshop Credits: 1–6 Writing for the Media

# **General Admission Requirements**

Graduate Program admission requirements, academic information and graduation procedures are detailed in the School of Graduate Studies & Research section of this catalog.

# **Departmental Admission Requirements**

This is a summary of the procedures that a student planning to enroll in the MA should note:

- At the time of application for admission, students must:
  - O have a bachelor's degree or its equivalent.
  - O present a resume of current experience.
  - submit a Statement of Purpose which explains how the relevant disciplines will be integrated to meet his/her career and academic goals.
- Upon acceptance and registration, the student in conjunction with the graduate advisor will develop a Plan of Study which is based on the student's Statement of Purpose.
- In addition to the admission requirements of the School of Graduate Studies & Research, the student applying to the Department of Communication must:

- have a minimum of 12 semester credits in communication and/or related areas.
- have an overall GPA of 2.75
- complete any deficiencies at the beginning of the program. These courses are in addition to the regular graduate-degree course work.
- demonstrate adequate proficiency in English to succeed in the academic setting. A student can demonstrate such proficiency by obtaining at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:
  - Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
  - Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
  - MELAB composite score of 84 with no component score lower than 80.
  - IELTS [Academic] composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.
  - PTE [Academic] composite score of 68, with no component score lower than 48.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete language requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOFFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Exceptions to these requirements may be granted by the Department of Communication on an individual basis.

# **Progression**

All graduate students need to understand that

- The GRE must be completed in order to register for the second semester
- A student on regular status must, in consultation with the graduate advisor, identify members to serve on a supervisory committee. This committee is selected once students have completed COMM 652. It determines individual requirements for completion with reference to a student's Plan of Study.
- A 3.00 GPA per semester must be maintained.
- The Advancement to Candidacy deadline is the semester prior to the student applying for graduation.
- Students are responsible for completing all the required forms.

All required forms are submitted to the coordinator of the Department Graduate Program. On approval, recommendations are made to the Records Office and to the Dean of Graduate Studies. See General Academic Policies for further details on graduation procedures and degree conferral.

# **Masters Dual Degrees**

**Note:** Because each dual degree is listed in two schools you will find duplicates. The content is identical except for order of information.

# Master of Arts in Communication/Master of Divinity Track 1 Dual Degree MA/MDiv

# **Program Description**

Andrews University has chosen to establish a collaborative program between the Master of Divinity Degree of the Seventh-day Adventist Theological Seminary and the

Department of Communication in the College of Arts and Sciences. Students can potentially complete the two degrees in less than 3½ years; 2 years in the Theological Seminary and 1 to 1½ years in the Department of Communication.

It will also prepare MDiv students for service in occupations where Communication—and in particular, media-related Communication—intersects with the pastoral mission of the church. Pastors today are challenged to minister and serve in ever-widening fields and increasingly diverse audience groups, and being able to do so effectively through a variety of mediums is becoming more important than ever before. Likewise, there are benefits to understanding the how and why of communication and what it takes to be an effective communicator on all levels outside of the pulpit. Furthermore, this collaboration allows for widened employment opportunities including television and radio, public relations, corporate communications, advertising, management, healthcare communications, and more.

## **Total Credits: 103**

# **MDiv Degree Requirements: 70**

# Interdisciplinary Courses: 14

- GSEM 510 Revelation, Inspiration and Hermeneutics Credits: 3
- GSEM 530 Doctrine of the Sanctuary Credits: 2,3
   Recommended: Completion of OTST 551 Biblical Hebrew I
- GSEM 534 Issues in Ellen G. White Studies Credits: 2,3
- GSEM 539 Issues in Origins Credits: 2,3
- GSEM 626 Contemporary Adventist Theological Issues Credits: 2,3
- GSEM 627 Issues in Daniel and Revelation Credits: 3
   (Prereq: C+ completion/Exam pass of Int. Greek and Hebrew II)

# Christian Ministry: 14

- CHMN 539 Church Growth and the Equipping Pastor Credits: 3
- CHMN 555 Pastoral Counseling Credits: 2,3
- CHMN 562 Field Evangelism Credits: 3–6
- CHMN 566 Mobilizing Laity for the Ministry of Evangelism Credits: 2,3
- Or CHMN 656 Holistic Small Groups Credits: 2,3
- CHMN \_\_\_\_\_ Advanced Preaching elective (600-level) Credits: 2
- Or CHMN 523 Worship: Word and Music Credits: 2,3
- CHMN 553 The Church and Social Issues Credits: 2,3
- Or MSSN 505 Christian Responses to Human Needs Credits: 2,3

#### Discipleship and Religious Education: 8

- DSRE 541 Foundations of Biblical Spirituality Credits: 2,3
- DSRE 503 Marriage, Family, and Interpersonal Relationships Credits: 3
- DSRE 534 Ministry to Youth and Young Adults Credits: 2,3
- Or DSRE 610 Teaching for Discipleship Credits: 2,3

#### Church History: 6

- CHIS 674 Development of Seventh-day Adventist Theology Credits: 3
- Choose at least 3 (600 Level) credits from Church History CHIS list

#### New Testament: 8

Before registering for New Testament courses, check the course description for Greek Language and/or other course prerequisites.

- Choose one (600 Level) exegesis course Credits: 3
- Choose one (600 Level) theology course Credits: 3
- Choose one (600 Level) backgrounds course Credits 2

#### Old Testament: 8

Before registering for Old Testament courses, check the course description for Hebrew Language and/or other course prerequisites.

- Choose one (600 Level) Old Testament Archeology course Credits: 2
- Choose one (600 Level) Old Testament Exegesis course Credits: 3
- Choose one (600 Level) Old Testament Theology course Credits: 3

## Theology: 6

- THST 540 Doctrine of Salvation Credits: 2,3
- Choose one (600 Level) Systematic Theology course Credits: 2
- Choose one (600 Level) Historica Theology course Credits: 2

#### World Mission: 6

- MSSN 546 Mission in Cultural and Religious Context Credits: 3
- MSSN 561 Christian Witness and World Religions Credits: 3

# **Communication Degree Requirements: 33**

# Degree Core: 12

- COMM 500 Graduate Colloquium Credits: 0
- COMM 510 Communication Theory Credits: 3
- THST 634 Christian Social Ethics Credits: 2,3
- COMM 520 Communication Research Credits: 3
- COMM 650 Advanced Communication Research Credits: 3

#### Concentration: 12

#### Media Ministry

- COMM 620 Christian Mass Media Development Credits: 3
- COMM 630 Media Production Credits: 3
- COMM 648 Communication Workshop Credits: 1–6
- CHMN 635 Broadcast Evangelism Credits: 2,3

#### Interdisciplinary

- Six Master of Divinity credits
- Six Communication credits
- Plus competency in 2 of 3 areas: writing, speaking, and visual communication

# Program Electives: 6

- CHMN 543 Christian Leadership in a Changing World Credits: 3
- COMM 610 Advanced Persuasion Credits: 2,3
- Or COMM 615 Media Law Credits: 2,3
- Or COMM 589 Internship/Practicum in Communication Credits: 2,3

# Culminating Experience: 3

- COMM 670 Comprehensive Examination Credits: 0
- COMM 695 Production Project Credits: 3
- Or COMM 699 Master's Thesis Credits: 3

# **Admission Requirements**

#### Master of Divinity

- Baccalaureate Degree: A four-year degree from an accredited United States institution, or its equivalent from an institution outside the U.S.
  - MDiv Track 1 program is for students who have a Bachelors degree in Theology. Students who do not have a BA in Theology will need to complete the Track 2 program.
- Undergraduate GPA: A minimum GPA of 2.50.

- Recommendations: Recommendations from the Church board where the applicant is a member; College teacher/advisor, and Church administrator, pastor, or recent employer.
- 3. Personal Qualifications: Represent high moral integrity with a character, lifestyle, and spiritual commitment reflective of the beliefs and practices of the Seventh-day Adventist Church, and show promise of usefulness for ministry through personal maturity and adequate experience in the Church. (Persons of other faiths who are willing to live in harmony with these standards are welcome to apply).

#### **English Language Requirements**

Students whose language of education is not English must submit one of the following tests and minimum scores:

TOEFL Paper-based - 565 TOEFL Internet-based - 85 MELAB - 81

IELTS - 6.5 PTE - 58

#### Master of Arts In Communication

- Baccalaureate Degree: A four-year degree from an accredited United States institution, or its equivalent from an institution outside the U.S.
- 2. Undergraduate GPA: A minimum GPA of 2.75.
- Recommendations from the Church board where the applicant is a member;
   College teacher/advisor, and Church administrator, pastor, or recent employer.
- Undergraduate Coursework: 12 semester credits in communication and/or related areas
- 5. Other:
  - Satisfy the admission requirements of the School of Graduate Studies & Research
  - O Present a resume of current experience
  - Submit a Statement of Purpose which explains how the relevant disciplines will be integrated to meet his/her career and academic goals
  - O Complete any deficiencies at the beginning of the program

#### **English Language Requirements**

Students whose language of education is not English must submit one of the following tests and minimum scores:

**TOEFL** (ITP) Paper-based – composite score of 600, with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.

**TOEFL** Internet-based (iBT) – composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18)

MELAB - composite score of 84 with no component score lower than 80.

IELTS - [Academic] composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

PTE - PTE [Academic] composite score of 68, with no component score lower than 48. The exam must be taken within two years prior to enrollment. Students who score below these levels may complete language requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses.

Exceptions to these requirements may be granted by the Department of Communication on an individual basis.

# **Program Outcomes**

- To enable students to integrate both theological and communication-savvy approaches to reaching expanded audiences with increased levels of effectiveness and efficiency, thereby enhancing their usefulness as instruments of the Holy Spirit.
- To prepare students for various forms of ministry in which communication (in particular, media) skills/experience and theology are needed.
- To sensitize students to nontraditional ministry opportunities by exposing them to theoretical knowledge and practical skills that will increase their options for spreading the gospel.

# Master of Arts in Communication/Master of Divinity Track 2 Dual Degree MA/MDiv

# **Program Description**

Andrews University has chosen to establish a collaborative program between the Master of Divinity Degree of the Seventh-day Adventist Theological Seminary and the Department of Communication in the College of Arts and Sciences. Students can potentially complete the two degrees in less than 3½ years; 2 years in the Theological Seminary and 1 to 1½ years in the Department of Communication.

It will also prepare MDiv students for service in occupations where Communication—and in particular, media-related Communication—intersects with the pastoral mission of the church. Pastors today are challenged to minister and serve in ever-widening fields and increasingly diverse audience groups, and being able to do so effectively through a variety of mediums is becoming more important than ever before. Likewise, there are benefits to understanding the how and why of communication and what it takes to be an effective communicator on all levels outside of the pulpit. Furthermore, this collaboration allows for widened employment opportunities including television and radio, public relations, corporate communications, advertising, management, healthcare communications, and more.

# **Total Credits: 132**

# **MDiv Degree Requirements: 99**

# Interdisciplinary Courses: 15

- GSEM 525 The Bible and Biblical History Credits: 1
- GSEM 510 Revelation, Inspiration and Hermeneutics Credits: 3
- GSEM 511 Daniel and Revelation Credits: 3
   (Prereq: C+ completion/Exam pass of Int. Greek and Hebrew II)
- GSEM 530 Doctrine of the Sanctuary Credits: 2,3
   Recommended: Completion of OTST 551 Biblical Hebrew I
- GSEM 534 Issues in Ellen G. White Studies Credits: 2,3
   (Prereq: CHIS 504 Adventist Heritage)
- GSEM 539 Issues in Origins Credits: 2,3
- GSEM 626 Contemporary Adventist Theological Issues Credits: 2,3

## Christian Ministry: 20

- CHMN 505 Biblical Preaching Credits: 2,3
- CHMN 536 Personal Evangelistic Ministry Credits: 2,3
- CHMN 539 Church Growth and the Equipping Pastor Credits: 3
- CHMN 552 Foundations of Pastoral Ministry Credits: 2
- CHMN 555 Pastoral Counseling Credits: 2,3
- CHMN 560 Theological Field Education Credits: 2
- CHMN 562 Field Evangelism Credits: 3–6
- CHMN \_\_\_\_\_ Advanced Preaching elective (600-level) Credits: 2
- Or CHMN 523 Worship: Word and Music Credits: 2,3
- CHMN 553 The Church and Social Issues Credits: 2,3
- Or CHMN 656 Holistic Small Groups Credits: 2,3
- Or MSSN 505 Christian Responses to Human Needs Credits: 2,3

# Discipleship and Religious Education: 8

- DSRE 541 Foundations of Biblical Spirituality Credits: 2,3
- DSRE 503 Marriage, Family, and Interpersonal Relationships Credits: 3
- DSRE 534 Ministry to Youth and Young Adults Credits: 2,3
- Or DSRE 610 Teaching for Discipleship Credits: 2,3

# Church History: 12

- CHIS 504 Adventist Heritage Credits: 3
- CHIS 506 Church History to 1500 Credits: 3
- CHIS 507 Church History 1500 to Present Credits: 3
- CHIS 674 Development of Seventh-day Adventist Theology Credits: 3
   (Prereq: CHIS 504 Adventist Heritage)

#### New Testament: 15

- NTST 551 Beginning Greek Credits: 2 (C- or higher)
- NTST 552 Intermediate Greek Credits: 2,3 (C or higher)
- NTST 515 New Testament Backgrounds Credits: 2,3
- NTST 510 Intro to Exegesis and Theology 1: Gospels Credits: 3 (Coreq: NTST 551 or pass Beg. Greek)
- NTST 543 Intro to Exegesis and Theology 2: Acts and General Epistles Credits: 2 (Coreq: NTST 552 or pass Int. Greek)
- NTST 509 Intro to Exegesis and Theology 3: Pauline Writings Credits: 3 (Prereq: C+ in Inter Greek or pass exam)

#### World Mission: 6

- MSSN 546 Mission in Cultural and Religious Context Credits: 3
- MSSN 561 Christian Witness and World Religions Credits: 3

#### Old Testament: 15

- OTST 551 Biblical Hebrew I Credits: 3 (C- or higher)
- OTST 552 Biblical Hebrew II Credits: 2,3 (C+ or higher)
- OTST 565 Pentateuch Credits: 3 (Coreq: OTST 551 or pass Hebrew I)
- OTST 555 Prophets Credits: 3
- OTST 558 Writings Credits: 2 (Coreq: OTST 552 or pass Hebrew II)

(Coreq: OTST 552 or pass Hebrew II)

- ANEA 510 Archaeology and the Bible Credits: 2,3
- Or ANEA 514 Bible Lands and Their Explorations Credits: 2,3
- Or NTST 615 New Testament Archaeology Credits: 2,3

# Theology: 8

- THST 510 Understanding the Christian World Credits: 2,3
- THST 521 Christian Theology I Credits: 2,3
- THST 522 Christian Theology II Credits: 2,3

# **Communication Degree Requirements: 33**

#### Degree Core: 12

- COMM 500 Graduate Colloquium Credits: 0
- COMM 510 Communication Theory Credits: 3
- THST 550 Principles of Christian Ethics Credits: 2,3
- COMM 520 Communication Research Credits: 3
- COMM 650 Advanced Communication Research Credits: 3

#### Concentration: 12

# Media Ministry

- COMM 620 Christian Mass Media Development Credits: 3
- COMM 630 Media Production Credits: 3
- COMM 648 Communication Workshop Credits: 1–6
- CHMN 635 Broadcast Evangelism Credits: 2,3

#### Interdisciplinary

- Six Master of Divinity credits
- Six Communication credits
- Plus competency in 2 of 3 areas: writing, speaking, and visual communication

# Program Electives: 6

- CHMN 543 Christian Leadership in a Changing World Credits: 3
- COMM 610 Advanced Persuasion Credits: 2.3
- Or COMM 615 Media Law Credits: 2,3
- Or COMM 589 Internship/Practicum in Communication Credits: 2,3

# Culminating Experience: 3

- COMM 670 Comprehensive Examination Credits: 0
- COMM 695 Production Project Credits: 3
- Or COMM 699 Master's Thesis Credits: 3

# **Admission Requirements**

# Master of Divinity

- Baccalaureate Degree: A four-year degree from an accredited United States institution, or its equivalent from an institution outside the U.S.
  - MDiv Track 1 program is for students who have a Bachelors degree in Theology. Students who do not have a BA in Theology will need to complete the Track 2 program.
- 1. Undergraduate GPA: A minimum GPA of 2.50.
- Recommendations: Recommendations from the Church board where the applicant is a member; College teacher/advisor, and Church administrator, pastor, or recent employer.
- 3. Personal Qualifications: Represent high moral integrity with a character, lifestyle, and spiritual commitment reflective of the beliefs and practices of the Seventh-day Adventist Church, and show promise of usefulness for ministry through personal maturity and adequate experience in the Church. (Persons of other faiths who are willing to live in harmony with these standards are welcome to apply).

#### **English Language Requirements**

Students whose language of education is not English must submit one of the following tests and minimum scores:

TOEFL Paper-based - 565

TOEFL Internet-based - 85

MELAB - 81

IELIS - 6.5

**PTE** – 58

# Master of Arts In Communication

- Baccalaureate Degree: A four-year degree from an accredited United States institution, or its equivalent from an institution outside the U.S.
- 2. Undergraduate GPA: A minimum GPA of 2.75.
- Recommendations from the Church board where the applicant is a member;
   College teacher/advisor, and Church administrator, pastor, or recent employer.
- Undergraduate Coursework: 12 semester credits in communication and/or related areas
- 5. Other:
  - Satisfy the admission requirements of the School of Graduate Studies & Research
  - O Present a resume of current experience
  - Submit a Statement of Purpose which explains how the relevant disciplines will be integrated to meet his/her career and academic goals
  - O Complete any deficiencies at the beginning of the program

#### **English Language Requirements**

Students whose language of education is not English must submit one of the following tests and minimum scores:

**TOEFL** (ITP) Paper-based – composite score of 600, with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.

**TOEFL** Internet-based (iBT) – composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18)

MELAB - composite score of 84 with no component score lower than 80.

IELTS - [Academic] composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

PTE - PTE [Academic] composite score of 68, with no component score lower than 48. The exam must be taken within two years prior to enrollment. Students who score below these levels may complete language requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses.

Exceptions to these requirements may be granted by the Department of Communication on an individual basis.

# **Program Outcomes**

- To enable students to integrate both theological and communication-savvy approaches to reaching expanded audiences with increased levels of effectiveness and efficiency, thereby enhancing their usefulness as instruments of the Holy Spirit.
- To prepare students for various forms of ministry in which communication (in particular, media) skills/experience and theology are needed.
- To sensitize students to nontraditional ministry opportunities by exposing them to theoretical knowledge and practical skills that will increase their options for spreading the gospel.

# **Certificates**

# Communication Graduate Certificate

The Graduate Certificate Program in Communication is a focused group of Andrews University courses in the field of communication. After completing the program, a student will have general communication skills for work in business, communication industries and the Church setting, both nationally and internationally. These skills include planning and preparing promotional materials, web content, speeches, presentations and visual media products.

A portfolio of current evidence related to experience within related areas of communication must be submitted before completion of the Graduate Certificate Program. A student who successfully completes the 12 credits will have met the requirements of the Graduate Certificate Program which is noted on the student's transcript.

Courses taken in the Graduate Certificate Program may be applied by petition to a master's program in Communication.

#### Admission and Time Limit

Graduate admission processes and standards of the Graduate School apply. The Graduate Record Exam (GRE) is not required. The time limit for completion of the certificate program should not exceed five years from the first enrollment.

#### Prerequisite

Bachelor's degree

#### Delivery System

Courses may be delivered as summer courses, as intensives on a three-year rotation basis and pre-campus and post-campus work may be required. The courses may be offered on a regular on-campus basis during the semester.

## Curriculum

#### Core-5-6

 COMM 648 - Communication Workshop Credits: 1–6 -- competencies in speaking, 1 credit required; writing, 1 credit required; and visual communication, 1 credit required

#### R

 COMM 590 - Graduate Seminar in \_\_\_\_\_\_ Credits: 2,3 selected from Communication courses in consultation with advisor

#### Electives—6-7

Communication

Choose from:

•	PREL 510 - Advancement and Communication Credits: 2 Advancement and	
	Communication	
•	COMM 554 - Topics in	Credits: 1 International Communication
•	COMM 590 - Graduate Seminar in	Credits: 2,3 Organizational

 COMM 554 - Topics in \_\_\_\_\_ Media and Communication 1-2 Credits required

 Additional courses selected in consultation with the advisor to meet career goals.

# Total Credits for Graduate Certificate—12 Communication

#### COMM 104 - Communication Skills

Credits: 3 | Study of the human communication process—including a multicultural perspective and the importance of diversity—focusing on interactions with oneself, with one other person, with a small group, and within public-speaking situations. Transfer students, juniors, and seniors meet the General Education requirement by taking one of the following: COMM320, 436, or 456. Communication majors who transfer in take COMM 320, COMM 436 or COMM 456. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### COMM 104V - Communication Skills

Credits: 3 | Study of the human communication process—including a multicultural perspective and the importance of diversity—focusing on interactions with oneself, with one other person, with a small group, and within public-speaking situations. Transfer students, juniors, and seniors meet the General Education requirement by taking one of the following: COMM320, 436, or 456. Communication majors who transfer in take COMM 320, COMM 436 or COMM 456. | \$ - Course or lab fee | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **COMM 130 - Introduction to Communication Studies**

Credits: 1 | A foundational course which introduces students to communication as a field of study and future professional engagement. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 215 - Introduction to Communication Theory

Credits: 3 | A study of classical and modern theories of rhetoric, interpersonal communication, language, and the role of communication in establishing social reality. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 280 - Voice and Diction

Credits: 3 | Through vocal analysis and studying the production and differentiation of sound units in the English language, students identify and develop vocal strengths and identify and remedy vocal problems. Students learn to use their voices to achieve maximum understanding and pleasure. Includes theory, practice exercises, public performances, and an introduction to the International Phonetic Alphabet. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 290 - Practicum

Credits: 1–3 | Supervised work experience in journalism, public relations, or another aspect of communication. A minimum of 75 clock hours of work experience is required. Obtain procedures and guidelines from the department. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 3 credits | Schedule Type: Practicum | College Code: CAS

#### COMM 320 - Interpersonal Communication

Credits: 3 | Emphasis is placed on interpersonal skills for the workplace. Students examine components of interpersonal communication such as listening, perception, managing conflict, etc., then apply specific strategies to build relationships. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 325 - Media Literacy

Credits: 3 | A critical and experiential approach to information conveyed through the mass media. It includes an introduction to myth and meaning and the importance of understanding prevailing ideologies in the context of a Christian worldview and a sense of identity. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### COMM 336 - Intercultural Communication

Credits: 3 | Students examine the relationship between culture and communication and the ways culture influences values and perceptions. Discussion and activities help students develop and apply analytic and communication skills which enable them to interact with cultural sensitivity and communicate more effectively in intercultural, interethnic, and cross-gender contexts. Particularly useful for students in business, behavioral sciences, education, and theology. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### COMM 356 - Group Dynamics and Leadership

Credits: 3 | An experiential study of groups in process within organizations for the purpose of problem-solving and team building. Students work in teams to plan and complete a service project during the semester. | \$ - Course or lab fee | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 375 - Professional Presentations

Credits: 3 | Grounded in rhetorical theory and research, students conduct advanced research on speech topics of various situations and modes towards a professional and engaging performance of public communication. Speeches must be solidly supported and logically reasoned. Principles of eloquence, presentation design, and ethics characterize the articulate delivery. Focus is practical application of argumentation and debate skills to develop critical thinking for reasoned decision-making and problem-solving. Particularly useful for students in fields such as pre-law and business. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### COMM 389 - Internship in Communication

Credits: 1–3 | Students work full time at communication enterprises. At least 90 clock hours per credit of work experience are required. Obtain procedures and guidelines from the department. | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 3 credits | Schedule Type: Practicum | College Code: CAS

#### COMM 405 - Persuasion

Credits: 3 | The analysis of persuasive appeals from the point of view of a critical consumer plus practical experience, oral and written, in ethically persuading others. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): COMM 104 or COMM 230 or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### COMM 432 - Research Methods in Communication

Credits: 3 | An introduction to methods including textual analysis, qualitative, quantitative, ethnomethodology. Specific emphasis on methods in Public Relations, Journalism and Media Studies. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### COMM 434 - Healthcare Communication

Credits: 3 | Overview of health care communication - what health communicators do and where they work. This class will also provide an introduction to provider-patient communication, end of life communication, mass communication, health public relations, corporate communication. In addition, the course will examine a variety of theories used in health communication and explore health literacy, patient safety and health care reform. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 435 - Crisis Communications

Credits: 3 | Understanding communication during crisis conditions. Planning, preventing and anticipating Public Relations emergencies. Preparing a crisis communication's plan including internal and external consulting factors. Implementing Public Relations activities including understanding and handling the media and the press, explaining technical information, communicating about risks and responding to warnings. Notification priorities and protocols. Developing information centers and methods and tools for disseminating information during emergencies. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### COMM 445 - Family Communication

Credits: 3 | A study of the family from a communication perspective (odd years). | \$
- Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type:
Lecture | Offering: Alternate years | College Code: CAS

#### COMM 446 - Gender Communication

Credits: 3 | The study of the interactive relationships between gender and communication as experienced in various contexts such as personal relationships, school and work settings (even years). | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### COMM 450 - Communication in the Classroom

Credits: 3 | The study and development of effective communication skills within the context of the classroom. Focus is on interactive learning where the student rather than the instructor is central. Open only to upper division and graduate students. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 454 - Topics in Communication:\_\_\_\_\_

Credits: 1 | Topics of current significance. Credit to be announced with topic in advance. | \$ - Course or lab fee | Swing course | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### COMM 465 - Topics in Communication Arts:\_\_\_\_\_

Credits: 3 | Study of selected topics in Communication Arts. Topic to be announced in advance. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Varies according to topic. Drama Interpretive Reading British Dramatic Arts | Repeatable: Repeatable up to 9 credits with different topics | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### COMM 478 - Study Tour:

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### **COMM 480 - Communication Capstone**

Credits: 3 | A practical capstone class which helps students integrate and synthesize material acquired in their major. Practical applications are made to specific communities of practice. Students are required to complete their portfolios including mission statements and samples of performance in their major, and give evidence of an organized job search. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 495 - Independent Study/Readings/Research

Credits: 1–4 | Topics chosen in consultation with an instructor. | Grade Mode:

Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Requires prior approval from
instructor. | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent |
College Code: CAS

#### COMM 500 - Graduate Colloquium

Credits: 0 | A forum required of graduate students for every semester in residence. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Schedule Type: Seminar | College Code: CAS

### **COMM 510 - Communication Theory**

Credits: 3 | An in-depth exploration of theoretical perspectives, approaches, and issues within the field of Communication. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **COMM 520 - Communication Research**

Credits: 3 | Consideration of foundational research principles and methodologies with emphasis on constructing appropriate research designs and choosing appropriate methods. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s):

COMM515 | Schedule Type: Lecture | College Code: CAS

#### COMM 525 - Christian Communication Worldview & Ethics

**Credits:** 3 | This course involves a critical examination of a Seventh-day Adventist biblical worldview, the development of a personal worldview, and an exploration of ethical implications and applications on communication decision making and practices. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### COMM 535 - Crisis Communications

Credits: 2 | Understanding communication during crisis conditions. Planning, preventing and anticipating Public Relations emergencies. Preparing a crisis communication's plan including internal and external consulting factors. Implementing Public Relations activities including understanding and handling the media and the press, explaining technical information, communicating about risks and responding to warnings. Notification priorities and protocols. Developing information centers and

methods and tools for disseminating information during emergencies. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 536 - Issues in Intercultural Communication

Credits: 2,3 | Examination of intercultural communication issues with specific applications to student's chosen fields of enquiry or employment. Students explore critical issues influencing the effectiveness of their interaction with individuals from varied cultures in specific organizational and societal contexts. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### COMM 540 - Communication in Development Practice

Credits: 2,3 | Students examine the relationship between culture and communication. Apply analytic and communication skills which enable effective communication in various communities. Develop skills in persuasion and explore sensitivity to diversity issues. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### COMM 554 - Topics in \_\_\_\_\_

Credits: 1 | Study of selected communication topics of current significance. Topics to be announced in advance. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### COMM 589 - Internship/Practicum in Communication

Credits: 2,3 | Students apply their academic preparation at a full-time professional communication-related job. At least 400 clock hours of work experience are required. Obtain procedures and guidelines from the department. Registration for this course indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Practicum | College Code: CAS

#### COMM 590 - Graduate Seminar in \_\_\_\_\_

Credits: 2,3 | Projects, reports, and discussions. Seminars are offered in various subjects such as Conflict Management, Prejudice Communication and Forgiveness, Religious Journalism, Contextualized Communication, Communication Paradigms, and Teambuilding. Topic announced in advance. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable with different topics | Schedule Type: Blended Learning, Seminar, Interactive Online | College Code: CAS

#### COMM 600 - Leadership Communication

Credits: 2,3 | This course focuses on leadership from a communication standpoint. It explores what leadership communication is, focuses on mastery of key leadership communication skills, and requires the student to develop an individualized, real-life application of leadership communication within his/her work, school, or community environment. The course will include a perusal of organizational communication, communication theories, Biblical perspectives on leadership communication, and global leadership communication issues. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 610 - Advanced Persuasion

Credits: 2,3 | The analysis of persuasive appeals from the point of view of a critical consumer plus practical experience, oral and written, in ethically persuading others. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 615 - Media Law

Credits: 2,3 | Case studies of court decisions affecting the mass media in the United States and the place of the ethical journalist in society. Consideration of the development of freedom, censorship, libel, privacy, obscenity laws, and the relationship between the press and the courts and freedom of information, and broadcast regulation. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 620 - Christian Mass Media Development

Credits: 3 | Consideration and analysis of video and TV production from a Christian and evangelism perspective. The course lays a foundation for designing and producing new, effective, Christian media project. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### COMM 630 - Media Production

Credits: 3 | Foundations in media production. Includes developing story structure, writing to picture, interview techniques, shooting, editing, pitching media production and the student as the producer to media outlets. Students will write, shoot, and produce media content and be exposed to media room and studio operations. Editorial decision-making and production management is emphasized. Lab experience is required for the course. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | College Code: CAS

#### **COMM 640 - Project Continuation**

Credits: 0 | Students may register for this title while clearing deferred grade (DG) and/or incomplete (I) classes with advisor approval only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### COMM 648 - Communication Workshop

Credits: 1–6 | Intensive study on selected practical topics including competencies in speaking, writing and visual communication. Offered on a periodic basis with topic announced in class schedule. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable with different topics | Schedule Type: Workshop | College Code: CAS

#### COMM 650 - Advanced Communication Research

Credits: 3 | Building on the foundation provided in COMM 520, in this course, students identify and develop the appropriate research method(s) and theoretical framework for the thesis or projection project. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): COMM 520 | Schedule Type: Seminar | College Code: CAS

#### **COMM 655 - Program Continuation**

Credits: 0 | Students may register for this non-credit continuation course to maintain active status. For additional information on active status, please refer to p. 56 in the bulletin. Registration does not indicate full-time status. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### COMM 660 - Thesis Continuation

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approval only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **COMM 670 - Comprehensive Examination**

Credits: 0 | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### COMM 690 - Independent Study in Communication

Credits: 1 | Individualized reading or research in a specified area under the guidance of an instructor; admission by consent of Area Coordinator. | \$ - Course or lab fee | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **COMM 695 - Production Project**

Credits: 3 | Independent work on final research project(s). Registration for this course indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): COMM 520 and approved project proposal. | Repeatable: Repeatable up to 6 credits with Graduate Committee permission | Schedule Type: Independent | College Code: CAS

#### COMM 699 - Master's Thesis

Credits: 3 | Registration for this title indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Independent | College Code: CAS

## Journalism

#### JOUR 140 - Media, Culture and Society

Credits: 3 | A study of how media affects our popular culture and to critically assess the role of media in our lives. Beginning with the invention of mass communication and using culture as a thematic approach, students study the broad and overlapping media. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

### JOUR 230 - Beginning Media Writing

Credits: 3 | Aimed at all communication majors, media writing introduces students to writing targeted communication in a journalistic style. They learn the basics of journalistic writing for various media (i.e., newspapers, radio and television), public relations press releases, basic features and editorials, the importance of audience for any written communication as well as the values of timeliness, objectivity, and fairness critical to any communication career. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Ability in word-processing. | Schedule Type: Lecture | College Code: CAS

#### JOUR 241 - Intro to News Production

Credits: 3 | An introduction to basic news production. Topics will include story structure, writing to picture, interview techniques, shooting, editing, pitching your stories and yourself to media outlets. Lab experience is expected. Course culminates in the production of a short hard news story. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 330 - Advanced Media Writing

Credits: 3 | Continues on the foundation of Beginning Media Writing, helping students to develop a deeper understanding of journalism and its place in society. Students learn how to cover a journalistic "beat", develop sources, and how to research in-depth stories. Students also practice the art of the interview and learn the rights and obligations of reporters and communicators in any media. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): JOUR230. | Schedule Type: Lecture | College Code: CAS

#### JOUR 342 - Advanced News Production

Credits: 3 | Students will write, shoot, report, produce and anchor news stories. Students will rotate through different jobs, which will expose them to newsroom and studio operations. Editorial decision-making and production management is emphasized. Students will concentrate on producing hard news and feature reports. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 350 - News Editing for Electronic Media

Credits: 3 | Using news industry's editing standards, this course will assist students to develop techniques to edit news for the electronic media consistent with broadcast quality. This course will emphasize the roles and responsibilities of an editor including deadlines and ethics. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 375 - Photojournalism

Credits: 3 | Practice in the composition of good news pictures and in producing the picture story. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): JOUR230, PHTO115. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 389 - Internship in Journalism

Credits: 1–3 | Students work full time at journalistic enterprises. At least 90 clock hours per credit of work experience are required. Obtain procedures and guidelines from the department. | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 3 credits | Schedule Type: Practicum | College Code: CAS

#### JOUR 436 - Electronic News Magazine Production

Credits: 3 | Students will receive individual coaching, as they complete a 20–30 minute work of video storytelling designed to be the capstone of their studies in electronic news. Emphasis will be placed on production techniques, reporting and storytelling. The expectation is that work produced by students in this course will be of broadcast quality for media such as television, the Internet, or at a film festival. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 440 - Magazine and Feature Writing

Credits: 3 | This course emphasizes developing original ideas and content for the specific, niche audiences served by magazines and focuses on how to think and write for magazines and newspapers. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 445 - Publication Production

Credits: 3 | The theory and practice of planning and producing of any publication, be it newspaper, magazine or newsletter. Students will learn the value of careful editing and basic layout from an editor's perspective. Practice in editing copy, writing headlines, composing picture captions, planning layout and designing pages, as well as tips and tricks on project production, will be covered. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): JOUR 230. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 450 - Multimedia Journalism

Credits: 3 | In the context of media convergence, this course embraces storytelling for delivery across various media platforms. Hands-on production focuses on news content for print, broadcast (TV and radio), new media (Internet, blogs, vodcasts, podcasts and interactive elements). | \$ - Course or lab fee | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 455 - Media Law and Ethics

Credits: 3 | Case studies of court decisions affecting the mass media in the United States and the place of the ethical journalist in society. Consideration of the development of freedom, censorship, libel, privacy, obscenity laws, and the relationship between the press and the courts and freedom of information, and broadcast regulation. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### JOUR 465 - Advanced Topics in Journalism:\_\_\_\_\_

Credits: 3 | Study of selected topics in Journalism. Topic to be announced in advance. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 15 credits with different topics | Schedule Type: Lecture | College Code: CAS

#### JOUR 496 - Portfolio and Journalism Capstone

**Credits:** 3 | A practical capstone class which helps students integrate and synthesize material acquired in their major and make practical applications to relevant professional standards and expectations of the job market. Students are required to complete their portfolios including mission statements and samples of performance in their major, and give evidence of an organized job search. | \$ - Course or lab fee | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

# **Public Relations**

#### PREL 255 - Introduction to Public Relations

Credits: 3 | Basic concepts in public relations, publics, public opinions, attitudes, two-way communications, and evaluation of public relations effectiveness. Basic literature of the field is examined. Basic principles for production of news releases, public service announcements, and other materials are covered. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PREL 320 - Managing PR Campaigns and Special Events

Credits: 3 | Examines the characteristics of successful public relations campaigns. Emphasis given to public relations planning and evaluating, as well as to advanced techniques in news publicity, controlled media publicity, and media relations. Professional practitioners are frequent guest lecturers. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PREL 255 and JOUR 230 or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### PREL 389 - Internship in Public Relations

Credits: 1–3 | Students intern at public relations or a related field. At least 90 clock hours per credit of work experience are required. Obtain procedures and guidelines from the department. | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 3 credits | Schedule Type: Practicum | College Code: CAS

#### PREL 454 - Advanced Public Relations

Credits: 3 | Focuses on preparation for Public Relations careers, media relations, ethics, and industry issues and trends, including literature in the field and professional organizations. Students focus on writing projects, including press kits, proposals, newsletters, brochures, fund raising, speeches, public service announcements, copy writing and create documents for portfolios. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PREL 255. | Schedule Type: Lecture | College Code: CAS

#### PREL 460 - Development

Credits: 3 | Provides student with an understanding of the facets of development intrinsic to a non-profit organization. Students work on team projects in local agencies and organization. They report to the class, write reflection papers, and give a final oral presentation about their experiences. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PREL 465 - Advanced Topics in Public Relations:

Credits: 3 | Study of selected topics in Public Relations. Topic to be announced in advance. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PREL 255. Crisis/Issues Management Critical Issues in Public Relations Case Studies in Public Relations Health Care Communication Special Events Planning Public Relations Research Techniques | Repeatable: Repeatable up to 9 credits with different topics | Schedule Type: Lecture | College Code: CAS

#### PREL 510 - Advancement and Communication

Credits: 2 | Developing communication skills necessary to the non-profit arena, including working with volunteers, promoting and positioning various service organizations. Communication with relevant publics. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# Engineering & Computer Science

Haughey Hall, Room 312 269-471-3420 Fax: 269-471-3797

engineering@andrews.edu, computing@andrews.edu

www.andrews.edu/ecs

#### Faculty

George S. Agoki, Chair Donald C. DeGroot Hyun Kwon Gunnar Lovhoiden Boon-Chai Ng Rodney Summerscales Stephen Thorman Roy Villafane

#### Mission

William Wolfer

The Engineering and Computer Science department aspires to be a place of choice for engineering and computer science education where dedicated students and faculty grow together to reach their God-given potential for service to society and the church.

Faculty and students in the Engineering and Computer Science Department will:

#### Seek Knowledge by:

- Exploring current knowledge in engineering and computing from a Christian viewpoint, within the broader context of the liberal arts.
- Creating a nurturing environment for a committed lifetime of intellectual discovery, problem-solving, and innovation.
- Enhancing learning through research and scholarship.
- Preparing students to join their chosen profession or attend graduate school.
- Engaging industry and professional stakeholders in the planning and assessing of our curriculum.

#### Affirm Faith by:

- Acknowledging the leadership of God in their lives.
- Acting with personal and moral integrity.
- Serving humanity in a complex, technological, global society.

#### Change the World by:

- Applying knowledge and skills to the care of their God-given home.
- Solving contemporary societal problems.
- Providing selfless service to others.

# **Bachelors**

# Computer Science BS

# **Program Description**

Computer Science prepares students to design and implement innovative computing solutions to real world problems. Areas of study include (but not limited to) algorithms, software engineering, graphics, artificial intelligence, robotics, databases, theory of computation, networks and Internet technologies. The program emphasizes both theory and practical applications of computing. A degree in Computer Science prepares students for employment in developing and maintaining commercial applications and for graduate studies.

### **Total Credits: 124**

# Major: Core Requirements - 60

#### Core Requirements - 45

CPTR 151 - Computer Science I Credits: 3

- CPTR 152 Computer Science II Credits: 3
- CPTR 251 Application Development I Credits: 3
- CPTR 252 Application Development II Credits: 3
- CPTR 276 Data Structures and Algorithms Credits: 3
- CPTR 285 Systems Programming Credits: 3
- CPTR 425 Programming Languages Credits: 3
- CPTR 430 Analysis of Algorithms Credits: 3
- CPTR 437 Formal Theory of Computation Credits: 3
- CPTR 440 Operating Systems Credits: 3
- CPTR 460 Software Engineering Credits: 3
- CPTR 465 Computer Architecture Credits: 3
- 6 Credits of CPTR 493 Practicum Credits: 0
- CPTR 245 Discrete Structures Credits: 3
- Or MATH 355 Foundations of Advanced Mathematics Credits: 3

## Major Electives - 15

Chosen from CPTR courses in consultation with an advisor.

Up to 6 credits of the following courses may be substituted for CPTR elective credits if not already counted as cognate.

- MATH 192, 240, 286, 426
- STAT 340
- ENGR 225, 275, 310

# Cognates: 25-28

ENGR 385 - Microprocessor Systems Credits: 4

Student must have at least 22 credits from Math, Statistics and the Sciences.

#### Math

Choose at least two of the following courses:

- MATH 191 Calculus I Credits: 4
- MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 426 Mathematical Modeling in Biology Credits: 3

#### Statistics

Choose at least one of the following courses:

- STAT 285 Elementary Statistics Credits: 3
- STAT 340 Probability Theory with Statistical Applications Credits: 3

#### Sciences

Choose at least one of the following courses:

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- And PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
   Or
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- And PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

# Andrews Core Experience - 34

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience Program while noting the following requirements.

#### **Fine Arts and Humanities**

Chooose one of the following courses:

- ART 207 Basic Design I Credits: 3
- ART 209 Basic Design II Credits: 3
- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3
- One year of Ensemble, Applied Music

#### Service

BHSC 100 - Philosophy of Service Credits: 2

#### Life and Physical Sciences

Fulfilled in program requirements

# Undergraduate Electives: 5-7

# **Program Objectives**

#### Student Outcomes

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement and evaluate a computer-based system, process, component or program to meet desired needs
- 4. An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security, and social issues and responsibilities
- 6. An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations and society
- Recognition of the need for, and an ability to engage in, continuing professional development
- An ability to use current techniques, skills, and tolls necessary for computing practices
- 10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choice
- An ability to apply design and development principles in the construction of software systems of varying complexity
- A well-rounded, Christ-centered life perspective through the integration of the entire Andrews University curriculum

# Computing, Computer Science Emphasis BS

Computer Science focuses on a study of computing as well as on its role in an application area. Areas of interest include artificial intelligence, compilers, computer architectures, computer graphics, computer networks, operating systems, program development, and analytical theory. A degree in computing with the Computer Science emphasis prepares students for graduate study, employment in computer systems/networks, administration/ development, software development/maintenance, and for careers in education.

# Major Requirements - 40

Common Core - 22

- CPTR 151 Computer Science I Credits: 3
- CPTR 152 Computer Science II Credits: 3
- CPTR 276 Data Structures and Algorithms Credits: 3
- CPTR 440 Operating Systems Credits: 3
- CPTR 460 Software Engineering Credits: 3
- CPTR 491 Computing Capstone I Credits: 3
- CPTR 492 Computing Capstone II Credits: 3

#### Required courses—9

- CPTR 425 Programming Languages Credits: 3
- CPTR 437 Formal Theory of Computation Credits: 3
- CPTR 467 Database Concepts and Theory Credits: 3

## Major electives—9

Chosen from CPTR courses in consultation with an advisor. A minimum of 9 upper division credits required.

# Cognate requirements—26-28

- MATH 191 Calculus I Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- ENGR 385 Microprocessor Systems Credits: 4
- STAT 285 Elementary Statistics Credits: 3
- Or STAT 340 Probability Theory with Statistical Applications Credits: 3

#### Choose one of the following sets:

- BIOL 165 Foundations of Biology Credits: 5 or 4 \*
- BIOL 166 Foundations of Biology Credits: 5 or 4 \*
  Or
- CHEM 131 General Chemistry I Credits: 4 \*
- CHEM 132 General Chemistry II Credits: 4 \*
   Or
- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4 \*
   Or
- PHYS 241 Physics for Scientists and Engineers I Credits: 4 \*
- PHYS 242 Physics for Scientists and Engineers II Credits: 4 \*
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1 \*
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1 \*

# **Andrews Core Experience**

Students must take all courses designated in the BS Degree Requirements of the Andrews Core Experience.

# **Program Requirements**

#### Progression Requirements:

No grade lower than C- may be counted toward any degree requirement. An Engineering or Computing course may be repeated only once. Students may repeat only two Engineering or Computing courses. Students will be asked to withdraw from the program if they fail two Engineering or Computing courses in the same semester. Readmission will be considered on an individual basis. All prerequisites for CPTR courses must be passed with a minimum grade of C- before entry into the class it is required for. Transfer credits need to be submitted a minimum of six weeks prior to beginning of classes. Transfer students will be considered on an individual basis. Courses 200-level and above are restricted to admitted majors/minors only.

The major field examination in Computing is part of the senior exit test.

<sup>\*</sup>These courses may apply toward the general education life/physical science requirement.

#### Computer Policy

The computer is a tool that is integral to the success of the computer scientist in her/his professional development. All students in the Computing program are required to have a computer and software meeting the program guidelines. The policy is updated yearly and will be in effect at the beginning of the Fall semester. It includes changes to reflect continual changes in technolgoy. Computer purchases should be made such that the computer is ready for use on the first day of the semester.

# **Program Objectives**

#### Student Outcomes

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement and evaluate a computer-based system, process, component or program to meet desired needs
- 4. An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security, and social issues and responsibilities
- 6. An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations and society
- Recognition of the need for, and an ability to engage in, continuing professional development
- An ability to use current techniques, skills, and tolls necessary for computing practices
- 10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choice
- An ability to apply design and development principles in the construction of software systems of varying complexity
- A well-rounded, Christ-centered life perspective through the integration of the entire Andrews University curriculum

# Computing, Software Systems Emphasis BS

Software Systems is focusing on the development and maintenance of software in an application area. A minor in an application area is included as part of the degree. Typical minors might include one of the sciences, behavioral science, or business. Supervised "real-world"projects are a requirement for this degree. A degree in Computing with the Software Systems emphasis prepares students for employment in developing and maintaining commercial applications and for graduate studies in applied computing such as software engineering.

# Major Requirements - 40

# Common Core - 22

- CPTR 151 Computer Science I Credits: 3
- CPTR 152 Computer Science II Credits: 3
- CPTR 276 Data Structures and Algorithms Credits: 3
- CPTR 440 Operating Systems Credits: 3
- CPTR 460 Software Engineering Credits: 3
- CPTR 491 Computing Capstone I Credits: 3
- CPTR 492 Computing Capstone II Credits: 3

#### Required courses—9

- CPTR 251 Application Development I Credits: 3
- CPTR 425 Programming Languages Credits: 3
- CPTR 450 Network Computing and Architecture Credits: 3

# Major electives—9

Chosen from CPTR courses in consultation with an advisor. A minimum of 9 upper division credits required.

# Cognate requirements—30-32

- MATH 191 Calculus I Credits: 4
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- STAT 285 Elementary Statistics Credits: 3
- Or STAT 340 Probability Theory with Statistical Applications Credits: 3
- Minor in an advisor-approved application area (20–22)

# **Andrews Core Experience**

Students must take all courses designated in the BS Degree Requirements of the Andrews Core Experience.

# **Program Requirements**

#### **Progression Requirements:**

No grade lower than C- may be counted toward any degree requirement. An Engineering or Computing course may be repeated only once. Students may repeat only two Engineering or Computing courses. Students will be asked to withdraw from the program if they fail two Engineering or Computing courses in the same semester. Readmission will be considered on an individual basis. All prerequisites for CPTR courses must be passed with a minimum grade of C- before entry into the class it is required for. Transfer credits need to be submitted a minimum of six weeks prior to beginning of classes. Transfer students will be considered on an individual basis. Courses 200-level and above are restricted to admitted majors/minors only.

The major field examination in Computing is part of the senior exit test.

#### Computer Policy

The computer is a tool that is integral to the success of the computer scientist in her/his professional development. All students in the Computing program are required to have a computer and software meeting the program guidelines. The policy is updated yearly and will be in effect at the beginning of the Fall semester. It includes changes to reflect continual changes in technology. Computer purchases should be made such that the computer is ready for use on the first day of the semester.

# **Program Objectives**

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement and evaluate a computer-based system, process, component or program to meet desired needs
- 4. An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security, and social issues and responsibilities
- 5. An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations and society
- Recognition of the need for, and an ability to engage in, continuing professional development
- An ability to use current techniques, skills, and tolls necessary for computing practices
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choice
- An ability to apply design and development principles in the construction of software systems of varying complexity
- A well-rounded, Christ-centered life perspective through the integration of the entire Andrews University curriculum

# Engineering, Chemical Engineering Emphasis BS

# **Program Description**

Engineering builds on a strong traditional mathematics, science, and engineering core. The Chemical Engineering emphasis focuses on design and operation of chemical processes and optimization of production.

**Total Credits: 135** 

# Major: Core Requirements - 33

- ENGR 120 Introduction to Engineering & Design Credits: 2
- ENGR 125 Engineering Graphics Credits: 3
- ENGR 180 Materials Science Credits: 4
- ENGR 185 Engineering Statics Credits: 3
- ENGR 225 Circuit Analysis Credits: 3
- ENGR 275 Electronics I Credits: 3
- ENGR 285 Engineering Dynamics Credits: 3
- ENGR 310 Linear Systems Analysis Credits: 3
- ENGR 450 Engineering Economy Credits: 2
- ENGR 491 Review of Engineering Design Credits: 1
- ENGR 492 Senior Design Project Credits: 3
- CPTR 151 Computer Science I Credits: 3

# Major: Concentration Requirements - 29

# Concentration Requirements

- ENGR 345 Introduction to Chemical Engineering Processes Credits: 4
- ENGR 330 Thermodynamics Credits: 3
- ENGR 331 Thermodynamics II Credits: 3
- ENGR 355 Chemical Engineering Lab Credits: 3
- ENGR 360 Fluid Dynamics Credits: 3
- ENGR 410 Feedback Control Systems Credits: 4
- ENGR 464 Kinetics and Reactor Design Credits: 3
- ENGR 440 Heat and Mass Transfer Credits: 3
- ENGR 480 Process Design Credits: 3

# Cognates - 36

- MATH 191 Calculus I Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 200 Quantitative Analysis Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1

# **Andrews Core Experience**

Students must fullful the Andrews Core Experience requirements for Professional Degrees and note the following specific requirements.

#### Religion

- RELT 100 God and Human Life Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3

and two courses from RELB, RELG, RELP, RELT

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- COMM 104 Communication Skills Credits: 3
- ENGL 220 Technical Writing Credits: 3
- Or ENGL 215 College Writing II Credits: 3

#### History

HIST 118 - Civilizations and Ideas II Credits: 3

#### Service

- BHSC 100 Philosophy of Service Credits: 2
- ENGR 485 Community Project in Engineering Credits: 2

#### Social Sciences

Take one course from the following:

- ANTH 200 Cultural Anthropology Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- PLSC 104 American Government Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### Fitness Education

- HLED 120 Fit for Life Credits: 1
- and one additional course from personal fitness, outdoor skills or team activity.

# **Maintaining Academic Standing**

No grade lower than C- may be counted toward any degree requirement. An Engineering or Computing course may be repeated only once. Students may repeat only two Engineering or Computing courses. Students will be asked to withdraw from the program if they fail two Engineering or Computing courses in the same semester. Readmission will be considered on an individual basis. All prerequisites for ENGR courses must be passed with a minimum grade of C- before entry into the class it is required for. Transfer credits need to be submitted a minimum of six weeks prior to beginning of classes. Transfer students will be considered on an individual basis.

# **Program Objectives**

- 1. An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 4. An ability to function on multidisciplinary teams.
- 5. An ability to identify, formulate, and solve engineering problems.
- 6. An understading of professional and ethical responsibility.
- 7. An ability to communicate effectively.
- 8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- 9. A recognition of the need for, and an ability to engage in life-long learning.
- 10. A knowledge of contemporary issues.
- 11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- 12. A well-rounded, Christ-centered life perspective through the integration of the entire Andrews University curriculum.

# Engineering, Electrical and Computer Engineering Emphasis BS

# **Program Description**

Engineering builds on a strong traditional mathematics, science, and engineering core. The Electrical and Computer Engineering emphasis focuses on the areas of digital systems, communication systems, and computer controlled instrumentation and computer simulation.

The mathematics courses listed as cognates for the Engineering degree satisfy the requirements for a minor in mathematics. A second major in mathematics requires 6 additional credits in mathematics, and a second major in physics requires 14–17 additional credits in physics. See the Mathematics and Physics department listings for details.

# **Total Credits: 135**

# Major: Core Requirements - 33

- ENGR 120 Introduction to Engineering & Design Credits: 2
- ENGR 125 Engineering Graphics Credits: 3
- ENGR 180 Materials Science Credits: 4
- ENGR 185 Engineering Statics Credits: 3
- ENGR 225 Circuit Analysis Credits: 3
- ENGR 275 Electronics I Credits: 3
- ENGR 285 Engineering Dynamics Credits: 3
- ENGR 310 Linear Systems Analysis Credits: 3
- ENGR 450 Engineering Economy Credits: 2
- ENGR 491 Review of Engineering Design Credits: 1
- ENGR 492 Senior Design Project Credits: 3
- CPTR 151 Computer Science | Credits: 3

# Major: Concentration Requirements - 33

# Concentration Requirements - 27

- CPTR 152 Computer Science II Credits: 3
- CPTR 465 Computer Architecture Credits: 3
- ENGR 325 Electronics II Credits: 4
- ENGR 335 Logic Circuit Design Credits: 3
- ENGR 385 Microprocessor Systems Credits: 4
- ENGR 415 Virtual Instrumentation Credits: 3
- ENGR 435 Electromagnetic Fields Credits: 3
- ENGR 455 Communication Systems Credits: 4

#### Concentration Electives - 6

Chosen from ENGR and CPTR courses in consultation with an advisor.

#### Cognates - 35

- MATH 191 Calculus I Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1

- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- STAT 340 Probability Theory with Statistical Applications Credits: 3

# Andrews Core Experience

Students must fullful the Andrews Core Experience requirements for Professional Degrees and note the following specific requirements.

#### Religion

- RELT 100 God and Human Life Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
- and two courses from RELB, RELG, RELP, RELT

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- COMM 104 Communication Skills Credits: 3
- ENGL 220 Technical Writing Credits: 3
- Or ENGL 215 College Writing II Credits: 3

#### History

HIST 118 - Civilizations and Ideas II Credits: 3

#### Service

- BHSC 100 Philosophy of Service Credits: 2
- ENGR 485 Community Project in Engineering Credits: 2

#### Social Sciences

Take one course from the following:

- ANTH 200 Cultural Anthropology Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- PLSC 104 American Government Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### **Fitness Education**

- HLED 120 Fit for Life Credits: 1
- and one additional course from personal fitness, outdoor skills or team activity.

# **Maintaining Academic Standing**

No grade lower than C- may be counted toward any degree requirement. An Engineering or Computing course may be repeated only once. Students may repeat only two Engineering or Computing courses. Students will be asked to withdraw from the program if they fail two Engineering or Computing courses in the same semester. Readmission will be considered on an individual basis. All prerequisites for ENGR courses must be passed with a minimum grade of C- before entry into the class it is required for. Transfer credits need to be submitted a minimum of six weeks prior to beginning of classes. Transfer students will be considered on an individual basis.

# **Program Objectives**

- 1. An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 4. An ability to function on multidisciplinary teams.
- 5. An ability to identify, formulate, and solve engineering problems.
- An understading of professional and ethical responsibility.
- 7. An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- 9. A recognition of the need for, and an ability to engage in life-long learning.

- 10. A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- A well-rounded, Christ-centered life perspective through the integration of the entire Andrews University curriculum.

# Engineering, Mechanical Engineering Emphasis BS

# **Program Description**

Engineering builds on a strong traditional mathematics, science, and engineering core. The Mechanical Engineering emphasis focuses on mechanical design and the electromechanical elements of smart machines.

The mathematics courses listed as cognates for the Engineering degree satisfy the requirements for a minor in mathematics. A second major in mathematics requires 6 additional credits in mathematics, and a second major in physics requires 14–17 additional credits in physics. See the Mathematics and Physics department listings for details.

# **Total Credits: 135**

# Major: Core Requirements - 33

- ENGR 120 Introduction to Engineering & Design Credits: 2
- ENGR 125 Engineering Graphics Credits: 3
- ENGR 180 Materials Science Credits: 4
- ENGR 185 Engineering Statics Credits: 3
- ENGR 225 Circuit Analysis Credits: 3
- ENGR 275 Electronics I Credits: 3
- ENGR 285 Engineering Dynamics Credits: 3
- ENGR 310 Linear Systems Analysis Credits: 3
- ENGR 450 Engineering Economy Credits: 2
- ENGR 491 Review of Engineering Design Credits: 1
- ENGR 492 Senior Design Project Credits: 3
- CPTR 151 Computer Science I Credits: 3

# Major: Concentration Requirements - 33

# Concentration Requirements - 27

- ENGR 320 Manufacturing Processes Credits: 3
- ENGR 330 Thermodynamics Credits: 3
- ENGR 340 Mechanics of Materials Credits: 3
- ENGR 350 Sensors and Actuators Credits: 3
- ENGR 360 Fluid Dynamics Credits: 3
- ENGR 390 Engineering Measurements Lab Credits: 2
- ENGR 410 Feedback Control Systems Credits: 4
- ENGR 420 Machine Design Credits: 3
- ENGR 440 Heat and Mass Transfer Credits: 3

#### Concentration Electives - 6

Chosen from ENGR courses in consultation with an advisor.

# Cognates - 35

- MATH 191 Calculus I Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3

- STAT 340 Probability Theory with Statistical Applications Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1

# Andrews Core Experience

Students must fullful the Andrews Core Experience requirements for Professional Degrees and note the following specific requirements.

#### Religion

- RELT 100 God and Human Life Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
- and two courses from RELB, RELG, RELP, RELT

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- COMM 104 Communication Skills Credits: 3
- ENGL 220 Technical Writing Credits: 3
- Or ENGL 215 College Writing II Credits: 3

#### History

HIST 118 - Civilizations and Ideas II Credits: 3

#### Service

- BHSC 100 Philosophy of Service Credits: 2
- ENGR 485 Community Project in Engineering Credits: 2

#### **Social Sciences**

Take one course from the following:

- ANTH 200 Cultural Anthropology Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- PLSC 104 American Government Credits: 3
- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### **Fitness Education**

- HLED 120 Fit for Life Credits: 1
- and one additional course from personal fitness, outdoor skills or team activity.

# **Maintaining Academic Standing**

No grade lower than C- may be counted toward any degree requirement. An Engineering or Computing course may be repeated only once. Students may repeat only two Engineering or Computing courses. Students will be asked to withdraw from the program if they fail two Engineering or Computing courses in the same semester. Readmission will be considered on an individual basis. All prerequisites for ENGR courses must be passed with a minimum grade of C- before entry into the class it is required for. Transfer credits need to be submitted a minimum of six weeks prior to beginning of classes. Transfer students will be considered on an individual basis.

# **Program Objectives**

- 1. An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- . An ability to function on multidisciplinary teams.
- 5. An ability to identify, formulate, and solve engineering problems.

- 6. An understading of professional and ethical responsibility.
- 7. An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- 9. A recognition of the need for, and an ability to engage in life-long learning.
- 10. A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- A well-rounded, Christ-centered life perspective through the integration of the entire Andrews University curriculum.

# **Undergraduate Minors**

# Computing Minor

# Required courses—10

- CPTR 151 Computer Science I Credits: 3
- CPTR 152 Computer Science II Credits: 3
- CPTR 276 Data Structures and Algorithms Credits: 3

#### Minor electives—10

Chosen from CPTR courses in consultation with an advisor.

### Note:

No course grade below a C- may apply to a major or minor in Computing. All prerequisites for CPTR courses must be passed with a minimum grade of C- before entry into the class it is required for.

## **Total Credits: 20**

# **Engineering Minor**

# Required courses—11

- ENGR 120 Introduction to Engineering & Design Credits: 2
- ENGR 125 Engineering Graphics Credits: 3
- ENGR 185 Engineering Statics Credits: 3
- ENGR 225 Circuit Analysis Credits: 3

### Minor Electives—9

Chosen from ENGR courses in consultation with an engineering advisor.

# Cognates:

- MATH 191 Calculus I Credits: 4
- MATH 192 Calculus II Credits: 4

#### **Total Credits: 20**

# **Computing & Software Engineering**

#### CPTR 151 - Computer Science I

Credits: 3 | An introduction to programming methodology using a high level language, advanced operating system usage, problem-solving, algorithm development, control structures, arrays, program style, design correctness and documentation techniques, as well as a brief overview of computer systems and computer history. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab | Offering: Fall, Spring | College Code: CAS

#### **CPTR 152 - Computer Science II**

Credits: 3 | A continuation of CPTR151. Examines program specifications, design, coding, correctness, and style with additional coverage of pointers and arrays, and an in-depth study of recursion and data structures. Includes files, lists, stacks, queues, trees, graphs, and an overview of computer ethics. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 151 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **CPTR 245 - Discrete Structures**

Credits: 3 | Formal mathematical structures and methods used in developing computing solutions are introduced. Their application in computer science is emphasized. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 251 - Application Development I

Credits: 3 | A study of techniques and concepts used for developing service applications. Aspects covered include the internet, web, databases, networking and object-oriented. Content adjusted based on current trends. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **CPTR 252 - Application Development II**

Credits: 3 | A study of techniques and concepts used for developing endpoint applications for modern computing platforms such as mobile devices. The content is adjusted based on current trends. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 251 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 276 - Data Structures and Algorithms

Credits: 3 | A study of techniques for the design and analysis and implementation of data structures and algorithms commonly used in computing. Includes introductions to asymptotic notation, sorting, search trees, hash tables, and graphs. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **CPTR 285 - Systems Programming**

Credits: 3 | Organization of programs and data; program analysis, pointers, manual memory management, system calls, introduction to threads, embedded programming. | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: CPTR 152 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

# CPTR 295 - Directed Computer Language Study

Credits: 1 | Directed study of computer language in consultation with the instructor. Normally, the language is not included in other courses taught by the department. A programming project may be required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): CPTR 152or equivalent. | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CPTR 425 - Programming Languages

Credits: 3 | Survey of current programming languages, including structure, runtime systems, the specification of syntax, and semantics. Definition of syntax for formal languages with emphasis on context-free languages. Techniques for scanning and parsing programming languages. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 276 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 430 - Analysis of Algorithms

Credits: 3 | An introduction to the design and analysis of advanced algorithms. Topics include asymptotic complexity bounds, graph and tree algorithms, and algorithmic strategies (such as greedy, divide-and-conquer and dynamic programming). | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 245, CPTR 276 | Schedule Type: Lecture | College Code: CAS

#### CPTR 436 - Numerical Methods and Analysis

**Credits:** 3 | A study of common numerical techniques applicable on a computer. Includes interpolation, extrapolation, approximation techniques, numerical methods for linear problems, root finding, function fitting, numerical integration, location of extremes, efficiency of numerical algorithms, and minimization of computational error. | **Grade Mode:** Normal (A-F,I,W) | **Prerequisite(s):** CPTR 276 and MATH 215. | **Schedule Type:** Lecture | **College Code:** CAS

#### CPTR 437 - Formal Theory of Computation

Credits: 3 | Study of the various classes of formal languages, their grammars, properties and recognizing machines. Turing machines. Computability. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152, CPTR 245 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CPTR 440 - Operating Systems

**Credits:** 3 | Process management, including asynchronous concurrent processes and deadlock, virtual storage management and job and process scheduling, multiprocessing, disk scheduling and file and database systems, performance and

security. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 276, CPTR 285 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CPTR 450 - Network Computing and Architecture

Credits: 3 | Concepts applicable to constructing a computer network and the application of computing algorithms and solutions using networked computers and devices. Study topics such as physical transmission media, protocols and associated layers, TCP/IP, application programming interfaces and frameworks, sockets, clustering and security. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 460 - Software Engineering

Credits: 3 | Surveys basic software engineering topics associated with the processes, documents, and products of the entire software life cycle. Topics include software evolution, project organization, and management, feasibility studies, product definition, design, implementation, and testing issues, and the role of the software engineer within the life cycle. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CPTR 465 - Computer Architecture

Credits: 3 | Focus on hardware aspects of computing and logical concepts. Includes data representation for numbers and other data types, Boolean algebra, digital logic circuit representations of basic computational building blocks, CPU components, interrupt schemes and buses. Relevance of supporting concepts is discussed, including system software, assemblers, assembly language programming and operating systems.

| Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 467 - Database Concepts and Theory

Credits: 3 | Study of issues relevant to abstract and concrete aspects in both the creation of database management system software and its use. Indexing, buffering and other internal and physical database design issues. Relational model algebra, calculus and query languages. Functional dependencies and normalization. Study of and modeling using Entity-Relationship and other relevant paradigms. Common application databases. Introduction to the use of transactions, query optimization and non-relational database models. Design and programming assignments using databases. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 475 - Topics in \_\_\_\_\_\_

Credits: 1 | Selected topics of current interest in computing such as Robotics, advanced languages, or others. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### CPTR 485 - Computer Graphics

Credits: 3 | Introduction to computer graphics focusing on the algorithms and data structures for the modeling and shading of 3-d images. Topics include basic OpenGL programming, mesh generation, shading, raytracing, radiosity methods, procedural textures, and fractal methods. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CPTR 487 - Artificial Intelligence

Credits: 3 | Provides the conceptual basis for understanding current trends in Artificial Intelligence. Topics include both symbolic and numeric processing, intelligent search methods, problem representation, machine learning, expert systems, and a survey of some social implications of Al. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 152 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### CPTR 490 - Research

Credits: 1 | Students will either assist a faculty member in an ongoing research project or develop a project of their own with the help and approval of the faculty member in their areas of interest or study. this course is for students who have a reasonably established knowledge of computing at the college level. A minimum of 4 hours work per week is required for each credit earned and a written paper is required. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### CPTR 491 - Computing Capstone I

Credits: 3 | The first of a capstone project sequence required for all senior computing majors. Software engineering and its methodologies are applied. Various software life cycle models are incorporated. Students are placed into teams and assigned to a client and/or project. The teams create a project plan, analyze and specify requirements for their project and develop a design. Prototype demonstrations and periodic oral and written progress reports are required to help assure steady progress. Individuals and teams produce a variety of documents throughout the course. Documents include a management plan, project abstracts, a requirements specification, a user interface prototype document, and a design document consisting of architectural and detailed design elements. This course is a writing-intensive course. | Grade Mode: Normal (A-

F,I,W) | Prerequisite(s): CPTR 460 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **CPTR 492 - Computing Capstone II**

Credits: 3 | The second of a capstone project sequence required for all computing majors. Students are placed into teams and assigned to complete an existing project for a client. The teams implement and debug code according to a design produced earlier. They produce a testing plan, carry out testing, record test results and summarize them. Prototype demonstrations and periodic progress reports are required to help assure steady progress. Individuals and teams produce a variety of documents throughout the course. These documents include a testing plan, a testing log, and a summary of testing, a maintenance manual and a user manual. Teams also deliver a public demonstration at the end of the course, as well as a final presentation.

| Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 491 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### CPTR 493 - Practicum

Credits: 0 | This course facilitates a professional experience for the student. It functions with the consent and advice of the computer science program faculty. Opportunities and venues vary, and must include designing and implementing an innovative and novel computing solution. Three primary approaches are undergraduate research, professional internship, or a major design project. A minimum of 4 hours of work per week per credit is required. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | Special Approval: Instructor permission required. | College Code: CAS

#### CPTR 495 - Independent Study

Credits: 1 | Directed study of material of special interest chosen in consultation with the instructor. No more than 6 credits may be earned in CPTR495. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### CPTR 496 - Special Projects

Credits: 1 | Project chosen in consultation with instructor. No more than 6 credits may be earned in CPTR 495. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### CPTR 660 - Thesis/Project Continuation

Credits: 0 | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### CPTR 699 - Master's Thesis

Credits: 1–6 | To be repeated to 6 credits. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

# **Engineering**

#### **ENGR 120 - Introduction to Engineering & Design**

Credits: 2 | An introductory course in engineering and design. It teaches the basic principles of design and related design tools from a basic level. Students will be taught to use computer tools for engineering analysis. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **ENGR 125 - Engineering Graphics**

Credits: 3 | Fundamentals of drawing as applied to mechanical engineering problems. Orthographic projections, auxiliary and sectional views, dimensioning and tolerancing, oblique and isometric views, detail and assembly drawing. Sketching and computer aided drafting. | Weekly: two 1-hour lectures and two 1.5-hour labs | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### ENGR 180 - Materials Science

Credits: 4 | Introduction to the study of materials. Covers physical properties, application and relevant properties associated with engineering material. A weekly hands-on laboratory helps demonstrate the relationship of properties of materials studied in lecture. | Weekly: 3-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 131 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### **ENGR 185 - Engineering Statics**

Credits: 3 | Principles of statics and their application to engineering problems; forces, moments, couples, friction, centroids and moments of inertia. | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: MATH 191 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ENGR 215 - Robotics Programing

Credits: 2 | This course covers the basic operations of a robotic arm using the teach pendant as the main interface. A Robotics Handling Tool Software Package is used in this course. Students successfully completing this course will be able to: Safely power up and jog the robot; recover from common errors and robot faults; execute production operation; create, modify and execute a teach pendant program; and abort and access teach pendant programs. This course consists of lectures, demonstrations and a series of lab exercises. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENGR 225 - Circuit Analysis

Credits: 3 | Resistive circuit analysis, network theorems, dependent sources, energy storage elements, 1st and 2nd order circuit transient responses, ac circuit analysis using phasors and impedances, and ac complex power. | Weekly: 2-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) |

Prerequisite(s): MATH 191 | Prerequisite/Corequisite: MATH 192 | Schedule Type:
Lecture/Lab | Offering: Fall | College Code: CAS

#### ENGR 248 - Workshop

Credits: 1 | Provides flexibility for the occasional workshop where it is appropriate to offer engineering credit. Workshop requirements must be approved by the department. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Workshop | Special Approval: Advisor permission required. | College Code: CAS

#### **ENGR 275 - Electronics I**

Credits: 3 | Introduction to diodes and transistors and their applications in switching and amplification circuits. Introduction to the basic op-amp circuits and their characteristics. Binary numbers and codes, Boolean algebra, logic circuits, flip-flops and registers. Digital circuit applications. | Weekly: 2-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 225 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### ENGR 285 - Engineering Dynamics

Credits: 3 | Vectorial kinematics of moving bodies in fixed and moving reference frames. Kinetics of particles, assemblies of particles, and rigid bodies, with emphasis on the concept of momentum. Keplerian motion, elementary vibrations, and conservative dynamic systems. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 185 and MATH 192 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

# ENGR 310 - Linear Systems Analysis

Credits: 3 | Convolution, analysis and spectra of continuous time domain signals, Fourier and Laplace transforms, discrete time domain signals, and the z-transform. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): CPTR 151 | Prerequisite(s): MATH 215, MATH 286 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

## **ENGR 320 - Manufacturing Processes**

Credits: 3 | Deals with today's technologies and the future of manufacturing. It includes details of product design process, rapid prototyping and a survey of manufacturing technologies. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 180 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **ENGR 325 - Electronics II**

Credits: 4 | Modeling of transistors, biasing of transistors in amplifier circuits, and amplitude and frequency limitations of transistors. Linear and switching electronic circuits with an emphasis on op-amps. | Weekly: 3-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 275 | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

## ENGR 330 - Thermodynamics

Credits: 3 | Introduction to the nature of energy and study of energy transport conservation in closed and flowing systems; properties and states of solids, liquids, vapors, and gases; enthalpy; meaning and production of entropy and introduction to cyclic systems. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 241 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### ENGR 331 - Thermodynamics II

Credits: 3 | Principles of phase and chemical equilibria in the solution of chemical engineering problems in the traditional process industries, biological systems, materials processing, pharmaceutical manufacturing and other industries. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 330 | Schedule Type: Lecture | College Code: CAS

#### **ENGR 335 - Logic Circuit Design**

Credits: 3 | Modern digital logic families, state machines, design of digital logic circuits in FPGAs, and VHDL specification of logic circuits. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 275 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **ENGR 340 - Mechanics of Materials**

Credits: 3 | Study of stresses and strain, deformations and deflections of posts, shafts, beams, columns; combined stresses; elasticity. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 185 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **ENGR 345 - Introduction to Chemical Engineering Processes**

Credits: 4 | Foundation course covering applications of the concepts of material and energy balances to problems in chemical processes, biological systems and environmental phenomena; including problem-solving techniques, a working knowledge of phase equilibria, physical properties, and computer applications. Application of the principles of phase equilibria, transport processes, and chemical kinetics to the design and characterization of stage-wise and continuous separation processes. Both graphical and rigorous numerical techniques are used, and the general procedures applicable to different specific processes are covered; including example problems from the petroleum, chemical, food, biochemical, and electronic materials processing industries | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: ENGR 330 | Schedule Type: Lecture | College Code: CAS

#### **ENGR 350 - Sensors and Actuators**

Credits: 3 | Study of temperature, mechanical, and optical sensors; sensor signal conditioning; ac, dc, and stepping motors; and the motor control requirements. | Weekly: 2 lectures and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 275 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### ENGR 355 - Chemical Engineering Lab

Credits: 3 | Chemical Engineering laboratory course consisting of experiments in major subject areas of chemical engineering. Topics are combined to provide a focused learning experience emphasizing experimental techniques to observe fundamental behavior, understanding of the phenomena in terms of the appropriate theory and experience at technical report writing; including formal and informal oral presentation skills. | Weekly: 2-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CHEM 200 | Schedule Type: Lecture/Lab | College Code: CAS

#### ENGR 360 - Fluid Dynamics

Credits: 3 | Fluid statics and dynamics of fluid motion. Conservation of mass, momentum, and energy in laminar and turbulent flow. Boundary layer flow, lift and drag forces, viscous flow in conduits, open channel flow, flow measurements. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 285, ENGR 330, MATH 286 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ENGR 380 - Programmable Controllers

Credits: 2 | Introduction to typical programmable logic controllers and their applications. Emphasis on programming and interfacing to electromechanical systems. | Weekly: 1-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 275 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **ENGR 385 - Microprocessor Systems**

Credits: 4 | Introduction to computer organization, microprocessors, assembly language programming, memory devices, I/O devices, interfacing with emphasis on control applications. | Weekly: 3-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 335 or CPTR 276 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

# ENGR 390 - Engineering Measurements Lab

Credits: 2 | Introduction to various measurement techniques available for mechanical and general engineering application. National Instrument LabView Data Acquisition System is used to collect data for analysis. | Weekly: two 3-hour labs | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 330 ENGR 340 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ENGR 410 - Feedback Control Systems

Credits: 4 | Study of both analog and digital feedback control systems. Performance criteria and design and analysis methods. | Weekly: 3-hour lecture and a 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 275 ENGR 285 ENGR 310 | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### **ENGR 415 - Virtual Instrumentation**

Credits: 3 | For engineering majors. Introduction to virtual instrumentation with emphasis on the sampling requirements and the signal conditioning requirements. Data logging and control applications. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 275, CPTR 151 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### ENGR 415-002 - Virtual Instrumentation

Credits: 1 | Introduction to virtual instrumentation with emphasis on the sampling requirements and the signal conditioning requirements. Data logging and control applications. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): CPTR 151 | Schedule Type: Lab | Offering: Fall | College Code: CAS

#### ENGR 420 - Machine Design

Credits: 3 | This course emphasizes both failure theory and analysis as well as the synthesis and design aspect of machine elements. It touches on the commonality of the analytical approaches needed to design a wide variety of elements and the need to use computer aided engineering as an approach to the design and analysis of these classes of problems. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 320 ENGR 390 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **ENGR 425 - Project Management**

Credits: 3 | Methodology used successfully to carry out a technical project including proposals, planning, work breakdown, scheduling, creativity, monitoring progress, and documentation. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): STAT 285 or STAT 340 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### ENGR 430 - Quality Control

Credits: 3 | Analysis of the factors affecting product quality during manufacturing. Topics include use of basic statistics and probability for measurements, observations, sampling, control charts and reliability. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): STAT 285 or STAT 340 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ENGR 435 - Electromagnetic Fields

Credits: 3 | Study of static and dynamic electric and magnetic fields. Unbounded and bounded fields, fields in materials, force and torque, energy and potential functions, and Faraday induction. Propagation of electromagnetic energy; plane waves, transmission lines, and waveguides; radiation from dipole antennas; introduction to arrays. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH 286, PHYS 242 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### ENGR 440 - Heat and Mass Transfer

Credits: 3 | Study of steady-state and transient heat conduction, forced and non-forced convection through ducts and over surfaces, blackbody thermal radiation, solar radiation, heat exchangers, and mass transfer. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 360, MATH 286 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### ENGR 450 - Engineering Economy

Credits: 2 | Study of engineering decision methodology and criteria used to include economic factors in determining the best alternative in the design and selection of equipment, structures, methods, and processes. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 145 or MATH 191 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

# ENGR 455 - Communication Systems

Credits: 4 | Introduction to analog and digital communication systems; including topics in modulation; baseband and bandpass signals; power spectral density and bandwidth; random processes; noise, signal-to-noise ratio, and error probability; and system performance. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 310, ENGR 325, STAT 340 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### ENGR 464 - Kinetics and Reactor Design

Credits: 3 | Basic concepts of chemical rate processes as applied to the theory of the design and operation of various types of commercial reactors for both non-catalytic and catalytic reactions; including mole balances, rate laws and stoichiometry, collection and analysis of rate data, multiple reactions, isothermal and non-isothermal reactor design, catalysis and catalytic reactors. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 345 | Schedule Type: Lecture | College Code: CAS

#### ENGR 465 - Operations Analysis and Modeling

Credits: 3 | The methodology of mathematical modeling and its relation to solving problems in industrial and public systems. Linear programming, scheduling, queuing, simulation, optimization, and decision analysis. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 192, STAT 340. | Schedule Type: Lecture | Offering: Spring, may not be offered each year | College Code: CAS

#### **ENGR 470 - Finite Element Methods**

Credits: 3 | Introduction of finite element methods for the solution of problems in solid mechanics and heat transfer. Techniques for obtaining approximate numerical solutions to governing differential equations in the problem areas are covered. Industrial software is applied to the analysis and design of a broad range of engineering problems. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 330, ENGR 340, MATH 286 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### ENGR 475 - Topics in

Credits: 1 | Selected topics of current interest in engineering. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Dependant on topic | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### ENGR 478 - Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department offerings. | \$ - Tour fee | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | Offering: Summer | College Code: CAS

#### ENGR 480 - Process Design

Credits: 3 | Application of the basic concepts learned in previous courses to the design and analysis of a chemical processing system, primarily through a design project; Computer-Aided Design (process simulation), economic analysis, process safety, flow-sheet synthesis (conceptual design), and decision-making analysis (optimization) are covered. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGR 464 | Schedule Type: Lecture | College Code: CAS

#### **ENGR 485 - Community Project in Engineering**

Credits: 2 | "Hands-on" involvement in humanitarian and/or service-oriented projects. Work initiated by students requires prior approval of faculty. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 6 credits | Schedule Type: Lecture | College Code: CAS

#### **ENGR 491 - Review of Engineering Design**

Credits: 1 | Selection, proposal and planning of capstone project. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **ENGR 492 - Senior Design Project**

Credits: 3 | A significant design project which culminates in a working system, component, process or a complete description of a proposed design. Both an oral and written presentation of the results of the project are required. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): ENGR 385 or ENGR 390 | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### ENGR 495 - Independent Study

Credits: 1 | Individual study, research, or project in some field of engineering under the direction of a member of the engineering faculty. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | Special Approval: Instructor permission required. | College Code: CAS

### **ENGR 496 - Cooperative Work Experience**

Credits: 1 | Work experience in industry directed by an engineering faculty member. 120 hours of work is required per credit. A report must be submitted that summarizes the work experience and indicates the value of the experience to the student. |

Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 4 credits | Schedule Type: Practicum | Special Approval: Instructor permission required. |

College Code: CAS

# English

Nethery Hall, Room 126 269-471-3298 english@andrews.edu www.andrews.edu/cas/english/

#### Faculty

Janet Blackwood
Jeanette Bryson
Bruce A. Closser
Vanessa I. Corredera
D. Ivan Davis
Gary R. Gray
Douglas Jones
Eun-Young Kim
Asta Sakala LaBianca
Beverly J. Matiko
Scott E. Moncrieff

Meredith Jones Gray, Chair

#### Administrators with appointment in the Dept of English

Andrea T. Luxton Alayne D. Thorpe

L. Monique Pittman Dianne L. Staples

#### Emeriti

Delmer I. Davis F. Estella Greig Merlene A. Ogden

#### **Adjunct faculty**

Sara Austin

Karen Johnson-McWilliams Stefanie Marschner Paul Matychuk Lilia Moncrieff Beverly Romero Janalee Shaw

Kendra Manuel Smith Lauri Wood

Rebecca Wright

#### Mission

The Andrews University Department of English constitutes a vital component of this distinctive Seventh-day Adventist institution of higher learning. It draws together a diverse community of learners committed to seeking knowledge, affirming faith, and changing the world. Within the framework of Christian faith and purpose, it develops graduates who are competent, creative and critical readers, writers and thinkers, capable of a variety of careers and scholarly pursuits.

#### **English Proficiency Requirements**

Students whose first language is not English must provide evidence of Englishlanguage proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

- Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- 4. IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of English on an individual basis.

#### English as a Second Language

Housed in the Department of English, the Center for Intensive English Programs (CIEP) offers programs to assist students in improving their English language proficiency. Students may enroll in courses offered in reading, grammar, composition, and oral/aural practice. Students who complete the prescribed Advanced Level classes with a grade of B or better, and who pass the Exit Exam will be granted a certificate of completion. The certificate indicates that the student has completed the Intensive English Language Program.

Upon completion, students may apply for a transfer into their major of choice. Students planning to complete an undergraduate Bachelor of Arts degree may apply for a foreign language waiver.

# **Bachelors**

# English, English Education Emphasis BA

**Total Credits: 42** 

# Major: Core Requirements—12

## Core Requirements

- ENGL 185 Much Ado about English Credits: 2
- ENGL 267 Approaches to Literature Credits: 3
- ENGL 345 Introduction to Rhetoric Credits: 3
- ENGL 460 Linguistics Credits: 3
- ENGL 498 Senior Seminar Credits: 1

# **Major: Concentration Requirements**

# **English Education Emphasis**

This emphasis is for students seeking secondary teaching certification.

- 4 Credits of ENGL 300 Modern English Grammar Credits: 3,4
- ENGL 403 20th-century English and American Literature Credits: 3
- ENGL 408 Literature for Young Adults Credits: 2,3
- ENGL 437 Teaching and Tutoring Writing Credits: 3
- ENGL 459 Methods of Teaching English Credits: 3

#### Choose one of the following courses:

- ENGL 273 American Literature to 1865 Credits: 3
- ENGL 274 American Literature 1865 Credits: 3

#### Choose one of the following courses:

- ENGL 371 English Literature to 1600 Credits: 3
- ENGL 372 English Literature 1600 Credits: 3
- ENGL 373 English Literature 1800 Credits: 3

#### Choose one of the following courses:

- ENGL 404 New Global Literature Credits: 3
- ENGL 415 Gender Studies in Literature Credits: 3

#### Choose two of the following courses:

- ENGL 315 Professional Writing Credits: 3
- ENGL 430 Topics in \_\_\_\_\_ Credits: 1
- ENGL 438 Advanced Composition Credits: 3
- ENGL 454 The Writing Life Credits: 3
- ENGL 467 Creative Writing Credits: 3

# Major: Additional Requirements

## Michigan Test of Teacher Certification (MTTC)

English majors enrolled in the English Education emphasis seeking Michigan state secondary certification credentials will take the Michigan Test of Teacher Certification—subject area: English (MTTC) in their last year of study. Arrangements for taking the MTTC should be made with the Department of Teaching, Learning, and Curriculum in the School of Education. When test score results are tabulated by the Michigan Department of Education, they are shared with the students' certification advisor and then passed on to their English Education emphasis advisor. The Department of English decides how and when to share individual results.

# **Secondary Certification**

For more information see the Andrews Core Experience for Secondary Certification in the department of Teaching, Learning & Curriculum.

# Andrews Core Experience

Students must take all courses designated in the Professional Degree Requirements of the Andrews Core Experience Program while noting the following approved course substitutions. If a student changes to another degree program, these course substitutions will no longer apply even if already completed.

#### Religion

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- and a three credit elective chosen in consulation with your School of Education (SED) advisor

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### **Foreign Language**

four credits of Intermediate Language

#### History

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3

#### Fine Arts and Humanities

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- three credits of Studio Art
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3
- three credits of Ensemble Music

#### **Life and Physical Sciences**

 take one Life Science and one Physical Science course as recommended in the GE requirements or major level Life and Physical Science course.

#### Service

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### Social Sciences

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### Fitness Education

- HLED 120 Fit for Life Credits: 1
- and two Fitness Education courses

# **Admission Requirements**

# English Language Requirements

Students whose first language is not English must provide evidence of English-language proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

- Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# English, Literature Emphasis BA

## **Total Credits: 42**

# Major: Core Requirements—12

#### Core Requirements

- ENGL 185 Much Ado about English Credits: 2
- ENGL 267 Approaches to Literature Credits: 3
- ENGL 345 Introduction to Rhetoric Credits: 3
- ENGL 460 Linguistics Credits: 3
- ENGL 498 Senior Seminar Credits: 1

# Major: Concentration Requirements—30

This emphasis is recommended for those planning to do graduate work in English or for those planning professional careers that demand a broad liberal arts background.

#### Literature Emphasis

ENGL 450 - Literary Criticism and Theory Credits: 3

#### Choose six of the following courses:

- ENGL 273 American Literature to 1865 Credits: 3
- ENGL 274 American Literature 1865 Credits: 3
- ENGL 371 English Literature to 1600 Credits: 3
- ENGL 372 English Literature 1600 Credits: 3
- ENGL 373 English Literature 1800 Credits: 3
- ENGL 403 20th-century English and American Literature Credits: 3
- ENGL 404 New Global Literature Credits: 3

#### Choose one of the following courses:

- ENGL 315 Professional Writing Credits: 3
- ENGL 437 Teaching and Tutoring Writing Credits: 3
- ENGL 438 Advanced Composition Credits: 3
- ENGL 454 The Writing Life Credits: 3

ENGL 467 - Creative Writing Credits: 3

#### Concentration Electives

Choose six additional credits from the Department of English offerings (excluding ENGL 115, and ENGL 215)

# Major: Additional Requirements

# Michigan Test of Teacher Certification (MTTC)

English majors enrolled in the English Education emphasis seeking Michigan state secondary certification credentials will take the Michigan Test of Teacher Certification-subject area: English (MTTC) in their last year of study. Arrangements for taking the MTTC should be made with the Department of Teaching, Learning, and Curriculum in the School of Education. When test score results are tabulated by the Michigan Department of Education, they are shared with the students' certification advisor and then passed on to their English Education emphasis advisor. The Department of English decides how and when to share individual results.

# **Andrews Core Experience**

Students must fullfull the BA Degree Requirements of the Andrews Core Experience.

# **Admission Requirements**

#### English Language Requirements

Students whose first language is not English must provide evidence of Englishlanguage proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

- Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# English, Writing Emphasis BA

#### **Total Credits: 42**

# Major: Core Requirements—12

#### Core Requirements

- ENGL 185 Much Ado about English Credits: 2
- ENGL 267 Approaches to Literature Credits: 3
- ENGL 345 Introduction to Rhetoric Credits: 3
- ENGL 460 Linguistics Credits: 3
- ENGL 498 Senior Seminar Credits: 1

# Major: Concentration Requirements—30

#### Writing Emphasis

This emphasis is suitable for those planning professional careers as writers or those particularly interested in the teaching of writing. Students selecting this emphasis are encouraged to select a second major or minor that will enhance future employment.

In addition to the core courses required in the major, students must take:

ENGL 438 - Advanced Composition Credits: 3

#### Choose five of the following courses:

- ENGL 220 Technical Writing Credits: 3
- ENGL 315 Professional Writing Credits: 3
- ENGL 437 Teaching and Tutoring Writing Credits: 3
- ENGL 454 The Writing Life Credits: 3
- ENGL 467 Creative Writing Credits: 3
- ENGL 430 Topics in Credits: 1
- ENGL 497 Writing Internship Credits: 1

#### Choose two of the following courses:

- ENGL 273 American Literature to 1865 Credits: 3
- ENGL 274 American Literature 1865 Credits: 3
- ENGL 371 English Literature to 1600 Credits: 3
- ENGL 372 English Literature 1600 Credits: 3
- ENGL 373 English Literature 1800 Credits: 3
- ENGL 403 20th-century English and American Literature Credits: 3
- ENGL 404 New Global Literature Credits: 3

#### Concentration Electives

Choose six additional credits from the Department of English offerings (excluding ENGL 115, and ENGL 215) or related writing courses such as

- JOUR 230 Beginning Media Writing Credits: 3
- JOUR 330 Advanced Media Writing Credits: 3
- JOUR 445 Publication Production Credits: 3
- JOUR 465 Advanced Topics in Journalism:\_\_\_\_\_ Credits: 3
- PLSC 316 Legal Writing and Rhetoric Credits: 3
- DSGN 185 Digital Publishing Credits: 3

# Major: Additional Requirements

## Michigan Test of Teacher Certification (MTTC)

English majors enrolled in the English Education emphasis seeking Michigan state secondary certification credentials will take the Michigan Test of Teacher Certification-subject area: English (MTTC) in their last year of study. Arrangements for taking the MTTC should be made with the Department of Teaching, Learning, and Curriculum in the School of Education. When test score results are tabulated by the Michigan Department of Education, they are shared with the students' certification advisor and then passed on to their English Education emphasis advisor. The Department of English decides how and when to share individual results.

# **Andrews Core Experience**

Students must fullfull the BA Degree Requirements of the Andrews Core Experience.

# **Admission Requirements**

#### English Language Requirements

Students whose first language is not English must provide evidence of Englishlanguage proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.

- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# **Undergraduate Minors**

# English Minor

**Total Credits: 21** 

# **Minor: Core Requirements**

# Core Requirements

ENGL 267 - Approaches to Literature Credits: 3

#### Choose three of the following courses:

- ENGL 273 American Literature to 1865 Credits: 3
- ENGL 274 American Literature 1865 Credits: 3
- ENGL 371 English Literature to 1600 Credits: 3
- ENGL 372 English Literature 1600 Credits: 3
- ENGL 373 English Literature 1800 Credits: 3
- ENGL 403 20th-century English and American Literature Credits: 3
- ENGL 404 New Global Literature Credits: 3

#### Choose one of the following courses:

- ENGL 300 Modern English Grammar Credits: 3,4
- ENGL 460 Linguistics Credits: 3

#### Choose one of the following courses:

- ENGL 315 Professional Writing Credits: 3
- ENGL 345 Introduction to Rhetoric Credits: 3
- ENGL 438 Advanced Composition Credits: 3
- ENGL 454 The Writing Life Credits: 3
- ENGL 467 Creative Writing Credits: 3
- JOUR 230 Beginning Media Writing Credits: 3

#### Electives

Remaining credits from English Department courses not previously selected (excluding ENGL 115 and ENGL 215).

# **Secondary Certification**

For further information regarding Secondary Certification with a minor see the department of Teaching, Learning & Curriculum.

# **Admission Requirements**

# English Language Requirements

Students whose first language is not English must provide evidence of Englishlanguage proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

- Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# Teaching English to Speakers of Other Languages Minor

Available only to students obtaining elementary or secondary teacher certification. For more information regarding Certification Requirements with a minor, see the department of Teaching, Learning & Curriculum.

# **Total Credits: 21**

# **Minor: Core Requirements**

- 4 Credits of ENGL 300 Modern English Grammar Credits: 3,4
- ENGL 407 Literature for Children Credits: 2,3
- Or ENGL 408 Literature for Young Adults Credits: 2,3
- ENGL 440 Language and Culture Credits: 3
- ENGL 456 Introduction to TESOL Theories, Methods, and Issues Credits: 4
- ENGL 460 Linguistics Credits: 3
- ENGL 469 Second Language Acquisition Credits: 3
- ENGL 490 TESOL Practicum Credits: 1.2

#### **Electives**

ENGL 435 Topics: TESOL Certificate (recommended)

# Cognates

COMM 280 - Voice and Diction Credits: 3

# **Admission Requirements**

#### English Language Requirements

Students whose first language is not English must provide evidence of Englishlanguage proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

 Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.

- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- 4. IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# **Masters**

# English, General Emphasis MA

# **Total Credits: 33**

# **Degree Core**

# Core Requirements

ENGL 589 - Graduate Seminar Credits: 3

ENGL 597 - Research Methods Credits: 3

ENGL 670 - Comprehensive Exam Credits: 0

ENGL 520 - The Christian Tradition Credits: 3

Or ENGL 514 - Biblical Literature Credits: 3

ENGL 595 - Project Research Credits: 1,2

• Or ENGL 699 - Master's Thesis Credits: 1–4

#### Project/Thesis

Candidates must complete one of the following options:

- Project paper (30-50+ pages)
- 2. Two project papers (each a minimum of 20 pages)
- 3. MA thesis (75-100+ pages)

# **General Emphasis**

This program provides a balanced array of courses in literature and literary theory, composition and rhetoric, and language. Additional required courses are:

- ENGL 450 Literary Criticism and Theory Credits: 3
- ENGL 589 Graduate Seminar Credits: 3
- and at least one graduate course from each of the three areas of literature, composition, and language.

# **Admission Requirements**

- 1. Applicants must meet the English Proficiency Requirements.
- Applicants must have earned a minimum of 20 semester hours (30 quarter credits) in English courses as prerequisites, including ENGL 460 (or its equivalent).
  - These prerequisites are in addition to the General Education composition requirement.
  - It is desirable to have completed an English undergraduate major of at least 30 semester hours (45 quarter credits).
  - Students taking the MA: English (TESOL) must have completed ENGL 300 (or its equivalent) as a prerequisite.

- Applicants with fewer English prerequisite credits than the minimum number required must remove the deficiencies by taking additional English courses other than those required for the MA degree.
- Applicants must demonstrate proficiency in a foreign language by having done one of the following:
  - Earned credit through the intermediate college level with a minimum average grade of C.
  - O Passed an exam approved by the English Department.
  - Completed their education through secondary school in a first language other than English.

# English Language Requirements

Students whose first language is not English must provide evidence of Englishlanguage proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

- Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# English, Teaching English to Speakers of Other Languages (TESOL) Concentration MA

#### **Total Credits: 33**

# **Degree Core**

#### Core Requirements

- ENGL 589 Graduate Seminar Credits: 3
- ENGL 597 Research Methods Credits: 3
- ENGL 670 Comprehensive Exam Credits: 0
- ENGL 520 The Christian Tradition Credits: 3
- Or ENGL 514 Biblical Literature Credits: 3
- ENGL 595 Project Research Credits: 1,2
- Or ENGL 699 Master's Thesis Credits: 1–4

#### Project/Thesis

Candidates must complete one of the following options:

- Project paper (30-50+ pages)
- 2. Two project papers (each a minimum of 20 pages)
- 3. MA thesis (75-100+ pages)

# Concentration

# Teaching English to Speakers of Other Languages

The Teaching English to Speakers of Other Languages (TESOL) Emphasis includes extensive study of the English language and linguistics and is particularly appropriate for those who plan to teach English to speakers of other languages or do further work in linguistics.

- ENGL 561 TESOL Theories and Methods Credits: 4
- ENGL 562 TESOL Pedagogy and Practice Credits: 4
- ENGL 540 Language and Culture Credits: 3
- ENGL 566 Phonetics and Phonology Credits: 3
- ENGL 569 Second Language Acquisition Credits: 3
- ENGL 589 Graduate Seminar Credits: 3 \*
  - \* May be replaced by a graduate literature course, COMM 536, or EDRM 611.
- ENGL525 Teaching and Tutoring Writing
- Or ENGL 550 Study of Composition Credits: 3

# MA TESOL Emphasis South Korea Extension Program

This program follows the on-campus MA program admissions and course requirements. Department of English professors travel to South Korea to teach course modules. This program is not open to new students at this time. It is available to currently enrolled students only.

# **Admission Requirements**

- 1. Applicants must meet the English Proficiency Requirements.
- Applicants must have earned a minimum of 20 semester hours (30 quarter credits) in English courses as prerequisites, including ENGL 460 (or its equivalent).
  - These prerequisites are in addition to the General Education composition requirement.
  - It is desirable to have completed an English undergraduate major of at least 30 semester hours (45 quarter credits).
  - Students taking the MA: English (TESOL) must have completed ENGL 300 (or its equivalent) as a prerequisite.
  - Applicants with fewer English prerequisite credits than the minimum number required must remove the deficiencies by taking additional English courses other than those required for the MA degree.
- Applicants must demonstrate proficiency in a foreign language by having done one of the following:
  - Earned credit through the intermediate college level with a minimum average grade of C.
  - O Passed an exam approved by the English Department.
  - Completed their education through secondary school in a first language other than English.

# English Language Requirements

Students whose first language is not English must provide evidence of English-language proficiency before they are accepted into any program in the Department of English. To qualify for admission, students must obtain at least a minimum composite score on one of the following exams, with component score(s) at or above those indicated:

- Paper-based TOEFL (ITP) composite score of 600 with no component score lower than 55. An additional written essay exam is required with a minimum score of 80, and an additional speaking evaluation with a score of not less than 3.
- Internet-based TOEFL (iBT) composite score of 100, with Reading and Listening component scores of at least 15, Writing component score of at least 17, and Speaking component score of at least 18.
- 3. MELAB composite score of 84 with no component score lower than 80.
- IELTS composite score of 7, with Reading, Listening, and Speaking component scores of at least 6, and a Writing component score of at least 5.

The exam must be taken within two years prior to enrollment. Students who score below these levels may complete lanugage requirements by enrolling in Intensive English Program courses (ENSL) on campus. Students with a score on the TOEFL ITP of 575-599 (or the equivalent on any of the four other exams) may be eligible for the 100

Language Bridge Program which allows students to take a limited number of degree program courses while completing language proficiency requirements in Intensive English Program courses. Students in the Language Bridge Program must demonstrate language proficiency within two semesters in order to continue in the degree program. Exceptions to these requirements may be granted by the Department of Communications on an individual basis.

# **Certificates**

# Action America

# **Program Description**

Action America, on the campus of Andrews University in Berrien Springs, Michigan, will enhance your English skills through short-term intensive language study, cultural and professional experiences, travel, and interaction with native English speakers.

A four-week intensive is offered in June/July of each year. Students will be given English placement tests on arrival and assigned to appropriate courses.

All students participate in 30 hours a week of intensive language instruction, including:

- TOEFL preparation
- Grammar, reading and writing
- Listening, pronunciation and idioms
- Interaction with native English speakers
- Instructional videos and games
- Field trips
- Institutional TOEFL

#### **Certificate of Completion**

All students who fulfill program requirements will receive a certificate of completion.

#### Experience The Culture

Experiencing the American culture is also an integral part of the program. Out-of-class activities—designed for professionals as well as students—include:

Trips to Chicago

Opportunities to meet people from America and around the world

Sporting events such as baseball and basketball

Theater attendance and dining out

Shopping locally and in Chicago

Conversational training in everyday situations

Seasonal sports such as skiing & beach volleyball

#### **Options for Professionals**

Action America also offers a variety of activities specifically designed for professionals. These include:

- Lectures on diverse topics
- Tours of American organizations
- Interviews with professionals
- Visits to university classes (as available)
- In-class, career-related assignments

#### **Customized Sessions**

In addition to the regular schedule, Action America will design sessions at any time throughout the year based on the scheduling and curriculum needs of an organization. The group sessions must include 12 or more participants.

Those interested in tailor-made sessions should contact action@andrews.edu regarding session costs.

#### **Professional Options**

The Professional option includes classes and activities which promote language learning in the general professional area of the participants (business, medicine, religious institutions, etc.). Communication skills will be enhanced through in-class assignments, interaction with American professionals, tours of local organizations and other career-related field trips.

#### Cultural Experience

The Cultural option is for groups of students and professionals who wish to experience the American culture in addition to improving language skills. Groups may select the activities they prefer.

#### Fees

Fees for Action America are based on individual or group rates.

## **Contact Information**

Additional information regarding Action America can be obtained by contacting the Center for Intensive English Programs (CIEP) at ciep@andrews.edu.

# School of Education Programs in Conjunction with the Department of English

# Elementary Education, Language Arts Emphasis BSELED

Click here to see the requirements for the Elementary Education, Language Arts Emphasis BSELED

# Language Arts Minor

Click here to see the requirements for the Elementary Education, Language Arts Minor

# **English**

**Note**: ENGL 115, 215 are prerequisite to all upper division courses in English with the exception of ENGL 300. Writing courses may not be audited.

#### ENGL 115 - College Writing I

Credits: 3 | Introduction to college writing focusing on composing as a recursive process for generating meaning and communicating effectively. Emphasizes short analytical essay writing based on reading, media, film and other relevant discourse, including selections that examine issues of diversity. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Cannot be audited or CLEPed. | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### ENGL 115V - College Writing I

Credits: 3 | Introduction to college writing focusing on composing as a recursive process for generating meaning and communicating effectively. Emphasizes short analytical essay writing based on reading, media, film and other relevant discourse, including selections that examine issues of diversity. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): Cannot be audited or CLEPed. | Schedule Type: Self-Paced | College Code: CAS

#### ENGL 117 - College Writing I for Multilingual Students

Credits: 3 | For students whose native language is not English, an introduction to college writing focusing on composing as a recursive process for generating meaning and communicating effectively. Emphasizes short analytical essay writing based on reading, media, film and other relevant discourse, including selections that examine issues of diversity. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Cannot be audited or CLEPed. | Schedule Type: Lecture | College Code: CAS

#### ENGL 185 - Much Ado about English

Credits: 2 | An introductory course, organized thematically, featuring various texts and approached from several perspectives, including linguistic, rhetorical, and literary analysis. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENGL 215 - College Writing II

Credits: 3 | Introduction to source-based, academic writing, including practice in summarizing, analyzing, synthesizing, and reading from a critical perspective. Sections organized thematically. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 or ENGL 117. Cannot be audited or CLEPed. | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### ENGL 215V - College Writing II

Credits: 3 | Introduction to source-based, academic writing, including practice in summarizing, analyzing, synthesizing, and reading from a critical perspective. Sections organized thematically. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): ENGL 115 or ENGL 117. Cannot be audited or CLEPed. | Schedule Type: Self-Paced | College Code: CAS

#### ENGL 220 - Technical Writing

Credits: 3 | Instruction and practice in designing technical reports. Course studies rhetorical problems and practical strategies related to analyzing and communicating technical information to technical and non-technical audiences. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115. Cannot be audited. | Schedule Type: Lecture | College Code: CAS

#### **ENGL 255 - Studies in Literature**

Credits: 3 | An introductory literature course with the emphasis indicated by a subtitle, such as World Literature, Biblical Literature, or Short Story. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115. | Repeatable: Repeatable | Schedule Type: Lecture, Blended Learning, Lecture/Lab | Offering: Fall, Spring | College Code: CAS

#### **ENGL 267 - Approaches to Literature**

Credits: 3 | An introduction to genres, analysis, critical approaches, and writing about literature. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115. | Schedule Type: Lecture | College Code: CAS

#### ENGL 270V - American Literature to 1900

Credits: 3 | A survey of American literature from its beginnings to 1900. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): ENGL 115. | Schedule Type: Self-Paced | College Code: CAS

#### ENGL 273 - American Literature to 1865

Credits: 3 | A survey of American literature from the 17th century through the Civil War. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 274 - American Literature 1865

Credits: 3 | A survey of American literature from the Civil War to World War I. |
Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115. | Schedule Type: Lecture
| Offering: Alternate years | College Code: CAS

#### ENGL 300 - Modern English Grammar

Credits: 3,4 | Basic English syntax for students and future teachers, including grammatical terminology and a brief history of grammatical models. Students needing study in the history of the English language should enroll for 4 credits. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115. | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### **ENGL 315 - Professional Writing**

**Credits:** 3 | Practice in adapting writing to a variety of professional audiences and tasks, including resumes, proposals, business and technical reports, web writing, and collaborative writing. | **Grade Mode:** Normal (A-F,I,W) | **Prerequisite(s):** ENGL 115 and ENGL 215. Cannot be audited. | **Schedule Type:** Lecture | **College Code:** CAS

#### **ENGL 345 - Introduction to Rhetoric**

Credits: 3 | An introduction to the study of rhetoric, including classical and modern theories. Emphasis is given to the practical applications of rhetorical analysis in mass media, advertising, literary and political representations. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture | College Code: CAS

#### ENGL 371 - English Literature to 1600

Credits: 3 | A survey of literature of the British Isles from Beowulf through the 16th century. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 372 - English Literature 1600

Credits: 3 | A survey of literature of the British Isles of the 17th and 18th centuries. |
Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule
Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 373 - English Literature 1800

Credits: 3 | A survey of Literature of the British Isles from the 19th century to World War I. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 375V - English Literature I (to 1660)

Credits: 3 | Literature of the British Isles from Beowulf through the Renaissance. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Self-Paced | College Code: CAS

#### ENGL 376V - English Literature II (1660

Credits: 3 | Literature of the British Isles from the Restoration through the Victorian period. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Self-Paced | College Code: CAS

#### ENGL 403 - 20th-century English and American Literature

Credits: 3 | A survey of 20th-century literature of British, American and other literature in English. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215 and ENGL 267. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 404 - New Global Literature

Credits: 3 | A survey of recent global literary texts with a focus on issues of diversity. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215 and ENGL 267. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 407 - Literature for Children

Credits: 2,3 | Selection, analysis, and evaluation of literary works which meet the reading and/or the listening interests of children and enhance the preparation of elementary teachers, librarians, and parents. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture | College Code: CAS

#### ENGL 408 - Literature for Young Adults

Credits: 2,3 | Selection, analysis, and evaluation of literary works that meet the reading interests of young adults and enhance the preparation of middle-school and secondary English teachers, librarians, and parents. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 410 - Academic Writing for Advanced Study

Credits: 3 | Additional practice in academic writing designed to improve the skills of students who are underprepared for advanced writing tasks and/or whose native language is not English. Empahsizes academic writing conventions through the study and completion of various academic genres including summary, proposal, critique, and research writing. Does not fulfill General Education requirements. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENGL 414 - Biblical Literature

Credits: 3 | Advanced study of the English Bible as literature and its literary influences. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215, ENGL 267 | Schedule Type: Lecture | College Code: CAS

#### ENGL 415 - Gender Studies in Literature

Credits: 3 | Advanced study of literary texts dealing with gender issues. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL115, ENGL215, ENGL267 | Schedule Type: Lecture | College Code: CAS

#### **ENGL 425 - Literary Topics**

Credits: 3 | Advanced study of a literary period, genre, or theme, such as Victorian Literature, Poetry, Travel Writing or the Classical Heritage. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215, and ENGL 267. | Repeatable: Repeatable | Schedule Type: Lecture, Lab | College Code: CAS

#### ENGL 430 - Topics in \_\_\_\_\_

Credits: 1 | Study of selected topics in composition, language, or literature. Topic and credit to be announced in advance. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Repeatable: Repeatable up to 12 credits with different topics | Schedule Type: Lecture, Blended Learning, Lecture/Lab | College Code: CAS

#### **ENGL 435 - Topics in Linguistics**

Credits: 1 | Study of topics in linguistics such as bilingualism, the TESOL professional, teaching and learning in the ESL classroom, or the TESOL Certificate Program. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### ENGL 437 - Teaching and Tutoring Writing

Credits: 3 | Theory and practice in teaching, tutoring and responding to student writing. Exercises in composition, revision and evaluation. A minimum of 20 hours tutoring required. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture | College Code: CAS

#### ENGL 438 - Advanced Composition

Credits: 3 | An exploration of published essays, writing theory, and strategies. Student essays move beyond—in style, scope and subject matter— the writing done in ENGL 115 and ENGL 215, which are prerequisites. Cannot be audited. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate 102

students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 440 - Language and Culture

Credits: 3 | The study of language in the context of ethnology with emphasis on (1) the effect of social variables (including gender) on language use, and (2) on paralanguage (e.g., kinesics and proxemics). | Grade Mode: Normal (A-F,I,W) |
Prerequisite(s): ENGL 115, ENGL 215, and ENGL 460 or permission of instructor. |
Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### **ENGL 450 - Literary Criticism and Theory**

Credits: 3 | An introduction to literary criticism and theory. Readings start with Plato, but special emphasis is on New Criticism to the present. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215, and ENGL 267. | Schedule Type: Lecture | College Code: CAS

#### ENGL 454 - The Writing Life

Credits: 3 | An exploration of composition theory and writing practice through the study of published writers' narrative accounts of the writing life. Students engage in an extended writing project selected in consultation with the instructor. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. Cannot be audited. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 456 - Introduction to TESOL Theories, Methods, and Issues

Credits: 4 | This course introduces pre-service teachers to theories, methods, and issues in teaching English to second language learners. It explores effective teaching methods and strategies for teaching listening, speaking, reading, and writing for social and academic purposes. Participants will also gain knowledge of various issues surrounding TESOL, such as incorporating standards into teaching, developing and administering assessments, learning the teacher's role as a contributing professional, locating and utilizing available resources, and understanding implications of current language policy issues. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENGL 459 - Methods of Teaching English

Credits: 3 | An integration and exploration of pedagogical theories and practices in literature for young adults, and writing and language study for the secondary-school classroom. Does not apply toward the first 16 credits in English for an MAT degree. Enrollment by permission of the instructor. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### **ENGL 460 - Linguistics**

Credits: 3 | An introduction to linguistics for those planning to teach or work in the area of language, communication, or English on any level. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. | Schedule Type: Lecture, Blended Learning, Interactive Online | College Code: CAS

#### ENGL 464 - Major Literary Author

Credits: 3 | Study of a major author, such as Chaucer, Shakespeare, Johnson, Dickens, Hawthorne, or Cather. | Swing course | Grade Mode: Normal (A-F,I,W) |

Prerequisite(s): ENGL 115, ENGL 215, and ENGL 267. | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Lab | College Code: CAS

#### **ENGL 465 - TESOL Methods**

Credits: 2 | Specialized techniques for teaching and testing various English-language skills. Content rotates among grammar; reading and writing; speaking and listening. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): ENGL 490 or ENGL 505-002 TESOL Practicum. | Prerequisite(s): ENGL 115, ENGL 215, and ENGL 460 | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### **ENGL 467 - Creative Writing**

Credits: 3 | Practice in writing stories, essays, poetry, or drama. Course emphasis changes from semester to semester. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115 and ENGL 215. Cannot be audited. | Repeatable: Repeatable up to 9 credits with different topics | Schedule Type: Lecture | College Code: CAS

#### **ENGL 469 - Second Language Acquisition**

Credits: 3 | Study of current theories of and research in language acquisition and the implications of this scholarship for language teachers and teaching. | Grade Mode:

Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215, and ENGL 460 or permission of instructor. | Schedule Type: Lecture, Blended Learning, Interactive Online |

Offering: Alternate years | College Code: CAS

#### ENGL 478 - Study Tour:

 $\textbf{Credits: 0} \hspace{0.1in} | \hspace{0.1in} \textbf{Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. \hspace{0.1in} | \hspace{0.1in} \$ \text{-Course or }$ 

lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | **Grade Mode:** Normal (A-F,I,W) | **Repeatable:** Repeatable up to 6 credits | **Schedule Type:** Blended Learning | **College Code:** CAS

#### ENGL 490 - TESOL Practicum

Credits: 1,2 | Study of and/or supervised practice in teaching English as a second language. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): Permission of instructor required. | Repeatable: Repeatable up to 3 credits | Schedule Type: Blended Learning, Practicum | College Code: CAS

#### ENGL 495 - Independent Study/Readings

Credits: 1 | Studies in various areas of language, literature, or composition under supervision of an appropriate instructor, including regular conferences, and resulting in oral and/or written reports and papers. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

#### ENGL 497 - Writing Internship

Credits: 1 | Students intern 90 clock hours per hour of credit in journalism, business or other approved field. Procedures and guidelines available from department. Open only to Writing Emphasis students. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215 and either ENGL 315 or JOUR 230. | Repeatable: Repeatable up to 3 credits | Schedule Type: Practicum | College Code: CAS

#### ENGL 498 - Senior Seminar

Credits: 1 | Discussion topics include career and placement. The development of a senior portfolio including capstone writing project. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): 24 credits in English (not including ENGL 115, ENGL 215) or by permission of the instructor. | Schedule Type: Seminar | College Code: CAS

#### ENGL 505 - Practicum

Credits: 1,2 | Study of and/or supervised practice in teaching college writing (section 01) or English as a second language (section 02). | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite/Corequisite: Prerequisite or corequisite for those teaching English as a second language: ENGL 465. | Repeatable: Repeatable up to 4 credits | Schedule Type: Practicum | College Code: CAS

#### ENGL 510 - Academic Writing for Advanced Study

Credits: 3 | Additional practice in academic writing designed to improve the skills of students who are underprepared for advanced writing tasks and/or whose native language is not English. Emphasizes academic writing conventions through the study and completion of various academic genres including summary, proposal, critique, and research writing. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENGL 514 - Biblical Literature

Credits: 3 | Advanced study of the English Bible as literature and its literary influences. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **ENGL 515 - Gender Studies in Literature**

Credits: 3 | Advanced study of literary texts dealing with gender issues. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **ENGL 520 - The Christian Tradition**

Credits: 3 | The study of noteworthy Christian literature, including works by authors such as John Milton, C.S. Lewis, G.K. Chesterton, and Flannery O'Connor. Also may include focus on Christian perspectives in response to literature. | Grade Mode:

Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### ENGL 525 - Topics in \_\_\_\_\_

Credits: 1 | Study of selected topics in composition (Modern Rhetoric), language (Contrastive Analysis), or literature (Shakespeare, Literature on Location, or Drama). Topic and credit to be announced in advance. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 12 credits with different topics | Schedule Type: Lecture, Lecture/Lab | College Code: CAS

#### ENGL 540 - Language and Culture

Credits: 3 | Study of language in the context of ethnology with emphases on (1) the effect of social variables (including gender) on language use, and on (2) paralanguage (e.g., kinesics and proxemics). | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 460 or permission of instructor. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### **ENGL 550 - Study of Composition**

**Credits:** 3 | Introduction to rhetorical and other principles involved in the writing process and in the teaching of composition to secondary-school and college students.

| Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### ENGL 561 - TESOL Theories and Methods

Credits: 4 | Critical survey of traditional and current theories and methods of teaching English to speakers of other languages. Includes supervised observation of ESL classes. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENGL 562 - TESOL Pedagogy and Practice

Credits: 4 | Study of current methods and techniques for teaching reading, writing, speaking, and listening to speakers of other languages. Includes supervised teaching of ESL classes. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 561 - TESOL Theories and Methods. | Schedule Type: Lecture | College Code: CAS

#### ENGL 566 - Phonetics and Phonology

Credits: 3 | Study of speech sounds and patterns including articulatory phonetics, phonemics, and an introduction to modern phonological theory and analysis. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215 and ENGL 460 or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### **ENGL 569 - Second Language Acquisition**

Credits: 3 | Study of current theories of and research in language acquisition and the implications of this scholarship for language teachers and teaching. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ENGL 115, ENGL 215 and ENGL 460 or permission of instructor. | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### ENGL 589 - Graduate Seminar

Credits: 3 | Research projects, reports, and discussions. Seminars are offered in various subjects corresponding with faculty specialization and greatest library strength. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): ENGL 597. | Repeatable: Repeatable with different topics | Schedule Type: Blended Learning, Seminar | College Code: CAS

#### ENGL 590 - Independent Study in English

Credits: 1 | Individualized reading or research in a specified area under the guidance of an instructor; admission by the chair's consent. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

# ENGL 595 - Project Research

Credits: 1,2 | Research and writing leading to the completion of the required project paper under the guidance of an instructor. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 4 credits | Schedule Type: Independent | College Code: CAS

#### **ENGL 597 - Research Methods**

Credits: 3 | Research materials, methods of research, and documentation in English studies. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### ENGL 648 - Workshop

Credits: 1–4 | Intensive study on selected topics. As needed | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### **ENGL 650 - Project Continuation**

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approval only. Registration for this title indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **ENGL 655 - Program Continuation**

Credits: 0 | Students may register for this non-credit continuation course to maintain active status. For additional information on active status, see Admission Status Categories in the School of Graduate Studies & Research. Registration does not indicate full-time status. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **ENGL 660 - Thesis Continuation**

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approval only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### **ENGL 665 - Preparation for Comprehensive Exams**

Credits: 0 | Advisor approval required. Registration for this title indicates fulltime status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### ENGL 670 - Comprehensive Exam

Credits: 0 | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### ENGL 699 - Master's Thesis

Credits: 1–4 | Registration for this title indicates full-time status. | Course Attribute: Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

# Intensive English

#### ENSL 130 - English for Academic Purposes:

#### Beginning/Intermediate/Advanced

Credits: 0 cr 1–16 hr | Individual and small group study of English as a second language in preparation for undergraduate and graduate study. May include (but not limited to) grammar, writing, reading, listening, and speaking. All international students are required to be in class a minimum of 12 hours per week. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different content | Schedule Type: Lecture | College Code: CAS

#### ENSL 135 - Intermediate Grammar

Credits: 4 | Develops the grammatical skills necessary for clear written and oral communication. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENSL 136 - Intermediate Speaking and Listening

Credits: 4 | Develops fluency in conversation and accuracy in listening skills necessary for effective communication in academic and nonacademic settings. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **ENSL 137 - Intermediate Writing**

Credits: 4 | Develops writing strategies and skills necessary for well-developed, grammatical academic writing. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ENSL 138 - Intermediate Reading

Credits: 4 | Develops vocabulary, reading skills, and strategies in critical thinking necessary for university course work. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **ENSL 145 - Advanced Grammar Review**

Credits: 4 | A rapid and intensive review of English grammar. Emphasis is on accurate grammar usage in a variety of communicative and academic contexts, both oral and written. Advanced students only. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **ENSL 155 - Pronunciation**

Credits: 4 | Pronunciation improvement, with emphasis on vowels, consonants, word stress, and intonation patterns. Advanced and intermediate students only. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different content | Schedule Type: Lecture | College Code: CAS

#### ENSL 165 - TOEFL Preparation: Intermediate/Advanced

Credits: 2 | Intensive preparation for the TOEFL, including review and strategies for taking grammar, reading, listening, and writing sections of the test. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different content | Schedule Type: Lecture | College Code: CAS

#### **ENSL 166 - The American Experience:**

#### Basic/Intermediate/Advanced

Credits: 1–5 | An introduction to American culture, appropriate to proficiency level, through readings, discussion, and activities in American literature, history, and culture. Includes field trips and participation in cultural activities. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 5 credits | Schedule Type: Lecture | College Code: CAS

## ENSL 167 - Research Seminar: Advanced Writing

Credits: 4 | Develops research writing skills, with emphasis on summary, paraphrase, synthesis, organization, and appropriate use of sources. Advanced students only. |
Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | College Code: CAS

#### ENSL 168 - Research Seminar: Advanced Reading and Discussion

Credits: 4 | Develops skills in the analytical reading and discussion of academic research, oral presentation of research, and note taking. Advanced students only. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | College Code: CAS

#### ENSL 195 - Individualized Study:

## Beginning/Intermediate/Advanced

Credits: 1–12 | Individualized study of English as a second language, appropriate to proficiency level. May include (but not limited to) grammar, writing, reading, listening, and speaking. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

# ENSL 530 - English for Academic Purposes:

#### Beginning/Intermediate/Advanced

Credits: 0 cr 1–16 hr | Individual and small group study of English as a second language in preparation for undergraduate and graduate study. May include (but not limited to) grammar, writing, reading, listening, and speaking. All international students are required to be in class a minimum of 12 hours per week. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

# English as a Second Language

CENTER FOR INTENSIVE ENGLISH PROGRAMS

Nethery Hall, Room 203 269-471-2260 ciep@andrews.edu www.andrews.edu/cas/english/esl/

Faculty

Asta LaBianca Dianne Staples

#### Mission

The Intensive English program at Andrews University seeks to provide students with an opportunity to develop the skills needed to:

- Meet life's needs in aural/oral and written communication
- Communicate within the language formalities of an academic institution
- Prepare for college/university entrance

#### Methods

- We offer a rigorous academic program to help students prepare to apply to college/university
- We enhance English skills through a variety of academic, cultural, and professional experiences
- We mentor graduate students who teach English language learners
- We establish tutorials and conversation partners to encourage interaction with native English speakers
- We maintain small class sizes for optimal learning

#### Results

- Participants matriculate into undergraduate and graduate programs
- Professionals achieve language proficiency
- Participants function within the various language formalities

#### **Programs**

#### **English for Academic Purposes (credit)**

- English Language Proficiency
- College/university Preparation
  - O Research Seminar: Writing
  - O Research Seminar: Reading
  - Pronunciation

# English Language Training (non-credit)

#### Non-Credit ESL Courses

- Individuals may register for non-credit undergraduate (ENSL 130) or graduate (ENSL 530) courses
- Tuition for the semester is \$4,320 for 12-16 non-credit hours or \$360 per noncredit hour for up to 12 hours
- Fees do not include textbooks, health insurance, or airfare to and from Andrews
  University
- Transportation is provided to and from the South Bend Regional Airport, upon request
- Health insurance is required for enrollment at Andrews University and is available from the university. Participants in the program must either show proof of insurance or purchase insurance through Andrews University.
- Housing and cafeteria meal plans are available for additional cost

One four-week intensive is offered in June/July of each year. Customized sessions can be arranged for groups of twelve or more. Additional information regarding Action America can be obtained by contacting the Center for Intensive English Programs (CIEP) at ciep@andrews.edu.

- English language classes
- Cultural immersion
- Professional experiences
- Educational excursions

# History & Political Science

Buller Hall, Room 135 269-471-3292 history@andrews.edu www.andrews.edu/cas/history/

#### Faculty

John J. Markovic, *Chair* Brent A. Geraty Marcella Myers Kathryn M. Silva Banks Brian E. Strayer Gary V. Wood

#### **Adjunct Faculty**

Adam Fenner Jackie Gonzalez-Feezer Douglas Morgan

#### Mission

The Andrews University Department of History & Political Science constitutes a vital component of this distinctive Seventh-day Adventist institution of higher learning. Serving its majors and minors and General Education, the department promotes the study of history, politics and philosophies within the framework of a Christian worldview, emphasizing both individual and corporate responsibility for service to humanity.

## **Bachelors**

# History BA

**Total Credits: 124** 

# Major: Core Requirements - 36

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 277 History Colloquium Credits: 0
- HIST 290 Research Seminar Credits: 3
- HIST 404 Adventist Heritage Credits: 3
- HIST 480 Senior Seminar Credits: 3
- HIST 488 Faith and History Credits: 3
- two upper division courses in American History
- and two upper division courses in European or other non-U.S. history

# **Andrews Core Experience**

Students must take the courses outlined in the Andrews Core Experience: BA & BS Degrees .

# **Undergraduate Electives**

Six credits of the following political sciences courses may be applied to the history major:

- PLSC 104 American Government Credits: 3
- PLSC 365 American Foreign Relations Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- PLSC 457 Modern Political Thought Credits: 3
- Or PLSC 458 American Political Thought Credits: 3

Remaining credits chosen in consultation with the advisor.

#### Certification

# Secondary Certification

For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 277 History Colloquium Credits: 0
- HIST 290 Research Seminar Credits: 3
- HIST 404 Adventist Heritage Credits: 3
- HIST 459 Special Methods in Teaching History and Social Studies Credits: 3
- HIST 480 Senior Seminar Credits: 3
- HIST 488 Faith and History Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- PLSC 104 American Government Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 365 American Foreign Relations Credits: 3
- PLSC 435 Public Policy Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- PLSC 460 Area Study: Credits: 3

# Andrews Core Experience for Secondary Certification

For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum.

#### Religion - 12

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- and a 3-credit elective chosen in consultation with your SED advisor

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### Foreign Language (BA only)

Intermediate Language Credits: 4

#### History

covered in major

#### Fine Arts and Humanities - 3

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art Credits: 3
- Ensemble Music Credits: 3
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3

#### Life, Physical Sciences and Mathematics

Take one Life Science course and one Physical Science course. Choose from Andrews Core Experience: BA & BS Degrees.

#### Service

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### Social Sciences

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### **Fitness Education**

- HLED 120 Fit for Life Credits: 1
- plus two Fitness Education courses

#### Note:

For BA majors in History or Political Science, and BS majors in Political Science or Social Studies, a statistics/mathematics course will fulfill the Andrews Core mathematics requirements.

# Political Science BA

# Major: Core Requirements - 42

#### Core Requirements

- PLSC 104 American Government Credits: 3
- PLSC 115 Introduction to Political Theory Credits: 3
- PLSC 225 Comparative Politics Credits: 3
- PLSC 230 International Relations Credits: 3
- PLSC 277 Political Science Colloquium Credits: 0
- PLSC 298 Research Seminar Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3

#### **American Politics**

Choose at least one course from the following:

- PLSC 260 Introduction to American Law Credits: 3
- PLSC 316 Legal Writing and Rhetoric Credits: 3
- PLSC 324 American Political Parties and Elections Credits: 3
- PLSC 326 American Political Institutions: Judiciary Credits: 3
- PLSC 328 American Political Institutions: Congress Credits: 3

#### International Relations

Choose at least one course from the following:

- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 365 American Foreign Relations Credits: 3
- PLSC 420 Human Rights, Violations, and Reconciliations Credits: 3

#### Theory

Choose at least one course from the following:

- PLSC 314 Contemporary Political Thought Credits: 3
- PLSC 366 Terrorism and Political Theory Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- PLSC 457 Modern Political Thought Credits: 3

#### Seminars

Take 12 credits of the following courses:

- PLSC 405 Globalization Credits: 3
- PLSC 419 Political Extremism Credits: 3
- PLSC 437 Topics: Credits: 3
- PLSC 454 Utopian Political Thought Credits: 3

- PLSC 458 American Political Thought Credits: 3
- PLSC 460 Area Study: Credits: 3
- PLSC 490 Internship Credits: 1–6

#### Note:

The Major Field Achievement Test in political science must be taken by all majors in their senior year.

# **Undergraduate Electives**

Remaining credits to be chosen in consultation with your advisor.

- COMM 405 Persuasion Credits: 3 \*
- ENGL 220 Technical Writing Credits: 3 \*
- ENGL 345 Introduction to Rhetoric Credits: 3 \*
- ENGL 415 Gender Studies in Literature Credits: 3 \*
- SOCI 425 Racial and Ethnic Relations Credits: 3 \*
- SOCI 430 Gender Roles in Contemporary Society Credits: 3 \*
  - \* = These courses are recommended courses to fulfill your elective credit need.

# Secondary Certification - 42

See Department of Teaching, Learning & Curriculum section under School of Education for teaching certification requirements.

#### **Required Courses**

- PLSC 104 American Government Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 277 Political Science Colloquium Credits: 0
- PLSC 298 Research Seminar Credits: 3
- PLSC 435 Public Policy Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- HIST 204 American Experience | Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 459 Special Methods in Teaching History and Social Studies Credits: 3

#### Choose one from each of the following sets

- PLSC 225 Comparative Politics Credits: 3
- PLSC 230 International Relations Credits: 3
- PLSC 457 Modern Political Thought Credits: 3
- PLSC 458 American Political Thought Credits: 3

# Andrews Core Experience for Secondary Certification

For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum.

#### Religion - 12

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- and a 3-credit elective chosen in consultation with your SED advisor

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### Foreign Language (BA only)

Intermediate Language Credits: 4

#### History

covered in major

#### Fine Arts and Humanities - 3

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art Credits: 3
- Ensemble Music Credits: 3
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3

#### Life, Physical Sciences and Mathematics

Take one Life Science course and one Physical Science course. Choose from Andrews Core Experience: BA & BS Degrees.

#### Service

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### Social Sciences

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### Fitness Education

- HLED 120 Fit for Life Credits: 1
- plus two Fitness Education courses

#### Note:

For BA majors in History or Political Science, and BS majors in Political Science or Social Studies, a statistics/mathematics course will fulfill the Andrews Core mathematics requirements

# Political Science BS

# Major: Core Requirements - 42

#### Core Requirements

- PLSC 104 American Government Credits: 3
- PLSC 115 Introduction to Political Theory Credits: 3
- PLSC 225 Comparative Politics Credits: 3
- PLSC 230 International Relations Credits: 3
- PLSC 277 Political Science Colloquium Credits: 0
- PLSC 298 Research Seminar Credits: 3
- BHSC 230 Research Methods I: Statistics for the Behavioral Sciences Credits: 3

#### **American Politics**

Choose at least one course from the following:

- PLSC 260 Introduction to American Law Credits: 3
- PLSC 316 Legal Writing and Rhetoric Credits: 3
- PLSC 324 American Political Parties and Elections Credits: 3
- PLSC 326 American Political Institutions: Judiciary Credits: 3
- PLSC 328 American Political Institutions: Congress Credits: 3

#### **International Relations**

Choose at least one course from the following:

PLSC 237 - The Individual, State, and Marketplace Credits: 3

- PLSC 365 American Foreign Relations Credits: 3
- PLSC 420 Human Rights, Violations, and Reconciliations Credits: 3

#### Theory

Choose at least one course from the following:

- PLSC 314 Contemporary Political Thought Credits: 3
- PLSC 366 Terrorism and Political Theory Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- PLSC 457 Modern Political Thought Credits: 3

#### Seminars

Take 12 credits of the following courses:

- PLSC 405 Globalization Credits: 3
- PLSC 419 Political Extremism Credits: 3
- PLSC 437 Topics: Credits: 3
- PLSC 454 Utopian Political Thought Credits: 3
- PLSC 458 American Political Thought Credits: 3
- PLSC 460 Area Study: Credits: 3
- PLSC 490 Internship Credits: 1–6

#### Note.

The Major Field Achievement Test in political science must be taken by all majors in their senior year.

# Secondary Certification - 42

See Department of Teaching, Learning & Curriculum section under School of Education for teaching certification requirements.

#### **Required Courses**

- PLSC 104 American Government Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 277 Political Science Colloquium Credits: 0
- PLSC 298 Research Seminar Credits: 3
- PLSC 435 Public Policy Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 459 Special Methods in Teaching History and Social Studies Credits: 3

#### Choose one from each of the following sets

- PLSC 225 Comparative Politics Credits: 3
- PLSC 230 International Relations Credits: 3
- PLSC 457 Modern Political Thought Credits: 3
- PLSC 458 American Political Thought Credits: 3

# Andrews Core Experience for Secondary Certification

For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum.

#### Religion - 12

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- and a 3-credit elective chosen in consultation with your SED advisor

#### **Language and Communication**

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### Foreign Language (BA only)

Intermediate Language Credits: 4

#### History

covered in major

#### Fine Arts and Humanities - 3

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art Credits: 3
- Ensemble Music Credits: 3
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3

#### Life, Physical Sciences and Mathematics

Take one Life Science course and one Physical Science course. Choose from Andrews Core Experience: BA & BS Degrees.

#### Service

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### **Social Sciences**

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### **Fitness Education**

- HLED 120 Fit for Life Credits: 1
- plus two Fitness Education courses

#### Note:

For BA majors in History or Political Science, and BS majors in Political Science or Social Studies, a statistics/mathematics course will fulfill the Andrews Core mathematics requirements.

# Social Studies BS

### **Total Credits: 57**

# **Major: Core Requirements**

#### Core Requirements

- BHSC 235 Culture, Place and Interdependence Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- ECON 226 Principles of Microeconomics Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- GEOG 260 Cultural Geography Credits: 3
- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 277 History Colloquium Credits: 0
- HIST 290 Research Seminar Credits: 3
- HIST 404 Adventist Heritage Credits: 3

- one upper-division United States history course
- one upper-division European or other non-U.S. history course
- PLSC 104 American Government Credits: 3
- PLSC 225 Comparative Politics Credits: 3
- Or PLSC 230 International Relations Credits: 3

### **Electives:**

Remaining credits chosen from history, political science, geography, and economics.

#### Certification - 56

# Secondary Certification

See Department of Teaching, Learning & Curriculum section under School of Education for teaching certification requirements.

- BHSC 235 Culture, Place and Interdependence Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- ECON 226 Principles of Microeconomics Credits: 3
- FNCE 206 Personal Finance Credits: 2,3
- GEOG 110 Survey of Geography Credits: 3
- GEOG 260 Cultural Geography Credits: 3
- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3
   HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- PLSC 277 Political Science Colloquium Credits: 0
- HIST 290 Research Seminar Credits: 3
- HIST 404 Adventist Heritage Credits: 3
- HIST 459 Special Methods in Teaching History and Social Studies Credits: 3
- PLSC 104 American Government Credits: 3
- PLSC 120 Analyzing Politics Credits: 3
- PLSC 225 Comparative Politics Credits: 3
- Or PLSC 230 International Relations Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 435 Public Policy Credits: 3
- plus 3 credits of electives

# Andrews Core Experience for Secondary Certification

For more information regarding Andrews Core Experience or Secondary Certification with a BA or BS degree see the department of Teaching, Learning & Curriculum.

#### Religion - 12

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- and a 3-credit elective chosen in consultation with your SED advisor

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### Foreign Language (BA only)

• Intermediate Language Credits: 4

#### History

covered in major

#### Fine Arts and Humanities - 3

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art Credits: 3
- Ensemble Music Credits: 3
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3

#### Life, Physical Sciences and Mathematics

Take one Life Science course and one Physical Science course. Choose from Andrews Core Experience: BA & BS Degrees.

#### Service

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### Social Sciences

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### Fitness Education

- HLED 120 Fit for Life Credits: 1
- plus two Fitness Education courses

# **Undergraduate Minors**

# **History Minor**

# **Minor Requirements**

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 404 Adventist Heritage Credits: 3
- and 6 additional credits to be selected from upper-division history courses.

#### **Total Credits: 21**

# Minor Requirements for Secondary Certification

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 290 Research Seminar Credits: 3
- HIST 404 Adventist Heritage Credits: 3
- HIST 459 Special Methods in Teaching History and Social Studies Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- PLSC 104 American Government Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 435 Public Policy Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3

# **Total Credits: 39**

# Political Science Minor

# **Degree Requirements**

- PLSC 104 American Government Credits: 3
- PLSC 120 Analyzing Politics Credits: 3
- PLSC 225 Comparative Politics Credits: 3
- Or PLSC 230 International Relations Credits: 3
- PLSC 326 American Political Institutions: Judiciary Credits: 3
- Or PLSC 328 American Political Institutions: Congress Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- and 6 additional credits to be selected from upper-division political science courses.

#### **Total Credits: 21**

# Minor Requirements for Secondary Certification

- PLSC 104 American Government Credits: 3
- PLSC 120 Analyzing Politics Credits: 3
- PLSC 225 Comparative Politics Credits: 3
- Or PLSC 230 International Relations Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3
- PLSC 435 Public Policy Credits: 3
- PLSC 456 Classical, Medieval and Early Modern Political Thought Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- GEOG 110 Survey of Geography Credits: 3
- HIST 204 American Experience I Credits: 3
- HIST 205 American Experience II Credits: 3
- HIST 459 Special Methods in Teaching History and Social Studies Credits: 3

## **Total Credits: 33**

## Pre-Professional

# Pre-Professional Curricula in Public History

Public or applied history refers to careers in history-related fields other than teaching. The major areas include museum management, archival management, and historic preservation, as well as the production of historical programs for the media. A master's degree in a public or applied history program or certification upon completion of certain graduate courses is needed prior to employment.

The Department of History & Political Science recommends curricula which combine a major in history with a second major or minor and electives, providing an advantageous undergraduate basis for a public history career. Curriculum recommendations are available from the department chair.

# **History**

#### HIST 110 - Worldviews, Cultures and Gods

Credits: 3 | This course examines the concept of worldview and how worldviews are manifested through history in various cultures/religions, from ancient monistic types to modern and postmodern types. The course covers biblical worldview, special revelation, natural and scientific worldview, various philosophies of history, and the interaction between various worldviews, ideologies and ideas. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### HIST 117 - Civilizations and Ideas I

Credits: 3 | Survey of the development of major world civilizations to the eighteenth century, including the origins and history of ideas, worldviews, and institutions (Stoicism, Hinduism, Catholicism, etc.), with an emphasis on the interaction of cultures in the premodern world. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning, Interactive Online | Offering: Fall | College Code: CAS

#### HIST 117V - Civilizations and Ideas I

Credits: 3 | Survey of the development of major world civilizations to the eighteenth century, including the origins and history of ideas, worldviews, and institutions (Stoicism, Hinduism, Catholicism, etc.), with an emphasis on the interaction of cultures in the premodern world. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### HIST 118 - Civilizations and Ideas II

Credits: 3 | Survey of the development of world civilizations from the eighteenth century, including the origins and history of ideas, worldviews, and institutions (nationalism, anti-Semitism, racism, multiculturalism, etc.), with emphasis on cultural diversity and interaction and their meaning in the modern and post-modern world. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning, Interactive Online | Offering: Spring | College Code: CAS

#### HIST 118V - Civilizations and Ideas II

Credits: 3 | Survey of the development of world civilizations from the eighteenth century, including the origins and history of ideas, worldviews, and institutions (nationalism, anti-Semitism, racism, multiculturalism, etc.), with emphasis on cultural diversity and interaction and their meaning in the modern and post-modern world. |

Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### HIST 135 - Introduction to Black Studies

**Credits:** 3 | An interdisciplinary introduction to the basic concepts and literature in the disciplines covered by African-American studies. The role of historical, political, social, and economic forces in shaping cultural expression will be stressed. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### HIST 204 - American Experience I

Credits: 3 | A study of the rise and development of the United States from European contact with the Americas through the Civil War. Emphasis placed on cultural, religious, ethnic, and other social issues as well as politics, economics, and foreign relations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### HIST 204V - American Experience I

Credits: 3 | A study of the rise and development of the United States from European contact with the Americas through the Civil War. Emphasis placed on cultural, religious, ethnic, and other social issues as well as politics, economics, and foreign relations. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### HIST 205 - American Experience II

Credits: 3 | A study of the development of the United States from Reconstruction to the present. Emphasis placed on cultural, religious, ethnic, and other social issues as well as politics, economics, and foreign relations. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### HIST 205V - American Experience II

Credits: 3 | A study of the development of the United States from Reconstruction to the present. Emphasis placed on cultural, religious, ethnic, and other social issues as well as politics, economics, and foreign relations. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### HIST 277 - History Colloquium

Credits: 0 | Current topics and issues of interest to historians and political scientists. Required each semester of all students majoring in history, political science, or social studies. | Weekly: 1 lecture or activity | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

#### HIST 290 - Research Seminar

Credits: 3 | Introduction to historical research methodology, including both bibliographical searches and critical evaluation of sources. Requires the writing of a research paper using primary sources. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Fall | College Code: CAS

#### HIST 316 - History of the Christian Church I

Credits: 3 | Surveys the internal and external developments and conflicts which Christianity has experienced from the time of Christ up to the Reformation. Special attention given to those developments that relate to Seventh-day Adventist theological heritage. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): HIST 117 or permission of instructor. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### HIST 316V - History of the Christian Church I

Credits: 3 | Surveys the internal and external developments and conflicts which Christianity has experienced from the time of Christ up to the Reformation. Special attention given to those developments that relate to Seventh-day Adventist theological heritage. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): HIST 117 or permission of instructor. | Schedule Type: Self-Paced | College Code: CAS

#### HIST 317 - History of the Christian Church II

Credits: 3 | Surveys the history of the church from the Protestant Reformation to the current time. Special attention is given to the Protestant Reformation, the Catholic counter-reformation, Puritanism, Rationalism, Evangelicalism, the rise of modern denominations, and worldwide mission expansion and ecumenism. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): HIST 118 or permission of instructor. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### HIST 317V - History of the Christian Church II

Credits: 3 | Surveys the history of the church from the Protestant Reformation to the current time. Special attention is given to the Protestant Reformation, the Catholic counter-reformation, Puritanism, Rationalism, Evangelicalism, the rise of modern denominations, and worldwide mission expansion and ecumenism. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite/Corequisite: HIST 118 or permission of instructor. | Schedule Type: Self-Paced | College Code: CAS

## HIST 320 - Economic History of the United States

Credits: 3 | A survey of the United States' growth and transformation into an industrialized nation. Economic analysis is used to explain the sources and consequences of the U.S. economic change. Topics covered include the rise of the corporation, the emergence of a national market, financial development, slavery, government regulation, transportation, the Great Depression, and rapid post-World War II growth. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 325 - History of American Women

Credits: 3 | The social, political, and economic roles and changing status of women in America. This course will examine how social constructions of gender, race, and class have shaped women's lives in the U.S. from the 1600s to the present, and how some women have pushed at the boundaries of those constructions through, for example, changing patterns of public/private sphere, work, leisure, and education; through political activism, involvement in a variety of social movements; and popular culture. We will emphasize the diversity of women's historical experiences by region as well as by social category, and will situate those experiences in the larger contexts of social, economic, and political change on local, national, and even global levels. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### HIST 378 - Study Tour

**Credits:** 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee may apply | **Grade Mode:** Normal with DG (A-F,I,W,DG,DN) | **Repeatable:** Repeatable | **Schedule Type:** Blended Learning | **College Code:** CAS

#### HIST 404 - Adventist Heritage

Credits: 3 | A study of the background and development of the Seventh-day Adventist denomination from its beginnings in the Millerite Movement to its present global impact. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### HIST 404V - Adventist Heritage

Credits: 3 | A study of the background and development of the Seventh-day Adventist denomination from its beginnings in the Millerite Movement to its present global impact. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### HIST 409 - African American History

Credits: 3 | The African American experience is the American experience. By understanding the issues of race, ethnicity, class, and gender within the African American experience, we can better understand the paradoxes of slavery and freedom from the founding of the nation in the Revolutionary period; the promise and ultimate denial of citizenship rights in emancipation and Federal Reconstruction; and the continual struggles of African American men and women to fulfill the promise of democracy from the Long Civil Rights and to the Black Power movement. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### HIST 413 - Torture and Execution in Early Modern Europe, 1400-1800

Credits: 3 | This course examines criminal law, courts, torture, and prisons from the Late Middle Ages to the French Revolution of 1789. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### HIST 414 - Renaissance and Reformation, 1300-1648

Credits: 3 | pects of the Renaissance and the religious, political, social, and intellectual aspects of the Protestant Reformation. Special emphasis is given to church-state relations and the struggle for religious toleration from 1517–1650. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 415 - Absolutism and Enlightenment, 1648–1789

Credits: 3 | The rise of absolute monarchies and their impact on political, social, economic, and intellectual developments of early modern Europe. Special emphasis is given to church-state relations and the struggle for religious liberty from 1650–1789. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 426 - Nationalism and Modernity, 1534-1914

**Credits:** 3 | A history of the concept of nation, nationalism, Liberalism and socialism, with concentration on social, political and intellectual transformation of Europe during and since the French Revolution, revolutionary movements of the 19th century, the industrial revolution, the Age of Progress, and causes behind a the outbreak of the Great War. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### HIST 427 - World Wars and the Postmodern Age, since 1914

**Credits:** 3 | A study of European society starting with the Great War, the Russian Revolution, totalitarian regimes, the Second World War, the Holocaust, the Cold War, the Second Vatican Council, the postmodern cultural and intellectual world of the 1960's, terrorism, racism and globalization. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### HIST 434 - From Discovery to Nation, 1492-1789

Credits: 3 | A study of the political, economic, and social development of America from discovery to 1789. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 435 - Union and Disunion, 1789-1865

Credits: 3 | Examines major events and developments through the lenses of religion, race, gender, class and culture. Emphasis is given to disestablishment of the churches, concepts of democracy, slavery, westward expansion, and the Civil War. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 437 - Topics:

Credits: 3 | A study of selected topics in history as announced in the class schedule. May be repeated with different topics. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

#### HIST 454 - Racism, Antisemitism, Holocaust

**Credits:** 3 | A history of hatred and contempt of Jews and Judaism since the first century, modern antisemitism and racism, the rise of Nazism, the Final Solution, and the response of the Christian Church toward these developments. Attention is given to the Nostra Aetate and ramifications of it for contemporary society. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### HIST 458 - The Emergence of Modern America, 1865–1939

**Credits:** 3 | Examines major events and developments through the lenses of religion, race, gender, and class and their impact on the individual's place in American society. Topics include religious pluralism and its social implications, Reconstruction, the industrial revolution, social and political reform, expansionism, World War I, and the

Great Depression. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 459 - Special Methods in Teaching History and Social Studies

Credits: 3 | A practicum taken prior to student teaching. Emphasizes methods, materials, and techniques of teaching history, geography, and social studies in grades 712. Required of students seeking secondary certification in history or social studies. Does not apply to a minor in history. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): EDTE 459. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### HIST 468 - Multi-cultural America

Credits: 3 | An examination of immigration and the historical experience of ethnic minority groups in the United States, including their development as subcultures and interactions with the dominant society. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 469 - America as a World Power, 1939-Present

Credits: 3 | An examination of issues of national consciousness and cultural identity within major topics of the period such as World War II, the Cold War, Vietnam, the Civil Rights movement, Watergate, and various contemporary issues. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### HIST 475 - History, Myth and Film

Credits: 3 | Examines how films from 1900 to the present interpret historical events using docu-drama, propaganda, and feature films. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### HIST 480 - Senior Seminar

Credits: 3 | A capstone course for the history major normally taken during the senior year, including the reading of classic works of history, the presentation of a portfolio of the student's writing, and a departmental comprehensive oral examination. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Spring | College Code: CAS

#### HIST 488 - Faith and History

Credits: 3 | A study of the major philosophies of history and contemporary theoretical issues in the discipline with emphasis upon implications for a Christian understanding of history. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### HIST 495 - Independent Study/Readings/Research

Credits: 1 | Individually directed study, readings, or research in selected areas of history under the guidance of the appropriate instructor. Limited to majors and minors in history and social studies. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 3 credits with different topics | Schedule Type: Independent | Special Approval: Instructor permission required. | Offering: Fall, Spring | College Code: CAS

#### HIST 578 - Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee may apply | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Blended Learning | College Code: CAS

#### HIST 590 - Independent Readings

Credits: 1,2 | Individual reading in a specified area under the guidance of an instructor. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | Offering: Fall, Spring | College Code: CAS

#### HIST 650 - Historical Method and Research

Credits: 3 | Examination of historical research methodology, including bibliographical searches, critical evaluation of sources, documentation style, and written and oral presentation of research. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PHIL 224 - Introduction to Philosophy

Credits: 3 | An introduction to basic philosophical issues, including the relationship of faith and reason, epistemology, the mind-body problem, determinism and free will, and ethics. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### PHIL 320 - Critical Thinking

Credits: 3 | Designed to encourage independent thinking and to teach analytical and logical skills necessary for problem solving as well as understanding and evaluating the ideas and claims of others. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 3 credits | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

# **Political Science**

#### PLSC 104 - American Government

Credits: 3 | A study of American political institutions and behavior, primarily on the national level. May be applied to the history major. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### PLSC 104V - American Government

Credits: 3 | A study of American political institutions and behavior, primarily on the national level. May be applied to the history major. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### PLSC 115 - Introduction to Political Theory

**Credits:** 3 | An introductory survey of political thought as a basis of Western political thought from Greece through the present. This course is designed for beginning political science majors and non-majors with an interest in political thought. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### PLSC 120 - Analyzing Politics

Credits: 3 | An introduction to political science designed to develop critical thinking skills and apply those skills to the analysis of politics. Topics examined include concepts of power, authority, political ideology, and the structures and processes of political systems. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, alternate years | College Code: CAS

#### PLSC 225 - Comparative Politics

Credits: 3 | An introduction to the general theories and methods of comparative politics through case studies of both advanced industrialized and developing countries. Examines a variety of governmental structures and analyzes their historical emergence, natures, forms, and dynamics. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 230 - International Relations

Credits: 3 | This course provides a general introduction to the study and practice of international relations, including the roles played by nation states, international organizations, international law, power, morality, globalization, and terrorism. Special emphasis will be placed on alternative theories and models that have been employed in the study and practice of international relations from classical antiquity to the present. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 237 - The Individual, State, and Marketplace

Credits: 3 | An introduction to international political economy, which examines the interactions between international politics and international economics. Beginning with an introduction to the primary theories guiding international political economy, topics studied include international capital markets, global and regional trade, monetary policy, global finance, and the effects of these issues on domestic politics. Not applicable to the political science major or minor. Applies to the General Education Social Science requirements. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 260 - Introduction to American Law

Credits: 3 | A study of the roles that law and the legal system play in American life. Topics include: the constitution, civil rights, property, employment, consumer protections, criminal punishment and judicial activism/restraint. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 277 - Political Science Colloquium

Credits: 0 | Current topics and issues of interest to historians and political scientists. Required each semester of all students majoring in history, political science, or social studies. | Weekly: 1 lecture or activity | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

#### PLSC 298 - Research Seminar

Credits: 3 | Introduction to political science research methodology, including bibliographical searches, critical evaluation of sources, surveys, and application of statistical data. Requires the writing of a paper based on original research. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Fall | College Code: CAS

#### PLSC 314 - Contemporary Political Thought

Credits: 3 | Our contemporary political world is a complex one, characterized by both tremendous promise and enduring human misery. Political theory is a realm of intellectual inquiry where we examine our most basic concepts and definitions, engage in normative judgment of our existing systems of government, and articulate and defend a vision of the system of political organization we envision to be ideal. The goal of this course is to familiarize you with important themes within contemporary political theory and the ways in which they relate to the world in which we reside. We will accomplish this through surveying the most influential political theorists of our time. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 316 - Legal Writing and Rhetoric

Credits: 3 | An introduction to academic and professional writing, particularly argument and analysis, as they relate to the law, including theoretical and practical applications. Assignment will include pleadings, briefs, and memoranda. Students will also develop a philosophical and rhetorical understanding of their function as writers in relation to the law and the legal system. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### PLSC 324 - American Political Parties and Elections

Credits: 3 | This course is an overview of the role of political parties and elections in the American national political system. We will consider the origins of political parties in the United States, and the history of elections and voting. Discussions will include an examination of the rise and origins of political polarization in the United States and the potential seriousness of its effects. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 326 - American Political Institutions: Judiciary

Credits: 3 | Course covers the structure of the United States legal system. This includes an examination of the roles of law enforcement, lawyers, and judges; as well as the structure of courts and appointment process for judges, the legal system, the court system, and the judicial decision making. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 328 - American Political Institutions: Congress

**Credits:** 3 | Course covers the history and structure of the U.S. Congress from its beginnings, the process of congressional elections, the differences between the House of Representatives and the Senate in terms of legislative processes, constitutional responsibilities, decision making process, committees and leadership structures. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

## PLSC 350 - State and Local Government

Credits: 3 | An examination of politics at the state, county and municipal levels in the United States. Consideration is given to the changing relationship between state and local government and the federal government with emphasis on Michigan state and local governments as a case study. Topics include state-federal relations, state legislatures and executives, state-local relations, and structures of local government. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years |

College Code: CAS

#### PLSC 365 - American Foreign Relations

Credits: 3 | A study of the formation and conduct of American diplomacy in the light of major themes, including the diplomacy of human rights, globalization, and the American relationship with Islamic states. | Grade Mode: Normal (A-F,I,W) |
Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 366 - Terrorism and Political Theory

Credits: 3 | Terrorism has gone from a persistent yet marginal security concern to one of the most important problems of our day. Terrorists menace governments worldwide, there are few if any countries that do not suffer from some form of terrorism. This course examines a wide range of questions in order to provide students with a deeper understanding of the threat of terrorism today. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 378 - Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee may apply | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### PLSC 405 - Globalization

Credits: 3 | This course explores the meaning and impact of globalization on contemporary international politics. This course uses the perspectives of political science and international political economy to examine the processes and consequences of globalization. We will study how globalization affects the international economy, state, sovereignty, international organizations, transnational corporations, trade, immigration and democratic governance. We begin with developed democracies and go on to explore the benefits and costs of globalization

for developing countries. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 419 - Political Extremism

Credits: 3 | This course examines the varieties of political extremism in party politics, radicalized religion, revolutions and terrorism. We will examine definitions of extremism, who belongs to and who leads extremist movements and parties; what are the goals and expectations of both leaders and members of extremist movements and political parties? Finally, we will discuss how these movements and parties influence societies and mainstream politics. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### PLSC 420 - Human Rights, Violations, and Reconciliations

Credits: 3 | An interdisciplinary approach to concepts of human rights within western and non-western traditions. Evaluates legal and political instruments that address human rights and examine the meaning and relevance of these rights to such contemporary issues as torture, political repression, war crimes, genocide, and refugees. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 435 - Public Policy

Credits: 3 | An introduction to the theories and methods used by comparativists to study public policies. Topics include policy variations and similarities in education, health, social security, economics, taxation and environmental policy. Examines the interaction between policy development and institutions and various theoretical models of policy making. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) |
Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 437 - Topics:

Credits: 3 | A study of selected topics in political science as announced in the class schedule. May be repeated with different topics. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

#### PLSC 454 - Utopian Political Thought

**Credits:** 3 | This course examines the relationship between the power of modern science and utopian political theory. To this end, we will explore the project to conquer nature and perfect man and consider the likelihood (and consequences) of a more perfect marriage of technology and ideology in the future. | **Grade Mode:**Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### PLSC 456 - Classical, Medieval and Early Modern Political Thought

Credits: 3 | A study of the great political ideas from antiquity to early modern times through a consideration of thinkers such as Plato, Aristotle, Aquinas, Machiavelli, Hobbes and Locke. The course explores such issues as human nature, the good life, freedom, justice, and authority as understood by pre-modern and early modern theorists. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 457 - Modern Political Thought

Credits: 3 | Explores major political ideas from the eighteenth century to the present. Writers discussed typically include Rousseau, Kant, Hegel, Marx, Nietzsche, Heidegger and Leo Strauss. Central topics include the abandonment of natural right; the turn to history as a standard of right; and the subsequent self-destruction and recovery of reason (and revelation) in late modern political thought. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 458 - American Political Thought

Credits: 3 | An examination of American political thought from the revolutionary period to the present. Required readings are drawn mainly from primary sources including the Declaration of Independence, the U.S. Constitution, the Federalist, and the writings of statesmen and theorists from the Civil War era, Progressive movement, New Deal and contemporary politics. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 460 - Area Study:

Credits: 3 | Study of the government and politics of individual nations (for example, India) or geographical regions (for example, Asia), as announced in the course schedule. Examines process, forces, and trends in the nation's/region's politics as it addresses societal needs and economic development. May be repeated with a different emphasis. May be applied to the history major. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade

Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PLSC 490 - Internship

Credits: 1–6 | Students work part- or full-time with government agencies, elected government officials, political campaigns, private interest groups, or NGOs. A minimum of 60 clock hours of work experience are required for each semester hour of credit. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) |

Prerequisite(s): at least junior standing and consent of the department. May not be applied to the political science minor. | Repeatable: Repeatable up to 6 credits |

Schedule Type: Practicum | Offering: Fall, Spring | College Code: CAS

#### PLSC 495 - Independent Study/Readings/Research

Credits: 1 | Individually directed study, readings, or research under the guidance of the instructor. Limited to students with majors in political science or social studies or a minor in political science. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 4 credits with different topics | Schedule Type: Independent | Special Approval: Instructor permission required. | Offering: Fall, Spring | College Code: CAS

#### PLSC 525 - Public Policy, Civil Society and Development

**Credits:** 2,3 | Governments are pressed to address issues of individual and collective concern. Resolving matters may demand the creation of programs and governmental policies, modification of existing ones or termination of current policy. Utilizing a case study approach, this course considers the essential phases of policymaking on behalf of civil society. Taught only for the off-campus MIDA degree. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### PLSC 578 - Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee may apply | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Blended Learning | College Code: CAS

#### PLSC 580 - Seminar in Comparative Politics

Credits: 3 | A study of general theories and methods of comparative politics through case studies of both advanced industrialized and developing countries. Examines a variety of governmental structures and analyzes their historical emergence, natures, forms and dynamics. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Alternate years | College Code: CAS

#### PLSC 585 - Seminar in International Relations

Credits: 3 | An examination of the study and practice of international relations, including the roles played by nation states, international organizations, international law, power, morality, globalization and terrorism. Special emphasis will be place on alternative theories and models that have been employed in the study and practice of international relations from classical antiquity to the present. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Alternate years | College Code: CAS

# International Language Studies

Nethery Hall, Room 210 269-471-6539 inls@andrews.edu www.andrews.edu/inls/

#### Faculty

Pedro A. Navia, *Chair* Sonia Badenas Elaine J. Navia Ruben Perez-Schulz

## Emeriti

Wolfgang Kunze Eduardo Ocampo

#### Mission

The Department of International Language Studies strives to develop students' knowledge of foreign languages and cultures in a Christian environment. It provides a broad range of educational courses and programs that build foreign language competence and enhance the understanding of foreign literatures and cultures. The department not only helps students develop a global perspective by training them to use their foreign language skills in a variety of fields, but also to develop critical understanding of world culture in its complexity and diversity, supporting and promoting Christ's appeal to this generation, "And this gospel of the kingdom will be preached in all the world as a witness to all the nations, and then the end will come."

The department provides students with communicative competence in a second language, promotes a greater understanding of and appreciation for the significance of language in human interaction, fosters interest in other cultures, and encourages intellectual development through enhanced cognitive and analytical skills.

The department offers many opportunities for language students to enhance an appreciation of other cultures and to develop fluency in the use of another language by participating in the Adventist Colleges Abroad (ACA) programs, language clubs, the National Language Honor Society, and religious activities.

#### **Departmental Tours**

The Department of International Language Studies offers two study tours: Europe and South America. Each tour is equivalent to six credits that count towards majors and minors. The South American tour may be taken only as Portuguese and Spanish credits; the European tour can be taken as French or Spanish credits. A maximum of 6 tour credits may be applied to the major or minor for students participating in the ACA program. All courses included in the tour are taught in the target language. Andrews University policies apply to the tour.

# **Bachelors**

# French for International Trade BA

This program integrates the study of international languages and cultures with preparation in international trade and business.

The objective of this major is to prepare students for international careers with the necessary business and language skills. Students in French participate in an internship in a business/industrial work environment either in the U.S. or abroad where French is spoken. Students may take examinations leading to certification in Business French. See details below. The major consists of study in the following three areas: (1) specialized studies in language, (2) business and economics, and (3) required cognates.

# Specialized Studies in French—30

All majors are required to attend a full academic year, excluding summer sessions, at the Adventist University of France, Collonges, France.

# ACA Courses—9

- FREN321
- FREN341
- FREN351
- FREN361

# AU Courses—21

- FREN 275 Intermediate French Credits: 4
- FREN 280 French Conversation and Composition Credits: 3
- FREN 415 Advanced French Communication Credits: 3
- •
- FREN 420 Francophone Cultures: The New World and the Third World Credits: 3 or
- FREN 430 Contemporary French Culture and Society Credits: 3
- •
- FREN 460 French for International Trade Credits: 3
- INLS 490 Language and International Trade Internship/Practicum Credits: 3
- remaining FREN/INLS credits to complete 30 credits

#### Note:

Language proficiency exit exam required.

# **Business and Economics—24**

- ACCT 121 Fundamentals of Accounting Credits: 3
- ACCT 122 Fundamentals of Accounting Credits: 3
- BSAD 355 Management and Organization Credits: 3
- BSAD 365 International Environment of Business Credits: 3
- BSAD 450 Multicultural Business Relations Credits: 3 or
- BSAD 467 International Management Credits: 3
- ECON 226 Principles of Microeconomics Credits: 3
- FNCE 317 Business Finance Credits: 3
- MKTG 310 Principles of Marketing Credits: 3

# Required Cognates—6

- ECON 225 Principles of Macroeconomics Credits: 3
- MKTG 465 International Marketing Credits: 3 or
- ECON 454 International Economics Credits: 3

#### Note:

No more than 30 credits from the School of Business Administration can apply to the degree.

#### **Total Credits: 54**

# French for K-12 Education BA

This degree is for students seeking elementary or secondary teaching certification. All majors are required to attend a full academic year, excluding summer sessions, at the Adventist University of France, Collonges, France.

## ACA Courses—21-24

- FREN321
- FREN341
- FREN351
- FREN361
- electives the equivalent of 12–15 FREN semester credits from 300-level and above

#### AU Courses—12

- FREN 401 Fundamentals of Translation Credits: 3 or
- FREN 402 French for Interpreters Credits: 3
- FREN 415 Advanced French Communication Credits: 3

- FREN 420 Francophone Cultures: The New World and the Third World Credits: 3 or
- FREN 430 Contemporary French Culture and Society Credits: 3
- INLS 458 Methods of Foreign Language Instruction: K-12 Credits: 3

#### **Electives:**

Remaining FREN/INLS credits at the upper division level to complete 36 credits. Language proficiency exit exam required.

#### Note:

For more information regarding General Education Requirements or Secondary Certification with a BA or BS degree, see the department of Teaching, Learning & Curriculum

### **Total Credits: 36**

# French Studies BA

All majors are required to attend a full academic year, excluding summer sessions, in the Adventist Colleges Abroad program at the Adventist University of France, Collonges, France. This requirement may be waived for native speakers or candidates who have spent an extended period of time in a French-speaking country.

### ACA Courses—18

- FREN321
- FREN341
- FREN351
- FRFN361
- FREN electives the equivalent of 9 semester credits from 300-level and above

#### AU Courses—18

- FREN 275 Intermediate French Credits: 4 (or ACA equivalent)
- FREN 280 French Conversation and Composition Credits: 3
- FREN 401 Fundamentals of Translation Credits: 3 or
- FREN 402 French for Interpreters Credits: 3
- FREN 415 Advanced French Communication Credits: 3
- FREN 420 Francophone Cultures: The New World and the Third World Credits: 3 or
- FREN 430 Contemporary French Culture and Society Credits: 3
- Plus 2 credits of electives

# **Additional Requirement:**

A language proficiency exit exam required.

#### **Total Credits: 36**

# Language and International Business BA/BBA

# **Program Description**

This program prepares students for international careers with business and language skills, providing practical, on-site, work experience and an academic background in international affairs. Students receive two separate but integrated degrees: a Bachelor of Business Administration with a major in management and a Bachelor of Arts in language for international trade.

#### Total Credits: 156

### **Business Core - 39**

- ACCT 121 Fundamentals of Accounting Credits: 3
- ACCT 122 Fundamentals of Accounting Credits: 3
- BSAD 341 Business Law Credits: 3
- BSAD 355 Management and Organization Credits: 3
- BSAD 365 International Environment of Business Credits: 3
- BSAD 475 Operations Management Credits: 3
- BSAD 494 Business Strategy and Decisions Credits: 3
- ECON 225 Principles of Macroeconomics Credits: 3
- ECON 226 Principles of Microeconomics Credits: 3
- FNCE 317 Business Finance Credits: 3
- INFS 120 Foundations of Information Technology Credits: 3
- INFS 215 Information Systems Theory and Application Credits: 3
- MKTG 310 Principles of Marketing Credits: 3

# **Business Major: Core Requirements - 27**

#### Business Core - 21

- BSAD 345 Business and Society Credits: 3
- BSAD 384 Human Resource Management Credits: 3
- BSAD 410 Entrepreneuring Credits: 3
- BSAD 436 Motivation and Work Behavior Credits: 3
- BSAD 450 Multicultural Business Relations Credits: 3
- BSAD 467 International Management Credits: 3
- BSAD 470 Quality Management Credits: 3

#### **Business Electives**

#### Group A Electives - 3

Choose one of the following courses:

- FNCE 426 International Finance Credits: 3
- ECON 427 Economic Development Credits: 3

#### Group B Electives - 3

Choose one of the following courses:

- ECON 454 International Economics Credits: 3
- MKTG 465 International Marketing Credits: 3

# Business Major Graduation Requirements

Students must complete the required and elective major courses (27 credits) with a minimum GPA of 2.33 (C+). The GPA is figured including all courses attempted—even those in which a D is received and which, therefore, do not apply towards the 27 credits of the major.

All management majors must obtain a C (2.00) minimum grade in ACCT 121, ACCT 122 and a C (2.00) minimum grade in BSAD 355.

# Language Major: Core Requirements - 30

Students may choose to do a concentration in either French or Spanish.

#### French

All majors are required to attend a full academic year, excluding summer sessions, at the Adventist University of France, Collonges, France.

#### Adventist Colleges Abroad - 9

- FREN 321
- FREN 341
- FREN 351
- FREN 361

#### Andrews University Language Courses - 21

- FREN 275 Intermediate French Credits: 4
- FREN 280 French Conversation and Composition Credits: 3
- FREN 415 Advanced French Communication Credits: 3
- remaining FREN/INLS credits to complete 30 credits.
- FREN 460 French for International Trade Credits: 3
- INLS 490 Language and International Trade Internship/Practicum Credits: 3

- FREN 420 Francophone Cultures: The New World and the Third World Credits: 3
- Or FREN 430 Contemporary French Culture and Society Credits: 3

Note: Language proficiency exit exam required.

# Spanish

All majors are required to attend a full academic year, excluding summer sessions, at Colegio Adventista de Sagunto, Spain, or Universidad Adventista del Plata, Argentina.

#### Adventist Colleges Abroad - 6

Advanced Grammer

- SPAN 351, 352, 353, 451, 452, 453
   Advanced Composition
- SPAN 361, 362, 363, 461, 462, 463
   Advanced Conversation
- SPAN 371, 372, 373, 471, 472, 473
- SPAN 275 Intermediate Spanish Credits: 4
- SPAN 280 Spanish Conversation and Composition Credits: 3
- SPAN 470 Spanish for International Trade Credits: 3
- SPAN 488 Spanish for International Relations Credits: 3
- remaining SPAN/INLS credits to complete 30 credits
- SPAN 416 Spanish for Native Speakers Credits: 3
- Or SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3
- Or SPAN 436 Spanish-American Culture Credits: 3

Note: Language proficiency exit exam required.

# Cognates - 3

STAT 285 - Elementary Statistics Credits: 3

# **Andrews Core Experience - 57**

Students must take all courses designated in the Andrews Core Experience: BA & BS Degrees while noting the following approved course substitutions. Note: if a student changes to another degree program, these course substitutions will no longer apply even if already completed.

#### Religion

- RELT 100 God and Human Life Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
- Or RELT 390 Christian Business Ethics Credits: 3

#### Mathematics

MATH 166 - College Algebra for Business Credits: 3

#### Social Sciences

- ECON 225 Principles of Macroeconomics Credits: 3
- FNCE 206 Personal Finance Credits: 2,3

# **Additional Requirements**

#### Transfer Work

The School of Business Administration does not accept 100-200 level courses (i.e. lower division) as transfer work to replace 300-400 level courses (i.e. upper division).

# Residence Requirement

Students must complete in residence in the School of Business Administration at Andrews University a minimum of 50% (33 credits) of the course work for the BBA degree (66 credits=39 credits in the BBA core + 27 credits in BBA required/elective major courses).

# Spanish for International Trade BA

This program integrates the study of the Spanish language and culture with preparation in international trade and business. The objective of this major is to prepare students for international careers with the necessary business and language skills. Students in Spanish participate in an internship in a business/industrial work environment either in the U.S. or abroad where Spanish is spoken. Students may take examinations leading to certification in Business Spanish. See details below. The major consists of study in the following three areas: (1) specialized studies in language, (2) business and economics, and (3) required cognates. All majors are required to attend a full academic year, excluding summer sessions, at Colegio Adventista de Sagunto, Spain, or Universidad Adventista del Plata, Argentina.

# Specialized Studies in Spanish—30

#### ACA Courses—6

#### Advanced Grammar

One of the following courses:

SPAN 351, 352, 353, 451, 452, 453

#### **Advanced Composition**

One of the following courses:

SPAN 361, 362, 363, 461, 462, 463

#### **Advanced Conversation**

One of the following courses:

SPAN 371, 372, 373, 471, 472, 473

#### AU Courses-24

- SPAN 275 Intermediate Spanish Credits: 4
- SPAN 280 Spanish Conversation and Composition Credits: 3
- SPAN 426 Contemporary Spain Credits: 3 or
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 416 Spanish for Native Speakers Credits: 3 or
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 470 Spanish for International Trade Credits: 3
- SPAN 488 Spanish for International Relations Credits: 3

#### Note:

Language proficiency exit exam required.

# **Business and Economics - 24**

- ACCT 121 Fundamentals of Accounting Credits: 3
- ACCT 122 Fundamentals of Accounting Credits: 3
- BSAD 355 Management and Organization Credits: 3
- BSAD 365 International Environment of Business Credits: 3
- BSAD 450 Multicultural Business Relations Credits: 3 or
- BSAD 467 International Management Credits: 3
- ECON 226 Principles of Microeconomics Credits: 3
- FNCE 317 Business Finance Credits: 3
- MKTG 310 Principles of Marketing Credits: 3

# Required Cognates - 6

- ECON 225 Principles of Macroeconomics Credits: 3
- MKTG 465 International Marketing Credits: 3 or

ECON 454 - International Economics Credits: 3

No more than 30 credits from the School of Business Administration can apply to the degree.

# Spanish for K-12 Education BA

This degree is for students seeking elementary or secondary teaching certification. All majors are required to attend a full academic year, excluding summer sessions, in the Adventist Colleges Abroad program at Colegio Adventista de Sagunto, Spain, or Universidad Adventista del Plata, Argentina.

#### ACA Courses—21-24

#### Advanced Grammar

One of the following courses:

SPAN 351, 352, 353, 451, 452, 453

### Advanced Composition

One of the following courses:

SPAN 361, 362, 363, 461, 462, 463

#### Advanced Conversation

One of the following courses:

SPAN 371, 372, 373, 471, 472, 472

#### Note:

Electives the equivalent of 15–18 SPAN semester credits at 300-level or above

#### AU Courses—12-15

- SPAN 416 Spanish for Native Speakers Credits: 3 or
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3 or
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 447 Spanish for Translation Credits: 3 or
- SPAN 449 Spanish for Interpreters Credits: 3
- INLS 458 Methods of Foreign Language Instruction: K-12 Credits: 3
- remaining SPAN/INLS credits at the upper division level to complete 36 credits.

#### Note

Language proficiency exit exam required.

For more information regarding General Education Requirements or Secondary Certification with a BA or BS degree, see the deparment of Teaching, Learning & Curriculum

# Spanish for Translation BA

#### Track 1:

(On-campus program—only available to native speakers)

- SPAN 275 Intermediate Spanish Credits: 4
- SPAN 280 Spanish Conversation and Composition Credits: 3
- SPAN 325 Spanish for the Medical Professions Credits: 3
- SPAN 405 Spanish Grammar Review Credits: 1
- SPAN 416 Spanish for Native Speakers Credits: 3
- SPAN 426 Contemporary Spain Credits: 3
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 447 Spanish for Translation Credits: 3
- SPAN 449 Spanish for Interpreters Credits: 3

- SPAN 457 Spanish Media Translation Credits: 3
- SPAN 470 Spanish for International Trade Credits: 3
- SPAN/INLS credits to complete 36 credits

#### Note.

Language proficiency exit exam required.

## Track 2:

(includes studies abroad) All majors are required to attend a full academic year, excluding summer sessions, in the Adventist Colleges Abroad program at Colegio Adventista de Sagunto, Spain, or Universidad Adventista del Plata, Argentina.

### ACA Courses—7

Choose one course from each of the following sets:

- SPAN 351, 352, 353, 451, 452, 453
- SPAN 361, 362, 363, 461, 462, 463
- SPAN 371, 372, 373, 471, 472, 473

# AU Courses—29

- SPAN 325 Spanish for the Medical Professions Credits: 3
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3 or
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 447 Spanish for Translation Credits: 3
- SPAN 449 Spanish for Interpreters Credits: 3
- SPAN 457 Spanish Media Translation Credits: 3
- SPAN 470 Spanish for International Trade Credits: 3
- SPAN 488 Spanish for International Relations Credits: 3
- INLS 400 Topics in Credits: 3
- remaining SPAN/INLS credits to complete 36 credits

#### Note.

Language proficiency exit exam required.

# Spanish Studies BA

#### Track 1:

(On-campus program—only available to native speakers)

- SPAN 275 Intermediate Spanish Credits: 4
- SPAN 280 Spanish Conversation and Composition Credits: 3
- SPAN 405 Spanish Grammar Review Credits: 1
- SPAN 416 Spanish for Native Speakers Credits: 3
- SPAN 426 Contemporary Spain Credits: 3
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 438 Mexico and Central American Culture Credits: 3
- SPAN 439 Spanish Caribbean Culture Credits: 3
- SPAN 446 Spanish and Latin American Drama Credits: 3
- SPAN 448 Spanish and Latin American Literature and Film Credits: 3
- SPAN/INLS electives at the upper division level to complete 36 credits. Language proficiency exit exam required.

#### Track 2:

(It includes studies abroad). All majors are required to attend a full academic year, excluding summer sessions, in the Adventist Colleges Abroad program at Colegio Adventista de Sagunto, Spain, or Universidad Adventista del Plata, Argentina.

#### ACA Courses—18

Choose one course from each of the sollowing sets:

- SPAN 351, 352, 353
- SPAN 361, 362, 363
- SPAN 371, 372, 373
- 400-level courses for Advanced II
- Electives at the 300-level to fulfill requirement

#### AU Courses—18

- SPAN 275 Intermediate Spanish Credits: 4
- SPAN 280 Spanish Conversation and Composition Credits: 3
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3 or
- SPAN 436 Spanish-American Culture Credits: 3

#### **Electives:**

Remaining SPAN/INLS credits at the upper division level to complete 36 credits. Language proficiency exit exam required.

# Spanish Studies/Speech-Language Pathology & Audiology BA/BS

Speech-Language Pathology and Audiology/Spanish Studies BS/BA

No grade lower thatn a C will count toward the major or cognates.

# Spanish Major: Core Requirements - 42

#### ACA Requirements - 18

Choose one course from each of the following sets:

- SPAN 351, 352, 353
- SPAN 361, 362, 363
- SPAN 371, 372, 373
- Plus 9 Spanish credits at the 300-400 level

#### AU Cognates - 6

Choose one of the following sets:

- SPAN 171 Elementary Spanish I Credits: 3
- SPAN 172 Elementary Spanish II Credits: 3
- SPAN 275 Intermediate Spanish Credits: 4

#### AU Requirements - 18

- SPAN 325 Spanish for the Medical Professions Credits: 3
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 447 Spanish for Translation Credits: 3
- SPAN 449 Spanish for Interpreters Credits: 3
- SPAN 456 Spanish for Speech Pathologists and Audiologists Credits: 3

# SPLAD Major: Core Requirements - 46

- SPPA 234 Introduction to Speech-Language Pathology and Audiology Credits: 3
- SPPA 270 Preclinical Observation Credits: 1
- SPPA 280 Anatomy and Physiology of Speech and Hearing Credits: 4
- SPPA 285 Applied Phonetics Credits: 3
- SPPA 310 Speech Science Credits: 3

- SPPA 321 Normal Language Development Credits: 3
- SPPA 322 Child Language Disorders Credits: 3
- SPPA 331 Basic Audiology Credits: 3
- SPPA 332 Audiological Procedures Credits: 3
   SPPA 340 Neuroscience of Communication Credits: 3
- SPPA 374 Articulation and Phonology: Development and Disorders Credits: 3
- SPPA 425 Clinical Principles and Practices Credits: 3
- SPPA 448 Disorders of Voice, Fluency and Swallowing Credits: 3
- SPPA 458 Aural Rehabilitation Credits: 3
- SPPA 482 Clinical Application in Audiology Credits: 2,3
- SPPA 481 Clinical Application in Speech-Langauge Pathology Credits: 2,3

### Cognates - 14 Credits

- PHYS 225 Sound and Waves Credits: 4
- STAT 285 Elementary Statistics Credits: 3 (Fullfills General Education math requirement)
- PSYC 301 Human Development Credits: 3
- BIOL 100 Human Biology Credits: 4
- or any BIOL with a lab

# **Andrews Core Experience**

For the BS/BA dual degree follow the Andrews Core Experience: BA & BS Degrees and the Professional Degree Requirements

and note the following specific requirements for the Professional Degree:

#### Religion - 12

Equivalent of one course per year of full-time enrollment at AU. Required course:

PBHL 440 - Fundamentals of Spirituality & Ethics in Healthcare Credits: 3

#### **Total Credits - 140**

# **Undergraduate Minors**

# French for Education Minor

For students seeking elementary or secondary teacher certification. One semester, or summer session, of advanced courses in France through ACA is required or take a challenge exam in advanced grammar, composition and conversation courses.

## **Total Credits: 21**

#### ACA Courses—9

### fall/spring option

- FREN321
- FREN341
- FREN351
- FREN361

#### summer option

- FREN322
- FREN342
- FREN352
- FREN362

#### AU Courses—12

- INLS 458 Methods of Foreign Language Instruction: K-12 Credits: 3
- FREN 415 Advanced French Communication Credits: 3

Choose one course from each of the following sets:

- FREN 401 Fundamentals of Translation Credits: 3 or
- FREN 402 French for Interpreters Credits: 3
- FREN 420 Francophone Cultures: The New World and the Third World Credits: 3 or
- FREN 430 Contemporary French Culture and Society Credits: 3
- remaining FREN/INLS upper division credits to complete 24 credits.

#### Note:

For more information regarding Teacher Certification with a minor see the department of Teaching, Learning & Curriculum

# French Minor

One semester, or summer session, of intermediate or advanced courses in France through ACA is required.

#### ACA Courses—8

# Fall/spring option

Choose one set of courses:

- FREN 221, 231, 251, 261
- FREN 321, 341, 351, 361

# Summer option

Choose one set of courses:

- FREN 202, 222, 232, 252, 262
- FREN 322, 332, 342, 352, 363

#### AU Courses—16

- FREN 171 Elementary French I Credits: 3
- FREN 172 Elementary French II Credits: 3
- FREN 275 Intermediate French Credits: 4 (or ACA equivalent)
- 6 upper division elective credits from FREN/INLS courses

# Portuguese Minor

One semester of intermediate or advanced courses in Brazil through ACA is required.

## ACA Courses—12

Choose one course from each of the following sets:

- PORT 251, 252
- PORT 261, 262
- PORT 271, 272
- One elective at the 300-level or higher

#### AU Courses—12

- PORT 171 Elementary Portuguese I Credits: 3
- PORT 172 Elementary Portuguese II Credits: 3
- PORT 420 Portuguese Literature & Culture Credits: 3
- PORT 430 Contemporary Brazilian Culture Credits: 3

# Spanish for Education Minor

For students seeking elementary or secondary teacher certification. One semester of advanced courses in Spain or Argentina through ACA is required and take a challenge exam in advanced grammar, composition and conversation courses to complete this requirement.

## ACA Courses—9

One course from each of the following sets:

- SPAN 351, 352, 353
- SPAN 361, 362, 363
- SPAN 371, 372, 373

#### Note:

Electives the equivalent of 4 SPAN semester credits from 300- level and above.

#### AU Courses—12

• INLS 458 - Methods of Foreign Language Instruction: K-12 Credits: 3

#### Choose one course from each of the following sets:

- SPAN 416 Spanish for Native Speakers Credits: 3 or
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3 or
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 447 Spanish for Translation Credits: 3 or
- SPAN 449 Spanish for Interpreters Credits: 3

#### Note:

remaining SPAN/INLS upper division credits to complete 21 credits

For more information regarding Teacher Certification with a minor see the department of Teaching, Learning & Curriculum

# Spanish Minor

One semester, or summer session, of intermediate or advanced courses in Argentina or Spain through ACA is required.

#### ACA Courses—8

Fall/spring options: (choose one course from each set)

- SPAN 251, 252, 253
- SPAN 261, 262, 263
- SPAN 271, 272, 273
- SPAN 351, 352, 353

Summer option: (choose one set of courses)

- SPAN 211, 212, 213 or
- SPAN 311, 350, 360, 370

#### **AU Courses—16**

- SPAN 171 Elementary Spanish I Credits: 3
- SPAN 172 Elementary Spanish II Credits: 3
- SPAN 275 Intermediate Spanish Credits: 4 (or ACA equivalent)
- 6 upper division elective credits from SPAN/INLS courses

# **Certificates**

# Business French Certificate

Andrews University is an approved examination center of the Paris Chamber of Commerce. Students may take the Diplome de Francais des Affaires ler fi Zeme degrees de la Chambre de Commerce et d'Industrie de Paris at Andrews University. These French diplomas, identical to the ones taken in France, are highly respected in the United States, Canada, France, and Europe. Students who succeed in obtaining the Diplome de Francais des Affaires I or II will be able to handle basic business tasks in a French setting.

# Business Spanish Certificate

Andrews University is also an approved examination center for the Madrid Chamber of Commerce and Industry. Students may take the Examen de Español de Negocios and receive the Diploma or Certificate from the Chamber of Commerce and Industry of Madrid and the prestigious University of Alcalá de Henares. The urpose of this exam is to prove that students have an in-depth knowledge of the Spanish language and that they can work in any business-related field. The deadline for registration is February 15

# Spanish

# Translation/Interpretation Certificate

The Department of International Language Studies offers a Certificate in Spanish Translation/Interpretation. Students who wish to obtain the Certificate should demonstrate fluency in both English and Spanish.

# Requirements for the Certificate:

- SPAN 325 Spanish for the Medical Professions Credits: 3
- SPAN 420 Advanced Spanish Written and Oral Communication Credits: 3
- SPAN 426 Contemporary Spain Credits: 3 or
- SPAN 436 Spanish-American Culture Credits: 3
- SPAN 447 Spanish for Translation Credits: 3
- SPAN 449 Spanish for Interpreters Credits: 3
- SPAN 470 Spanish for International Trade Credits: 3
- SPAN 488 Spanish for International Relations Credits: 3

# **Other Programs**

# Adventist Colleges Abroad Program

Andrews University, as a member institution, participates in the Adventist Colleges Abroad (ACA) program which gives North American students an opportunity to enhance their ability to use a foreign language and to experience a foreign culture while completing the requirements for a baccalaureate degree in the regular four-year period without losing credits or extending their courses of study.

The Adventist Colleges Abroad program offers a wide variety of courses in composition, phonetics, reading, literature, folklore, culture, business, and civilization. Other courses may be taken to fulfill Andrews Core Experience requirements. In addition, students participate in on-site guided field trips of geographic, historic, or economic significance.

# **Admission Requirements**

- Admission as a student at Andrews University.
- Competence in the language at the intermediate level is recommended.
   However, applicants with two to three years of secondary or one year of elementary-level college language study may be admitted.
- GPA of 2.25 in the language and 2.00 overall.
- Good citizenship record
- Completion of ACA application with all required information and signatures (academic and financial arrangements).

#### Fulfilling Major/Minor Requirements.

Adventist Colleges Abroad students with majors or minors in a language are encouraged to take the required conversation, composition, civilization, and literature courses at the upper division level while studying abroad if their level of proficiency enables them to do so (see major requirements). Upon their return to Andrews University, students must take in residence the following minimum number of credits:

- For a language major: 12 upper division credits
- For a language minor: 6 upper division credits

These requirements apply to all students who spend a full school year abroad, including transfer students. Students should take a normal load of 16 credits each quarter or 12 credits per semester. Students also are encouraged to take as many Andrews Core Experience courses as possible.

# Adventist Colleges Abroad Full-year Study Options

- Adventist University of France, Collonges-sous-Salève, France
- Centro Universitário Adventista de São Paulo, Brazil
- Colegio Adventista de Sagunto, Sagunto (Valencia), Spain
- Universidad Adventista del Plata, Entre Ríos, Argentina

Adventist Colleges Abroad Summer Program offers students an opportunity to take, during a six-week session, beginning-, intermediate-, or advanced-level courses in the following languages:

#### rench

Adventist University of France Collonges-sous-Salève, France

#### Germar

Seminar Schloss Bogenhofen, St. Peter am Hart near Braunau Austria

#### Greek/Hebrew

Athens Study Center, Athens, Greece

#### Italian

Instituto Avventista Villa Aurora Florence, Italy

#### Portuguese

Centro Universitário Adventista, São Paulo, Brazil

#### Spanish

Colegio Adventista de Sagunto, Valencia, Spain Universidad Adventista de Montemorelos, México

In addition to language study, students participate in on-site guided field trips of geographic, historic, or economic significance.

#### **ACA Academic Year Courses**

See the ACA bulletin for course descriptions. A minimum of  ${\bf C}$  is required.

#### Argentina

#### (Quarter Credits)

- SPAN251, 252, 253 Intermediate Spanish Grammar Credits: 4, 4, 4
- SPAN261, 262, 263 Intermediate Spanish Composition Credits: 2, 2, 2
- SPAN271, 272, 273 Intermdiate Spanish Conversation Credits: 2, 2, 2
- SPAN351, 352, 353 Advanced Spanish Grammar Credits: 4, 4, 4
- SPAN361, 362, 363 Advanced Spanish Composition Credits: 2, 2, 2
- SPAN371, 372, 373 Advanced Spanish Conversation Credits: 2, 2, 2
- SPAN451, 452, 453 Advanced Spanish Grammar II Credits: 4, 4, 4
- SPAN461, 462, 463 Advanced Spanish Composition II Credits: 2, 2, 2
- SPAN471, 472, 473 Advanced Spanish Conversation II Credits: 2, 2, 2
- RELH/SPAN211 Hist of the Church in South America Credits: 2
- RELH/SPAN313 The Adventist Professional Credits: 2
- RELH/SPAN310 Contemporary Religious Outlook Credits: 2
   SPAN/GEOG205/306 Geography of Latin America Credits: 2/2
- SPAN232 Phonetics Credits: 2
- SPAN240 Orthography Credits: 1
- SPAN293 Language Through Drama Credits: 1
- SPAN301, 302, 303 Folklore of Argentina Credits: 2, 2, 2
- SPAN326, 327 Translation & Interpretation Credits: 2, 2
- SPAN332, 333 Latin American Literature Credits: 3, 3
- SPAN/HIST342, 343 History of Argentina Credits: 2, 2
- SPAN381, 382 Current Events in South America Credits: 1, 1
- SPAN422, 423 Translation & Interpretation Credits: 2, 2
- SPAN495 Independent Study Credits: 1-4
- MUPF126 Private Lessons Credits: 1

- MUPF136 Choir Credits: 1
- MUPF146 Orchestra or Band Credits: 1
- MUPF156 Ensemble Credits: 1

#### Austria

#### (Quarter Credits)

- GRMN101, 102, 103 Beginning German Credits: 6, 6, 6
- GRMN111, 112, 113 Elementary German Credits: 3, 3, 3
- GRMN121, 122, 123 Elementary Phonetics Credits: 1, 1, 1
- GRMN215, 216, 217 Intermediate Oral Expression Credits: 3, 3, 3
- GRMN211, 212, 213 Intermediate Written Expression Credits: 2, 2, 2
- GRMN221, 222, 223 Intermed. Reading Comprehension Credits: 3, 3, 3
- GRMN235, 236, 237 Intermed. Listening Comprehension Credits: 2, 2, 2
- GRMN306, 307, 308 Advanced Oral Expression Credits: 3, 3, 3
- GRMN311, 312, 313 Advanced Written Expression Credits: 2, 2, 2
- GRMN325, 326, 327 Advanced Reading Comprehension Credits: 3, 3, 3
- GRMN335, 336, 337 Advanced Listening Comprehension Credits: 3, 3, 3
- HIST204, 205, 206 European Civilization Credits: 2, 2, 2
- HIST304, 305, 306 European Civilization Credits: 2, 2, 2
- RELB101, 102, 103 Dogmatics Credits: 2, 2, 2
- RELB301, 302, 303 Dogmatics Credits: 2, 2, 2
- BUAD/GRMN105, 106 Business German Credits: 3, 3
- BUAD/GRMN401, 402, 403 Advanced Business German Credits: 2, 2, 2
- GRMN254, 255, 256 Survey of German Literature Credits: 3, 3, 3
- GRMN495 Independent Study Credits: 2-6
- HMEC102 Vegetarian Cooking & Nutrition Credits: 1.5
- MUPF165, 166, 167 Private Music Lessons Credits: .5-1, .5-1, .5-1
- MUPF171, 172, 173 Choir Credits: 1, 1, 1
- MUPF146 Chamber Orchestra Credits: 1
- FTES104, 105, 106 Physical Education Credits: 1, 1, 1
- FREN101, 102, 103 Elementary French Credits: 2, 2, 2
- BUAD/GRMN115, 116, 117 Elem. Business German & Internship Credits: 1, 1, 1
- BUAD/GRMN215, 216, 217 Intermed. Bus. German & Internship Credits: 1, 1, 1

#### Brazil

#### (Semester Credits)

- PORT350 Intermediate Portuguese Grammar Credits: 3
- PORT360 Intermediate Portuguese Composition Credits: 3
- PORT370 Intermediate Portuguese Conversation Credits: 3
- PORT300 Folklore of Brazil Credits: 3
- PORT330 Brazilian Literature Credits: 2
- PORT310 Contemporary Religious Outlook Credits: 3
- PORT381 Current Events in Brazil Credits: 2
- FTES120 Beginning Soccer Credits: 1

#### **France**

#### (Quarter Credits)

- FREN101 Beginning French Credits: 4
- FREN121 Comprehension and Written Expression Credits: 3
- FREN131 Spelling and Grammar Credits: 4
- FREN151 Elementary Spoken Language Credits: 4
- FREN111 Phonetics Credits: 1
- FREN191 Intensive Elementary French Credits: 11
- FREN201 Intermediate French Credits: 3
- FREN221 Intermediate Composition Credits: 3
- FREN231 Spelling and Grammar Credits: 4
- FREN251 Intermediate Spoken Language Credits: 4
- FREN261 Reading Comprehension Credits: 2
- FREN291 Intensive Intermediate French Credits: 9
- FREN321 Advanced Composition Credits: 3
- FREN331 Advanced Orthography Credits: 2
- FREN341 Advanced Grammar Credits: 6

- FREN351 Advanced Spoken Language Credits: 3
- FREN361 Text Analysis Credits: 2
- FREN422, 423 Literary Analysis, Summary Tech. Credits: 2, 2
- FREN424, 425 Document Analysis and Synthesis Credits: 2, 2
- FREN421 French Composition Credits: 3
- FREN431, 432 Advanced Orthography Credits: 2, 2
- FREN441 Morphology/Syntax of the Simple Sentence Credits: 4
- FREN442 Morphology/Syntax of the Complex Sent. Credits: 4
- FREN451, 452 Oral Communication Credits: 2, 2
- FREN493 Advanced Oral Communication Credits: 4
- FREN461 Advanced Literary Studies Credits: 3
- FREN/HIST457, 458 France and Its History Credits: 2, 2
- FREN/PLSC459, 460 French Institutions Credits: 2, 2
- FREN/SOCI476, 477 Changes in French Society Credits: 2, 2
- FREN/SOCI479, 480 Cultures in French-Speaking World Credits: 2, 2
- FREN/RELG254, 354 Religion (Conversation Topics) Credits: 2, 2
- FREN269/369 Independent Reading Credits: 1, 1
- MUPF171, 271, 371 Campus Choir Credits: 1, 1, 1
- FREN/GEOG272, 372 Regional France Credits: 1,1
- FREN/ARTS273, 373 French Fine Arts and Monuments Credits: 1, 1
- FREN/PLSC374 European Institutions Credits: 2
- FREN/PLSC375 International organizations Credits: 2
- FREN/SOCI376 French Civilization Credits: 2
- FREN378, 478 Language Through Drama Credits: 2, 2

#### Germany

#### (Semester Credits)

- GRMN105, 106 Elementary German Credits: 6, 6
- GRMN115, 116 Elementary Oral Expression Credits: 4, 4
- GRMN125 Phonetics Credits: 2
- GRMN208, 209 Intermediate German Credits: 4, 4
- GRMN225 Intermediate Phonetics Credits: 2
- GRMN235, 236 Intermediate Oral Expression Credits: 4, 4
- GRMN141, 142 Multimedia Language Lab Credits: 2, 2
- GRMN195, 196 Independent Reading Credits: 2, 2
- GRMN175, 176 Cultural Studies Credits: 2, 2
- GRMN248, 249 Multimedia Language Lab Credits: 2, 2
- GRMN257, 258 Survey of German Literature Credits: 2, 2
- GRMN295, 296 Independent Reading Credits: 2, 2
- GRMN281, 282 Cultural Studies Credits: 2, 2
   GRMN/HIST288 German History Credits: 1
- GRMN318, 319 Advanced Comprehensive German Credits: 4, 4
- GRMN309, 310 Advanced Grammar Credits: 2, 2
- GRMN328, 329 Advanced Reading Credits: 2, 2
- GRMN338, 339 Cultural Studies Credits: 2, 2
- GRMN361, 362 Survey of German Literature Credits: 2, 2
- RELB351, 352 Theology Credits: 2, 2
- HIST381, 382 German History Credits: 1, 1
- SOWK301, 302 Social Work Credits: 2, 2
- GRMN388, 389 Adv Grammar & Reading Comprehension Credits: 2, 2
- ART321, 322 Ceramics: Drawing/Handicraft Credits: 2, 2
- MUPF131, 132 Music Lessons Credits: 1, 1
- MUPF141, 142 Choir Credits: 1, 1
- MUPF151, 152 Brass Ensemble Credits: 1, 1
- HMEC107 International Cooking Credits: 1
   FTES111, 112 Physical Education Credits: 1, 1

## Italy

#### (Quarter Credits)

- ITLN111 Phonetics Credits: 1
- ITLN151, 152, 153 Elementary Grammar Credits: 5, 5, 5
- ITLN181, 182, 183 Elementary Conversation Credits: 3, 3, 3

- ITLN212 Italian Culture Credits: 2
- ITLN251, 252, 253 Intermediate Grammar Credits: 5, 5, 5
- ITLN281, 282, 283 Intermediate Conversation Credits: 2, 2, 2
- ITLN262 Intermediate Composition Credits: 2
- ITLN313 Advanced Italian Culture Credits: 2
- ITLN351, 352, 353 Advanced Grammar Credits: 3, 3, 3
- ITLN361 Advanced Composition Credits: 2
- ITLN381, 382, 383 Advanced Conversation Credits: 2, 2, 2
- ITLN451 Advanced Grammar II Credits: 3
- ITLN461 Advanced Composition II Credits: 2
- ITLN471 Advanced Conversation II Credits: 3
- ITLN/HIST303 Italian History Credits: 2
- ITLN/LITT333 Italian Literature Credits: 2
- ITLN431 Advanced Italian Literature Credits: 2
- ITLN/ART/HIST230, 330 History of Italian Art Credits: 3, 3
- ITLN/GEOG310 Geography of Italy Credits: 1
- ITLN/MUHL/HIST375 History of Italian Music Credits: 2
- ART/HMEC315, 316 The Art of Tailoring Credits: 1, 1
- ART311, 312, 313 Ceramics Credits: 2, 2, 2
- ART322, 323 Fashion Design Credits: 2, 2
- ART341, 342, 343 Fine Arts Drawing Credits: 2, 2, 2
- ITLN/LITT/ENGL360 Italy & its Culture in British & American Literature Credits:
   2
- ITLN370, 470 History of the Italian Cinema Credits: 2, 2
- ITLN380, 480 Current Events Credits: 1, 1
- FREN101, 102, 103 French I Credits: 2, 2, 2
- HMEC101, 102 Mediterranean Cooking Credits: 1, 1
- ITLN278, 378 Language Through Drama Credits: 2, 2
- ITLN/ART172, 272, 372 Italian Fine Arts and Monument Credits: 1, 1, 1
- ITLN/ART/RELB399 Independent Study Credits: 1-4
- ITLN422, 423 Translation and Interpretation Credits: 2, 2
- MUPF101, 202, 303 Piano Credits: 1, 1, 1
- MUPF171, 172, 173 Choir Credits: 1, 1, 1
- MUPF291 Voice Credits: 1
- FTES101, 102, 103 General Fitness Program Credits: 1, 1, 1
- RELB101, 201, 301 Religion Credits: 1, 1, 1
- RELH301 History of the Adventist Church Credits: 2

#### Spain

#### (Quarter Credits)

- SPAN201, 202, 203 Spanish Folklore Credits: 2, 2, 2
- SPAN225 Spanish in Contemporary Music Credits: 1
- SPAN228 Spanish and European Movies Credits: 1
- SPAN241, 242, 243 Preparation for the Spanish Diploma Credits: 1, 1, 1
- SPAN251, 252, 253 Intermediate Spanish Grammar Credits: 4, 4, 4
- SPAN261, 262, 263 Intermediate Spanish Composition Credits: 3, 3, 3
- SPAN271, 272, 273 Intermediate Spanish Conversation Credits: 2, 2, 2
- SPAN281, 282, 283 Current Events in Spain Credits: 1, 1, 1
- SPAN301, 302, 303 History of Spain Credits: 3, 3, 3
- SPAN312, 313 Spain and Its Culture Credits: 2, 2
- SPAN/BUAD321, 322 Business Spanish Credits: 2, 2
- SPAN331, 332, 333 History of Spanish Literture Credits: 3, 3, 3
- SPAN341, 342, 343 Preparation for the Spanish Diploma Credits: 1, 1, 1
- SPAN351, 352, 353 Advanced Spanish Grammar Credits: 4, 4, 4
- SPAN361, 362, 363 Advanced Spanish Composition 3, 3, 3
- SPAN371, 372, 373 Advanced Spanish Conversation 2, 2, 2
- SPAN375 Spanish for Health Professionals Credits: 2
- SPAN421, 422, 423 Translation and Interpretation Credits: 2, 2, 2
- SPAN441, 442, 443 Preparation for the Spanish Diploma Credits: 1, 1, 1
- SPAN451, 452, 453 Advanced Spanish Grammar II Credits: 4, 4, 4
- SPAN461, 462, 463 Advanced Spanish Composition II Credits: 3, 3, 3
- SPAN471, 472, 473 Advanced Spanish Conversation II Credits: 2, 2, 2
- SPAN495 Independent Study Credits: 1-4

- ART321, 322, 323 History of European Art Credits: 3, 3, 3
- GEOG311 Geography of Spain Credits: 2
- HIST301, 302, 303 History of Spain Credits: 3, 3, 3
- RELB291, 292, 293 The Gospel & Contemporary Culture Credits: 2, 2, 2
- MUFP126 Private Lessons Credits: 1-3
- MUPF171, 172, 173 Choir Credits: 1, 1, 1
- MUPF146, 147, 148 Orchestra Credits: 1, 1, 1
- FTES121, 122, 123 Physical Education Credits: 1, 1, 1

#### **ACA Summer Courses**

See the summer ACA bulletin for course descriptions. A minimum of C is required.

#### Austria

#### (Quarter Credits)

- GRMN101, 102, 103 Beginning German Credits: 2, 2, 2
- GRMN151, 152, 153 Elementary Oral Expression Credits: 1, 1, 1
- GRMN191, 192, 193 Intensive German Review Credits: 3, 3, 3
- GRMN201, 202, 203 Intermediate German Credits: 2, 2, 2
- GRMN251, 252, 253 Intermediate Oral Expression Credits: 1, 1, 1
- GRMN291, 292, 293 Intensive German Review Credits: 3, 3, 3
- GRMN301, 302, 303 Advanced German Credits: 2, 2, 2
- GRMN351, 352, 353 Advanced Oral Expression Credits: 1, 1, 1
- BUAD115, 116, 117 Elem. Business German & Internship Credits: 1, 1, 1
- BUAD215, 216, 217 Intermed. Bus. German & Internship Credits: 1, 1, 1

#### Brazil

#### (Semester Credits)

- PORT101, 102 Beginning Portuguese Credits: 3, 3
- PORT191, 192 Intensive Portuguese Review Credits: 3, 3
- PORT211, 212 Intermediate Portuguese Credits: 3, 3
- PORT291, 292 Intensive Portuguese Review II Credits: 3, 3
- PORT321, 322 Advanced Portuguese I Credits: 3, 3

#### France

#### (Quarter Credits)

- FREN102 Beginning French Credits: 3
- FREN122 Written Comprehension & Expression Credits: 2
- FREN132 Spelling and Grammar Credits: 1
- FREN152 Elementary Oral Expression Credits: 3
- FREN192 Intensive Elementary French Credits: 6
- FREN202 Intermediate French Credits: 2
- FREN222 Intermediate Composition Credits: 2
- FREN232 Spelling and Grammar Credits: 2
- FREN252 Intermediate Oral Expression Credits: 2
- FREN262 Reading Comprehension Credits: 1
- FREN292 Intensive Intermediate French Credits: 5
- FREN322 Advanced Composition Credits: 2
- FREN332 Orthography Credits: 1
   FREN342 Advanced Grammar Credits: 2
- FREN352 Advanced Oral Expression Credits: 2
- FREN362 Literary Studies Credits: 2
- FREN422 Literary Analysis, Summary Techniques Credits: 2
- FREN462 Advanced Literary Studies Credits: 2

#### Greece

#### (Quarter Credits)

- GREK/RELL331, 332, 333 Intermediate Greek I, II, III Credits: 3, 3, 3
- HEBR331, 332, 333 Hebrew Credits: 3, 3, 3

#### Italy

## (Quarter Credits)

- ITLN101, 102, 103 Beginning Italian Credits: 2, 2, 2
- ITLN/ART131 Italian Art Credits: 3
- ITLN191, 192, 293 Intensive Italian Review I Credits: 2, 2, 2
- ITLN201, 202, 203 Intermediate Italian Credits: 2, 2, 2
- ITLN/ART231 Italian Art Credits: 3
- ITLN291, 292, 293 Intensive Italian Review II Credits: 2, 2, 2

#### Mexico

#### (Quarter Credits)

- SPAN101, 102, 103 Beginning Spanish Credits: 3, 3, 3
- SPAN211, 212, 213 Intermediate Spanish Credits: 3, 3, 3
- SPAN312 Mexico and its Culture Credits: 2
- SPAN351 Advanced Spanish Grammar Credits: 3
- SPAN361 Advanced Spanish Composition Credits: 2
- SPAN371 Advanced Spanish Conversation Credits: 2

### Spain

#### (Quarter Credits)

- SPAN101, 102, 103 Beginning Spanish Credits: 3, 3, 3
- SPAN191, 192, 193 Intensive Spanish Review Credits: 3, 3, 3
- SPAN211, 212, 213 Intermediate Spanish Credits: 3, 3, 3
- SPAN291, 292, 293 Intensive Spanish Review II Credits: 3, 3, 3
- SPAN311 Spain and Its Culture Credits: 2
- SPAN350 Advanced Spanish Grammar Credits: 3
- SPAN360 Advanced Spanish Composition Credits: 2
- SPAN370 Advanced Spanish Conversation Credits: 2

#### Ukraine

#### (Quarter Credits)

- RUSS101, 102, 103 Beginning Russian Credits: 3, 3, 3
- RUSS211, 212, 213 Intermediate Russian Credits: 3, 3, 3
- RUSS351 Advanced Russian Grammar Credits: 3
- RUSS361 Advanced Russian Composition Credits: 3
- RUSS371 Advanced Russian Conversation Credits: 3

#### Additional Information

**Language Honor Society.** The local Beta Kappa chapter of AlphaMu Gamma, the national collegiate honor society for foreign languages, gives recognition to outstanding students.

Language Clubs. The Department of International Language Studies sponsors two language clubs. The purpose is to promote cultural, academic, social and spiritual activities. "Adelante" is the Spanish club and "Oh la la" is the French club. Both clubs require membership fees.

Language Requirements for Andrews Core Experience. Students who wish to have the language requirement waived (with or without credit) by passing a proficiency exam should apply at the Department of International Language Studies. Exams are given in the languages taught at the department: French, German, Korean, Portuguese, and Spanish. Exceptions can be made for other languages by the chair of the Department of International Language Studies. The examination will reflect the student-performance outcomes expected at the intermediate level in the four language skills of reading, writing, listening, and speaking according to the American Council of Teaching Foreign Languages (ACTFL) guidelines. Upon written approval by the instructor, the Department of International Language Studies will grant up to 12 credits per language examined. See here for fees for Language Proficiency exams. See p. 44 for CLEP options.

Preparation for Teaching. Students preparing to teach French or Spanish at the elementary or secondary level must qualify for teaching credentials as outlined in the School of Education section of this bulletin. The program leading to the Master of Arts in Teaching (MAT) degree in French or Spanish is described in the School of Education section of this bulletin.

#### French

# FREN 171 - Elementary French I

**Credits:** 3 | Grammar with reading and writing of simple French in the context of significant aspects of culture—oral and listening work stressed. Designed for students who have no French or less than 2 years of high-school French or its equivalent. | A

one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### FREN 172 - Elementary French II

Credits: 3 | Grammar and reading continued in the context of significant aspects of culture; oral and listening work progressively increased. Designed for students with 23 years of high-school French. A one-hour lab per week is required. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): FREN 171 with a minimum grade of C or permission of the instructor. | Schedule Type: Lecture/Lab | College Code: CAS

#### FREN 275 - Intermediate French

Credits: 4 | Grammar, reading, composition, and oral and aural exercises in the context of significant aspects of French culture. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): FREN 172 with a minimum grade of C or permission of the instructor. | Schedule Type: Blended Learning, Lecture/Lab | College Code: CAS

#### FREN 280 - French Conversation and Composition

Credits: 3 | Training in oral and writing self-expression, with emphasis on fluency and accuracy. Acquisition of idioms and review of different speaking and writing levels that exist within the French language. Special attention to important differences that exist among all Francophone countries when speaking and writing. Reading comprehension and study of grammatical structures are important components of this course. | Weekly: 3 lectures and a 1-hour lab | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): FREN 275 with a minimum grade of C or instructor permission | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### FREN 401 - Fundamentals of Translation

Credits: 3 | Techniques of translation processes in rendering into French and English materials ranging from official documents to technical essays and literary texts.

Conducted entirely in French. | An arranged lab is required | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lecture/Lab | College Code: CAS

#### FREN 402 - French for Interpreters

Credits: 3 | Intensive study and practice in the art of consecutive and simultaneous oral translation. Conducted entirely in French. | An arranged lab is required | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### FREN 405 - French Grammar Review

Credits: 1 | A review of all basic grammar rules that are required to elaborate written documents and to help in the process of achieving fluency. Special emphasis is given to conjugation, orthography, and syntax. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### FREN 415 - Advanced French Communication

Credits: 3 | A comprehensive study of French grammar for written and oral communication. A review of techniques and strategies to improve communication through creative writing, speech preparation and class presentations. Emphasis on language fluency and accuracy. Conducted entirely in French. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# FREN 420 - Francophone Cultures: The New World and the Third World

Credits: 3 | Explores non-European cultures where French is used as a medium of expression. Study in French literature and film from North America, the Caribbean and Africa. Conducted entirely in French. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### FREN 429 - French for International Travel and Tourism

Credits: 3 | Spoken and written French common to the French-speaking world of tourism, hotel business and catering, emphasizing on practices and cultural tools required to communicate in a French-speaking professional environment. This course provides an intensive preparation to the Diplome de Francais Professional Tourisme et Hotellerie conferred by the Chambre de Commerce et d'Industrie de Paris. Conducted entirely in French. | An arranged lab is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### FREN 430 - Contemporary French Culture and Society

**Credits:** 3 | Analysis and comparison of French and American value orientations, family structures, and educational, political, economic, and cultural institutions. Course offered only during summer study tour to France. Conducted entirely in

French. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### FREN 434 - French for Medical Professions

Credits: 3 | Spoken and written French used by medical professions in the French-speaking world. Strong emphasis on vocabulary, phrases, terminology and specific language used in a doctor's office and hospital settings. This course provides an intensive preparation to the Diplome de Francais Professional Medical conferred by the Chambre de Commerce et d'Industrie de Paris. Conducted entirely in French. | An arranged lab is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### FREN 445 - French Literature and Film

Credits: 3 | Analysis and comparison of artistic differences between selected pieces of French literature and their film adaptation. Conducted entirely in French. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### FREN 460 - French for International Trade

Credits: 3 | Spoken and written French common to the French-speaking world of business and industry, emphasizing business practices and cultural tools required to communicate in the French-speaking economic environment: business operations and socio-economics in France; the economy of France. This course provides an intensive preparation of the Diplôme Français des Affaires I conferred by the Chambre de Commerce et d'Industrie de Paris. Conducted entirely in French. | An arranged lab is required | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### FREN 505 - Reading French

Credits: 5 | For students without a working knowledge in French; an introduction to the grammar and syntax of French for the purpose of translating written French into English. May count toward a general elective only. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### German

#### GRMN 505 - Reading German

Credits: 5 | For students without a working knowledge in German; an introduction to the grammar and syntax of German for the purpose of translating written German into English. May count toward a general elective only. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

# **International Language Studies**

#### INLS 121 - Elementary \_\_\_\_\_ I

Credits: 3 | significant aspects of culture of the foreign language—oral and listening work stressed. A one-hour lab per week is required. Language options can be discussed with the Department of INLS. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### INLS 122 - Elementary \_\_\_\_\_ II

Credits: 3 | Grammar with reading and writing continued in the context of significant aspects of culture of the foreign language—oral and listening work progressively increased. | A one-hour lab per week is required. Language options can be discussed with the Department of INLS. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### INLS 235 - Intermediate \_\_\_\_\_\_

Credits: 4 | Grammar, reading, composition, oral and aural exercises in the context of significant aspects of the culture of the foreign language. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): INLS 122 with a minimum grade of C or permission of the instructor. | Schedule Type: Lecture, Lab | College Code: CAS

#### INLS 295 - Directed Study/Readings/Research/Project

Credits: 1 | In the area of language, culture, literature, or international trade. INLS495 is open only to qualified upper division students. Permission of instructor required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable with different topics | Schedule Type: Blended Learning, Independent | College Code: CAS

#### INLS 330 - French/Spanish Service Fieldwork

**Credits:** 1,2 | Designed for students having an advanced level of proficiency in French or Spanish. Services may include activities such as mentoring international students on and off campus, tutoring, interpreting and translating for community and government

agencies. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 2 credits | Schedule Type: Practicum | College Code: CAS

#### INLS 400 - Topics in \_\_\_\_\_

Credits: 3 | A study of selected topics in language, culture, literature, or international trade. Topic and credits to be announced. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### INLS 458 - Methods of Foreign Language Instruction: K-12

Credits: 3 | An overview of approaches and practical techniques in foreign language instruction as well as the theoretical notions underlying current trends in classroom practice. Topics of study will include pedagogical practices and research in FL teaching, ways of using that research, and practical applications of instructional methods. This course focuses on methods for K–12. Attending the Michigan World Language Association Conference in Lansing is required. Required for teacher certification. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### INLS 478 - Study Tour:

**Credits:** 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | **Grade Mode:** Noncredit (NC,W) | **Repeatable:** Repeatable | **Schedule Type:** Blended Learning | **College Code:** CAS

#### INLS 490 - Language and International Trade Internship/Practicum

Credits: 3 | A one-semester, full-time work assignment which provides the opportunity to extend theoretical classroom learning in an appropriate setting in the U.S. or abroad. A final report is required. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Practicum | College Code: CAS

#### INLS 495 - Directed Study/Readings/Research/Project

Credits: 1 | In the area of language, culture, literature, or international trade. INLS495 is open only to qualified upper division students. Permission of instructor required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable with different topics | Schedule Type: Independent | College Code: CAS

#### INLS 575 - Topics in \_\_\_\_\_

Credits: 1 | A study of selected topics in language, literature, or civilization. Topics and credits to be announced. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### INLS 590 - Directed Study/Reading/Research/Project

Credits: 1 | Studies in the area of French/Spanish language, literature, or civilization, as determined in consultation with the instructor. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

# Italian

#### ITLN 141 - Elementary Italian I

Credits: 3 | ignificant aspects of culture—oral and listening work stressed. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall, alternate years | College Code: CAS

# ITLN 142 - Elementary Italian II

Credits: 3 | Grammar and reading continued: oral and listening work progressively increased. A one-hour lab per week is required. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): ITLN171 with a minimum grade of C or permission of the instructor. | Schedule Type: Lecture/Lab | Offering: Spring | College Code: CAS

#### ITLN 436 - Contemporary Italian Culture

Credits: 3 | Studies of the life and people of Italian speaking countries through lectures and readings in standard Italian. Readings are related to geography, history, politics, business, social problems, arts, and literatures. Conducted entirely in Italian. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### ITLN 468 - Italian Fine Arts, Literature and Film

Credits: 3 | Analysis and comparison of artistics differences between selected pieces of Italian literature and their film adaptation. Emphasis on language and all artistic expressions connected to the identity of the Italian culture and society. Conducted entirely in Italian. | Weekly: 3 lectures | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# **Portuguese**

#### PORT 171 - Elementary Portuguese I

Credits: 3 | Grammar with reading and writing of simple Portuguese in the context of significant aspects of culture—oral and listening work stressed. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | Offering: Alternate years | College Code: CAS

#### PORT 172 - Elementary Portuguese II

Credits: 3 | Grammar and reading continued: oral and listening work progressively increased. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PORT 171 with a minimum grade of C or permission of instructor. | Schedule Type: Lecture, Lab, Lecture/Lab | College Code:

#### PORT 420 - Portuguese Literature & Culture

Credits: 3 | A study of selected major Portuguese and Brazilian writers whose works reflect important political, social, moral, and cultural aspects of Portuguese societies. Conducted entirely in Portuguese. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PORT 430 - Contemporary Brazilian Culture

Credits: 3 | An introduction to the life and people of Brazil through lectures and readings in Brazilian Portuguese on the geography, history, politics, social problems, arts, business and literature of the region. Conducted entirely in Portuguese. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

# Spanish

#### SPAN 171 - Elementary Spanish I

Credits: 3 | Grammar with reading and writing of simple Spanish in the context of significant aspects of culture—oral and listening work stressed. Elementary Spanish I is designed for students who have studied no Spanish or less than 2 years of high-school Spanish or its equivalent. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### SPAN 172 - Elementary Spanish II

Credits: 3 | Grammar and reading continued: oral and listening work progressively increased. Designed for students with 23 years of high-school Spanish or its equivalent. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SPAN 171 with a minimum grade of C or permission of instructor. | Schedule Type: Lecture/Lab | College Code: CAS

#### SPAN 275 - Intermediate Spanish

Credits: 4 | Grammar, reading, composition, oral and listening exercises on the intermediate level, including significant aspects of Spanish culture. | A one-hour lab per week is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SPAN 172 with a minimum grade of C or permission of instructor. | Schedule Type: Lecture/Lab | College Code: CAS

#### SPAN 280 - Spanish Conversation and Composition

Credits: 3 | Training in oral and writing self-expression, with emphasis on fluency and accuracy. Acquisition of idioms and review of different speaking and writing levels that exist within theSpanish language. Special attention to important differences that exist among allSpanish speaking countries when using the language in bothspeaking and writing. Reading comprehension and study of grammatical structures are important components of this course. | Weekly: 3 lectures and a 1-hour lab | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SPAN 275 with a minimum grade of C or instructor permission | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### SPAN 325 - Spanish for the Medical Professions

Credits: 3 | Spoken and written Spanish used by the medical professions in the Spanish-speaking world. Strong emphasis on vocabulary, phrases, medical terminology, and specific language use in a doctor's office and hospital settings. Basic knowledge of Spanish recommended. | An arranged lab is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### SPAN 405 - Spanish Grammar Review

**Credits:** 1 | A review of all basic grammar rules that are required to elaborate written documents and to help in the process of achieving fluency. Special emphasis is given to conjugation, orthography, and syntax. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### SPAN 416 - Spanish for Native Speakers

Credits: 3 | An in-depth study of the Spanish language for native speakers who have not had previous formal academic instruction in Spanish. Special emphasis will be given to oral and written communication by focusing on grammar, syntax, and correct usage of the Spanish language. Conducted entirely in Spanish. | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### SPAN 420 - Advanced Spanish Written and Oral Communication

Credits: 3 | A comprehensive study of Spanish grammar for written and oral communication. A review of techniques and strategies to improve communication through creative writing, speech preparation, and class presentations. Emphasis on language fluency and accuracy. Conducted entirely in Spanish. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SPAN 426 - Contemporary Spain

Credits: 3 | An overview of contemporary Spain and its role in Europe as well as Latin America. Special consideration of geographical aspects, commerce, industry, tourism, education, political settings, and status of the Monarchy are given. Conducted entirely in Spanish. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### SPAN 434 - Spanish Culture and Ethics

Credits: 3 | A course designed to explore basic concepts related to ethics in the Spanish world. It will include religion, tradition, work environment, education, discrimination, migration, politics, and social differences. Conducted entirely in Spanish. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SPAN 436 - Spanish-American Culture

Credits: 3 | An introduction to the life and people of Spanish America through lectures and readings in standard Spanish on the geography, history, politics, social problems, arts, and literature of the area. Conducted entirely in Spanish. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SPAN 438 - Mexico and Central American Culture

**Credits:** 3 | An overview of the Mexico and Central American cultures and their presence in the United States of America. Special consideration to customs, traditions, values, lifestyle, and social problems along with some historical events that have greatly influenced Mexicans and Central Americans. Conducted entirely in Spanish. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

### SPAN 439 - Spanish Caribbean Culture

Credits: 3 | A course designed to explore Hispanic culture and traditions in the Spanish-speaking Caribbean islands. Special interest in Cuba, Dominican Republic and Puerto Rico and their immigration trends to the United States of America. A study of their lifestyle, values, traditions, and customs. Conducted entirely in Spanish. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

### SPAN 446 - Spanish and Latin American Drama

Credits: 3 | A study of selected major Spanish and Latin American writers whose works reflect important political, social, moral, and cultural aspects of Hispanic societies. Conducted entirely in Spanish. | An arranged lab is required | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

#### SPAN 447 - Spanish for Translation

Credits: 3 | An introduction to the basic principles of translation from English to Spanish and from Spanish to English. An approach to techniques used in writing translation. Strong emphasis on written translations. Conducted entirely in Spanish. | An arranged lab is required | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Blended Learning, Lecture/Lab | College Code: CAS

#### SPAN 448 - Spanish and Latin American Literature and Film

Credits: 3 | Comparison of artistic and linguistic differences between selected pieces of Spanish and Latin American literature and their film adaptation. Emphasis on language, characters, and cultural aspects of society. Conducted entirely in Spanish. | An arranged lab is required | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### SPAN 449 - Spanish for Interpreters

Credits: 3 | A study of the basic principles of oral interpretation from English to Spanish and from Spanish to English. An approach to techniques used in oral interpretation. Strong emphasis on oral communication. Conducted entirely in Spanish. | An arranged lab is required | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### SPAN 456 - Spanish for Speech Pathologists and Audiologists

Credits: 3 | Spoken and written Spanish used by speech pathologists and audiologists in both the medical and the educational fields in the United States of America as well as Spanish-speaking countries in the world. Strong emphasis on vocabulary, including specific terminology used in medical settings. This course is specifically oriented to students completing a degree in Spanish and Speech Language Pathology and Audiology as well as to those completing a degree in translation. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SPAN 457 - Spanish Media Translation

Credits: 3 | A study of the basic principles of translation in the media. Comparison between translation of written documents and oral messages. Special attention to translating news, commercials, movies, websites, speeches, newspapers, and magazines. Conducted in both English and Spanish. | An arranged lab is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Lecture/Lab | College Code: CAS

#### SPAN 470 - Spanish for International Trade

Credits: 3 | Spoken and written Spanish common to the Spanish-speaking world of business and industry, with emphasis upon business practices, and the writing and translating of business letters and professional reports. Cross-cultural references provide opportunities for comparative and contrastive analysis of American and Spanish cultural patterns in business settings. Conducted entirely in Spanish. | An arranged lab is required | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Lab, Blended Learning, Lecture/Lab | College Code: CAS

#### SPAN 488 - Spanish for International Relations

Credits: 3 | Spoken and written Spanish common to the Spanish-speaking world of international relations with emphasis in vocabulary related to government agencies, non-profit organizations, diplomacy, religious entities, independent agencies (UN, OEA). Special emphasis in communication. Conducted entirely in Spanish. | An arranged lab is required | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | College Code: CAS

# Liberal Arts, General Studies & Interdisciplinary Studies

#### **On-Campus Degree Programs**

Nethery Hall, Room 135 269-471-3411; Fax 269-471-6236 may@andrews.edu Donald May. *Advisor* 

#### **Distance Degree Programs**

Griggs Hall, Room 120 269-471-6570 stuservgriggs@andrews.edu www.andrews.edu/distance/ Glynis Bradfield, *Advisor* 

#### Mission

The Liberal Arts, General Studies & Interdisciplinary Studies programs serve students who need an individualized and interdisciplinary degree, and house specific courses that do not naturally fit within any existing departments. The goal is to cooperate with the mission of the sponsoring departments and the fundamental mission of Andrews University.

# For more information about the Distance Education options at Andrews University, please visit the following links:

- Course information interactive and self-paced online course descriptions
- Student Services videos, tutorials, and contact information for distance students
- Apply online or contact a distance admissions counselor
- All distance degrees offered by Andrews University

#### **Associates**

# General Studies AA

The General Studies Associate of Arts degree is designed to serve students seeking to complete a degree for personal or professional goals. On-campus students looking to complete the General Studies AA will need to make application in the College of Arts & Sciences Dean's Office (Nethery Hall, Room 135). Students electing to complete more than 50% of the program online will choose the distance education version, coordinated through the School of Distance Education.

# **Degree Requirements**

- Complete a minimum of 62 semester credits
- Fulfill the Andrews Core Experience for an Associate degree
- Fulfill the general associate degree requirements
- Course selection is made in consultation with the advisor
- Earn a minimum of 15 semester credits through Andrews University
- A minimum of 9 credits of the major must be taken in residence
- The overall GPA for all courses (including transfer credits) must be 2.0
- The GPA for all focus-area courses (including transfer credits) must be 2.25

# General Studies AS

The General Studies Associate of Science degree is designed to serve students seeking to complete a degree for personal or professional goals. On-campus students looking

to complete the General Studies AS will need to make application in the College of Arts & Sciences Dean's Office (Nethery Hall, Room 135). Students electing to complete more than 50% of the program online will choose the distance education version, coordinated through the School of Distance Education.

# **Degree Requirements**

- Complete a minimum of 62 semester credits
- Fulfill the Andrews Core Experience for an Associate degree
- Fulfill the general associate degree requirements
- Course selection is made in consultation with the advisor
- Earn a minimum of 15 semester credits through Andrews University
- A minimum of 9 credits of the major must be taken in residence
- The overall GPA for all courses (including transfer credits) must be 2.0
- The GPA for all focus-area courses (including transfer credits) must be 2.25

# **Bachelors**

# General Studies BA

The General Studies Bachelor of Arts degree is designed to serve students seeking to complete a degree for personal or professional goals. On-campus students looking to complete the General Studies BA will need to make application in the College of Arts & Sciences Dean's Office (Nethery Hall, Room 135). Students electing to complete more than 50% of the program online will choose the distance education version, coordinated through the School of Distance Education.

# **Program Requirements**

- Complete a minimum of 124 semester credits
- Fulfill the Andrews Core Experience for a BA degree
- Fulfill the general baccalaureate degree requirements
- A minimum of 33 semester credits in the student's chosen focus area, with at least 11 credits numbered 300 or above
- A minimum of 30 semester credits from courses numbered 300 or above
- Earn a minimum of 30 semester credits through Andrews University
- Elective courses to fill the balance of 124 semester credits
- The overall GPA for all courses (including transfer credits) must be 2.0
- The GPA for all focus-area courses (including transfer credits) must be 2.25
- No course with a grade below C- may count toward the focus area

# General Studies BS

The General Studies Bachelor of Science degree is designed to serve students seeking to complete a degree for personal or professional goals. On-campus students looking to complete the General Studies BS will need to make application in the College of Arts & Sciences Dean's Office (Nethery Hall, Room 135). Students electing to complete more than 50% of the program online will choose the distance education version, coordinated through the School of Distance Education.

# **Degree Requirements**

- A minimum of 124 semester credits
- Fulfill the Andrews Core Experience requirements for a BS degree
- Fulfill the general baccalaureate degree requirements
- A minimum of 39 semester credits in the student's chosen focus area, with at least 13 credits numbered 300 or above
- A minimum of 30 semester credits from courses numbered 300 or above
- Earn a minimum of 30 semester credits through Andrews University
- Elective courses to fill the balance of 124 semester credits
- The overall GPA for all courses (including transfer credits) must be 2.0

The GPA for all focus-area courses (including transfer credits) must be 2.25

No course with a grade below C- may count toward the focus area

# Liberal Arts BA, Humanities Concentration

# **Program Description**

The Andrews University liberal arts curriculum seeks to challenge students by preparing them for an increasingly complex and interconnected world.

The liberal arts degrees demonstrate the following learning objectives in each of the concentrations: critical thinking, effective communication, and life-long learning and the preparation of students for lives of leadership and service.

The degree on the diploma and transcript will be listed as a Bachelor of Arts or a Bachelor of Science. The major on the transcript will be Liberal Arts, with a listing of one of four concentrations: Humanities, Sciences, Social Sciences, Interdisciplinary.

The Liberal Arts degree program will be administered from the College of Arts and Sciences Dean's Office, with the Associate Dean assigned the responsibility to coordinate the advising of students. Academic oversight of the program will be the responsibility of the Liberal Arts Advisory Committee whose membership will include representation from the departments represented by the curricular requirements.

Liberal Arts students will be required to keep a portfolio of work done during their education in order to demonstrate progress toward meeting learning objectives.

# Degree Details

- Divided into four Concentrations
  - Humanities
  - Sciences
  - Social Sciences
  - Interdisciplinary
- Governed by an Andrews University Advisory Committee
- A minimum of 124 semester credits must be earned, including a concentration of 45 credits plus general education requirements and electives
- A minimum of 30 semester credits in the degree must be from courses numbered 300 and above
- A minimum of 60 credits must be earned from approved AU courses
- A minimum of 15 credits in the concentration must be earned from approved AU courses numbered 300 and above
- Why and For Whom
  - O Person with a broader interest than a single discipline
  - For those who switched majors
  - O Fall-back for the capable student
  - O More flexible than single-discipline degree
  - For affiliate campuses only approved concentrations

#### **Humanities Concentration**

- Required course: PHIL 224 Introduction to Philosophy
- Three foundation classes are required.
  - O RELG 350 World Religions and
  - O Two from the following list:
    - ARTH 220 Language of Art
    - MUHL 214 Enjoyment of Music
    - ENGL 255 Studies in Literature
- 33 credits taken from three of the six areas listed below (including 15 upperdivision credits from two of the six following areas):
  - Fine Arts
  - Philosophy
  - O Music
  - Literature
  - History
  - Religion

#### Total Credits: 45

# Liberal Arts BA/BS, Interdisciplinary Concentration

# **Program Description**

The Andrews University liberal arts curriculum seeks to challenge students by preparing them for an increasingly complex and interconnected world.

The liberal arts degrees demonstrate the following learning objectives in each of the concentrations: critical thinking, effective communication, and life-long learning and the preparation of students for lives of leadership and service.

The degree on the diploma and transcript will be listed as a Bachelor of Arts or a Bachelor of Science. The major on the transcript will be Liberal Arts, with a listing of one of four concentrations: Humanities, Sciences, Social Sciences, Interdisciplinary.

The Liberal Arts degree program will be administered from the College of Arts and Sciences Dean's Office, with the Associate Dean assigned the responsibility to coordinate the advising of students. Academic oversight of the program will be the responsibility of the Liberal Arts Advisory Committee whose membership will include representation from the departments represented by the curricular requirements.

Liberal Arts students will be required to keep a portfolio of work done during their education in order to demonstrate progress toward meeting learning objectives.

# Degree Details

- Divided into four Concentrations
  - Humanities
  - Sciences
  - Social Sciences
  - Interdisciplinary
- Governed by an Andrews University Advisory Committee
- A minimum of 124 semester credits must be earned, including a concentration of 45 credits plus general education requirements and electives
- A minimum of 30 semester credits in the degree must be from courses numbered 300 and above
- A minimum of 60 credits must be earned from approved AU courses
- A minimum of 15 credits in the concentration must be earned from approved AU courses numbered 300 and above
- Why and For Whom
  - O Person with a broader interest than a single discipline
  - O For those who switched majors
  - O Fall-back for the capable student
  - More flexible than single-discipline degree
  - For affiliate campuses only approved concentrations

# Interdisciplinary Concentration

- 45 credits total
- Required upper division: 15 credits
- Required course: PHIL 224 Introduction to Philosophy
- The equivalent of two 20-hour focus areas approved by the Andrews liberal arts advisory committee
- Restrictions on available minors for affiliate sites will be impacted by the terms and conditions of the specific affiliation agreement

#### **Total Credits: 45**

Liberal Arts BS, Sciences Concentration

# **Program Description**

The Andrews University liberal arts curriculum seeks to challenge students by preparing them for an increasingly complex and interconnected world.

The liberal arts degrees demonstrate the following learning objectives in each of the concentrations: critical thinking, effective communication, and life-long learning and the preparation of students for lives of leadership and service.

The degree on the diploma and transcript will be listed as a Bachelor of Arts or a Bachelor of Science. The major on the transcript will be Liberal Arts, with a listing of one of four concentrations: Humanities, Sciences, Social Sciences, Interdisciplinary.

The Liberal Arts degree program will be administered from the College of Arts and Sciences Dean's Office, with the Associate Dean assigned the responsibility to coordinate the advising of students. Academic oversight of the program will be the responsibility of the Liberal Arts Advisory Committee whose membership will include representation from the departments represented by the curricular requirements.

Liberal Arts students will be required to keep a portfolio of work done during their education in order to demonstrate progress toward meeting learning objectives.

# **Degree Details**

- Divided into four Concentrations
  - Humanities
  - Sciences
  - Social Sciences
  - Interdisciplinary
- Governed by an Andrews University Advisory Committee
- A minimum of 124 semester credits must be earned, including a concentration of 45 credits plus general education requirements and electives
- A minimum of 30 semester credits in the degree must be from courses numbered 300 and above
- A minimum of 60 credits must be earned from approved AU courses
- A minimum of 15 credits in the concentration must be earned from approved AU courses numbered 300 and above
- Why and For Whom
  - O Person with a broader interest than a single discipline
  - For those who switched majors
  - O Fall-back for the capable student
  - O More flexible than single-discipline degree
  - O For affiliate campuses only approved concentrations

#### **Sciences Concentration**

- Required upper division: 15 credits
- Required course: PHIL 224 Introduction to Philosophy
- Four foundation classes chosen from:
  - O BIOL 165 Foundations of Biology
  - O CHEM 131 General Chemistry I
  - PHYS 141 General Physics I or PHYS 241 Physics for Scientists and Engineers I
  - MATH 191 Calculus I or MATH 195 Calculus I for Biology
- Remaining credits from post-foundation classes
  - Biology
  - O Chemistry & Biochemistry
  - Physics
  - Mathematics

## **Total Credits: 45**

# Liberal Arts BS, Social Sciences Concentration

# **Program Description**

The Andrews University liberal arts curriculum seeks to challenge students by preparing them for an increasingly complex and interconnected world.

The liberal arts degrees demonstrate the following learning objectives in each of the concentrations: critical thinking, effective communication, and life-long learning and the preparation of students for lives of leadership and service.

The degree on the diploma and transcript will be listed as a Bachelor of Arts or a Bachelor of Science. The major on the transcript will be Liberal Arts, with a listing of one of four concentrations: Humanities, Sciences, Social Sciences, Interdisciplinary.

The Liberal Arts degree program will be administered from the College of Arts and Sciences Dean's Office, with the Associate Dean assigned the responsibility to coordinate the advising of students. Academic oversight of the program will be the responsibility of the Liberal Arts Advisory Committee whose membership will include representation from the departments represented by the curricular requirements.

Liberal Arts students will be required to keep a portfolio of work done during their education in order to demonstrate progress toward meeting learning objectives.

# **Degree Details**

- Divided into four Concentrations
  - Humanities
  - Sciences
  - Social Sciences
  - Interdisciplinary
- Governed by an Andrews University Advisory Committee
- A minimum of 124 semester credits must be earned, including a concentration of 45 credits plus general education requirements and electives
- A minimum of 30 semester credits in the degree must be from courses numbered 300 and above
- A minimum of 60 credits must be earned from approved AU courses
- A minimum of 15 credits in the concentration must be earned from approved AU courses numbered 300 and above
- Why and For Whom
  - O Person with a broader interest than a single discipline
  - For those who switched majors
  - O Fall-back for the capable student
  - More flexible than single-discipline degree
  - O For affiliate campuses only approved concentrations

#### **Social Sciences Concentration**

- Required course: PHIL 224 Introduction to Philosophy
- Three foundation classes are required. It is highly recommended that you take upper-division courses in the two focus areas you choose, since they are likely to be prerequisites for some of the other upper-division classes you will need.
   Choose three from the following list:
  - O ANTH 124 Introduction to Anthropology
  - FMST 115 Introduction to Family Studies or FMST 201 Personal Relationships
  - O PSYC 101 Introduction to Psychology
  - O SOCI 119 Principles of Sociology
  - O PLSC 104 American Government
  - ECON 225 Principles of Macroeconomics or ECON 226 Principles of Microeconomics
- 27 upper-division credits in two of the following six areas with a minimum of 4
  upper-division classes from the two focus areas (for a total of 12 credits). The
  other 15 upper-division credits may come from any of the areas in the social
  sciences noted below:
  - Anthropology
  - Family Studies
  - Psychology
  - Sociology
  - Political Science
  - Economics
- Two classes of electives (6 credits) from any of these acronyms: ANTH, FMST, PSYC, SOCI, PLSC, or ECON

**Total Credits: 45** 

# **Undergraduate Minors**

# General Studies Minor

- A minor in General Studies may be used in conjunction with regular degrees or with a General Studies major
- A GPA of at least 2.00 is required in all transfer credits—and in all credits earned at Andrews University that are counted for the minor—with no grade below C-
- At least 3 semester credits must be earned on campus in courses numbered 300 or above
- No more than 5 semester credits from the major can be used in the minor

#### Total Credits: 20

# **General Studies**

#### GNST 091 - Academic Tutorial Support

Credits: 1–4 | A tutorial application of the principles of academic success. Includes one-on-one tutoring and/or group-learning experiences. Could also include academic or cognitive evaluations when necessary. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Prerequisite(s): Consent of the instructor required. | Schedule Type: Independent | College Code: CAS

#### GNST 298 - PLA: (Special Topic)

Credits: variable | PLA (Prior Learning Assessment) is a process which validates learning experiences that have occurred outside traditional college/university academic programs. A portfolio of evidence for demonstrating experience and competency justifies and determines the amount of credit granted. | Grade Mode: By examination (P) | Repeatable: Repeatable with different topics | Schedule Type: Independent | College Code: CAS

#### GNST 416 - GRE Standardized Test Preparation: Verbal

Credits: 1 | Review of topics covered on the standardized GRE exam. Includes at least one full-length practice exam. | Grade Mode: Satisfactory (S,U,I,W) | Schedule Type: Lecture | College Code: CAS

#### GNST 417 - GRE Standardized Test Preparation: Quantitative

Credits: 1 | Review of topics covered on the standardized GRE exam. Includes at least one full-length practice exam. | Grade Mode: Satisfactory (S,U,I,W) | Schedule Type: Lecture | College Code: CAS

## GNST 498 - PLA: (Special Topic)

Credits: variable | PLA (Prior Learning Assessment) is a process which validates learning experiences that have occurred outside traditional college/university academic programs. A portfolio of evidence for demonstrating experience and competency justifies and determines the amount of credit granted. | Grade Mode: By examination (P) | Repeatable: Repeatable up to 32 credits | Schedule Type: Independent | College Code: CAS

#### **GNST 499V - PLA Portfolio Development**

# Mathematics

Haughey Hall, Room 121 269-471-3423 math@andrews.edu www.andrews.edu/math

#### Faculty

Shandelle M. Henson, Chair
Joon Hyuk Kang
Robert C. Moore
Yun Myung Oh
Marian Prince (Adjunct Faculty)
Amanda Umlauf (Mathematics & Science Center)
Abdias Vence (Mathematics & Science Center)
Lynelle M. Weldon

#### Distance Education Faculty

Aurora Burdick (Adjunct Faculty)

Credits: 2 | The development of a portfolio of evidence to present for Prior Learning Assessment. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

# **Interdisciplinary Studies**

Details of departmental course offerings and course descriptions may be obtained from the department(s) involved.

#### IDSC 278 - Study Tour:

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### IDSC 280 - Cooperative Education in\_\_\_\_\_(subject area)

Credits: 0.5,1 | Supervised work experience with a cooperating industry, agency, or institution. The student is supervised by his/her department. At least 175 hours of work required per credit. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Sophomore standing or above and permission of the department chair. Students must apply and be accepted one semester in advance of their planned cooperative education experiences. | Repeatable: Repeatable up to 1 credit | Schedule Type: Independent | College Code: CAS

#### IDSC 294 - Off-Campus Study in \_\_\_\_\_

Credits: 3 | See advisor for details. | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable up to 12 credits | Schedule Type: Independent | College Code: CAS

#### IDSC 296 - Student Missionary/Taskforce Experience

Credits: 0 | \$ - Course or lab fee | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDSC 380 - Cooperative Education in\_\_\_\_\_(subject area)

Credits: 0.5,1 | Supervised work experience with a cooperating industry, agency, or institution. The student is supervised by his/her department. At least 175 hours of work required per credit. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Sophomore standing or above and permission of the department chair. Students must apply and be accepted one semester in advance of their planned cooperative education experiences. | Repeatable: Repeatable up to 1 credit | Schedule Type: Independent | College Code: CAS

#### IDSC 394 - Off-Campus Study in \_\_\_\_\_

Credits: 0–15 | See advisor for details. | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### IDSC 456 - Integrated Science

Credits: 4 | This course is designed to provide a science experience that models what science professionals do in the real world. This course will integrate content from life, physical and earth science using a project driven, problem solving approach.

Laboratory and lecture experiences are integrated continuously and include a strong technology component. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | College Code: CAS

#### IDSC 596 - Student Missionary/Taskforce Experience

Jonathan Duncan (Adjuct Faculty) Jane Nesbit (Adjunct Faculty)

#### Emeriti

Kenneth L. Franz Theodore R. Hatcher Donald H. Rhoads

#### Mission

Through teaching, research and service, the Department of Mathematics seeks to provide leadership in the mathematical sciences by preparing students with the mathematical understanding, problem-solving skills and dispositions that enable them to excel in their chosen careers; increasing mathematical and scientific knowledge through publication and presentation; supporting the broader mathematics education community; and mentoring others for generous service through a committed Christian life.

Mathematics is foundational to physics, engineering, and computer science, and is increasingly important in many fields of study such as finance, accounting, economics, biology, medicine, and environmental science. Students majoring in these and other fields will find that acquiring an additional major in mathematics or mathematical studies greatly enhances the marketability of their degree.

#### Special Requirements and Placement Test

#### Non-overlapping Credit Restrictions

Because there is substantial overlap in material covered in the following groups of courses, no student is granted credit (other than general elective credit) in more than one course from each group:

- 1. MATH182, 191, 195 (Calculus with Applications, Calculus I, Calculus I for Biology)
- MATH145, 165, 166 (Reasoning with Functions, College Algebra, College Algebra for Business)

#### Minimum Grade for Prerequisites

Except for MATH191 and 195 which require a C in the prerequisite class (MATH168), the minimum grade to satisfy prerequisites is C-.

#### Mathematics Placement Examination (MPE) and General Education Mathematics Requirement

For more information on the MPE and General Education Mathematics Requirements follow the link. The MPE score is valid as a prerequisite for mathematics courses for 3 years after it is earned. For more information, see the Mathematics Web site.

#### Behavioral Neuroscience

The Department of Mathematics is a participant in the Behavioral Neuroscience program funded by the National Science Foundation.

### **Bachelors**

# Mathematics BS

# Major Requirements: 39

#### Required courses

- MATH 191 Calculus I Credits: 4 or MATH 195 Calculus I for Biology Credits 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3
- MATH 315 Linear Algebra Credits: 3
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- MATH 389 Mathematics Colloquium Credits: 0 or PHYS 277 Physics Colloquium Credits 0 (4 semesters)
- MATH 431 Real Analysis I Credits: 3
- MATH 432 Real Analysis II Credits: 3
- MATH 441 Abstract Algebra I Credits: 3

#### At least 6 credits in additional courses

In consultation with a Department of Mathematics advisor, students should choose at least 6 credits from the following courses:

- MATH 405 Applied Mathematics Credits: 3
- MATH 408 Complex Analysis Credits: 3
- MATH 426 Mathematical Modeling in Biology Credits: 3
- MATH 442 Abstract Algebra II Credits: 3
- MATH 475 Geometry Credits: 3
- MATH 487 Special Topics in \_\_\_\_\_ Credits: :
- MATH 495 Independent Study Credits: 1
- MATH 497 Research in Mathematics Credits: 0–3
- STAT 340 Probability Theory with Statistical Applications Credits: 3

# Students in a secondary teacher certification program are required to take

- MATH 375 Secondary School Mathematics Teaching Credits: 3
- MATH 475 Geometry Credits: 3
- STAT 285 Elementary Statistics Credits: 3

#### Note:

MATH 375 and STAT 285 do not count toward the 39 major credits.

A major field test in mathematics is required during the senior year.

# Cognate Course—3

- CPTR 151 Computer Science I Credits: 3 or
- PHYS 235 MATLAB Credits: 2,3

# Mathematics Education BS

# Major Requirements: 36

- MATH 191 Calculus I Credits: 4 or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- MATH 375 Secondary School Mathematics Teaching Credits: 3
- MATH 475 Geometry Credits: 3
- MATH 315 Linear Algebra Credits: 3 or MATH 441 Abstract Algebra | Credits: 3
- MATH 286 Differential Equations Credits: 3 or MATH 426 Mathematical Modeling in Biology Credits: 3
- MATH 389 Mathematics Colloquium Credits: 0 or PHYS 277 Physics Colloquium Credits: 0 (4 semesters)
- STAT 285 Elementary Statistics Credits: 3
- STAT 340 Probability Theory with Statistical Applications Credits: 3

#### Note:

Students in an elementary teacher certification program take MATH 220 instead of MATH 375. This major is available only to those who are obtaining elementary or secondary teacher certification.

A major field test in mathematics is required during the senior year.

# Cognate Course—3 credits

- CPTR 151 Computer Science I Credits: 3 or
- PHYS 235 MATLAB Credits: 2,3

# Andrews Core Experience—for Mathematics Education with Secondary Certification

For more information regarding Andrews Core Experience requirements or Secondary Certification with a BA or BS degree, see the department of Teaching, Learning & Curriculum

Note the following specific requirements:

# Religion: 12\*

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4 and
- a 3-credit elective chosen in consultation with your SED advisor

# Language/Communication:

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3

COMM 450 - Communication in the Classroom Credits: 3

# Foreign Language (BA only)

Intermediate Language (4)

#### History:

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3

#### Fine Arts/Humanities:

Choose one course from:

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art (3)
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3
- Ensemble Music (3)

### Life/Physical Sciences:

Take one course from the Life Sciences and one from the Physical Sciences. Choose from the General Education Program requirements.

#### Mathematics:

Covered in major

#### Service:

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

#### Social Sciences:

- GDPC 302 Educational Psychology Credits: 3 &
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### Fitness Education:

HLED 120 - Fit for Life Credits: 1 plus two Fitness Education courses

# Non-degree Majors

# Mathematical Studies Major

# Major Requirements: 30

#### Required courses:

- MATH 191 Calculus I Credits: 4 or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 389 Mathematics Colloquium Credits: 0 or PHYS 277 Physics Colloquium Credits: 0 (4 semesters)

#### At least 15 credits in additional courses

In consultation with a Department of Mathematics advisor, students will take at least

- MATH 286 Differential Equations Credits: 3
- MATH 315 Linear Algebra Credits: 3
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- MATH 405 Applied Mathematics Credits: 3
- MATH 408 Complex Analysis Credits: 3
- MATH 426 Mathematical Modeling in Biology Credits: 3
- MATH 431 Real Analysis I Credits: 3

- MATH 432 Real Analysis II Credits: 3
- MATH 441 Abstract Algebra I Credits: 3
- MATH 442 Abstract Algebra II Credits: 3
- MATH 475 Geometry Credits: 3
- MATH 487 Special Topics in \_\_\_\_\_ Credits: 1
- MATH 495 Independent Study Credits: 1

MATH 497 - Research in Mathematics Credits: 0-3

STAT 340 - Probability Theory with Statistical Applications Credits: 3

#### Note:

This major is available only as a second major, to those taking a major in another field.

# **Cognate Course--3**

- CPTR 151 Computer Science I Credits: 3 or
- PHYS 235 MATLAB Credits: 2,3

# **Undergraduate Minors**

# Mathematics Education Minor

This minor is available only to those obtaining elementary teacher certification. For more information regarding teacher certification with a minor, see the department of Teaching, Learning & Curriculum.

# Minor Requirements - 20

- MATH 168 Precalculus Credits: 4
- MATH 191 Calculus I Credits: 4 or MATH 195 Calculus I for Biology Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 220 Geometry and Numbers Credits: 3
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- STAT 285 Elementary Statistics Credits: 3

# Mathematics Minor

# Minor Requirements - 20

- MATH 191 Calculus I Credits: 4 or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3

#### At least 9 credits in additional courses

Choose at least 9 credits of additional courses in consultation with a departmental advisor:

- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3
- MATH 315 Linear Algebra Credits: 3
- MATH 355 Foundations of Advanced Mathematics Credits: 3
- MATH 405 Applied Mathematics Credits: 3
- MATH 408 Complex Analysis Credits: 3
- MATH 426 Mathematical Modeling in Biology Credits: 3
- MATH 431 Real Analysis I Credits: 3
- MATH 432 Real Analysis II Credits: 3
- MATH 441 Abstract Algebra I Credits: 3
- MATH 442 Abstract Algebra II Credits: 3
- MATH 475 Geometry Credits: 3
- MATH 487 Special Topics in \_\_\_\_\_ Credits: 1
- MATH 495 Independent Study Credits: 1

- MATH 497 Research in Mathematics Credits: 0–3
- STAT 340 Probability Theory with Statistical Applications Credits: 3

# Minor Requirements for elementary or secondary certification

For more information regarding teacher certification with a minor see the department of Teaching, Learning & Curriculum. Students in a secondary teacher certification program are required to take the following courses:

- MATH 355 Foundations of Advanced Mathematics Credits: 3
- MATH 375 Secondary School Mathematics Teaching Credits: 3
- MATH 475 Geometry Credits: 3
- STAT 285 Elementary Statistics Credits: 3
- STAT 340 Probability Theory with Statistical Applications Credits: 3
   NOTE: A major field test in mathematics is required during the senior year.
   Students in an elementary teacher certification program should take MATH 220 instead of MATH 375.

# Minor in Mathematics of Economics and Finance

This minor is available only to students obtaining a degree in the School of Business Administration.

# Minor Requirements - 20

- MATH 191 Calculus I Credits: 4 or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 286 Differential Equations Credits: 3
- STAT 285 Elementary Statistics Credits: 3
- STAT 340 Probability Theory with Statistical Applications Credits: 3

## **Mathematics**

MATH 091 and MATH 92 are provided for students not achieving a score of at least P2 on the Mathematics Placement Examination (MPE).

Students complete the sequence MATH091/092 by passing a set of proficiency tests in arithmetic and algebra, at which time a P2 score is awarded. When this occurs, the student has completed the Math Skill part of the General Education requirement, and is considered ready to take MATH 145, MATH 165, MATH 166 or STAT 285. Depending on the diligence and previous preparation of the student, this may occur at any time in the MATH 091/MATH 92 sequence.

#### MATH 091 - Arithmetic and Algebra Review I

Credits: 3 | Individualized review of arithmetic and algebra skills. Algebra topics include linear, quadratic and rational equations; graphs and systems of linear equations; and polynomial operations and factoring. Students completing the sequence requirements while enrolled in MATH091 are not required to take MATH 092. This developmental course does not count toward college credit. | \$ - Course or lab fee | Grade Mode: Normal with R (A-F,I,W,R) | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 92 - Arithmetic and Algebra Review II

Credits: 3 | Continuation of MATH091. Students not completing the sequence requirements but fulfilling attendance, participation, and progress requirements may receive an R grade requiring re-registration the next semester. This developmental course does not count toward college credit. | \$ - Course or lab fee | Grade Mode: Normal with R (A-F,I,W,R) | Prerequisite(s): MATH091 | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 145 - Reasoning with Functions

Credits: 3 | Functions given by tables, formulas, graphs, and words; inverse functions; linear, exponential, and other types of functions, such as quadratic, trigonometric, logarithmic, or power functions; rates of change and applications to science and business. Additional topics may be selected by the instructor. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE ? P2. | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 165 - College Algebra

Credits: 3 | Introduction to precalculus. Linear, quadratic, radical, and absolute value equations and inequalities; graphs of lines, parabolas, circles, ellipses and hyperbolas; composition and inverses of functions; transformations of graphs, symmetry; linear, quadratic, exponential, logarithmic, polynomial, and rational functions. Introduction to derivatives of polynomials. Applications to business and science, including interpretation of graphs and charts. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE ? P2. | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 165V - College Algebra

Credits: 3 | Introduction to precalculus. Linear, quadratic, radical, and absolute value equations and inequalities; graphs of lines, parabolas, circles, ellipses and hyperbolas; composition and inverses of functions; transformations of graphs, symmetry; linear, quadratic, exponential, logarithmic, polynomial, and rational functions. Introduction to derivatives of polynomials. Applications to business and science, including interpretation of graphs and charts. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Self-Paced (A-F,I,W) |
Prerequisite(s): MPE ? P2 | Schedule Type: Self-Paced | College Code: CAS

#### MATH 166 - College Algebra for Business

Credits: 3 | Introduction to precalculus. Linear, quadratic, radical, and absolute value equations and inequalities; graphs of lines, parabolas, circles, ellipses and hyperbolas; composition and inverses of functions; transformations of graphs, symmetry; linear, quadratic, exponential, logarithmic, polynomial, and rational functions. Introduction to derivatives of polynomials. Applications to business and science, including interpretation of graphs and charts. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE greater than or equal to P2 | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 167 - Precalculus Trigonometry

Credits: 1 | Trigonometric functions and their inverses, identities, trigonometric equations; laws of sines and cosines, vectors, applications, and selected topics. |
Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE ? P3orMATH 165 or MATH 166 |
Schedule Type: Lecture | College Code: CAS

#### MATH 168 - Precalculus

Credits: 4 | Linear, quadratic, and absolute value equations and inequalities with applications; radical equations; polynomial, rational, exponential, logarithmic, inverse, trigonometric functions; higher order equations; exponential and logarithmic equations; the unit circle, trigonometric identities and equations; Law of Sines and Cosines; vectors in the plane, polar coordinates and graphs; complex numbers and De Moivre's Theorem; conic sections. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE? P3 or MATH 165 or MATH 166 | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 168V - Precalculus

Credits: 4 | Linear, quadratic, and absolute value equations and inequalities with applications; radical equations; polynomial, rational, exponential, logarithmic, inverse, trigonometric functions; higher order equations; exponential and logarithmic equations; the unit circle, trigonometric identities and equations; Law of Sines and Cosines; vectors in the plane, polar coordinates and graphs; complex numbers and De Moivre's Theorem; conic sections. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): MPE ? P3 or MATH 165 or MATH 166. | Schedule Type: Self-Paced | College Code: CAS

#### MATH 182 - Calculus with Applications

Credits: 3 | Introduction to single-variable calculus, including limits, differentiation, optimization, and integration with applications to problems in business and the social sciences. Some topics from multivariable calculus, including partial derivatives and extrema of functions of two variables. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE ? P4 or MATH 167 or MATH 168 | Schedule Type: Lecture | College Code: CAS

#### MATH 191 - Calculus I

Credits: 4 | MATH191, 192 is a standard introduction to single-variable calculus. MATH 191 includes limits, continuity, derivatives, applications and integration up through substitution and integration by parts. Formal definitions of limit, derivative, and Riemann integral. Proofs of standard theorems, including the Fundamental Theorem of Calculus. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE=P5 or MATH 167 or MATH 168 with grade no lower than C. | Schedule Type: Lecture, Interactive Online | Offering: Fall, Spring | College Code: CAS

#### MATH 192 - Calculus II

Credits: 4 | Continuation of MATH191. Techniques of integration, improper integrals, applications of integrals, sequences, power series, Taylor and Maclaurin series, tests of convergence, error estimates, polar coordinates, parameterized curves, vectors, dot and cross products. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 191 or MATH 195. | Schedule Type: Lecture | Offering: Spring/May Express | College Code: CAS

#### MATH 195 - Calculus I for Biology

Credits: 4 | Introduction to single-variable calculus in the context of the life sciences from the dynamical systems point of view. Limits, continuity, derivatives, integration by substitution and by parts. Formal definitions of limit, derivative, and Riemann integral. Proofs of standard theorems, including the Fundamental Theorem of Calculus. In addition to standard topics, includes research applications to biology and medicine, an introduction to mathematical models and differential equations, equilibria, stability, and eigenvalues. Equivalent to MATH191 in serving as prerequisite to higher-level courses. | Course Attribute: Fulfills the General Education Mathematics reasoning requirement | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE=P5 or MATH 167 or MATH 168 with grade no lower than C; pre- or corequisite: BIOL 165 or BIOL 166 or consent of the instructor. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### MATH 215 - Introduction to Linear Algebra

Credits: 3 | Vectors, Euclidean n-space, matrices, systems of linear equations, determinants, eigenvalues, eigenvectors, vector spaces, and linear transformations with emphasis on applications and computation. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 182, MATH 191, or MATH 195. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### MATH 220 - Geometry and Numbers

Credits: 3 | Number systems and Euclidean geometry for elementary and middle school teachers. Topics include problem solving, reasoning and proof, computational algorithms, analysis and classification of geometric figures, geometric transformations, and other selected topics. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE ≥ P2. | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MATH 240 - Calculus III

Credits: 4 | Standard introduction to multivariable calculus. Vectors and vector functions, curves and surfaces, partial derivatives, multiple integrals, line and surface integrals. Stokes', Green's, and divergence theorems. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 192. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

### MATH 286 - Differential Equations

Credits: 3 | Ordinary differential equations as dynamical systems. Linear and nonlinear first order equations and systems, higher order linear equations, modeling, standard analytic and qualitative methods of solution, equilibria and stability, phase plane analysis. Computer graphing tools will be used. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 192. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### MATH 295 - Independent Study

Credits: 1 | Independent study of selected topics in mathematics under the supervision of a mathematics professor. Ordinarily a minimum of three hours of study per week is expected for each credit. The instructor may require written reports or oral presentations. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Consent of the instructor. | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MATH 315 - Linear Algebra

Credits: 3 | Vector spaces, eigenspaces, linear transformations, orthogonality, inner product spaces, quadratic forms, and selected topics. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 215, MATH 355. | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MATH 355 - Foundations of Advanced Mathematics

Credits: 3 | An introduction to concepts and methods that are fundamental to the study of advanced mathematics. Topics include logic, proof methods, set theory, relations, functions, number theory, and other selected topics from discrete mathematics. Mathematical reasoning and the reading and writing of proofs are emphasized. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 182, MATH 191, or MATH 195. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### MATH 375 - Secondary School Mathematics Teaching

**Credits:** 3 | Content, methods, and materials for secondary school mathematics teaching, including secondary mathematics content, mathematical problem solving, lesson preparation, teaching of skills and concepts, use of technology, assessment of learning, issues in teaching and learning, and other selected topics. | **Grade Mode:** 

Normal (A-F,I,W) | Prerequisite(s): MATH 355. | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MATH 389 - Mathematics Colloquium

Credits: 0 | Participation in at least 10 departmental colloquia or approved colloquia of other departments. Meets weekly, grade is based on attendance. | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### MATH 405 - Applied Mathematics

Credits: 3 | Solutions of first- and second-order partial differential equations and applications. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH 286. | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MATH 408 - Complex Analysis

Credits: 3 | Elementary complex analysis, contour integrals, complex series. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH 355. | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MATH 426 - Mathematical Modeling in Biology

Credits: 3 | Theory and application of linear and nonlinear mathematical models of biological processes. Topics selected from discrete- and continuous-time deterministic and stochastic modeling, analytic solution techniques, linearization, bifurcations, chaos, computer simulation, model parameterization, and model validation. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 191 or MATH 195. | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MATH 431 - Real Analysis I

Credits: 3 | Theorems on continuity, differentiation, integration, and convergence; additional selected topics such as topology, differentiable manifolds, and real analysis. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH 355. | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MATH 432 - Real Analysis II

Credits: 3 | Theorems on continuity, differentiation, integration, and convergence; additional selected topics such as topology, differentiable manifolds, and real analysis. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH 355, MATH 431. | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MATH 441 - Abstract Algebra I

Credits: 3 | Study of groups, rings, fields, modules, vector spaces, and algebras. |
Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH
355. | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MATH 442 - Abstract Algebra II

Credits: 3 | Study of groups, rings, fields, modules, vector spaces, and algebras. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 240, MATH 355, MATH 441 | Schedule Type: Lecture | Offering: As needed | College Code: CAS

### MATH 475 - Geometry

Credits: 3 | Axiomatic development and history of Euclidean and non-Euclidean geometries, constructions, geometric transformations, and selected topics from finite, fractal, affine, and projective geometries. Relation of these topics to secondary teaching. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 355. | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MATH 487 - Special Topics in \_\_\_\_\_

Credits: 1 | Consult the instructor in regard to the topic to be covered. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Consent of the instructor. | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### MATH 495 - Independent Study

Credits: 1 | Independent study of selected topics in mathematics to enable advanced students to pursue topics not offered in other scheduled courses. The student will study under the supervision of a mathematics professor whose prior approval is required. Ordinarily a minimum of three hours of study per week is expected for each credit. Grades are assigned on the basis of an instructor-selected procedure such as oral or written exams or reports. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Consent of the instructor. | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MATH 497 - Research in Mathematics

**Credits:** 0–3 | A research project in mathematics supervised by a faculty mentor. A minimum of 4 work hours per week is required for each credit earned and a minimum of 4 work hours per week is required for the zero-credit option. A written paper is required for both the zero-credit option and all other credit options. Students register

for each semester of ongoing research. | **Grade Mode:** Normal w S/DG (A-F,I,S,U,DG,W) | **Prerequisite(s):** Approval of the instructor. | **Repeatable:** Repeatable up to 6 credits | **Schedule Type:** Independent | **College Code:** CAS

#### MATH 530 - Topics in Teaching Mathematics

Credits: 2,3 | A. Algebra; B. Geometry; C. Analysis; D. Applications; Consult with department chair regarding availability in any given year. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Lecture | College Code: CAS

#### MATH 540 - Topics in Mathematics

Credits: 2,3 | Consult with the instructor in regard to the topic to be covered. |
Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Consent of the instructor. |
Repeatable: Repeatable up to 6 credits | Schedule Type: Lecture | College Code: CAS

### **Statistics**

#### STAT 285 - Elementary Statistics

Credits: 3 | A study of basic descriptive and inferential statistics, including elementary probability and probability distributions, statistical inference involving binomial, normal, and t-distributions, and hypothesis testing. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE ≥ P2. | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### STAT 285V - Elementary Statistics

Credits: 4 | A study of basic descriptive and inferential statistics, including elementary probability and probability distributions, statistical inference involving binomial, normal, and t-distributions, and hypothesis testing. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): MPE ≥ P2 | Schedule Type: Self-Paced | College Code: CAS

#### STAT 340 - Probability Theory with Statistical Applications

Credits: 3 | Probability theory and statistics for students having preparation in calculus. Topics include probability models, combinatoric problems, random variables, discrete and continuous distributions, expectation, moment generating functions, central limit theorem. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MATH 191 or MATH 195. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **Mathematics Education**

#### MAED 505 - Understanding Numbers and Operations for Middle Grade Educators

Credits: 2,3 | This course is designed to strengthen middle school teachers' rational number knowledge and number sense. This includes the in-depth study of rational numbers and operations on rational numbers, the structure of the rational and real number systems, algorithms for computation, estimation strategies, and working with very large and very small numbers. The pedagogy of the course models that of effective middle school mathematics teachers. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MAED 510 - Exploring Algebra and Functions for Middle Grades Educators

Credits: 2,3 | This course extends the middle school teachers' understanding of algebra as a symbolic language. This course moves beyond symbol manipulation to include modeling of physical situations. Students will explore algebraic, linear, and non-linear functions within the context of the course. The pedagogy of the course models that of effective middle school mathematics teachers. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MAED 515 - Data Analysis for Middle Grades Educators

Credits: 3 | This course presents an integrated approach to data analysis, statistics, and probability for middle grades math teachers. Instruction focuses on specific real-world data sets and statistical investigations. The pedagogy of the course models that of effective middle school mathematics teachers. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MAED 521 - Informal Geometry and Measurement for Middle Grades Educators

Credits: 2 | This course is the first of two which lead prospective mathematics teachers through a series of explorations to develop competence in geometric reasoning, including conjecture, proving, and disproving. Prospective teachers develop a deeper understanding of the role of proof in geometry. The pedagogy of this course models that of effective middle school mathematics teachers. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MAED 522 - Formal Geometry for Middle Grades Educators

Credits: 2 | This course is the second of two which lead prospective mathematics teachers through a series of explorations to develop competence in geometric reasoning, including conjecturing, proving, and disproving. Prospective teachers refine their understanding of the role of proof in geometry. The pedagogy of the course models that of effective middle school mathematics teachers. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# MAED 600 - Discrete Mathematics and Number Theory for Middle Grades Educators

**Credits:** 2 | Students investigate concepts of number theory, discrete mathematics, and logic as they apply to middle grades mathematical education. Each topic includes a study of graphic representation of concepts and applications in technology. The pedagogy of the course models that of effective middle school mathematics teachers. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### MAED 610 - Mathematical Modeling for Middle Grades Educators

**Credits:** 4 | Investigation of concepts and practices of mathematical modeling with an emphasis on application to middle grades education. The pedagogy of the course models that of effective middle school mathematics teachers. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

# MAED 625 - Mathematical Investigations for Middle Grades Classrooms

Credits: 2 | Participants investigate topics in mathematics, including probability, programming, fractals, and chaos theory. Emphasis is placed on participant understanding of these topics and their appropriate use as investigations with middle grades students. The pedagogy of the course models that of effective middle school mathematics teachers. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | College Code: CAS

#### MAED 630 - Seminar:\_\_\_\_\_

Credits: 1–4 | Seminar in specific topics relevant to mathematics education. Each seminar examines one topic in detail. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable with different topics | Schedule Type: Seminar | College Code: CAS

# Music

Hamel Hall, Room 207 269-471-3555; FAX 269-471-6339 music@andrews.edu

Please visit the Department of Music website for additional information.

#### Faculty

Lilianne Doukhan, Chair Carlos A. Flores Claudio Gonzalez Kenneth D. Logan Alan F. Mitchell Charles Reid Trina Thompson Carla L. Trynchuk Chi Yong Yun Stephen P. Zork

# Adjunct Faculty

Karla Bucklew

Academic Programs	Credits
BA: Music	45
BS in Music	89
BMus: Music Education	84
Teacher Certification	35+
BMus: Performance	85-93
Minor in Music	26
MA: Music	32
MMus: Conducting	32
MMus: Music Education	34
MMus: Music Ministry	35
MMus: Performance	32

#### Mission

To mentor students in artistic, intellectual, and character development. Faculty of the Department of Music are committed to providing a vibrant musical and learning environment to nurture artistic and creative growth in all students of music, to encourage and guide students through dynamic interaction in classroom and practical experiences as they mature into tomorrow's music professionals, and to mentor students in responsible use of their talents for service to Christ and to humanity.

Bachelor of Music curricula provide a comprehensive exposure to and experience with the performance, history, and theory of music. Students receive hands-on supervised teaching experience in studio or classroom teaching. Bachelor of Arts curricula are for students wishing to pursue concerted study in music within a liberal arts context.

Non-music majors may take courses in music or participate in music lessons or ensembles for credit or non-credit. See General Education section and course descriptions below for further clarification.

The Andrews University Department of Music has been a member of the National Association of Schools of Music since 1964. Music majors may choose to join the student chapter of Music Educators National Conference.

## Undergraduate Information

#### Enrollment

Status as an undergraduate music major is provisional until the student demonstrates academic and performance skills on an acceptable level. All first-year students must take the Freshman Theory Placement Exam and arrange for an audition with the coordinator of their applied area prior to being considered for acceptance as a music major. After the student successfully completes these two admission requirements the Music Department freshman advisor makes a recommendation to the music faculty concerning the student's application for admission as a music major. See the Department of Music Student Handbook for further information.

**Student Handbook**. The *Department of Music Student Handbook*, available at the Department of Music office, provides clarification of general guidelines, requirements, and standards as well as information concerning recital attendance, recital requirements, and financial aid and departmental scholarships.

**Applied Music General Requirements.** All music majors register in applied music for every semester in residence and until they complete their senior recital.

**Applied Music Examination Requirements.** All music majors participate in an applied music examination at least twice during the school year. See the *Department of Music Student Handbook* for full details.

**Ensemble Requirements.** All music majors must enroll in a music ensemble each semester of residence for a minimum of 8 credits. Students who require more than eight semesters to complete their degree must participate in an ensemble during each semester of residence.

**Minimum Passing Grades.** No grade lower than a C in an applied lesson, ensemble, or music class will count towards fulfillment of degree or program requirements for the music major or music minor. This includes transfer music credits.

Piano Proficiency. All music majors and minors are required to achieve an acceptable level of piano proficiency. This requirement may be met by one of the following two ways: 1) by passing the piano proficiency requirement as stated in the document Andrews University Department of Music Information Sheet: Piano Proficiency Examination available at the Music Office as well as at the Department of Music web page, or 2) by taking four semesters of piano instruction for credit at the Andrews University Department of Music with a minimum passing grade of a B in each semester. Students choosing the first of these two options are expected to take the Piano Proficiency Examination before the end of the second semester of their freshman year; students choosing the second option are expected to start taking piano lessons during their first year in residence. If one of these two options is not met, students will not be allowed to register for upper-division classes (with the exception of ensembles) or upper-division applied lessons until the Piano Proficiency requirement has been met.

**Recital Attendance.** All music majors are required to enroll in the course MUPF 489 - Recital Attendance each semester in residence. Music minors are required to enroll in this course for four (4) semesters.

**Upper-division Status.** Request for advancement to upper-division status is submitted by the end of the sophomore year. See the Department of Music Student Handbook for full information.

**State Certification.** Students planning to teach music in K–12 must take the Bachelor of Music in Music Education degree and also complete required education courses specified by the School of Education.

**Denominational Certification** is not automatic with state certification and is not required for graduation. Contact the certification clerk in the School of Education for full information.

#### Music Performance Credits

The Department of Music offers private instruction in all major instruments and voice which may fulfill music major or non-music major elective requirements. Course outlines detailing specific course content are available from the instructor. The requirements correlate with guidelines suggested by the National Association of Schools of Music as outlined in the Department of Music Student Handbook.

#### Graduate Information

#### **Graduate Programs Admission Requirements**

- General requirements for admission to graduate study as stated in the Admissions section of this bulletin.
- Musicians with various backgrounds often qualify to study music at the graduate level. Normally, a baccalaureate degree with a major in music is required; however, the following categories may also qualify:
- 1. Students with an earned baccalaureate degree within any major, assuming adequate undergraduate preparation in music. Adequate preparation includes mastery of music theory equivalent to content of MUCT242 Music Theory IV and MUCT153 Ear Training Laboratory III; mastery of music history equivalent to content of MUHL446-448 Music Literature and Style (Antiquity to 20th Century); and mastery of level of performance appropriate to the specific chosen master's program.
- 2. Students who have completed programs comparable to the baccalaureate degree from non-United States institutions.
- The Department of Music requires placement examinations in music history and literature, music theory, and an audition in the major area of performance for all entering students prior to registration. Admission status is provisional until these examinations are completed and any deficiencies removed. Courses used to make up for a deficiency may be taken for graduate credit but may not count for graduate requirements; a minimum grade of B must be earned.
- A Graduate Scholarship Tuition Reduction is available to students with a minimum GRE Exam score of 297 (quantitative + verbal) or Music Placement Exam average score of 70 or higher.
- Piano Proficiency. Music majors must pass a piano proficiency examination.
   Graduate students who have not passed this examination on the undergraduate level may meet this requirement by one of the following two ways: 1) by passing

the piano proficiency test as stated in the document Andrews University

Department of Music Information Sheet: Piano Proficiency Examination available at the Music Office as well as at the Department of Music web page, prior to the first registration, or 2) by taking four semesters of MUPF 516 Piano

Proficiency with a minimum passing grade of a B in each semester.

- Language Proficiency. For admission to the Master of Music, Voice Performance, language proficiency is required in French, German and Italian. Proficiency in these languages can be validated by evidence of coursework in each of these languages equivalent to two semesters of college level study, or by passing a language proficiency exam. Lack of proficiency in these three languages can be addressed by taking additional remedial coursework. Remedial coursework does not count toward completion of the graduate degree.
- Non-degree (Guest) Students. A student who plans to study music under this
  classification may be admitted to courses as approved by the department chair.

#### Double Major Policy for Graduate Music Programs:

- Two majors may be allowed only within a specific program such as the Master of Arts in Music or the Master of Music. No more than two majors are allowed.
- Only one degree is granted. The different majors will only be listed in the transcript.
- Candidates must complete the specific requirements for both majors.
- Candidates must enroll for Final Project (thesis option, project option, or recital
  option as it may apply) twice to fulfill final project requirements for each of the
  two majors.
- Candidates take comprehensive examinations that cover both concentration areas
- Decision on adding a second major must be made before the candidate fills out and submits the Advancement to Candidacy Form.
- Once a degree is earned, a second major area may not be added to the transcripts.

#### **Ensemble Requirements**

- Participation on a no-credit basis is required for four semesters in one of the
  following Andrews University ensembles: Wind Symphony, University Singers or
  AU Symphony Orchestra. Keyboard majors: see note below. Students who
  require more than four semesters to complete their degree must participate in
  an ensemble during each semester of residence.
- Keyboard students in the MA and MMus (music education) programs on the Andrews University campus are required to enroll for one semester of MUPF505 Keyboard Accompaniment or one semester of MUPF510 Collaborative Piano. This may apply as one of the minimum four semesters of ensemble.
- Performance majors in piano and organ are required to enroll for one semester of MUPF510 Collaborative Piano and one semester of MUPF515 Recital Accompaniment and may apply these towards the minimum four semesters of ensemble.

### Recital Attendance

All Graduate music majors are required to enroll in the course MUPF 489 Recital Attendance each semester in residence.

#### **Practical Training Requirement**

All students pursuing master's programs (MA: Music, MMus: Conducting, MMus: MUSIC 195 Music Education, MMus: Music Ministry; MMus: Performance) are required to take the 0-credit course MUED655 Practical Training to develop professional experience in music. To fulfill this requirement, students are required to meet a minimum of 50 hours of work/service while enrolled in the masters program. This could be done over the summer. Some recommended areas of work/service that may count toward this practical training experience are as follows:

- Music ministers in church settings
- Music teachers or instructors for a public or private school
- Instrumentalists performing in professional or community ensembles
- Research assistants in approved music research projects
- Other alternative activities must be approved by the student's major professor

After completing this requirement students will fill out and submit the form Completion of Practical Training Requirements to their major professor for evaluation and signature. Students who have developed experiences equivalent to this practical training before entering the masters program may fulfill this requirement by submitting appropriate evidence showing sufficient work/ service experience.

Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
- 1. A thesis—6 credits of MUHL699 and/or EDRM505.
- 2. Two projects—2 credits of MUHL698 for each project.
- 3. A credit recital—2 credits plus a minimum of 6 credits of applied music.
- 4. One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.
- The MMus: Performance degree requires a 2-credit recital. Recitalists must have taken in residence at least one-half of their applied music credit in their major performance area. They must enroll in applied lessons for at least two consecutive semesters prior to the recital date and must audition before a committee of music faculty one month prior to the recital. Students majoring in performance without an undergraduate major in the same performance area (or the equivalent) must offer two recitals, only the second of which is for credit.
- Students who opt for the project or thesis or Project Continuation must take concurrently the Research Master class.

Comprehensive Examinations. All graduate students in music take the 0-credit course MUHL670 Comprehensive Exam toward the end of their studies. Students should consult with their advisor concerning the appropriate time to apply for these examinations and for guidance in preparing for them.

Active Status. After completing all course requirements, all graduate music students must maintain an active status continuous enrollment for both Fall and Spring semesters until the degree is granted. This is accomplished by enrolling in MUHL665 Comprehensive Exam Preparation (non-repeatable with fee attached), MUHL670 Comprehensive Exam (non-repeatable), or MUHL655 Program Continuation (repeatable with fee attached) until the degree is earned. Students who fail to maintain continuous enrollment as defined here, will not be allowed to finish their degree requirements until they apply to the Department of Music for degree reactivation and pays the established fees for each semester of absence in the program. The reactivation fee used will be the latest AU Bulletin fee listed for MUHL655 Program Continuation.

# **Bachelors**

# Music BA

A liberal arts degree allows one to pursue a broad range of interests while majoring in music. The BA with a major in music is viable as a double major.

Note that in order to receive the BA: Music, students must take Andrews Core Experience requirements for the Bachelor of Arts.

# **Total Credits: 45**

# **Major Requirements:**

- MUCT 141 Music Theory I: Introduction to Harmony Credits: 3
- MUCT 142 Music Theory II: Diatonic Harmony Credits: 3
- MUCT 151 Ear Training Laboratory I Credits: 1
- MUCT 152 Ear Training Laboratory II Credits: 1
- MUCT 153 Ear Training Laboratory III Credits: 1
- MUCT 154 Ear Training Laboratory IV Credits: 1
- MUCT 241 Music Theory III: Chromatic Harmony Credits: 3
- MUCT 242 Music Theory IV: Chromatic to Post-Tonal Harmony Credits: 3
- MUCT 251 Music Technology Laboratory I Credits: 1
- MUHL 258 American and World Music Credits: 3
- MUHL 446 Music Literature and Style (Antiquity-Renaissance) Credits: 3
- MUHL 447 Music Literature and Style (Baroque and Classical) Credits: 3
- MUHL 448 Music Literature and Style (20th Century and Romantic) Credits: 3
- minimum 8 credits of performance in one area which includes a 1- or 2-credit recital or project
- 8 credits of ensemble
- MUPF 489 Recital Attendance Credits: 0 every semester
- Piano Proficiency.

## Cognate:

- PHYS 225 Sound and Waves Credits: 4 (fulfills GE Physical Science requirement)
- MURE 420 Church Music and Hymnology Credits: 3 (fulfills GE Religion requirement)

#### Note:

At least one course other than ensemble or applied music must be taken in residence. A minimum of 4 credits in applied music must be taken as upper-division credits. Keyboard majors (piano or organ) must take 1 credit of MUPF405 Keyboard Accompaniment and 1 credit of MUPF410 Collaborative Piano as part of their 8 credits of ensemble. The remaining 6 credits must be taken in one of the major ensembles.

# Music BSM

This degree provides a strong foundation in both music and the sciences and is especially designed for those interested in pursuing professional degrees in medical fields such as medicine, or dentistry programs.

## **Total Credits: 89**

# Major Requirements: 45 Credits

- MUCT 141 Music Theory I: Introduction to Harmony Credits: 3
- MUCT 142 Music Theory II: Diatonic Harmony Credits: 3
- MUCT 151 Ear Training Laboratory I Credits: 1
- MUCT 152 Ear Training Laboratory II Credits: 1
- MUCT 153 Ear Training Laboratory III Credits: 1
- MUCT 154 Ear Training Laboratory IV Credits: 1
- MUCT 241 Music Theory III: Chromatic Harmony Credits: 3
- MUCT 242 Music Theory IV: Chromatic to Post-Tonal Harmony Credits: 3
- MUCT 251 Music Technology Laboratory I Credits: 1
- MUHL 258 American and World Music Credits: 3
- MUHL 446 Music Literature and Style (Antiquity-Renaissance) Credits: 3
- MUHL 447 Music Literature and Style (Baroque and Classical) Credits: 3
- MUHL 448 Music Literature and Style (20th Century and Romantic) Credits: 3
- minimum 8 credits of performance in one area which infcludes a 1- or 2-credit recital or project.
- 8 credits of ensemble.
- MUPF 489 Recital Attendance Credits: 0
- Piano Proficiency.
- At least one course other than ensemble or applied music must be takekn in residence.
- A minimum of 4 credits in applied music must be taken as upper-division credits.
   Keyboard majors (piano or organ) must take 1 credit of MUPF 405 Keyboard
   Accompaniment and 1 credit of MUPF 410 Collaborative Piano as a part of their
   8 credits of ensemble. The remaining 6 credits must be taken in one of the major ensembles.

# Science Requirements: 38 Credits

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- PHYS 141 General Physics I Credits: 4
- PHYS 142 General Physics II Credits: 4

#### BCHM 421 - Biochemistry I Credits: 4

# **General Education Requirements: 35 Credits**

See professional program requirements and not the following specific requirements.

#### Fitness Education:

professional degree requirements

#### Social Sciences:

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3

#### Service

fulfilled thorugh professional components of the program.

#### Mathematics:

STAT 285 - Elementary Statistics Credits: 3

## Life/Physical Sciences:

fulfilled through core curriculum.

#### Fine Arts/Humanities:

fulfilled through core curriculum.

### Language/Communication:

professional degree requirements

### History:

professional degree requirements.

### Religion:

professional degree requirements including

MURE 420 - Church Music and Hymnology Credits: 3

# Major Electives: 6 Credits

From the music or science fields.

# Music Education, Teacher Certification BMus

A degree for students seeking careers as certified K–12 teachers in pre-collegiate denominational or public schools. Students normally spend five years in residence to complete the requirements. Requires state teacher certification. First-year students must make application and consult with the certification clerk in the School of Education to keep abreast of certification requirements.

#### **Total Credits: 84**

## Core Requirements - 38

- MUCT 141 Music Theory I: Introduction to Harmony Credits: 3
- MUCT 142 Music Theory II: Diatonic Harmony Credits: 3
- MUCT 151 Ear Training Laboratory I Credits: 1
- MUCT 152 Ear Training Laboratory II Credits: 1
- MUCT 153 Ear Training Laboratory III Credits: 1
- MUCT 154 Ear Training Laboratory IV Credits: 1
- MUCT 241 Music Theory III: Chromatic Harmony Credits: 3
- MUCT 242 Music Theory IV: Chromatic to Post-Tonal Harmony Credits: 3
- MUCT 251 Music Technology Laboratory I Credits: 1
- MUCT 454 Orchestration Credits: 3

- MUCT 470 Form Analysis Credits: 3
- MUHL 258 American and World Music Credits: 3
- MUHL 446 Music Literature and Style (Antiquity-Renaissance) Credits: 3
- MUHL 447 Music Literature and Style (Baroque and Classical) Credits: 3
- MUHL 448 Music Literature and Style (20th Century and Romantic) Credits: 3
- MUPF 489 Recital Attendance Credits: 0 every semester
- Piano Proficiency
- MUCT 425 Counterpoint Credits: 3
- Or MUCT 430 Composition Seminar Credits: 3

# Music Education Requirements—46

- MUED 301 Conducting I Credits: 2
- MUED 302 Conducting II Credits: 2
- MUED 316 Instrumental Literature Credits: 2
- MUED 317 Choral Literature Credits: 2
- MUED 376 Brass Methods Credits: 2
- MUED 377 Percussion Methods Credits: 2
- MUED 378 Vocal Methods Credits: 2
- MUED 379 String Methods Credits: 2
- MUED 380 Woodwind Methods Credits: 2
- MUED 458 Music in the Elementary School Credits: 3
- MUED 459 Music Methods and Materials Credits: 3
- minimum 8 credits major performance which includes a 1- or 2-credit recital (wind, string, voice or key-board instrument) or project.
- minimum 3 credits minor performance (wind, string, voice or keyboard instrument).
- 8 credits of ensemble (must be in a major instrumental or choral ensemble: University Singers, Chorale, Wind Symphony or Symphony Orchestra).
- Keyboard performers must take 6 credits in major ensembles plus 1 credit each of MUPF405 Keyboard Accompaniment and MUPF410 Collaborative Piano.

#### Choose one of the following courses:

- MUED 421 Organ Literature and Pedagogy I Credits: 3
- MUED 427 Piano Pedagogy Credits: 3
- MUED 429 String Pedagogy Credits: 3
- MUED 437 Vocal Pedagogy Credits: 3
- MUPF 420 Diction for Singers Credits: 3

# **Andrews Core Experience**

Students must fullfill all requirements in the Andrews Core Experience: Professional Degrees, while noting the following specific requirements.

#### Religion

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- 4th course (see SED advisor)

#### Language and Communication

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

#### History

- HIST 117 Civilizations and Ideas I Credits: 3
- Or HIST 118 Civilizations and Ideas II Credits: 3

#### **Fine Arts and Humanities**

fulfilled in core curriculum

#### Life and Physical Sciences

PHYS 225 - Sound and Waves Credits: 4

#### Mathematic

MATH 145 - Reasoning with Functions Credits: 3 or higher

#### Service

 EDTE 165 - Philosophical and Social Foundations of Education Credits: 4 from SED requirements

#### Social Sciences

GDPC 302 - Educational Psychology Credits: 3 from SED requirements

#### **Fitness Education**

- HLED 120 Fit for Life Credits: 1
- plus one Fitness Education course

# Teacher Certification Requirements—35+

#### (School of Education)

- GDPC 302 Educational Psychology Credits: 3
- EDTE 165 Philosophical and Social Foundations of Education Credits: 4
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3
- EDTE 408 Principles of Teaching and Learning Credits: 3
- EDTE 417 Teaching Reading in the Secondary Content Areas Credits: 3
- EDTE 424 Classroom Testing and Evaluation Credits: 2,3
- EDTE 459 Methods for Teaching Secondary School: Area Credits: 3
- EDTE 476 Methods for Integrating Instructional Technology Credits: 2,3
- EDTE 480 First Days of School Experience Credits: 2
- EDTE 487 Student Teaching Seminar Credits: 1
- EDTE 488 Student Teaching (Level) Credits: 1

# Performance BMus

A degree for those whose career goals focus on performance, studio or collegiate teaching and graduate school.

#### Total Credits: 85-93

# Core Requirements - 38

- MUCT 141 Music Theory I: Introduction to Harmony Credits: 3
- MUCT 142 Music Theory II: Diatonic Harmony Credits: 3
- MUCT 151 Ear Training Laboratory I Credits: 1
- MUCT 152 Ear Training Laboratory II Credits: 1
- MUCT 153 Ear Training Laboratory III Credits: 1
- MUCT 154 Ear Training Laboratory IV Credits: 1
- MUCT 241 Music Theory III: Chromatic Harmony Credits: 3
- MUCT 242 Music Theory IV: Chromatic to Post-Tonal Harmony Credits: 3
- MUCT 251 Music Technology Laboratory I Credits: 1
- MUCT 454 Orchestration Credits: 3
- MUCT 470 Form Analysis Credits: 3
- MUHL 258 American and World Music Credits: 3
- MUHL 446 Music Literature and Style (Antiquity-Renaissance) Credits: 3
- MUHL 447 Music Literature and Style (Baroque and Classical) Credits: 3
  - MUHL 448 Music Literature and Style (20th Century and Romantic) Credits: 3
- MUPF 489 Recital Attendance Credits: 0 every semester

- Piano Proficiency
- MUCT 425 Counterpoint Credits: 3
- Or MUCT 430 Composition Seminar Credits: 3

# Performance—37-40

- Major instrument: 16 credits (4 credits each of MUPF 165, MUPF 265, MUPF 365, and MUPF 465).
- MUED 301, MUED 302; MUPF 420 (for voice majors only); MUPF 339 (3 credits required for instrumentalists only)
- Applied area literature course, applied area pedagogy course.
- Ensemble: 8 credits. Bachelor of Music degree students majoring in piano or organ performance must take 2 credits of MUPF405 Keyboard Accompaniment and 2 credits of MUPF410 Collaborative Piano. The remaining 4 credits must be taken in one of the major ensembles.
- MUPF 397 Recital—Junior (1 credit) and MUPF 497 Recital—Senior (2 credits).
- Attendance at major area master classes.

### Cognate

- PHYS 225 Sound and Waves Credits: 4 (fulfills GE Life/Physical Science requirement);
- MURE 420 Church Music and Hymnology Credits: 3 (fulfills GE Religion requirement)

# Other Music Requirements—10-15

- For piano and instrumental majors only-10 credits of music electives
- For voice majors only-15 credits of languages to be selected from: French I and II
  (3, 3); German I and II (3, 3); and Italian I and II (3, 3)

# **Andrews Core Experience**

Students must fullfill all requirements in the Andrews Core Experience: Professional Degrees while noting the following specific requirements.

#### Religior

MURE 420 - Church Music and Hymnology Credits: 3

#### Fine Arts and Humanities

• fulfilled through core curriculum

#### Life and Physical Sciences

PHYS 225 - Sound and Waves Credits: 4

#### Service

fulfilled through professional components of the program

# **Undergraduate Minors**

# Music Minor

# Minor Requirements: - 26

- MUCT 141 Music Theory I: Introduction to Harmony Credits: 3
- MUCT 142 Music Theory II: Diatonic Harmony Credits: 3
- MUCT 151 Ear Training Laboratory I Credits: 1
- MUCT 152 Ear Training Laboratory II Credits: 1
- MUCT 153 Ear Training Laboratory III Credits: 1
- MUCT 241 Music Theory III: Chromatic Harmony Credits: 3
- MUHL 258 American and World Music Credits: 3
- MUHL 447 Music Literature and Style (Baroque and Classical) Credits: 3

- MUHL 448 Music Literature and Style (20th Century and Romantic) Credits: 3
- minimum 3 credits of performance in one area
- 2 credits of ensemble
- MUPF 489 Recital Attendance Credits: 0 (for a minimum of three semesters).
- Piano Proficiency

# **Masters**

# Conducting MMus

## Total Credits: 32+

# Core Requirements - 13

- MUCT 535 Analytical Techniques I Credits: 2
- MUCT 536 Analytical Techniques II Credits: 2
- MUHL 695 Bibliography and Research in Music Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 519 Studies in 20th Century Music Credits: 2
- MUED 648 Workshop Credit: 1

### Additional courses-min. 19

#### Choral

- MUPF 506 Advanced Conducting Credits: 1,2 (9 credits required: 8 in major area and 1 in related area)
- MUPF 575 Recital Credits: 1,2 (2 credits required for this degree)
- MUED 564 Score Study Credits: 2
- MUED 437 Vocal Pedagogy Credits: 3
- MUPF 420 Diction for Singers Credits: 3
- MUXX Music Electives Credits: 0-6
- MUPF XXX Ensemble (four semesters for 0 credits each) Credits: 0
- MUPF 489 Recital Attendance Credits: 0
- MUED 655 Practical Training Credits: 0
- MUHL 670 Comprehensive Exam Credits: 0

#### Instrumental:

#### see above for requirements

- MUPF 506 Advanced Conducting Credits: 1,2 (9 credits required: 8 in major area and i in related area)
- MUPF 575 Recital Credits: 1,2
- MUED 564 Score Study Credits: 2
- MUPF 420 Diction for Singers Credits: 3
- MUED Pedagogy or Music Education course: Credits 3
- MUXX Electives: Credits: 0-6
- MUPF 489 Recital Attendance Credits: 0
- MUED 655 Practical Training Credits: 0
- MUHL 670 Comprehensive Exam Credits: 0

# **Admission Requirements**

### Graduate Programs Admission Requirements and Procedures

 General requirements for admission to graduate study as stated in the Admissions section of this bulletin.

- Musicians with various backgrounds often qualify to study music at the graduate level. Normally, a baccalaureate degree with a major in music is required; however, the following categories may also qualify:
- 1. Students with an earned baccalaureate degree within any major, assuming adequate undergraduate preparation in music. Adequate preparation includes mastery of music theory equivalent to content of MUCT242 Music Theory IV and MUCT153 Ear Training Laboratory III; mastery of music history equivalent to content of MUHL446-448 Music Literature and Style (Antiquity to 20th Century); and mastery of level of performance appropriate to the specific chosen master's program.

  2. Students who have completed programs comparable to the baccalaureate degree from non-United States institutions.
- The Department of Music requires placement examinations in music history and literature, music theory, piano proficiency, and an audition in the major area of performance for all entering students prior to registration. Admission status is provisional until these examinations are completed and any deficiencies removed. Courses used to make up for a deficiency may be taken for graduate credit but may not count for graduate requirements; a minimum grade of B must be earned.
- A Graduate Scholarship Tuition Reduction is available to students with a minimum GRE Exam score of 297 (quantitative + verbal) or Music Placement Exam average score of 80.

#### Double Major Policy for Graduate Music Programs:

- Two majors may be allowed only within a specific program such as the Master of Arts in Music or the Master of Music. No more than two majors are allowed.
- Only one degree is granted. The different majors will only be listed in the transcript.
- Candidates must complete the specific requirements for both majors.
- Candidates must enroll for Final Project (thesis option, project option, or recital
  option as it may apply) twice to fulfill final project requirements for each of the
  two majors.
- Candidates take comprehensive examinations that cover both concentration areas.
- Decision on adding a second major must be made before the candidate fills out and submits the Advancement to Candidacy Form.
- Once a degree is earned, a second major area may not be added to the transcripts.

#### **Ensemble Requirements**

- Participation on a no-credit basis is required for four semesters in one of the
  following: any Andrews University Department of Music band, choir or
  orchestra. Keyboard majors: see note below. Students who require more than
  four semesters to complete their degree must participate in an ensemble during
  each semester of residence.
- Keyboard students in the MA and MMus (music education) programs on the Andrews University campus are required to enroll
- for one semester of MUPF505 Keyboard Accompaniment or one semester of MUPF510 Collaborative Piano. This may apply as one of the minimum four semesters of ensemble.
- Performance majors in piano and organ are required to enroll for one semester
  of MUPF510 Collaborative Piano and one semester of MUPF515 Recital
  Accompaniment and may apply these towards the minimum four semesters of
  ensemble.

#### Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
  - 1. A thesis—6 credits of MUHL699 and/or EDRM505.
  - 2. Two projects—2 credits of MUHL698 for each project.
  - 3. A credit recital—2 credits plus a minimum of 6 credits of applied music.
  - One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.
- The MMus: Performance degree requires a 2-credit recital. Recitalists must have taken in residence at least one-half of their applied music credit in their major performance area. They must enroll in applied lessons for at least two consecutive semesters prior to the recital date and must audition before a committee of music faculty one month prior to the recital. Students majoring in

performance without an undergraduate major in the same performance area (or the equivalent) must offer two recitals, only the second of which is for credit.

**Piano Proficiency.** Music majors must pass a piano proficiency examination. Graduate students who have not passed this examination on the undergraduate level must take the examination prior to the first registration. Students who do not pass this examination must enroll in applied piano until the examination is passed.

Language Proficiency. For admission to the Master of Music: Performance (voice performance specialization), language proficiency is required in French, German and Italian. Proficiency in these languages can be validated by evidence of coursework in each of these languages equivalent to two semesters of college level study, or by passing a language proficiency exam. Lack of proficiency in these three languages can be addressed by taking additional remedial coursework. Remedial coursework does not count toward completion of the graduate degree.

Electives. Each area of study has appropriate choices of electives.

Practical Training Requirement. All students pursuing master's programs (MA: Music, MMus: Conducting, MMus: MUSIC 195 Music Education, MMus: Music Ministry; MMus: Performance) are required to take the 0-credit course MUED655 Practical Training to develop professional experience in music. To fulfill this requirement, students are required to meet a minimum of 50 hours of work/service while enrolled in the masters program. This could be done over the summer. Some recommended areas of work/service that may count toward this practical training experience are as follows:

- Music ministers in church settings
- Music teachers or instructors for a public or private school
- Instrumentalists performing in professional or community ensembles
- Research assistants in approved music research projects
- Other alternative activities must be approved by the student's major professor

After completing this requirement students will fill out and submit the form Completion of Practical Training Requirements to their major professor for evaluation and signature. Students who have developed experiences equivalent to this practical training before entering the masters program may fulfill this requirement by submitting appropriate evidence showing sufficient work/ service experience.

Comprehensive Examinations. All graduate students in music take the 0-credit course MUHL670 Comprehensive Exam toward the end of their studies. Students should consult with their advisor concerning the appropriate time to apply for these examinations and for guidance in preparing for them.

**Non-degree (PTC) Students.** A student who plans to study music under this classification may be admitted to courses as approved by the department chair.

Active Status. After completing all course requirements, all graduate music students must maintain an active status continuous enrollment for both Fall and Spring semesters until the degree is granted. This is accomplished by enrolling in MUHL665 Comprehensive Exam Preparation (non-repeatable with fee attached), MUHL670 Comprehensive Exam (non-repeatable), or MUHL655 Program Continuation (repeatable with fee attached) until the degree is earned. A student who fails to maintain continuous enrollment as defined here, will not be allowed to finish their degree requirements until he/she applies to the Department of Music for degree reactivation and pays the established fees for each semester of absence in the program. The reactivation fee used will be the latest AU Bulletin fee listed for MUHL655 Program Continuation.

# Music Education MMus

Students majoring in music education must qualify for a state teaching certificate prior to conferral of degree.

#### Total Credits: 34+

# Core Requirements - 13

- MUCT 535 Analytical Techniques I Credits: 2
- MUCT 536 Analytical Techniques II Credits: 2
- MUHL 695 Bibliography and Research in Music Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 519 Studies in 20th Century Music Credits: 2
- MUED 648 Workshop Credit: 1

### Music Education Core & One Track: 21+ Credits

#### Music Education Core - 12 Credits

- MUED 515 Introduction to Research in Music Education Credits: 3
- MUED 521 Historical and Philosophical Foundations of Music Education Credits: 3
- MUED 530 Current Issues and Trends in Music Education Credits: 3
- MUED XXX Area Literature or Area Pedagogy course\* Credits: 3
- MUPF XXX Ensemble (four semesters for 0 credits each)
- MUED 655 Practical Training Credits: 0
- MUPF 489 Recital Attendance Credits: 0
- MUHL 670 Comprehensive Exam Credits: 0

\*Students who took these course at AU will substitute with electives.

#### Practice Oriented Track - 9 Credits

- MUPF 506 Advanced Conducting Credits: 1,2
- MUPF 560 Applied Music Study in Private Lessons (for performance music majors)
   Credits: 1,2 (6 credits required for this degree.)
- MUPF 575 Recital Credits: 1,2 (2 credits required for this course.)
- MUXX Music Electives Credits:0-3

#### Research Oriented Track - 9 Credits

- MUPF 506 Advanced Conducting Credits: 1,2
- MUXX Music Electives Credits: 0-5
- MUHL 699 Master's Thesis Credits: 2 OR MUHL 698 Project Credits: 4

## **Admission Requirements**

#### **Graduate Programs Admission Requirements and Procedures**

- General requirements for admission to graduate study as stated in the Admissions section of this bulletin.
- Musicians with various backgrounds often qualify to study music at the graduate level. Normally, a baccalaureate degree with a major in music is required; however, the following categories may also qualify:
- 1. Students with an earned baccalaureate degree within any major, assuming adequate undergraduate preparation in music. Adequate preparation includes mastery of music theory equivalent to content of MUCT242 Music Theory IV and MUCT153 Ear Training Laboratory III; mastery of music history equivalent to content of MUHL446-448 Music Literature and Style (Antiquity to 20th Century); and mastery of level of performance appropriate to the specific chosen master's program.
  2. Students who have completed programs comparable to the baccalaureate degree from non-United States institutions.
- The Department of Music requires placement examinations in music history and literature, music theory, piano proficiency, and an audition in the major area of performance for all entering students prior to registration. Admission status is provisional until these examinations are completed and any deficiencies removed. Courses used to make up for a deficiency may be taken for graduate credit but may not count for graduate requirements; a minimum grade of B must be earned.
- A Graduate Scholarship Tuition Reduction is available to students with a minimum GRE Exam score of 297 (quantitative + verbal) or Music Placement Exam average score of 80.

#### Double Major Policy for Graduate Music Programs:

- Two majors may be allowed only within a specific program such as the Master of Arts in Music or the Master of Music. No more than two majors are allowed.
- Only one degree is granted. The different majors will only be listed in the transcript.
- Candidates must complete the specific requirements for both majors.
- Candidates must enroll for Final Project (thesis option, project option, or recital
  option as it may apply) twice to fulfill final project requirements for each of the
  two majors.
- Candidates take comprehensive examinations that cover both concentration areas
- Decision on adding a second major must be made before the candidate fills out and submits the Advancement to Candidacy Form.

 Once a degree is earned, a second major area may not be added to the transcripts.

#### **Ensemble Requirements**

- Participation on a no-credit basis is required for four semesters in one of the
  following: any Andrews University Department of Music band, choir or
  orchestra. Keyboard majors: see note below. Students who require more than
  four semesters to complete their degree must participate in an ensemble during
  each semester of residence.
- Keyboard students in the MA and MMus (music education) programs on the Andrews University campus are required to enroll
- for one semester of MUPF505 Keyboard Accompaniment or one semester of MUPF510 Collaborative Piano. This may apply as one of the minimum four semesters of ensemble.
- Performance majors in piano and organ are required to enroll for one semester
  of MUPF510 Collaborative Piano and one semester of MUPF515 Recital
  Accompaniment and may apply these towards the minimum four semesters of
  ensemble.

#### Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
  - 1. A thesis—6 credits of MUHL699 and/or EDRM505.
  - 2. Two projects—2 credits of MUHL698 for each project.
  - 3. A credit recital—2 credits plus a minimum of 6 credits of applied music.
  - One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.
- The MMus: Performance degree requires a 2-credit recital. Recitalists must have taken in residence at least one-half of their applied music credit in their major performance area. They must enroll in applied lessons for at least two consecutive semesters prior to the recital date and must audition before a committee of music faculty one month prior to the recital. Students majoring in performance without an undergraduate major in the same performance area (or the equivalent) must offer two recitals, only the second of which is for credit.

**Piano Proficiency.** Music majors must pass a piano proficiency examination. Graduate students who have not passed this examination on the undergraduate level must take the examination prior to the first registration. Students who do not pass this examination must enroll in applied piano until the examination is passed.

Language Proficiency. For admission to the Master of Music: Performance (voice performance specialization), language proficiency is required in French, German and Italian. Proficiency in these languages can be validated by evidence of coursework in each of these languages equivalent to two semesters of college level study, or by passing a language proficiency exam. Lack of proficiency in these three languages can be addressed by taking additional remedial coursework. Remedial coursework does not count toward completion of the graduate degree.

**Electives.** Each area of study has appropriate choices of electives.

Practical Training Requirement. All students pursuing master's programs (MA: Music, MMus: Conducting, MMus: MUSIC 195 Music Education, MMus: Music Ministry; MMus: Performance) are required to take the 0-credit course MUED655 Practical Training to develop professional experience in music. To fulfill this requirement, students are required to meet a minimum of 50 hours of work/service while enrolled in the masters program. This could be done over the summer. Some recommended areas of work/service that may count toward this practical training experience are as follows:

- Music ministers in church settings
- Music teachers or instructors for a public or private school
- Instrumentalists performing in professional or community ensembles
- Research assistants in approved music research projects
- Other alternative activities must be approved by the student's major professor

After completing this requirement students will fill out and submit the form Completion of Practical Training Requirements to their major professor for evaluation and signature. Students who have developed experiences equivalent to this practical training before entering the masters program may fulfill this requirement by submitting appropriate evidence showing sufficient work/ service experience.

Comprehensive Examinations. All graduate students in music take the 0-credit course MUHL670 Comprehensive Exam toward the end of their studies. Students should consult with their advisor concerning the appropriate time to apply for these examinations and for guidance in preparing for them.

**Non-degree (PTC) Students.** A student who plans to study music under this classification may be admitted to courses as approved by the department chair.

Active Status. After completing all course requirements, all graduate music students must maintain an active status continuous enrollment for both Fall and Spring semesters until the degree is granted. This is accomplished by enrolling in MUHL665 Comprehensive Exam Preparation (non-repeatable with fee attached), MUHL670 Comprehensive Exam (non-repeatable), or MUHL655 Program Continuation (repeatable with fee attached) until the degree is earned. A student who fails to maintain continuous enrollment as defined here, will not be allowed to finish their degree requirements until he/she applies to the Department of Music for degree reactivation and pays the established fees for each semester of absence in the program. The reactivation fee used will be the latest AU Bulletin fee listed for MUHL655 Program Continuation.

# Music MA

# Total Credits: 32+

# Core Requirements - 13

- MUCT 535 Analytical Techniques I Credits: 2
- MUCT 536 Analytical Techniques II Credits: 2
- MUHL 695 Bibliography and Research in Music Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 519 Studies in 20th Century Music Credits: 2
- MUED 648 Workshop Credit: 1

#### Additional courses—19

- MUPF 500 Applied Music Study in Private Lessons (for music non-performance majors) Credits: 1,2 (2-8 credits required for this degree)
- MUED XXX Music Education: Credit 3
- MUXX Thesis/Project/Recital: Credits: 2-6
- MUXX Music Electives: Credits: 6-12
- MUPF XXX Ensemble (four semesters for 0 credits each): Credit: 0
- MUPF 489 Recital Attendance Credits: 0
- MUED 655 Practical Training Credits: 0
- MUHL 670 Comprehensive Exam Credits: 0

#### Note(s):

Students who plan to enter a doctoral program in musicology or who plan to teach music history and literature should elect the thesis option and fulfill a language requirement of reading proficiency in French or German.

# **Admission Requirements**

#### **Graduate Programs Admission Requirements and Procedures**

- General requirements for admission to graduate study as stated in the Admissions section of this bulletin.
- Musicians with various backgrounds often qualify to study music at the graduate level. Normally, a baccalaureate degree with a major in music is required; however, the following categories may also qualify:
- 1. Students with an earned baccalaureate degree within any major, assuming adequate undergraduate preparation in music. Adequate preparation includes mastery of music theory equivalent to content of MUCT242 Music Theory IV and MUCT153 Ear Training Laboratory III; mastery of music history equivalent to content of MUHL446-448 Music Literature and Style (Antiquity to 20th Century); and mastery of level of performance appropriate to the specific chosen master's program.

  2. Students who have completed programs comparable to the baccalaureate degree from non-United States institutions.
- The Department of Music requires placement examinations in music history and literature, music theory, piano proficiency, and an audition in the major area of performance for all entering students prior to registration. Admission status is provisional until these examinations are completed and any deficiencies removed. Courses used to make up for a deficiency may be taken for graduate

- credit but may not count for graduate requirements; a minimum grade of B must be earned.
- A Graduate Scholarship Tuition Reduction is available to students with a minimum GRE Exam score of 297 (quantitative + verbal) or Music Placement Exam average score of 80.

#### Double Major Policy for Graduate Music Programs:

- Two majors may be allowed only within a specific program such as the Master of Arts in Music or the Master of Music. No more than two majors are allowed.
- Only one degree is granted. The different majors will only be listed in the transcript.
- Candidates must complete the specific requirements for both majors.
- Candidates must enroll for Final Project (thesis option, project option, or recital
  option as it may apply) twice to fulfill final project requirements for each of the
  two majors.
- Candidates take comprehensive examinations that cover both concentration areas.
- Decision on adding a second major must be made before the candidate fills out and submits the Advancement to Candidacy Form.
- Once a degree is earned, a second major area may not be added to the transcripts.

#### **Ensemble Requirements**

- Participation on a no-credit basis is required for four semesters in one of the following: any Andrews University Department of Music band, choir or orchestra. Keyboard majors: see note below. Students who require more than four semesters to complete their degree must participate in an ensemble during each semester of residence.
- Keyboard students in the MA and MMus (music education) programs on the Andrews University campus are required to enroll
- for one semester of MUPF505 Keyboard Accompaniment or one semester of MUPF510 Collaborative Piano. This may apply as one of the minimum four semesters of ensemble.
- Performance majors in piano and organ are required to enroll for one semester
  of MUPF510 Collaborative Piano and one semester of MUPF515 Recital
  Accompaniment and may apply these towards the minimum four semesters of
  ensemble.

#### Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
  - 1. A thesis—6 credits of MUHL699 and/or EDRM505.
  - 2. Two projects—2 credits of MUHL698 for each project.
  - A credit recital—2 credits plus a minimum of 6 credits of applied music.
  - One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.
- The MMus: Performance degree requires a 2-credit recital. Recitalists must have taken in residence at least one-half of their applied music credit in their major performance area. They must enroll in applied lessons for at least two consecutive semesters prior to the recital date and must audition before a committee of music faculty one month prior to the recital. Students majoring in performance without an undergraduate major in the same performance area (or the equivalent) must offer two recitals, only the second of which is for credit.

**Piano Proficiency.** Music majors must pass a piano proficiency examination. Graduate students who have not passed this examination on the undergraduate level must take the examination prior to the first registration. Students who do not pass this examination must enroll in applied piano until the examination is passed.

Language Proficiency. For admission to the Master of Music: Performance (voice performance specialization), language proficiency is required in French, German and Italian. Proficiency in these languages can be validated by evidence of coursework in each of these languages equivalent to two semesters of college level study, or by passing a language proficiency exam. Lack of proficiency in these three languages can be addressed by taking additional remedial coursework. Remedial coursework does not count toward completion of the graduate degree.

Electives. Each area of study has appropriate choices of electives.

Practical Training Requirement. All students pursuing master's programs (MA: Music, MMus: Conducting, MMus: MUSIC 195 Music Education, MMus: Music Ministry; MMus: Performance) are required to take the 0-credit course MUED655 Practical Training to develop professional experience in music. To fulfill this requirement,

students are required to meet a minimum of 50 hours of work/service while enrolled in the masters program. This could be done over the summer. Some recommended areas of work/service that may count toward this practical training experience are as follows:

- Music ministers in church settings
- Music teachers or instructors for a public or private school
- Instrumentalists performing in professional or community ensembles
- Research assistants in approved music research projects
- Other alternative activities must be approved by the student's major professor

After completing this requirement students will fill out and submit the form Completion of Practical Training Requirements to their major professor for evaluation and signature. Students who have developed experiences equivalent to this practical training before entering the masters program may fulfill this requirement by submitting appropriate evidence showing sufficient work/ service experience.

Comprehensive Examinations. All graduate students in music take the 0-credit course MUHL670 Comprehensive Exam toward the end of their studies. Students should consult with their advisor concerning the appropriate time to apply for these examinations and for guidance in preparing for them.

**Non-degree (PTC) Students.** A student who plans to study music under this classification may be admitted to courses as approved by the department chair.

Active Status. After completing all course requirements, all graduate music students must maintain an active status continuous enrollment for both Fall and Spring semesters until the degree is granted. This is accomplished by enrolling in MUHL665 Comprehensive Exam Preparation (non-repeatable with fee attached), MUHL670 Comprehensive Exam (non-repeatable), or MUHL655 Program Continuation (repeatable with fee attached) until the degree is earned. A student who fails to maintain continuous enrollment as defined here, will not be allowed to finish their degree requirements until he/she applies to the Department of Music for degree reactivation and pays the established fees for each semester of absence in the program. The reactivation fee used will be the latest AU Bulletin fee listed for MUHL655 Program Continuation.

# Music Ministry MMus

## Total Credits: 35+

## Core Requirements - 13

- MUCT 535 Analytical Techniques I Credits: 2
- MUCT 536 Analytical Techniques II Credits: 2
- MUHL 695 Bibliography and Research in Music Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 519 Studies in 20th Century Music Credits: 2
- MUED 648 Workshop Credit: 1

## Music Components—29+

#### Sacred Music—7-11

- MURE 590 Ministry of Music Practicum Credits: 1+1 (with portfolio)
- MUPF 506 Advanced Conducting Credits: 1,2 (4-6 credits required for this degree.)
- CHMN 523 Worship: Word and Music Credits: 2,3 (2 credits required for this course.)
- MURE 520 Hymnology and Church Music Credits: 2

## Other Studies in Music - 7+

- MUPF 500 Applied Music Study in Private Lessons (for music non-performance majors) Credits: 1,2 (2-6 credits required for this degree.)
- MUPF 500 Organ (1)
- MUXX Music Electives Credits: 2-6
- MUPF XXX Ensemble (4 semesters: 2 choral & 2 student choice) Credits: 0
- MUPF 489 Recital Attendance Credits: 0
- MUED 655 Practical Training Credits: 0

MUHL 670 - Comprehensive Exam Credits: 0

### Seminary Studies—4

- CHMN 527 Church Leadership and Administration Credits: 2,3 (2 credits required for this course.)
- DSRE 534 Ministry to Youth and Young Adults Credits: 2,3 (2 credits required for this course.) OR CHMN 552 - Foundations of Pastoral Ministry Credits: 2

## Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
  - 1. A thesis—6 credits of MUHL699 and/or EDRM505.
  - 2. Two projects—2 credits of MUHL698 for each project.
  - 3. A credit recital—2 credits plus a minimum of 6 credits of applied music.
  - 4. One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.

## **Admission Requirements**

#### **Graduate Programs Admission Requirements and Procedures**

- General requirements for admission to graduate study as stated in the Admissions section of this bulletin.
- Musicians with various backgrounds often qualify to study music at the graduate level. Normally, a baccalaureate degree with a major in music is required; however, the following categories may also qualify:
- 1. Students with an earned baccalaureate degree within any major, assuming adequate undergraduate preparation in music. Adequate preparation includes mastery of music theory equivalent to content of MUCT242 Music Theory IV and MUCT153 Ear Training Laboratory III; mastery of music history equivalent to content of MUHL446-448 Music Literature and Style (Antiquity to 20th Century); and mastery of level of performance appropriate to the specific chosen master's program.
- 2. Students who have completed programs comparable to the baccalaureate degree from non-United States institutions.
- The Department of Music requires placement examinations in music history and literature, music theory, piano proficiency, and an audition in the major area of performance for all entering students prior to registration. Admission status is provisional until these examinations are completed and any deficiencies removed. Courses used to make up for a deficiency may be taken for graduate credit but may not count for graduate requirements; a minimum grade of B must be earned.
- A Graduate Scholarship Tuition Reduction is available to students with a minimum GRE Exam score of 297 (quantitative + verbal) or Music Placement Exam average score of 80.

#### Double Major Policy for Graduate Music Programs:

- Two majors may be allowed only within a specific program such as the Master of Arts in Music or the Master of Music. No more than two majors are allowed.
- Only one degree is granted. The different majors will only be listed in the transcript.
- Candidates must complete the specific requirements for both majors.
- Candidates must enroll for Final Project (thesis option, project option, or recital
  option as it may apply) twice to fulfill final project requirements for each of the
  two majors.
- Candidates take comprehensive examinations that cover both concentration areas.
- Decision on adding a second major must be made before the candidate fills out and submits the Advancement to Candidacy Form.
- Once a degree is earned, a second major area may not be added to the transcripts.

#### **Ensemble Requirements**

 Participation on a no-credit basis is required for four semesters in one of the following: any Andrews University Department of Music band, choir or orchestra. Keyboard majors: see note below. Students who require more than four semesters to complete their degree must participate in an ensemble during each semester of residence.

- Keyboard students in the MA and MMus (music education) programs on the Andrews University campus are required to enroll
- for one semester of MUPF505 Keyboard Accompaniment or one semester of MUPF510 Collaborative Piano. This may apply as one of the minimum four semesters of ensemble.
- Performance majors in piano and organ are required to enroll for one semester
  of MUPF510 Collaborative Piano and one semester of MUPF515 Recital
  Accompaniment and may apply these towards the minimum four semesters of
  ensemble.

#### Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
  - 1. A thesis—6 credits of MUHL699 and/or EDRM505.
  - 2. Two projects—2 credits of MUHL698 for each project.
  - 3. A credit recital—2 credits plus a minimum of 6 credits of applied music.
  - One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.
- The MMus: Performance degree requires a 2-credit recital. Recitalists must have taken in residence at least one-half of their applied music credit in their major performance area. They must enroll in applied lessons for at least two consecutive semesters prior to the recital date and must audition before a committee of music faculty one month prior to the recital. Students majoring in performance without an undergraduate major in the same performance area (or the equivalent) must offer two recitals, only the second of which is for credit.

**Piano Proficiency.** Music majors must pass a piano proficiency examination. Graduate students who have not passed this examination on the undergraduate level must take the examination prior to the first registration. Students who do not pass this examination must enroll in applied piano until the examination is passed.

Language Proficiency. For admission to the Master of Music: Performance (voice performance specialization), language proficiency is required in French, German and Italian. Proficiency in these languages can be validated by evidence of coursework in each of these languages equivalent to two semesters of college level study, or by passing a language proficiency exam. Lack of proficiency in these three languages can be addressed by taking additional remedial coursework. Remedial coursework does not count toward completion of the graduate degree.

Electives. Each area of study has appropriate choices of electives.

Practical Training Requirement. All students pursuing master's programs (MA: Music, MMus: Conducting, MMus: MUSIC 195 Music Education, MMus: Music Ministry; MMus: Performance) are required to take the 0-credit course MUED655 Practical Training to develop professional experience in music. To fulfill this requirement, students are required to meet a minimum of 50 hours of work/service while enrolled in the masters program. This could be done over the summer. Some recommended areas of work/service that may count toward this practical training experience are as follows:

- Music ministers in church settings
- Music teachers or instructors for a public or private school
- Instrumentalists performing in professional or community ensembles
- Research assistants in approved music research projects
- Other alternative activities must be approved by the student's major professor

After completing this requirement students will fill out and submit the form Completion of Practical Training Requirements to their major professor for evaluation and signature. Students who have developed experiences equivalent to this practical training before entering the masters program may fulfill this requirement by submitting appropriate evidence showing sufficient work/ service experience.

Comprehensive Examinations. All graduate students in music take the 0-credit course MUHL670 Comprehensive Exam toward the end of their studies. Students should consult with their advisor concerning the appropriate time to apply for these examinations and for guidance in preparing for them.

**Non-degree (PTC) Students.** A student who plans to study music under this classification may be admitted to courses as approved by the department chair.

Active Status. After completing all course requirements, all graduate music students must maintain an active status continuous enrollment for both Fall and Spring semesters until the degree is granted. This is accomplished by enrolling in MUHL665 Comprehensive Exam Preparation (non-repeatable with fee attached), MUHL670 Comprehensive Exam (non-repeatable), or MUHL655 Program Continuation (repeatable with fee attached) until the degree is earned. A student who fails to maintain continuous enrollment as defined here, will not be allowed to finish their degree requirements until he/she applies to the Department of Music for degree reactivation and pays the established fees for each semester of absence in the program. The reactivation fee used will be the latest AU Bulletin fee listed for MUHL655 Program Continuation.

## Performance MMus

#### Total Credits: 32+

## Core Requirements - 13

- MUCT 535 Analytical Techniques I Credits: 2
- MUCT 536 Analytical Techniques II Credits: 2
- MUHL 695 Bibliography and Research in Music Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 524 Music Literature Seminar Credits: 2
- MUHL 519 Studies in 20th Century Music Credits: 2
- MUED 648 Workshop Credit: 1

## Additional courses—min. 19

- MUPF 538 Chamber Music Ensemble Credits: 0 or 1 (This course required for string majors only for 1-3 credits.)
- MUPF 575 Recital Credits: 1,2 (2 credits required for this degree)
- MUPF 420 Diction for Singers Credits: 3 (This course required for voice majors only.)\*
- MUED XXX Area Literature\* Credits: 3
- MUED XXX Area Pedagogy\* Credits: 3
- MUXX Music Electives Credits: 0-6
- MUPF 655 Practical Training Credits: 0
- MUPF XXX Ensemble (four semesters for 0 credits each)
- MUPF 560 Applied Music Study in Private Lessons (for performance music majors)
   Credits: 1,2 (8 credits required for this degree)
- MUPF 489 Recital Attendance Credits: 0
- MUED 655 Practical Training Credits: 0
- MUHL 670 Comprehensive Exam Credits: 0

## **Admission Requirements**

#### **Graduate Programs Admission Requirements and Procedures**

- General requirements for admission to graduate study as stated in the Admissions section of this bulletin.
- Musicians with various backgrounds often qualify to study music at the graduate level. Normally, a baccalaureate degree with a major in music is required; however, the following categories may also qualify:
- 1. Students with an earned baccalaureate degree within any major, assuming adequate undergraduate preparation in music. Adequate preparation includes mastery of music theory equivalent to content of MUCT242 Music Theory IV and MUCT153 Ear Training Laboratory III; mastery of music history equivalent to content of MUHL446-448 Music Literature and Style (Antiquity to 20th Century); and mastery of level of performance appropriate to the specific chosen master's program.
- 2. Students who have completed programs comparable to the baccalaureate degree from non-United States institutions.
- The Department of Music requires placement examinations in music history and literature, music theory, piano proficiency, and an audition in the major area of performance for all entering students prior to registration. Admission status is provisional until these examinations are completed and any deficiencies removed. Courses used to make up for a deficiency may be taken for graduate credit but may not count for graduate requirements; a minimum grade of B must be earned.
- A Graduate Scholarship Tuition Reduction is available to students with a minimum GRE Exam score of 297 (quantitative + verbal) or Music Placement Exam average score of 80.

#### Double Major Policy for Graduate Music Programs:

<sup>\*</sup>Students who took these courses at AU will substitute with music electives.

- Two majors may be allowed only within a specific program such as the Master of Arts in Music or the Master of Music. No more than two majors are allowed.
- Only one degree is granted. The different majors will only be listed in the transcript.
- Candidates must complete the specific requirements for both majors.
- Candidates must enroll for Final Project (thesis option, project option, or recital
  option as it may apply) twice to fulfill final project requirements for each of the
  two majors.
- Candidates take comprehensive examinations that cover both concentration areas.
- Decision on adding a second major must be made before the candidate fills out and submits the Advancement to Candidacy Form.
- Once a degree is earned, a second major area may not be added to the transcripts.

#### **Ensemble Requirements**

- Participation on a no-credit basis is required for four semesters in one of the
  following: any Andrews University Department of Music band, choir or
  orchestra. Keyboard majors: see note below. Students who require more than
  four semesters to complete their degree must participate in an ensemble during
  each semester of residence.
- Keyboard students in the MA and MMus (music education) programs on the Andrews University campus are required to enroll
- for one semester of MUPF505 Keyboard Accompaniment or one semester of MUPF510 Collaborative Piano. This may apply as one of the minimum four semesters of ensemble.
- Performance majors in piano and organ are required to enroll for one semester
  of MUPF510 Collaborative Piano and one semester of MUPF515 Recital
  Accompaniment and may apply these towards the minimum four semesters of
  ensemble.

#### Thesis/Project/Recital Requirement

- This requirement for an MA in music, MA in music ministry or MMus in music education may be met by one of the following:
  - 1. A thesis—6 credits of MUHL699 and/or EDRM505.
  - 2. Two projects—2 credits of MUHL698 for each project.
  - 3. A credit recital—2 credits plus a minimum of 6 credits of applied music.
  - One project plus a one-credit recital—2 credits of MUHL698 for the project plus a minimum of 4 credits of applied music.
- The MMus: Performance degree requires a 2-credit recital. Recitalists must have taken in residence at least one-half of their applied music credit in their major performance area. They must enroll in applied lessons for at least two consecutive semesters prior to the recital date and must audition before a committee of music faculty one month prior to the recital. Students majoring in performance without an undergraduate major in the same performance area (or the equivalent) must offer two recitals, only the second of which is for credit.

**Piano Proficiency.** Music majors must pass a piano proficiency examination. Graduate students who have not passed this examination on the undergraduate level must take the examination prior to the first registration. Students who do not pass this examination must enroll in applied piano until the examination is passed.

Language Proficiency. For admission to the Master of Music: Performance (voice performance specialization), language proficiency is required in French, German and Italian. Proficiency in these languages can be validated by evidence of coursework in each of these languages equivalent to two semesters of college level study, or by passing a language proficiency exam. Lack of proficiency in these three languages can be addressed by taking additional remedial coursework. Remedial coursework does not count toward completion of the graduate degree.

Electives. Each area of study has appropriate choices of electives.

Practical Training Requirement. All students pursuing master's programs (MA: Music, MMus: Conducting, MMus: MUSIC 195 Music Education, MMus: Music Ministry; MMus: Performance) are required to take the 0-credit course MUED655 Practical Training to develop professional experience in music. To fulfill this requirement, students are required to meet a minimum of 50 hours of work/service while enrolled in the masters program. This could be done over the summer. Some recommended areas of work/service that may count toward this practical training experience are as follows:

- Music ministers in church settings
- Music teachers or instructors for a public or private school
- Instrumentalists performing in professional or community ensembles

- Research assistants in approved music research projects
- Other alternative activities must be approved by the student's major professor

After completing this requirement students will fill out and submit the form Completion of Practical Training Requirements to their major professor for evaluation and signature. Students who have developed experiences equivalent to this practical training before entering the masters program may fulfill this requirement by submitting appropriate evidence showing sufficient work/ service experience.

Comprehensive Examinations. All graduate students in music take the 0-credit course MUHL670 Comprehensive Exam toward the end of their studies. Students should consult with their advisor concerning the appropriate time to apply for these examinations and for guidance in preparing for them.

**Non-degree (PTC) Students.** A student who plans to study music under this classification may be admitted to courses as approved by the department chair.

Active Status. After completing all course requirements, all graduate music students must maintain an active status continuous enrollment for both Fall and Spring semesters until the degree is granted. This is accomplished by enrolling in MUHL665 Comprehensive Exam Preparation (non-repeatable with fee attached), MUHL670 Comprehensive Exam (non-repeatable), or MUHL655 Program Continuation (repeatable with fee attached) until the degree is earned. A student who fails to maintain continuous enrollment as defined here, will not be allowed to finish their degree requirements until he/she applies to the Department of Music for degree reactivation and pays the established fees for each semester of absence in the program. The reactivation fee used will be the latest AU Bulletin fee listed for MUHL655 Program Continuation.

## **Music Composition & Theory**

#### MUCT 141 - Music Theory I: Introduction to Harmony

Credits: 3 | Review of music fundamentals, including the music vocabulary, keys and rhythm, as well as the basic elements of melody and harmony (scales, intervals, and triads) and a basic study of the principles of chord progression utilizing triads in root position. Requires concurrent enrollment in MUCT 151. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUCT 142 - Music Theory II: Diatonic Harmony

Credits: 3 | Study of the principles of voice leading and chord progression in applied four-part harmonization. Emphasis will be placed on interpretation and realization of Figured Basses, four-part harmonization using triads and seventh chords in root position as well as in inversions, the study and use of non-harmonic tones, and the dominant seventh chord as well as the other nondominant seventh chords. Requires concurrent enrollment in MUCT 152. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MUCT 141. | Schedule Type: Lecture | College Code: CAS

#### MUCT 151 - Ear Training Laboratory I

Credits: 1 | Aural skill with melodies, rhythms, intervals, chords and harmonic progressions. Activities include sight reading, error correction, transcription and improvisation of tonal music. Requires concurrent enrollment in MUCT 141, MUCT 142, MUCT 241 and MUCT 242. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lab | College Code: CAS

#### **MUCT 152 - Ear Training Laboratory II**

Credits: 1 | Aural skill with melodies, rhythms, intervals, chords and harmonic progressions. Activities include sight reading, error correction, transcription and improvisation of tonal music. Requires concurrent enrollment in MUCT 141, MUCT 142, MUCT 241 and MUCT 242. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lab | College Code: CAS

#### MUCT 153 - Ear Training Laboratory III

Credits: 1 | Aural skill with melodies, rhythms, intervals, chords and harmonic progressions. Activities include sight reading, error correction, transcription and improvisation of tonal music. Requires concurrent enrollment in MUCT 141, MUCT 142, MUCT 241 and MUCT 242. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lab | College Code: CAS

#### MUCT 154 - Ear Training Laboratory IV

Credits: 1 | Aural skill with melodies, rhythms, intervals, chords and harmonic progressions. Activities include sight reading, error correction, transcription and improvisation of tonal music. Requires concurrent enrollment in MUCT 141, MUCT 142, MUCT 241 and MUCT 242. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lab | College Code: CAS

#### MUCT 241 - Music Theory III: Chromatic Harmony

**Credits:** 3 | Theoretical and practical study of the entire spectrum of chromatic harmony vocabulary with emphasis in composition and analysis. Requires concurrent

enrollment in MUCT 153. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MUCT 142. | Schedule Type: Lecture | College Code: CAS

#### MUCT 242 - Music Theory IV: Chromatic to Post-Tonal Harmony

Credits: 3 | Continuation of Music Theory III with an introduction to the compositional practices and techniques employed by composers of the Impressionistic Period and the Twentieth Century. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): Requires concurrent enrollment in MUCT 154. | Prerequisite(s): MUCT 241. | Schedule Type: Lecture | College Code: CAS

#### MUCT 251 - Music Technology Laboratory I

Credits: 1 | Acquaintance with current technological resources in music. Emphasis in computer notation systems, sequencing and MIDI systems. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUCT 252 - Music Technology Laboratory II

Credits: 1 | Acquaintance with current technological resources in music. Emphasis in computer notation systems, sequencing and MIDI systems. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUCT 425 - Counterpoint

Credits: 3 | Historical overview of counterpoint with emphasis on the practice and analysis of 18th-century contrapuntal techniques. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MUCT 430 - Composition Seminar

Credits: 3 | Development of skills in original musical composition emphasizing the writing of short items of melody, and accompaniment for supplied melodies, leading to the writing of a substantial original composition for public performance. Emphasizes the development of critical skills in a highly participatory classroom environment. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Fall, odd years | College Code: CAS

#### MUCT 454 - Orchestration

Credits: 3 | Scoring for chamber groups, larger ensembles and full orchestra. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MUCT 470 - Form Analysis

Credits: 3 | The origin and meaning of form: motives, phrases, and periods with elementary and combined binary and ternary forms, rondo and sonata-allegro. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MUCT 535 - Analytical Techniques I

**Credits:** 2 | Detailed comprehensive analysis of representative works from literature of the tonal period. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### MUCT 536 - Analytical Techniques II

Credits: 2 | Detailed comprehensive analysis of representative works from literature of the post-tonal and 20th Century periods. Music Education | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | College Code: CAS

## **Music Education**

#### MUED 301 - Conducting I

Credits: 2 | The theory and application of basic conducting principles. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MUED 302 - Conducting II

Credits: 2 | The application of theory and techniques unique to the conducting of both choral and instrumental ensembles. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MUED301 or equivalent. | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MUED 316 - Instrumental Literature

Credits: 2 | Score analysis; score preparation and programming; study of significant band, orchestra and ensemble literature. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MUED 317 - Choral Literature

Credits: 2 | Score analysis; score preparation and programming; study and survey of significant choral literature. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MUED 376 - Brass Methods

Credits: 2 | Fundamentals of performing and teaching brass instruments with emphasis on their use in band and orchestra. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### **MUED 377 - Percussion Methods**

Credits: 2 | Fundamentals of performing and teaching percussion-instruments with emphasis on their use in band and orchestra. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MUED 378 - Vocal Methods

Credits: 2 | Fundamentals of performing and teaching voice with emphasis on their use in choir. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MUED 379 - String Methods

Credits: 2 | Fundamentals of performing and teaching string instruments with emphasis on their use in orchestra. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MUED 380 - Woodwind Methods

Credits: 2 | Fundamentals of performing and teaching woodwind instruments with emphasis on their use in band and orchestra. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MUED 421 - Organ Literature and Pedagogy I

Credits: 3 | A chronological survey of organ literature and the development of the instrument along with study of organ teaching and emphasis on keyboard and pedal technique, interpretation, sight reading, and teaching repertoire. | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### MUED 422 - Organ Literature and Pedagogy II

Credits: 3 | Continuation of MUED 421. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MUED 421 or permission of instructor. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### MUED 426 - Piano Literature

Credits: 3 | A survey of clavichord, harpsichord and piano literature and style, and the evolution of these instruments. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MUED 427 - Piano Pedagogy

Credits: 3 | The study and review of the materials and methods of private and class piano instruction. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MUED 428 - String Literature

Credits: 3 | The study of string literature and style from the Baroque era to the present, including significant solo, chamber and orchestral works. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MUED 429 - String Pedagogy

Credits: 3 | The study of beginning through advanced pedagogical techniques, including tone production, dexterity, fingerings and bowings. | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### MUED 430 - Topics in\_\_\_\_\_

Credits: 1 | A study of selected topics related to the music profession. Consult current class schedule for topics covered each year. | Swing course | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### MUED 436 - Vocal Literature

Credits: 3 | Solo vocal literature representing significant repertoire from the primary eras of music history; Italian, French and German Literature. | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MUED 437 - Vocal Pedagogy

Credits: 3 | A comprehensive study of current methodology directed toward the achievement of artistic singing and productive studio procedures. | Swing course— Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MUED 438 - Workshop

Credits: 1–3 | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### MUED 458 - Music in the Elementary School

Credits: 3 | Methods and materials used in musical programs of the elementary grades including rhythm, singing, playing, and listening activities. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MUED 459 - Music Methods and Materials

Credits: 3 | Methods and materials for the teaching of music in the secondary school with emphasis on the organization and administration of choral and instrumental ensembles. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type:

Lecture | Offering: Fall, odd years | College Code: CAS

#### MUED 485 - Practicum in Conducting

Credits: 1 | Individual attention and instruction with one of the larger ensembles. | \$ - Course or lab fee | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MUED304 or 305 and permission of teacher. | Repeatable: Repeatable | Schedule Type: Practicum | College Code: CAS

#### MUED 500 - Graduate Theory/History Review

Credits: 1–4 | Review of the theory and history principles that are regarded essential for success in a graduate program in music. Includes music vocabulary, skills, and basic concepts in the two areas. | Grade Mode: Satisfactory (S,U,I,W) | Prerequisite(s): Complete sequence of Undergraduate Music History and Music Theory courses, or equivalent. | Schedule Type: Lecture | College Code: CAS

#### MUED 515 - Introduction to Research in Music Education

Credits: 3 | Research techniques appropriate to research in music education, principles of research design, organization of the research report, and critical examination of representative research studies in music education. Emphasis on developing knowledgeable and discriminating readers and interpreters of completed research. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### MUED 518 - Instrumental Methods

Credits: 3 | Comprehensive study of current methodology, emphasizing one of the following areas: woodwinds, brass, percussion, strings. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# MUED 521 - Historical and Philosophical Foundations of Music Education

**Credits:** 3 | Study of the philosophy and practice of Music Education from the 1920s to the present. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Fall, odd years | **College Code:** CAS

#### MUED 530 - Current Issues and Trends in Music Education

Credits: 3 | Study of current issues and trends in music education. | Grade Mode:
Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, even years | College Code:
CAS

#### MUED 564 - Score Study

Credits: 2 | A course designed to develop the essential abilities in the student to translate musical notation into a mental image, through the development of analytical tools to understand the larger design of a musical composition. Students will also be introduced to an effective method of score marking. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### MUED 648 - Workshop

Credits: 1–3 | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### MUED 655 - Practical Training

Credits: 0 | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable | Schedule Type: Practicum | College Code: CAS

## **Music History & Literature**

#### MUHL 214 - Enjoyment of Music

**Credits:** 3 | An opportunity to acquire a better appreciation of classical music —to discover how church music, folk songs, jazz, spirituals, gospel, rock and roll, and pop music fit into the broad spectrum of classical music from 1000 A.D. to the present day. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### MUHL 214V - Enjoyment of Music

Credits: 3 | An opportunity to acquire a better appreciation of classical music —to discover how church music, folk songs, jazz, spirituals, gospel, rock and roll, and pop music fit into the broad spectrum of classical music from 1000 A.D. to the present day.

| Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### MUHL 258 - American and World Music

Credits: 3 | A study of America's musical past with emphasis on the historical and social context of native, folk, sacred, popular, and classical music, and their interaction. An introduction to musical traditions from around the world with an investigation of their musical languages and the social context in which they happen. | \$ - Course or lab fee (\$60) | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUHL 446 - Music Literature and Style (Antiquity-Renaissance)

Credits: 3 | Historical development of musical styles and the relationship between music and social trends of the period. Visual and aural analysis of representative compositions and introduction to biographical and bibliographical materials. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUHL 447 - Music Literature and Style (Baroque and Classical)

Credits: 3 | See MUHL 446. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# MUHL 448 - Music Literature and Style (20th Century and Romantic)

Credits: 3 | See MUHL 446. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUHL 450 - Project Continuation

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approval only | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): MUHL 490 | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUHL 490 - Research Pro Seminar

Credits: 0 | The Research ProSeminar is designed to provide a safe, supportive environment for undergraduate musician scholars working on a research project in music, to provide constructive critique and encouragement for each other. While largely driven by the needs of the group members, the Research ProSeminar is conducted under the guidance of a faculty member, who, in addition to facilitating group discussion, will give short presentations on relevant aspects of scholarship in music. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): MUHL 450 | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

#### MUHL 495 - Independent Study

Credits: 1 | In consultation with a member of the music faculty, a student may choose independent study in a special area fo music. A brief outline of the study to be pursued must be submitted to the department chair. A minimum of 45 hours of work is required for each credit. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) |

Prerequisite(s): Permission of the department chair required. | Repeatable:

Repeatable | Schedule Type: Independent | College Code: CAS

#### MUHL 519 - Studies in 20th Century Music

**Credits:** 2 | A survey of 20th-century repertoire from its late 19th-century origins to the present. Emphasis is placed on compositional and stylistic trends and surrounding artistic climates. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture, Blended Learning | **Offering:** Spring, even years | **College Code:** CAS

#### MUHL 524 - Music Literature Seminar

Credits: 2 | A study of selected major works from representative period(s)/composer(s). Provides a synthesis of musicological, historical, analytical, and interpretational techniques. Different literature covered each semester. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Advanced-level survey courses or demonstrated equivalent. | Repeatable: Repeatable with different topics | Schedule Type: Blended Learning, Seminar | College Code: CAS

#### MUHL 590 - Research Pro Seminar

Credits: 0 | The Research Pro Seminar is designed to provide a safe, supportive environment for graduate musician scholars working on a research project in music, to provide constructive critique and encouragement for each other. While largely driven by the needs of the group members, the Research Pro Seminar is conducted under the guidance of a faculty member, who, in addition to facilitating group discussion, will give short presentations on relevant aspects of scholarship in music. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): MUHL 650, MUHL 698, or MUHL 699 | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

#### MUHL 650 - Project Continuation

Credits: 0 | Student may register for this title while clearing deferred grade (DG) with advisor approval only. | \$ - Course or lab fee | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): MUHL 590 | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUHL 655 - Program Continuation

Credits: 0 | Students may register for this non-credit continuation course to maintain active status. For additional information on active status, please refer to p. 56 in the bulletin. Registration does not indicate full-time status. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUHL 665 - Comprehensive Exam Preparation

Credits: 0 | Advisor approval required. Registration for this title indicates fulltime status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Schedule Type: Independent | College Code: CAS

#### MUHL 670 - Comprehensive Exam

Credits: 0 | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Independent | College Code: CAS

#### MUHL 695 - Bibliography and Research in Music

Credits: 2 | An introduction to the tools and materials available in music research, with a critical analysis of sources. An examination of the goals and methods of research in music and an introduction to scholarly writing. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MUHL 697 - Independent Study

Credits: 1–3 | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUHL 698 - Project

Credits: 2 | Requires concurrent enrollment in MUHL 590 - Research Pro
Seminarclass. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): MUHL
590 | Repeatable: Repeatable up to 4 credits | Schedule Type: Independent |
College Code: CAS

#### MUHL 699 - Master's Thesis

Credits: 2 | Requires concurrent enrollment MUHL 590 - Research Pro
Seminarclass.Registration for this title indicates full-time status. | Course Attribute:
Full-time status | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s):
MUHL 590 | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent |
College Code: CAS

## **Music Performance**

#### MUPF 116 - Piano Proficiency

Credits: 1,2 | The development of basic keyboard skills required for building musicianship for all music majors and minors: scales and chords, sight reading, accompaniment of melodies, and playing simple pieces and hymns. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 160 - Music Class

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | Special Approval: Classes open to all students upon permission of the instructor. | College Code: CAS

#### MUPF 164 - Applied Music

Credits: 1,2 | Applied Music Non-Performance Major/Minor The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF489. Non-music students may register for music lessons. These courses do not apply toward fulfilling music major degree requirements without specific music faculty action. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 165 - Applied Music

Credits: 1,2 | The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF489. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 170 - Applied Music

Credits: 1,2 | For non-music students | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code:

#### MUPF 260 - Music Class

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | Special Approval: Classes open to all students upon permission of the instructor. | College Code: CAS

#### MUPF 264 - Applied Music—Sophomore

Credits: 1,2 | Applied Music Non-Performance Major/Minor The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF 489. Non-music students may register for music lessons. These courses do not apply toward fulfilling music major degree requirements without specific music faculty action. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 265 - Applied Music—Sophomore

Credits: 1,2 | The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF 489. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 270 - Applied Music

Credits: 1,2 | For non-music students | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

## MUPF 330 - University Orchestra

Credits: 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 334 - Wind Symphony

Credits: 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 336 - University Chorale

Credits: 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 339 - Chamber Music Ensemble

Credits: 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 345 - Sinfonietta

**Credits:** 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | **Grade Mode:** Normal (A-F,I,W) | **Repeatable:** Repeatable | **Schedule Type:** Music Organization | **College Code:** CAS

#### MUPF 360 - Music Class

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | Special Approval: Classes open to all students upon permission of the instructor. | College Code: CAS

#### MUPF 364 - Applied Music-Junior

Credits: 1,2 | Applied Music Non-Performance Major/Minor The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF489. Non-music students may register for music lessons. These courses do not apply toward fulfilling music major degree requirements without specific music faculty action. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 365 - Applied Music-Junior

Credits: 1,2 | The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF 489. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 370 - Applied Music

Credits: 1,2 | For non-music students | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code:

#### MUPF 385 - University Singers

Credits: 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 396H - Honors Music Recital (Junior)

Credits: 1 | A memorized recital under the supervision of a music honors committee. Research document on compositions performed is required. May be taken in lieu of certain required and applied music courses. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Independent | College Code: CAS

#### MUPF 397 - Recital-Junior

Credits: 1 | Recitals | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Independent | College Code: CAS

#### MUPF 405 - Keyboard Accompaniment

Credits: 1 | Accompanying of instrumental and vocal soloists. Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 410 - Collaborative Piano

Credits: 1 | Coaching and instruction in collaborative piano; the study of piano ensemble repertoire, such as piano duos, piano duets, chamber music and other forms featuring the piano as a collaborative instrument. Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 420 - Diction for Singers

Credits: 3 | The study of the rules for pronunciation and diction of the major languages used by singers. Study of Italian, French, German and Latin with application of International Phonetic Alphabet symbols. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### MUPF 460 - Music Class

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | Special Approval: Classes open to all students upon permission of the instructor. | College Code: CAS

#### MUPF 464 - Applied Music—Senior

Credits: 1,2 | Applied Music Non-Performance Major/Minor The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF 489. Non-music students may register for music lessons. These courses do not apply toward fulfilling music major degree requirements without specific music faculty action. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 465 - Applied Music—Senior

Credits: 1,2 | The private study of the performance repertoire and technique of the given instrument or voice and the study of performance-related skills. Repertoire study includes solo and concerted works. Technical study includes scales and arpeggios, technical exercises appropriate to the performance medium, excerpts (where appropriate) and etudes. Performance-related skills study includes the development of basic-level skills in improvisation and the study of sight-reading. Each of these courses require concurrent enrollment in MUPF 489. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 470 - Applied Music

Credits: 1,2 | For non-music students | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 478 - Study Tour:

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### MUPF 489 - Recital Attendance

**Credits:** 0 | Attendance of on- and off-campus live musical events. Required for all music majors each semester in full-time residence and four (4) semesters for music minors. Students are required to attend nine (9) live musical events each semester in order to pass the course, at least seven (7) of which must be sponsored by the Department of Music. Students may count ensemble concerts in which they perform, but note that multiple performances of a given concert may only be counted as one (1) concert. Music majors and minors who do not achieve a "pass" for one (1)

semester may risk losing their standing as a music major or minor. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 490 - Recital Continuation

Credits: 0 | Recitals | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 496H - Honors Music Recital (Senior)

Credits: 2 | A memorized recital under the supervision of a music honors committee. A research document on compositions performed is required. May be taken in lieu of certain required and applied music courses. | Grade Mode: Normal (A-F,I,W) |
Schedule Type: Independent | College Code: CAS

#### MUPF 497 - Recital—Senior

Credits: 1,2 | Recitals | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 2 credits | Schedule Type: Independent | College Code: CAS

#### MUPF 499 - Senior Project

Credits: 1,2 | Requires concurrent enrollment in MUHL 490 - Research Pro Seminar. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): MUHL 490 | Schedule Type: Independent | College Code: CAS

# MUPF 500 - Applied Music Study in Private Lessons (for music non-performance majors)

Credits: 1,2 | Style and development of repertoire; preparation for public performance. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): Requires concurrent enrollment in MUPF 489. | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 505 - Keyboard Accompaniment

Credits: 0 or 1 | Accompanying of instrumental and vocal soloists. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 506 - Advanced Conducting

Credits: 1,2 | Choral/Instrumental Section 01: Study of the art and techniques of conducting relative to the score and to the chorus as a performance instrument. Section 02: Study of the art and techniques of conducting relative to the score and to the orchestra or band as performance instruments. Major works are studied and conducted. Each of these courses require concurrent enrollment in MUPF 489. MUPF 510 - Collaborative Piano and instruction in collaborative piano; the study of piano ensemble repertoire, such as piano duos, piano duets, chamber music, and other forms featuring the piano as a collaborative instrument. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### MUPF 510 - Collaborative Piano

**Credits:** 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | **Grade Mode:** Normal (A-F,I,W) | **Repeatable:** Repeatable | **Schedule Type:** Music Organization | **College Code:** CAS

#### MUPF 515 - Recital Accompanying

Credits: 0 or 1 | Preparation and public performance of a pianist/soloist recital in which the piano is the principal medium of accompaniment. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 516 - Piano Proficiency

Credits: 1,2 | The development of basic keyboard skills required for building musicianship for all music graduate students: scales and chords, sight reading, accompaniment of melodies, and playing simple pieces and hymns. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 525 - University Orchestra

Credits: 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 526 - University Wind Symphony

Credits: 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 527 - University Chorale

Credits: 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### **MUPF 528 - University Singers**

 $\begin{tabular}{ll} \textbf{Credits: 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS |$ 

#### MUPF 538 - Chamber Music Ensemble

Credits: 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Music Organization | College Code: CAS

#### MUPF 545 - Sinfonietta

Credits: 0 or 1 | Department of Music ensembles are open to all students upon permission of the instructor. Ensembles seek to expand the intellectual, psychological and spiritual horizons of the student. Ensemble credit may fulfill part of the General Education arts/ humanities breadth requirement. Permission to add or drop an ensemble must be approved by the respective instructor. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Blended Learning, Music Organization | College Code: CAS

#### MUPF 550 - Private Instruction in \_\_\_\_\_

Credits: 1 | Private instruction in composition. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

# MUPF 560 - Applied Music Study in Private Lessons (for performance music majors)

Credits: 1,2 | Style and development of repertoire; preparation for public performance. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): Requires concurrent enrollment in MUPF 489. | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

# MUPF 570 - Applied Music Study in Private Lessons (for non-music majors)

Credits: 1–2 | Style and development of repertoire; preparation for public performance. | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 575 - Recital

Credits: 1,2 | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### MUPF 640 - Recital Continuation

Credits: 1,2 | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

## Music-Religious

#### MURE 420 - Church Music and Hymnology

**Credits:** 3 | The biblical basis for and the theological implications involved in churchmusic practice with emphasis on the development of principles for guidance in the use

and selection of available literature. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MURE 485 - The Church Organ and Service Playing

Credits: 2 | The development of the organ and organ literature; a practical study of church services, including organ registrations for choral music, vocal solos, and hymn playing; discussion of the organ interlude and improvisation. Concurrent enrollment in applied music—organ is recommended. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### MURE 520 - Hymnology and Church Music

Credits: 2 | The understanding and appreciation of the heritage and development of Christian hymn singing and Church music repertoire, in their respective liturgical and theological contexts. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### MURE 590 - Ministry of Music Practicum

Credits: 1+1 | A two-semester internship as minister of music or minister of music assistant in a selected church in the local area. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Repeatable: Repeatable up to 2 credits | Schedule Type: Practicum | College Code: CAS

# Physics

Haughey Hall, Room 211 269-471-3430 physics@andrews.edu http://physics.andrews.edu

#### Faculty

Margarita C. K. Mattingly, Chair Gary W. Burdick G. Brendan Cross Mickey D. Kutzner Tiffany Z. Summerscales Stephen C. Thorman

#### **Adjunct Faculty**

Lonnie Pierce

Ronald L. Johnson, Director, Physics Enterprises Robert E. Kingman S. Clark Rowland

#### Mission

Advance the appreciation, understanding and application of physics in the context of personal integrity and service, scientific rigor, and Seventh-day Adventist faith.

#### Strategies

- 1. Create an environment of scholarly inquiry, learning, and creativity
- Develop technical, analytical, and critical thinking skills 2.
- Provide opportunities for intellectual independence, collaboration, and outreach
- Promote personal wholeness, integrity, balance, and spiritual well-being

#### Student and Faculty Goals

- Understand physics ideas, principles and interpretation, supporting and participating in research and education
- Measure, analyze and model physical phenomena, lending insight to other disciplines and professions
- Communicate scholarship in written and oral form, networking with scholarly, faith, and civic communities
- Connect scientific and religious world views, serving the Seventh-day Adventist Church and society

Physics describes the world in terms of matter and energy and relates phenomena to fundamental law using mathematical representations. Its scope includes systems that range in size from the sub-nuclear to the entire cosmos.

The BS: Physics program supports and enhances professional careers in all the physical sciences, engineering, and the life sciences. Its emphasis on problem-solving also provides a foundation for careers in medicine, business, law, and government.

The BS: Biophysics program prepares the graduate for direct entry into the workforce or advanced studies in medical and bioengineering fields as well as biophysics.

The BS: Physics Education program prepares the graduate for a career in secondary teaching.

The Major in Physics Studies is an add-on degree program that complements any baccalaureate degree without incurring additional general education requirements. It strengthens and expands marketability and interdisciplinary opportunities.

A Minor in Physics complements any baccalaureate degree. It is the minimum requirement for secondary teaching certification in physics. All physics majors and minors desiring certification should consult with the School of Education throughout their program.

## **Bachelors**

## Biophysics BS

## Offered by the biology and physics departments

- BIOL 165 Foundations of Biology Credits: 5 or 4
- BIOL 166 Foundations of Biology Credits: 5 or 4
- BIOL 371 Genetics Credits: 3

- BIOL 372 Cell and Molecular Biology Credits: 3
- Or BCHM 421 Biochemistry I Credits: 4 \*
- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4 PHYS 271 - Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- PHYS 277 Physics Colloquium Credits: 0 \*\*
- PHYS 377 Advanced Physics Laboratory I Credits: 1
- CHEM 431 Physical Chemistry I Credits: 3
- And CHEM 441 Physical Chemistry Laboratory I Credits: 1
- PHYS 431 Electricity and Magnetism I Credits: 3
- 1 Credit minimum of PHYS 495 Physics Research Credits: 0

#### Note:

\*A student may earn a minor in chemistry by selecting BCHM 421 or CHEM 431 and CHEM 441.

\*\*PHYS 277 is required every semester. MATH 389 may substitute for PHYS 277.

## **Cognate Courses:**

- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CHEM 231 Organic Chemistry I Credits: 3
- CHEM 232 Organic Chemistry II Credits: 3
- CHEM 241 Organic Chemistry Laboratory I Credits: 1
- CHEM 242 Organic Chemistry Laboratory II Credits: 1
- MATH 191 Calculus I Credits: 4
- Or MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 286 Differential Equations Credits: 3

#### **Recommended Electives:**

- BCHM 422 Biochemistry II Credits: 3
- BCHM 430 Biochemistry Lab Credits: 1
- CHEM 432 Physical Chemistry II Credits: 3
- CHEM 442 Physical Chemistry Laboratory II Credits: 1
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4

#### Senior Thesis.

All Physics and Biophysics majors do some original research in collaboration with an established physicist on-campus or at another university, industrial or national laboratory. If students enroll for 3 credits of PHYS 495 or HONS 497H, they may prepare a Senior Thesis. Undergraduate Research Scholarships are available through the Office of Research & Creative Scholarship when students collaborate with Andrews Physics faculty.

#### **Total Credits: 40**

## Physics BS

## Major Requirements: - 40

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4

- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- PHYS 277 Physics Colloquium Credits: 0 \*
- PHYS 377 Advanced Physics Laboratory I Credits: 1
- PHYS 431 Electricity and Magnetism I Credits: 3
- PHYS 477 Advanced Physics Laboratory II Credits: 1
- PHYS 481 Quantum Mechanics I Credits: 3
- PHYS 495 Physics Research Credits: 0 (a minimum of 1 credit)
- plus an additional 15 credits numbered 300 and above

#### Note:

\* PHYS 277 is required every semester. MATH 389 may substitute for PHYS 277.

## **Cognate Courses:**

- MATH 191 Calculus I Credits: 4 or
- MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 215 Introduction to Linear Algebra Credits: 3
- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- CHEM 132 General Chemistry II Credits: 4
- CPTR 151 Computer Science I Credits: 3 or
- PHYS 235 MATLAB Credits: 2,3

## **Secondary-teaching Certification:**

Physics majors desiring secondary-teaching certification should also consult with the School of Education. BIOL 165 is required in addition to all other cognates. Program is certified by the Michigan Department of Education. Accreditation by the National Science Teachers Association is pending.

## Physics Education BS

## Major Requirements: - 30

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- PHYS 277 Physics Colloquium Credits: 0 \*
- PHYS 377 Advanced Physics Laboratory I Credits: 1
- PHYS 431 Electricity and Magnetism I Credits: 3
- PHYS 481 Quantum Mechanics I Credits: 3
- PHYS 495 Physics Research Credits: 0 (a minimum of 1 credit)
- plus an additional 6 credits numbered 300 and above in consultation with advisor.

## Note:

\*PHYS 277 is required every semester. MATH 389 may substitute for PHYS 277.

## **Cognate Courses:**

- MATH 191 Calculus I Credits: 4 or
- MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 240 Calculus III Credits: 4

- MATH 286 Differential Equations Credits: 3
- CHEM 131 General Chemistry I Credits: 4
- BIOL 165 Foundations of Biology Credits: 5 or 4

#### Note:

This major is available only to those who are obtaining secondary teacher certification. Program is certified by the Michigan Department of Education and accreditated by the National Science Teachers Association.

# General Education Requirements—for Physics and Physics Education with Secondary Certification

For more information regarding General Education Requirements or Secondary Certification with a BA or BS degree, see the department of Teaching, Learning & Curriculum

## Religion: 12\*

- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- and a 3-credit elective chosen in consultation with your SED advisor

### Language/Communication:

- ENGL 115 College Writing I Credits: 3
- ENGL 215 College Writing II Credits: 3
- COMM 450 Communication in the Classroom Credits: 3

## Foreign Language (BA only)

Intermediate Language (4)

## History:

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3

#### Fine Arts/Humanities:

#### Choose one course from:

- ARTH 220 Language of Art Credits: 3
- PHTO 210 History of Photography Credits: 3
- Studio Art (3)
- ENGL 255 Studies in Literature Credits: 3
- PHIL 224 Introduction to Philosophy Credits: 3
- MUHL 214 Enjoyment of Music Credits: 3
- Ensemble Music (3)

#### Life/Physical Sciences:

• see cognate requirements for major

#### Mathematics:

see cognate requirements for major

## Service:

EDTE 165 - Philosophical and Social Foundations of Education Credits: 4

## Social Sciences:

- GDPC 302 Educational Psychology Credits: 3
- EDTE 228 Strategies for Educating Exceptional and Diverse Learners Credits: 3

#### Fitness Education:

HLED 120 - Fit for Life Credits: 1

plus two Fitness Education courses

## Non-degree Majors

## Physics Studies Major

## Major Requirements: - 30

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- PHYS 277 Physics Colloquium Credits: 0 \*
- PHYS 377 Advanced Physics Laboratory I Credits: 1
- PHYS 431 Electricity and Magnetism I Credits: 3 (or ENGR 435)
- PHYS 481 Quantum Mechanics I Credits: 3
- PHYS 495 Physics Research Credits: 0 (a minimum of 1 credit)
- plus an additional 3–6 credits numbered 300 and above in consultation with advisor.

#### Note:

\*PHYS 277 is required every semester. MATH 389 may substitute for PHYS 277.

## Cognate Courses:

- MATH 191 Calculus I Credits: 4 or
- MATH 195 Calculus I for Biology Credits: 4
- MATH 192 Calculus II Credits: 4
- MATH 240 Calculus III Credits: 4
- MATH 286 Differential Equations Credits: 3

#### Note:

This major is available only as a second major. It is designed to complement engineering, computer science, chemistry and mathematics degrees, but may be added to a major in any field.

## **Undergraduate Minors**

## Physics Minor

## Minor Requirements: - 20

- PHYS 241 Physics for Scientists and Engineers I Credits: 4
- PHYS 242 Physics for Scientists and Engineers II Credits: 4
- PHYS 271 Physics for Scientists and Engineers Laboratory I Credits: 1
- PHYS 272 Physics for Scientists and Engineers Laboratory II Credits: 1
- PHYS 277 Physics Colloquium Credits: 0 \*

#### Note

\*PHYS 277 is required every semester. MATH 389 may substitute for PHYS 277.

## Secondary-teaching Certification:

Students in a teacher certification program are required to take PHYS 430, PHYS 377 and PHYS 495 (1) Research. They are also required to take MATH 191, CHEM 131, and BIOL 165 as cognates. Program is certified by the State of Michigan Department of Education and accredited by the National Science Teachers Association.

For more information regarding Secondary Certification with a minor see the department of Teaching, Learning & Curriculum

## **Physics**

#### PHYS 107 - Concepts and Applications in Physics I

Credits: 3 | Identifying and quantifying physics concepts that organize daily experience, selected from mechanics, waves, thermodynamics, electromagnetism, optics, and modern physics. Includes individual and collaborative development of abstract and practical problem solving skills and applications in the classroom and integrated laboratory experience. Intended to lay a foundation for pre-professional and calculus-based introductory physics courses. For dual credit only for Berrien County RESA Mathematics & Science Center programs and calendar. In combination with PHYS108, meets the physical science requirement for Andrews University General Education. Does not apply to a physics major or minor. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture/Lab | Offering: Fall | College Code: CAS

#### PHYS 108 - Concepts and Applications in Physics II

Credits: 3 | A sequel to PHYS107, identifying and quantifying the remaining physics concepts frommechanics, waves, thermodynamics, electromagnetism, optics, and modern physics. Includes individual and collaborative development of abstract and practical problem solving skills and applications in the classroom and integrated laboratory experience. Intended to lay a foundation for pre-professional and calculus-based introductory physics courses. For dual credit only, associated with Berrien County RESA Mathematics & Science Center programs and calendar. In combination with PHYS107, meets the physical science requirement for Andrews University General Education. Does not apply to a physics major or minor. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS107 | Schedule Type: Lecture/Lab | College Code: CAS

#### PHYS 110 - Astronomy

Credits: 4 | Exploring the cosmic environment— the solar system, stars and their development, star clusters, the interstellar medium, galaxies, and large-scale features of the Universe. Meets the Andrews General Education Physical Science requirement. Does not apply to a major or minor. | Weekly: 3 lectures and a 2-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE P2 or MATH145 or 166 or STAT285. | Schedule Type: Lecture/Lab | Offering: Fall, Spring | College Code: CAS

#### PHYS 110V - Astronomy

Credits: 4 | Exploring the cosmic environment the solar system, stars and their development, star clusters, the interstellar medium, galaxies, and large-scale features of the Universe. Includes a distance laboratory component and meets the Andrews General Education Physical Science requirement. Does not apply to a major or minor. | The distance equivalent of 3 lectures and a 2-hour lab per week. | \$ - Course or lab fee | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): MPE P2 or MATH145 or 166 or STAT285 or equivalent. | Schedule Type: Self-paced | Offering: Fall, Spring, Summer | College Code: CAS

#### PHYS 115 - Mythbusting

Credits: 4 | Examining what is commonly believed about the physical world and how to realign it with measureable reality. A conceptual and relevant understanding of physics—forces, matter and energy with 21st century applications. Meets the General Education Physical Science requirement. Does not apply to a major or minor. |

Weekly: 3 lectures and a 2-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE P2 or any GE-level math course. | Schedule Type:

Lecture/Lab | College Code: CAS

#### PHYS 117 - Observational Astronomy Laboratory

Credits: 1 | Practical experience and background in observational astronomy with modern optical instruments in laboratory, field or remote facilities. As weather permits, will include sessions at the University observatory with departmental or personal telescopes. A standalone laboratory course suitable for students in any major and for the general public. General Education Physical Science credit is limited to transfer students who are articulating a lecture course in astronomy or a Physical Science with 3 or more credits. Does not apply to a major or minor. | Weekly: one 3-hour activity | \$ - Course or lab fee | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Schedule Type: Lab | College Code: CAS

#### PHYS 141 - General Physics I

Credits: 4 | Algebra based introduction to mechanics, wave motion, sound and thermodynamics. | Weekly: 3 lectures, 1 recitation, 1-hour of small-group learning and one 2.5-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE P4 or MATH 167 or MATH 168 | Schedule Type: Lecture, Lab, Workshop | College Code: CAS

#### PHYS 142 - General Physics II

Credits: 4 | Algebra based introduction to electricity, magnetism, physical and geometric optics, relativity, and modern physics | Weekly: 3 lectures, 1 recitation, 1-hour of small-group learning and one 2.5-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 141 | Schedule Type: Lecture, Lab, Workshop | College Code: CAS

#### PHYS 225 - Sound and Waves

Credits: 4 | The production, transmission, synthesis, and perception of sound as understood through the physical principles, properties, and nature of waves. Includes a survey of applications—music, speech, locomotion, and imaging—and comparisons with light and other kinds of waves. Meets the General Education Physical Science requirement. Does not apply to a major or minor. | Weekly: 3 lectures and a 2-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MPE P2 or MATH 145 or MATH 165 or STAT 285. | Schedule Type: Lecture/Lab | College Code: CAS

#### PHYS 235 - MATLAB

Credits: 2,3 | An introduction to MATLAB programming with a focus on its application to physics problems. The capabilities of MATLAB are explored in the areas of graphing, data analysis, numerical methods, Fourier analysis, and signal processing. | Weekly: 1 lecture and a 4-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lab | College Code: CAS

#### PHYS 241 - Physics for Scientists and Engineers I

Credits: 4 | A calculus-basedintroduction to mechanics, wave motion and thermodynamics emphasizing the mathematical formulation and the physical significance of fundamental principles. | Weekly: 4 lectures and 1 recitation | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PHYS 271 | Prerequisite(s): MATH 192 | Schedule Type: Lecture | College Code: CAS

#### PHYS 242 - Physics for Scientists and Engineers II

Credits: 4 | A calculus-basedintroduction to electricity, magnetism, geometric and physical optics, relativity, and modern physics emphasizing the mathematical formulation and the physical significance of fundamental principles. | Weekly: 4 lectures and 1 recitation | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PHYS 272 | Prerequisite(s): MATH 192 and PHYS 241 | Schedule Type: Lecture | College Code: CAS

#### PHYS 271 - Physics for Scientists and Engineers Laboratory I

Credits: 1 | Laboratory experiments in mechanics, wavemotion and thermodynamics, associated withthe PHYS241 course. | Weekly: one 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PHYS 241 | Schedule Type: Lab | College Code: CAS

#### PHYS 272 - Physics for Scientists and Engineers Laboratory II

Credits: 1 | Laboratory experiments inelectricity, magnetism, geometric and physical optics, and modern physicsassociated with the PHYS242 course. | Weekly: one 3-hour lab | \$ - Course or lab fee | Grade Mode: Normal (A-F,I,W) | Corequisite(s): PHYS 242 | Schedule Type: Lab | College Code: CAS

#### PHYS 277 - Physics Colloquium

Credits: 0 | Current topics and issues of interest to the physics community. Required each semester of all students with a physics major or minor. Interchangeable with MATH 389. | Weekly: 1 lecture or activity | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Seminar | College Code: CAS

## PHYS 280 - Topics in\_\_\_\_\_

Credits: 0.5 | Introductory-level topics in astrophysics, other current physics area or associated scientific programming. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): Approval of the instructor. | Repeatable: Repeatable up to 4 credits. Minimum of 4 hours per week is required for each credit earned. | Schedule Type: Seminar | College Code: CAS

#### PHYS 295 - Independent Study/Research

Credits: 1,2 | Individually directed reading and lab projects in physics (e.g., holography and astrophotography). A minimum of 4 hours per week is required for each credit earned. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Approval of the instructor. | Repeatable: Repeatable up to 4 credits | Schedule Type: Independent | College Code: CAS

#### PHYS 311 - Theoretical Mechanics I

Credits: 3 | Statics, kinematics, and dynamics for single particles, includingLagrangian and Hamiltonian formalisms. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) |
Prerequisite(s): PHYS 242(recommended) or PHYS 142; MATH 192. | Schedule Type:
Lecture | Offering: Fall | College Code: CAS

#### PHYS 316 - Biophysics

Credits: 3 | Modeling and describing physical phenomena of living systems, including transport and diffusion across membranes and electrical processes in muscle and nerve tissue. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 142 or PHYS 242; MATH 192. | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### PHYS 325 - Astrophysics

Credits: 3 | The application of physics to astronomical objects and systems. Includes orbital mechanics, observing with light, planetary systems, stellar mechanics, galaxies, and cosmology. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 242 (recommended) or PHYS 142; MATH 192 | Schedule Type: Lecture | College Code:

#### PHYS 330 - Thermodynamics and Statistical Mechanics

Credits: 3 | Systematic introduction to thermodynamics, kinetic theory, and statistical mechanics (classical and quantum). | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 142 or PHYS 242; MATH 192. | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

#### PHYS 350 - Optics

Credits: 3 | Geometric and physical optics; interference and diffraction, polarization, Fourier optics, lasers, and holography. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 242 (recommended) or PHYS 142; MATH 192. | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PHYS 377 - Advanced Physics Laboratory I

Credits: 1 | Development of advanced lab skills in the study of basic physical phenomena. Emphasis includes scientific instrumentation, scientific computing, lab procedure, data reduction, interpretation, and technical communication. A public presentation is required. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 2 credits | Schedule Type: Lab | Offering: Spring | College Code: CAS

#### PHYS 400 - Demonstrations in Physics

Credits: 1,2 | Identifying topics suitable for demonstration, surveying the literature, preparing demonstrations, finding suppliers of materials and equipment. Critically evaluating demonstrations—their design, preparation, and execution. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): Approval of the department chair. | Schedule Type: Lab | College Code: CAS

#### PHYS 412 - Theoretical Mechanics II

Credits: 3 | Statics, kinematics, and dynamics of multi-particle systems,including Lagrangian and Hamiltonian formalisms. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 411 (recommended) or ENGR 285; MATH 192. | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### PHYS 420 - Advanced Topics in\_\_\_\_\_

Credits: 2,3 | Astrophysics, atomic physics, nuclear physics, relativity or other current physics area. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): PHYS 242 or PHYS 411. | Repeatable: Repeatable up to 6 credits | Schedule Type: Lecture | College Code: CAS

#### PHYS 431 - Electricity and Magnetism I

Credits: 3 | A treatment of electromagnetic phenomena in terms of potentials and vector fields. Develops Maxwell's equations with descriptions of electrostatics and magnetostatics as solutions to Laplace's and Poisson's equations. | Swing course | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite/Corequisite: PHYS 411 . | Schedule Type: Lecture | Offering: Fall, even years | College Code: CAS

#### PHYS 432 - Electricity and Magnetism II

Credits: 3 | A treatment of electromagnetic phenomena in terms of potentials and vector fields. Addresses electromagnetic radiation in media, reflection and refraction, and the fields of waveguides and antennae. | Swing course | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): PHYS 431 | Schedule Type: Lecture | Offering: Spring, odd years | College Code: CAS

### PHYS 440 - Relativity

Credits: 3 | Einstein's theories of Special and General Relativity. Includes introductions to black holes, relativistic cosmology and gravitational waves. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 242 (recommended) or PHYS 142; MATH 192 | Schedule Type: Lecture | College Code: CAS

#### PHYS 445 - Particle Physics

Credits: 3 | A study of particle properties, forces, structure, decay and reaction mechanism in the context of the Standard Model. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 481. | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### PHYS 460 - Solid State Physics

**Credits:** 3 | A study of crystallography, x-ray diffraction, properties of crystalline and amorphous solids, band theory of solids, and lattice dynamics. | Swing course |

Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 411 . | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### PHYS 475 - Physics Review

Credits: 3 | A review and synthesis of physics concepts and analytical and experimental techniques in preparation for entry into a graduate program. Topics include classical, statistical and quantum mechanics, waves and classical fields. |

Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 411. | Schedule Type:

Workshop | Offering: Fall | College Code: CAS

#### PHYS 477 - Advanced Physics Laboratory II

Credits: 1 | Development of advanced lab skills in the study of basic physical phenomena. Emphasis includes scientific instrumentation, scientific computing, lab procedure, data reduction, interpretation, and technical communication. A public presentation is required. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 2 credits | Schedule Type: Lab | Offering: Spring | College Code: CAS

#### PHYS 478 - Study Tour:

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Noncredit (NC,W) | Schedule Type: Blended Learning | College Code: CAS

#### PHYS 481 - Quantum Mechanics I

Credits: 3 | The mechanics of physical phenomena at small scales in formalisms developed by Schoredinger, Heisenberg, and Dirac. Treatments of infinite and square well, barrier, step, and harmonic oscillator potentials; uncertainty relations and angular momenta. | Swing course | Grade Mode: Normal (A-F,I,W) |

Prerequisite/Corequisite: PHYS 411 . | Schedule Type: Lecture | Offering: Fall, odd years | College Code: CAS

#### PHYS 482 - Quantum Mechanics II

Credits: 3 | Matrix mechanics and spin, quantum mechanics applied to the hydrogen atom, many-electron atoms and solid state physics. Also an introduction to time-independent and time-dependent perturbation theory. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PHYS 481. | Schedule Type: Lecture | Offering: Spring, even years | College Code: CAS

#### PHYS 490 - Independent Study in Physics

Credits: 1–3 | Individually directed study or problem-solving in selected fields of physics. A minimum of 4 hours work per week is required for each credit earned and a written paper is required. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | Special Approval: Instructor permission required. | College Code: CAS

#### PHYS 495 - Physics Research

Credits: 0 | An independent research project in physics supervised by a faculty member. A minimum of 4 hours work per week is required for each credit earned and a written paper is required. Students should register for credit, or for the zero credit option, for each semester during which research is being done. | Grade Mode:

Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | Special Approval: Instructor permission required. | College Code: CAS

#### PHYS 530 - Topics in Teaching Physics

Credits: 1–3 | Discussions on 1) the principles of physics and effective approaches for teaching them, or 2) the physics lab, its purposes, administrative and safety procedures, essential equipment, seminal experiments, data analysis, lab journal, and reports. | \$ - Course or lab fee | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable up to 9 credits | Schedule Type: Seminar | College Code: CAS

#### PHYS 540 - Topics in Physics

Credits: 2,3 | Study in one of the traditional areas of graduate physics such as electromagnetic theory, analytical or quantum mechanics, solid state, atomic, nuclear or high energy physics, astrophysics, relativity, or mathematical physics. Students complete readings and problems. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 9 credits | Schedule Type: Lecture | College Code: CAS

#### PHYS 577 - Physics Colloquium

**Credits:** 0, 0.5, 1 | Current topics and issues of interest in the physics community. For non-zero credit options, includes specialized study and the preparation and delivery of a public presentation. | Weekly: 1 lecture or activity | \$ - Course or lab fee | **Grade Mode:** Satisfactory (S,U,I,W) | **Repeatable:** Repeatable up to 1 credit | **Schedule Type:** Seminar | **College Code:** CAS

#### PHYS 648 - Workshop

Credits: 1–3 | An intensive program for middle school and secondary teachers and teachers-in-training who seek certification or endorsement in physics and who wish to update and expand their skills in the physics laboratory. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Workshop | College Code: CAS

#### PHYS 690 - Independent Study/Research

Credits: 1 | Individually directed study, problem-solving, or research in selected fields of physics. Open to qualified students who show ability and initiative. A minimum of 4 hours work per week expected for each credit earned. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Consent of department chair. | Repeatable: Repeatable up to 6 credits | Schedule Type: Independent | College Code: CAS

# Religion & Biblical Languages

Buller Hall, Room 111 269-471-3177 Fax: 269-471-6258 religion@andrews.edu www.andrews.edu/relg/

#### Faculty

Paul B. Petersen, Chair Erhard Gallos Ante Jeroncic Keith E. Mattingly Ruben Muñoz-Larrondo Glenn E. Russell Rahel Schafer Susan P. Zork

#### **Adjunct Faculty**

Francy Duran
Trisha Gallimore-Broy
John Nixon
Ray McAllister
Bertram Melbourne
Alexej Muran
Adriani Rodriguez
Jan Aage Sigvartsen
Abner Hernandez

#### Research

Lael O. Caesar

#### Emeriti

A. Josef Greig S. Douglas Waterhouse Woodrow Whidden

#### Mission

The Department of Religion & Biblical Languages seeks to engage majors and general education students through a biblically grounded, theologically astute and relevant process of spiritual formation; equipping and inspiring them to passionately serve the Seventh-day Adventist Church and the wider world beyond as dedicated laypersons and committed denominational employees in the expectation of the soon coming of Jesus Christ.

Students who are religion and theology majors must be in good and regular standing in terms of student life citizenship. As future ministers of the church, they are expected to live in harmony with Seventh-day Adventist beliefs and practices. Failure in any of these areas may lead to a student being placed on probation or being dismissed from the program. Academic requirements and other program standards are stated in detail in the departmental handbook.

## **Associates**

# Christian Discipleship AA (Distance Ed)

This degree prepares students for personal outreach ministries, including Bible instruction, and offers an opportunity to study a broad spectrum of courses covering both Old and New Testament. The courses listed below are required for distance education students only.

## Requirements - 33

- RELB 210V Jesus in His Time and Ours Credits: 3
- RELB 304V Studies in Daniel Credits: 3
- RELB 305V Studies in Revelation Credits: 3
- RELB 335V Acts and Epistles I Credits: 3
- RELB 274V Prophets of Israel Credits: 3
- RELT 225V Doctrines of the Adventist Faith Credits: 3
- RELT 308V Gift of Prophecy Credits: 3

- RELT 340V Religion and Ethics in Modern Society Credits: 3
- HIST 404V Adventist Heritage Credits: 3

#### Choose two of the following

- RELP 240V Personal Witnessing Credits: 3
- RELP 335V Foundations of Youth Ministry Credits: 3
- RELG 225V Introduction to Missions Credits: 3

## **Bachelors**

## Religion BA (Distance Ed)

This degree is offered as a mainly self-paced online program only (see School of Distance Education Definitions). This program does not require any time on campus. Students are encouraged to come to campus for graduation.

## Major Requirements - 44-45

- RELB 111V Introduction to the Old Testament Credits: 3
- RELB 112V Introduction to the New Testament Credits: 3
- RELB 210V Jesus in His Time and Ours Credits: 3
- RELB 245V Hermeneutics Credits: 3
- RELB 274V Prophets of Israel Credits: 3
- RELB 335V Acts and Epistles I Credits: 3
- 3 Credits of: RELH 400V SDA History and Prophetic Heritage Credits: 3,4
- RELT 100V God and Human Life Credits: 3
- RELT 225V Doctrines of the Adventist Faith Credits: 3
- RELT 250V Personal Spirituality and Faith Credits: 3
- RELT 340V Religion and Ethics in Modern Society Credits: 3
- RELT 425V Seminar in Contemporary Theology Credits: 3
- RELB 304V Studies in Daniel Credits: 3
- Or RELB 305V Studies in Revelation Credits: 3

#### Choose two courses from the following:

• RELB 216V - Law and Writings of the Old Testament Credits: 3

#### Choose five-six credits from the following

- RELP 240V Personal Witnessing Credits: 3
- RELP 330V Homiletics-Introduction to Preaching Credits: 2
- RELP 335V Foundations of Youth Ministry Credits: 3
- RELP 441V Introduction to Pastoral Ministry Credits: 3
- RELG 225V Introduction to Missions Credits: 3

## **Andrews Core Experience**

- The Religion Andrews Core Experience requirement is fulfilled through completion of the religion major.
- The Andrews Core Experience foreign language requirement for the BA: Religion is to be fulfilled by either Greek or Hebrew or any modern language at the intermediate level.

#### Note:

Students planning to enter the Seventh-day Adventist Theological Seminary should select a major in theology. A religion major may be selected but must be supplemented with Seminary prerequisite courses. For entrance requirements, see the Theological Seminary section of this bulletin.

# Religion, Biblical and Theological Studies BA

## **Program Description**

The BA in Religion with a concentration in Biblical and theological studies is designed for students seeking a mastery of basic principles of biblical interpretation, theological reasoning, and practical ministry. In distinction to other BA in Religion emphases, this track does not aim for intentional integration with a student's primary major and related vocational goals, but instead provides a broad-based immersion into Adventist theology and practice. It is also suited as a stand-alone degree for non-traditional students who for various reasons are not in the position to complete a BA in Theology. The degree does not meet pre-Seminary requirements.

#### Total Credits - 103-105

## Major: Core Requirements

## Core Requirements - 44-45

- RELB 111 Introduction to the Old Testament Credits: 3
- RELB 112 Introduction to the New Testament Credits: 3
- RELB 245 Hermeneutics Credits: 3
- RELB 406 Studies in Daniel and Revelation Credits: 3
- 3 Credits of RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- RELT 325 Theology I Credits: 3
- RELT 326 Theology II Credits: 3
- RELP 200 Religion Forum Credits: 0 (taken each semester)
- RELT 100 God and Human Life Credits: 3
- RELB 210 Jesus in His Time and Ours Credits: 3
- RELT 250 Personal Spirituality and Faith Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3

#### Choose two of the following courses:

- RELB 216 Law and Writings of the Old Testament Credits: 3
- RELB 335 Acts and Epistles Credits: 3
- RELB 274 Prophetic Writings of the Old Testament Credits: 3

#### Choose five to six credits from the following courses:

- RELP 240 Personal Witnessing Credits: 2
- RELP 330 Homiletics—Introduction to Preaching Credits: 2
- RELP 335 Foundations of Youth Ministry Credits: 3
- RELP 485 Pastoral Ministry Credits: 3
- RELG 225 Introduction to Missions Credits: 3
- Or another practical theology class offered

## **Andrews Core Experience - 60-61**

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience.

#### Religion

Fulfilled through completion of the religion major.

#### Language\*

Choose one of the following sets:

- BIBL 211 Greek I Credits: 3
- BIBL 212 Greek II Credits: 3
- BIBL 313 Greek III Credits: 3

#### Or

- BIBL 341 Hebrew I Credits: 3
- BIBL 342 Hebrew II Credits: 3

0r

- Any modern foreign language, through the intermediate level.
  - \*Note: Language requirements may be fulfilled by any intermediate level foreign language course. Major requirement can be fulfilled by taking one of the Biblical languages.

## **Graduation Requirements**

- Minimum grade of "C-" for all major classes and cognates.
- Minimum overall GPA of 2.25
- Major GPA of 2.50
- Practical service in accordance with the requirements of the department.

#### **Additional Information**

## Seminary Prerequisites

Students planning to enter the Seventh-day Adventist Theological Seminary should select a major in theology. A religion major must be supplemented with Seminary prerequisite courses. For entrance requirements, see the Theological Seminary section of this bulletin.

## **Program Objectives**

#### **Program Outcomes**

#### Seek Knowledge

 Document foundational knowledge in the areas of Bible, history, and theology from an SDA perspective

#### Affirm Faith

- Effectively communicate the global mission, beliefs, and heritage of the Seventh-day Adventist Church
- 3. Exhibit growth in awareness of Christian values and life skills

#### Change the World

 Document service experiences & skills in community and cross cultural contexts

## **Off-campus Locations**

This program is also offered at approved off-camps locations.

## Religion, Religion and Society BA

## **Program Description**

The BA in Religion with a concentration in Religion and & Society is designed to function as a supplement to another major or to a pre-professional program. Its purpose is to provide students with a mastery of basic principles af biblical interpretation, theological reasoning, and practical ministry in the context of their chosen vocation. It aims for intentional integration of faith from an SDA perspective with a student's primary major or vocational goals. The degree does not meet pre-Seminary requirements.

## Major: Core Requirements

#### Core Requirements - 43

- RELB 210 Jesus in His Time and Ours Credits: 3
- RELB 245 Hermeneutics Credits: 3
- RELG 350 World Religions Credits: 3
- RELT 295 Introduction to Theological Research Credits: 1
- RELP 200 Religion Forum Credits: 0 (taken each semester)
- One interdisciplinary class with a service component approved by the Religion Department. Credits: 3

#### Choose one course from each of the following sets:

- RELB 111 Introduction to the Old Testament Credits: 3
- RELB 112 Introduction to the New Testament Credits: 3
- RELG 110 Global Adventism and Cross-Cultural Service Credits: 3
- RELG 225 Introduction to Missions Credits: 3
- RELT 100 God and Human Life Credits: 3
- RELT 325 Theology I Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELT 326 Theology II Credits: 3
- 3 Credits of RELH 400 SDA History and Prophetic Heritage Credits: 3,4
- One history class related to second major/discipline approved by the Religion Department. Credits: 3
- RELT 415 Topics in Theology Credits: 1
- RELT 420 Formative Thinkers in Religion Credits: 1
- RELG 496 Special Projects in Religion Credits: 1
- One interdisciplinary research class with religious topic approved by the Religion Department. Credits: 3
- RELT 250 Personal Spirituality and Faith Credits: 3
- RELB 230 Biblical Prayers Credits: 3
- RELT 315 Christian Discipleship Credits: 3
- RELT 340 Religion and Ethics in Modern Society Credits: 3
- RELT 348 Christians and the Environment Credits: 3
- RELT 385 Bioethics and Christian Faith Credits: 3
- RELT 390 Christian Business Ethics Credits: 3
- RELT 445 Modern Trends in Religion & Society Credits: 1–3
- RELB 406 Studies in Daniel and Revelation Credits: 3
- RELB 216 Law and Writings of the Old Testament Credits: 3
- RELB 274 Prophetic Writings of the Old Testament Credits: 3
- RELB 335 Acts and Epistles Credits: 3

## **Andrews Core Experience - 60-61**

Students must take all courses designated in the BA & BS Degree Requirements of the Andrews Core Experience.

#### Religior

Fulfilled through completion of the religion major.

#### Language\*

Choose one of the following sets:

- BIBL 211 Greek I Credits: 3
- BIBL 212 Greek II Credits: 3
- BIBL 313 Greek III Credits: 3

  Or
- BIBL 341 Hebrew I Credits: 3
- BIBL 342 Hebrew II Credits: 3
- Any modern foreign language, through the intermediate level.

\*Note: Language requirements may be fulfilled by any intermediate level foreign language course. Major requirement can be fulfilled by taking one of the Biblical languages.

## **Graduation Requirements**

- Minimum grade of "C-" for all major classes and cognates.
- Minimum overall GPA of 2.25
- Major GPA of 2.50
- Practical service in accordance with the requirements of the department.

#### **Additional Information**

## Seminary Prerequisites

Students planning to enter the Seventh-day Adventist Theological Seminary should select a major in theology. A religion major must be supplemented with Seminary prerequisite courses. For entrance requirements, see the Theological Seminary section of this bulletin.

## **Program Objectives**

## **Program Outcomes**

#### Seek Knowledge

- Describe and examine key issues within the fields of religion and society from an SDA perspective
- Evaluate a significant research question in a field-based project that relates to core concepts studied in religion and society

#### Affirm Faith

- Effectively communicate the global mission, beliefs, and heritage of the Seventh-day Adventist Church
- Demonstrate the ability to apply principles of Christian faith to their personal life and chosen vocation, integrating learning across disciplines

#### Change the World

 Document service experiences & skills in community and cross cultural contexts

# Religion, Secondary Education BA

## **Program Description**

The BA in Religion for Secondary Education includes all requirements in Religion for SDA church certification and designated for those seeking to teach religion on the secondary level. In order to meet Michigan State Teacher Certification requirements an additional major and minor must be earned. Students must obtain a second advisor in the School of Education and consult regularly with that advisor as well as their Religion advisor.

## **Major: Core Requirements**

## Core Requirements - 33-35

- RELB 111 Introduction to the Old Testament Credits: 3
- RELB 112 Introduction to the New Testament Credits: 3
- RELB 245 Hermeneutics Credits: 3
- RELB 210 Jesus in His Time and Ours Credits: 3
- RELB 406 Studies in Daniel and Revelation Credits: 3
- RELT 100 God and Human Life Credits: 3
- RELT 326 Theology II Credits: 3
- 3 Credits of RELH 400 SDA History and Prophetic Heritage Credits: 3,4

#### Choose one course from the following:

- RELB 216 Law and Writings of the Old Testament Credits: 3
- RELB 335 Acts and Epistles Credits: 3
- RELB 274 Prophetic Writings of the Old Testament Credits: 3

#### Choose two courses from the following:

RELT 250 - Personal Spirituality and Faith Credits: 3

- RELT 340 Religion and Ethics in Modern Society Credits: 3
- RELP 335 Foundations of Youth Ministry Credits: 3

#### Certification

#### Denominational

Religion for Secondary Education includes all requirements in Religion for SDA church certification and designated for those seeking to teach religion on the secondary level. In order to meet Michigan State Teacher Certification requirements an additional major and minor must be earned. Students must obtain a second advisor in the School of Education and consult regularly with that advisor as well as their Religion advisor.

## **Andrews Core Experience**

Please see the School of Education, Department of Teaching, Learning & Curriculum for specific Andrews Core Experience requirements.

## **Graduation Requirement:**

- A minimum grade of "C" for all major classes
- a minimum overall GPA of 2.5
- Major GPA of 2.50
- Practical service in accordance with the requirements of the department.
- See Department of Teaching, Learning & Curriculum for Additional Secondary Education graduation requirements.

#### **Additional Information**

## Seminary Prerequisites

Students planning to enter the Seventh-day Adventist Theological Seminary should select a major in theology. A religion major must be supplemented with Seminary prerequisite courses. For entrance requirements, see the Theological Seminary section of this bulletin.

## Theology BA

## Major: Core Requirements - 57

- RELB 111 Introduction to the Old Testament Credits: 3
- RELB 112 Introduction to the New Testament Credits: 3
- RELB 210 Jesus in His Time and Ours Credits: 3
- RELB 245 Hermeneutics Credits: 3
- RELB 335 Acts and Epistles Credits: 3
- RELB 406 Studies in Daniel and Revelation Credits: 3
- RELP 105 Introduction to Pastoral Service Credits: 1
- RELP 200 Religion Forum Credits: 0 (each semester registered)
- RELP 240 Personal Witnessing Credits: 2
- RELP 330 Homiletics—Introduction to Preaching Credits: 2
- RELP 350 Evangelism Credits: 3
- RELP 485 Pastoral Ministry Credits: 3
- RELH 400 SDA History and Prophetic Heritage Credits: 3,4
   Take for 4 credits.
- RELT 325 Theology I Credits: 3
- RELT 326 Theology II Credits: 3

Choose one class from each of the following sets: (One or both classes must be 400

- RELB 216 Law and Writings of the Old Testament Credits: 3 Or RELB 416 Advanced Study in Law and Writings Credits: 3
- RELB 274 Prophetic Writings of the Old Testament Credits: 3 Or RELB 474 -Advanced Study in Old Testament Prophets Credits: 3

#### Choose one of the following:

- RELG 225 Introduction to Missions Credits: 3
- RELP 335 Foundations of Youth Ministry Credits: 3

# Choose one course from each of the following three categories (must take 3 credits in each category):

Christian Spirituality: (3 credits)

- RELT 250 Personal Spirituality and Faith Credits: 3
- RELB 230 Biblical Prayers Credits: 3

Religion, Culture, and Society: (3 credits)

- RELT 340 Religion and Ethics in Modern Society Credits: 3
- RELT 348 Christians and the Environment Credits: 3
- RELT 385 Bioethics and Christian Faith Credits: 3
- RELT 390 Christian Business Ethics Credits: 3
- RELT 445 Modern Trends in Religion & Society Credits: 1–3
- RELG 350 World Religions Credits: 3

Issues in Theology: (3 credits)

- RELT 415 Topics in Theology Credits: 1
- RELT 420 Formative Thinkers in Religion Credits: 1

## Major: Additional Requirements

Theology majors must, within their first semester on campus, prove proficiency in Theology and Bible through a test, including a written paper and an interview, administered by the department. If they fail to meet these requirements, RELT 100 is required.

## Cognates - 22

- BIBL 211 Greek I Credits: 3
- BIBL 212 Greek II Credits: 3
- BIBL 313 Greek III Credits: 3
- BIBL 342 Hebrew II Credits: 3

BIBL 341 - Hebrew I Credits: 3

- RELH 316 History of the Christian Church I Credits: 3
- RELH 317 History of the Christian Church II Credits: 3
- RELT 295 Introduction to Theological Research Credits: 1

## **Andrews Core Experience**

Students must take the courses designated in the Andrews Core Experience: BA & BS Degrees outline. Noting the following courses as required courses;

#### Humanities

PHIL 224 - Introduction to Philosophy Credits: 3

#### Social Sciences

FMST 115 - Introduction to Family Studies Credits: 3

## **Graduation Requirements**

(a) A minimum grade of "C-" for all major classes and cognates; (b) a minimum overall of 2.25 GPA; (c) major GPA of 2.50; (d) a practical ministry portfolio in accordance with the requirements of the department.

## **Off-campus Locations**

This program is also offered at approved off-camps locations.

## **Undergraduate Minors**

# Biblical Languages Minor

## Minor Requirements - 20

- BIBL 211 Greek I Credits: 3
- BIBL 212 Greek II Credits: 3
- BIBL 313 Greek III Credits: 3
- BIBL 341 Hebrew I Credits: 3
- BIBL 342 Hebrew II Credits: 3
- BIBL 495 Independent Study Credits: 1–3
   A total of 5 credits of BIBL 495 must be taken.

## Missions Minor

## Minor Requirements - 20

- ANTH 200 Cultural Anthropology Credits: 3
- RELG 350 World Religions Credits: 3
- RELP 240 Personal Witnessing Credits: 2
- RELP 235 Christianity in a World Context Credits: 2
- RELP 325 Preparation for Mission Service Credits: 2
- RELP 340 Strategies for Service Credits: 2
- FDNT 469 International Nutrition Credits: 2,3

#### Choose one or two courses from the following:

- EDTE 165 Philosophical and Social Foundations of Education Credits: 4
- BSAD 365 International Environment of Business Credits: 3
- BSAD 450 Multicultural Business Relations Credits: 3
- ENGL 465 TESOL Methods Credits: 2

#### Choose one course from the following:

- GEOG 260 Cultural Geography Credits: 3
- FMST 350 Family Cultural Perspectives Credits: 3

## Religion Minor

## Minor Requirements - 20

6 upper-division credits, 15 credits from RELB, RELT and RELG. The remaining 5 credits may be taken from any Department of Religion & Biblical Languages offerings subject to consultation with the department.

## Certificates

# Certificate in Ministry, Spanish

## Description

The Certificate in Ministry in Spanish provides biblical and theological foundations for practical Hispanic ministry through blended learning. The certificate requires academic study and service learning in an practical life setting, with a portfolio as evidence of completing all certificate outcomes.

## **Certificate Requirements: 18 Credits**

The following courses will be taught in Spanish:

- RELB 111 Introduction to the Old Testament Credits: 3
- RELB 112 Introduction to the New Testament Credits: 3
- RELB 245 Hermeneutics Credits: 3
- RELB 210 Jesus in His Time and Ours Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- 3 Credits of RELP 240 Personal Witnessing Credits: 2

## **Additional Requirements**

#### **Practicum**

The certificate requires a practical ministry component with mentored learning.

## **Outcome Objectives**

At the end of the program the students should be able (in Spanish) to:

- 1. Document foundational knowledge in the area of Bible and Adventist teachings
- 2. Communicate the biblical message employing proper hermeneutical tools
- 3. Document service experiences and skills in practical witnessing

# Christian Discipleship Certificate

## **Certificate Description**

The Christian Discipleship Certificate prepares Christians to better connect with God, self, and others, through a deeper understanding of biblical foundations, applied to their vocational calling and specific ministries. The certificate requires academic study and service learning in an internship ministry experience, with a portfolio as evidence of completing all certificate outcomes.

This certificate will count towards an associate degree in Christian Discipleship.

## **Certificate Requirements: 17-18**

The classes listed below are available on-campus and online. Online classes are listed in the course schedule with a "V" following the course number.

RELB 210 - Jesus in His Time and Ours Credits: 3

#### Choose one course from each of the following sets:

- RELB 111 Introduction to the Old Testament Credits: 3
- RELB 112 Introduction to the New Testament Credits: 3
- RELT 250 Personal Spirituality and Faith Credits: 3
- RELB 230 Biblical Prayers Credits: 3
- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELG 110 Global Adventism and Cross-Cultural Service Credits: 3
- RELG 225 Introduction to Missions Credits: 3
- RELP 325 Preparation for Mission Service Credits: 2
- RELP 240 Personal Witnessing Credits: 2
- RELP 350 Evangelism Credits: 3

## **Additional Requirements**

#### **Practicum**

The certificate requires a practical ministry component.

## **Program Objectives**

At the end of the program the students should be able to:

- .. Demonstrate understanding of the spiritual development needs of different
- Appreciate biblical themes and key concepts foundational to being a disciple and to disciple others by applying the principles of biblical discipleship to the student's own faith journey
- Document experiences in a ministry of discipling where the academic training is applied to practical service

# Mission and Global Awareness Certificate

## **Certificate Description**

The Mission and Global Awareness Certificate prepares students for serving God and humanity in a cross cultural context. The programs provides theological foundations combined with sociological, anthrpological and missiological understandings which equip the student for international service.

## **Certificate Requirements: 17-18**

The below classes are available on-campus.

RELG 110 - Global Adventism and Cross-Cultural Service Credits: 3

#### Choose one course from each of the following sets:

- RELG 225 Introduction to Missions Credits: 3
- RELP 325 Preparation for Mission Service Credits: 2
- RELT 100 God and Human Life Credits: 3
- RELT 225 Doctrines of the Adventist Faith Credits: 3
- RELG 350 World Religions Credits: 3
- RELP 235 Christianity in a World Context Credits: 2
- ANTH 200 Cultural Anthropology Credits: 3
- BHSC 235 Culture, Place and Interdependence Credits: 3
- GEOG 260 Cultural Geography Credits: 3

## **Additional Requirements**

A mission trip or volunteer service in an overseas culture is required.

## **Program Objectives**

## **Program Outcomes**

At the end of the program the students should be able to

- Describe key factors which characterize the Seventh-day Adventist Church as a global movement
- 2. Identify significant challenges in cross cultural mission from an SDA perspective
- 3. Discern how culture and mission interact in service for God and humanity

## **Biblical Languages**

## BIBL 204V - Elementary Greek I

Credits: 4 | Elements of grammar of the koine Greek of the New Testament, including vocabulary, translation, and reading. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### BIBL 205V - Elementary Greek II

Credits: 4 | Instruction in intermediate grammar and reading of selected portions of the New Testament. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): BIBL 204V or equivalent. | Schedule Type: Self-Paced | College Code: CAS

#### BIBL 211 - Greek I

Credits: 3 | Elements of grammar of the koine Greek of the New Testament, including vocabulary, translation, and reading. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### BIBL 212 - Greek II

Credits: 3 | Instruction in intermediate grammar and reading of selected portions of the New Testament. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIBL 211 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **BIBL 221 - Elementary Latin**

Credits: 2 | Introduction to Latin grammar and syntax. Emphasis on biblical and ecclesiological vocabulary and reading and translation of simple texts from Vulgate and church history. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### BIBL 222 - Intermediate Latin

Credits: 2 | Instruction in intermediate Latin grammar and syntax and reading and translation of selected texts from Vulgate and church history. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIBL 221 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### BIBL 304V - Intermediate Greek I

Credits: 3 | Intermediate course in Greek to provide a fair working knowledge of the New Testament in the original language. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): BIBL 205V or equivalent. | Schedule Type: Self-Paced | College Code: CAS

#### BIBL 305V - Intermediate Greek II

Credits: 3 | Continues to refine the student's working knowledge of the New Testament in the original language. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): BIBL 304V or equivalent. | Schedule Type: Self-Paced | College Code: CAS

#### BIBL 313 - Greek III

Credits: 3 | Advanced Koine Reading. New Testament portions from Luke, Paul, the book of Hebrews, and James should be analyzed on the bases of Greek syntax and author specific vocabulary. Selections from the Septuagint and the early church fathers will be considered to illustrate the development of thought within Christianity. Furthermore, introducing students to selections from Philo and Josephus. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIBL 211 and BIBL 212 | Schedule Type: Lecture | Offering: Summer or Fall | College Code: CAS

#### BIBL 341 - Hebrew I

Credits: 3 | Fundamentals of Biblical Hebrew including a practical vocabulary, an understanding of the grammatical structure of the language, and practice in translation. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### BIBL 342 - Hebrew II

Credits: 3 | Development of reading ability in different portions of the Hebrew Bible on intermediate level. Application of the principles of Hebrew lexicography, grammar, syntax and style to the exegesis of selected passages of the Hebrew Old Testament. Emphasis placed upon practical and scholarly application of the text in an exegesis paper. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIBL 341 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### BIBL 495 - Independent Study

Credits: 1–3 | Provides opportunity for further and independent investigation of the history, development, and exegesis of the biblical text. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | Offering: Fall, Spring, Summer | College Code: CAS

## Religion-Biblical Studies

#### **RELB 111 - Introduction to the Old Testament**

Credits: 3 | An introduction to the writings and theology of the Old Testament within their near eastern cultural, geographical, and historical backgrounds. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | Offering: Fall | College Code: CAS

#### **RELB 111V - Introduction to the Old Testament**

Credits: 3 | An introduction to the writings and theology of the Old Testament within their near eastern cultural, geographical, and historical backgrounds. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELB 112 - Introduction to the New Testament**

Credits: 3 | An introduction to the writings and theology of the New Testament within their Jewish and Greco-Roman cultural, geographical, and historical backgrounds. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | Offering: Spring | College Code: CAS

#### **RELB 112V - Introduction to the New Testament**

Credits: 3 | An introduction to the writings and theology of the New Testament within their Jewish and Greco-Roman cultural, geographical, and historical backgrounds. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELB 210 - Jesus in His Time and Ours

Credits: 3 | Details the mission, the message and the meaning of Jesus Christ for His day and for ours. What is it about the Christian story that captured the attention of so much of world history? Also examines the connection between Christ's first Advent and His second. May be taught with specific emphasis on one of the four gospels. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning, Interactive Online | Offering: Fall, Spring, Summer | College Code: CAS

#### RELB 210V - Jesus in His Time and Ours

Credits: 3 | Details the mission, the message and the meaning of Jesus Christ for His day and for ours. What is it about the Christian story that captured the attention of so much of world history? Also examines the connection between Christ's first Advent and His second. May be taught with specific emphasis on one of the four gospels. |

Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELB 216 - Law and Writings of the Old Testament

**Credits:** 3 | An introduction to the Pentateuch and the "Writings" (historical books, Psalms, and Wisdom literature). May be taught with specific emphasis on a particular book or theme. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Fall or Spring | **College Code:** CAS

#### RELB 216V - Law and Writings of the Old Testament

Credits: 3 | An introduction to the Pentateuch and the "Writings" (historical books, Psalms, and Wisdom literature). May be taught with specific emphasis on a particular book or theme. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELB 230 - Biblical Prayers

Credits: 3 | Readings of biblical prayers as part of divine-human dialogue, assessing their significance for theology as well as for personal spiritual life. A study of the way prayers help to characterize both God and human beings in various types of biblical literature, and reflections of the role of prayer in the life of believers today. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### RELB 230V - Biblical Prayers

**Credits:** 3 | Readings of biblical prayers as part of divine-human dialogue, assessing their significance for theology as well as for personal spiritual life. A study of the way prayers help to characterize both God and human beings in various types of biblical literature, and reflections of the role of prayer in the life of believers today. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### RELB 235 - Apocalyptic and Biblical Prophecy

Credits: 3 | A study of the meaning for the 21st century of biblical apocalyptic prophecy, describing the principles of reading and applying biblical prophecy in a modern world, comparing it with other modes of prophecy and prediction in the present culture, and assessing its relevance in view of modern global challenges. Does not count toward a Religion and Theology major. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### RELB 235V - Apocalyptic and Biblical Prophecy

**Credits:** 3 | A study of the meaning for the 21st century of biblical apocalyptic prophecy, describing the principles of reading and applying biblical prophecy in a modern world, comparing it with other modes of prophecy and prediction in the present culture, and assessing its relevance in view of modern global challenges. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### **RELB 245 - Hermeneutics**

**Credits:** 3 | An introduction to the presuppositions beneath various interpretive approaches to the biblical text and application of the principles of interpretation to texts representing the various genres of the Old and New Testaments. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture, Blended Learning | **Offering:** Fall | **College Code:** CAS

#### **RELB 245V - Hermeneutics**

**Credits:** 3 | An introduction to the presuppositions beneath various interpretive approaches to the biblical text and application of the principles of interpretation to texts representing the various genres of the Old and New Testaments. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### RELB 274 - Prophetic Writings of the Old Testament

Credits: 3 | An introduction to the prophets of the Old Testament and their writings. May be taught with specific emphasis on a particular book or theme. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | Offering: Fall or Spring | College Code: CAS

#### RELB 274V - Prophets of Israel

Credits: 3 | An introduction to the prophets of the Old Testament and their writings. May be taught with specific emphasis on a particular book or theme. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELB 304V - Studies in Daniel**

Credits: 3 | Study of the background, content, and construction of these biblical books with emphasis upon the interpretation of prophecy, apocalyptic imagery and symbols. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELB 305V - Studies in Revelation**

Credits: 3 | Study of the background, content, and construction of these biblical books with emphasis upon the interpretation of prophecy, apocalyptic imagery and symbols. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELB 335 - Acts and Epistles**

Credits: 3 | Brief introduction to principles of New Testament interpretation; a study of Acts, the Pauline Epistles, Hebrews, and the General Epistles. Research paper may be required. May be taught with specific emphasis on a particular book or theme. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning | Offering: Fall or Spring | College Code: CAS

#### RELB 335V - Acts and Epistles I

**Credits:** 3 | Brief introduction to principles of New Testament interpretation; a study of Acts, the Pauline Epistles, Hebrews, and the General Epistles. Research paper may be required. May be taught with specific emphasis on a particular book or theme. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### **RELB 374V - Old Testament Prophets, Early**

Credits: 3 | Includes the history of prophecy, the pre-writing prophetic figures, and the books of the writing prophets of the 8th and early 7th century B.C. Research paper may be required. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELB 375V - Old Testament Prophets, Later

Credits: 3 | Includes the books of the writing prophets of the 7th century B.C. to the end of the prophetic canon. Research paper may be required. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELB 406 - Studies in Daniel and Revelation

Credits: 3 | Study of the background, content, and construction of these biblical books with emphasis upon the interpretation of prophecy, apocalyptic imagery and symbols. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### RELB 416 - Advanced Study in Law and Writings

Credits: 3 | Focused on a particular book or on themes in the law and writings of the Old Testament. Includes exegesis. Research paper required. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIBL 341 and BIBL 342 | Schedule Type: Lecture | Offering: Fall or Spring | College Code: CAS

#### RELB 474 - Advanced Study in Old Testament Prophets

Credits: 3 | Focused on a particular book or on themes in the prophetic writings of the Old Testament. Includes exegesis. Research paper required. | Grade Mode:

Normal (A-F,I,W) | Prerequisite/Corequisite: BIBL 341 and BIBL 342 | Schedule Type:
Lecture | Offering: Fall or Spring | College Code: CAS

## Religion-General

#### RELG 110 - Global Adventism and Cross-Cultural Service

Credits: 3 | A study of the Seventh-day Adventist Church as a global movement. Emphasis is on the interaction between mission, theology, organization, and culture in the 21st century. | Weekly: 3 lectures | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | College Code: CAS

#### RELG 110V - Global Adventism and Cross-Cultural Service

Credits: 3 | A study of the Seventh-day Adventist Church as a global movement. Emphasis is on the interaction between mission, theology, organization, and culture in the 21st century. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELG 160 - Topics in Religion**

Credits: 1 | Designed to add flexibility to the department offerings and to meet diverse student needs. Consult the class schedule for the current topic. | Grade

Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | Offering: Fall, Spring, Summer | College Code: CAS

#### **RELG 225 - Introduction to Missions**

Credits: 3 | An undergraduate religion course which explores the theology and practice of missions. The objective of the course is to understand God's mission in our world and to experience personal involvement in that mission. A long-term goal of the course is to create an experience through which God can inspire students to a lifetime of service and missions. The class experience includes intensive short-term missions exposure by means of a class tour. Note: Student missionaries are required to take a different missions course: RELP 325 - Preparation for Mission Service. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **RELG 225V - Introduction to Missions**

Credits: 3 | An undergraduate religion course which explores the theology and practice of missions. The objective of the course is to understand God's mission in our world and to experience personal involvement in that mission. A long-term goal of the course is to create an experience through which God can inspire students to a lifetime of service and missions. The class experience includes intensive short-term missions exposure by means of a class tour. Note: Student missionaries are required to take a different missions course: RELP 325 - Preparation for Mission Service. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELG 248 - Workshop

Credits: 1 | Provides flexibility for the occasional workshop where it is appropriate to offer religion credit. Workshop requirements must be approved by the department. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Workshop | Offering: Fall, Spring | College Code: CAS

#### RELG 350 - World Religions

Credits: 3 | Explores major world views and religious traditions and their fundamental teachings, beliefs, and practices. Considers each major religion's analysis of basic human problems and the proposed solutions. Students learn to respect and understand diverse beliefs and practices. Taught from a Christian perspective, the course seeks to explore common ground and challenges between Christianity and the major world religions. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | College Code: CAS

#### **RELG 350V - World Religions**

Credits: 3 | Explores major world views and religious traditions and their fundamental teachings, beliefs, and practices. Considers each major religion's analysis of basic human problems and the proposed solutions. Students learn to respect and understand diverse beliefs and practices. Taught from a Christian perspective, the course seeks to explore common ground and challenges between Christianity and the major world religions. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELG 360 - Topics in Religion**

Credits: 1 | Designed to add flexibility to the department offerings and to meet diverse student needs. Consult the class schedule for the current topic. This course qualifies for a deferred grade when it requires research. | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning, Interactive Online | Offering: Fall, Spring, Summer | College Code: CAS

#### RELG 378 - Study Tour:

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. Religion and theology majors may apply up to 6 elective study tour credits toward their major if preapproved by department. | \$ - Course or lab fee | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Repeatable: Repeatable up to 6 credits | Schedule Type: Blended Learning | College Code: CAS

#### RELG 380H - Honors in Religion (topic specified)

Credits: 1–3 | Readings and seminar observations on various topics. Area of study announced in advance. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### RELG 496 - Special Projects in Religion

Credits: 1 | By special permission of the Department of Religion & Biblical Languages. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | Offering: Fall, Spring, Summer | College Code: CAS

## Religion-History

RELH 316 - History of the Christian Church I

Credits: 3 | Surveys the internal and external developments and conflicts which Christianity has experienced in time and space from the time of Christ up to the Reformation. Special attention given to those developments that relate to Seventh-day Adventist theological heritage. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): HIST 117 or permission of instructor. Not applicable to the General Education requirements in religion nor a major in religion. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### RELH 316V - History of the Christian Church I

Credits: 3 | Surveys the internal and external developments and conflicts which Christianity has experienced in time and space from the time of Christ up to the Reformation. Special attention given to those developments that relate to Seventh-day Adventist theological heritage. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): HIST 117 or permission of instructor. Not applicable to the General Education requirements in religion nor a major in religion. | Schedule Type: Self-Paced | College Code: CAS

#### RELH 317 - History of the Christian Church II

Credits: 3 | Surveys the history of the church from the Protestant Reformation to current time. Special attention is given to the Protestant Reformation, the Catholic counter-reformation, Puritanism, Rationalism, Evangel-icalism, the rise of modern denominations, the world-wide mission expansion, and ecumenism. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): HIST 118 or permission of instructor. Not applicable to the GE requirements in religion. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **RELH 317V - History of the Christian Church II**

Credits: 3 | Surveys the history of the church from the Protestant Reformation to current time. Special attention is given to the Protestant Reformation, the Catholic counter-reformation, Puritanism, Rationalism, Evangel-icalism, the rise of modern denominations, the world-wide mission expansion, and ecumenism. | Grade Mode: Self-Paced (A-F,I,W) | Prerequisite(s): HIST 118 or permission of instructor. Not applicable to the GE requirements in religion. | Schedule Type: Self-Paced | College Code: CAS

#### RELH 400 - SDA History and Prophetic Heritage

Credits: 3,4 | An investigation of the background, rise, and development of the Seventh-day Adventist church in America and the world from its beginning until the present with special attention given to the historical role, ministry and writings of Ellen White. Theology majors take the class for 4 credits, Religion majors for 3 credits. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | Offering: Fall, Summer | College Code: CAS

#### RELH 400V - SDA History and Prophetic Heritage

Credits: 3,4 | An investigation of the background, rise, and development of the Seventh-day Adventist church in America and the world from its beginning until the present with special attention given to the historical role, ministry and writings of Ellen White. Theology majors take the class for 4 credits, Religion majors for 3 credits. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

## **Religion-Professional & Applied Studies**

#### **RELP 105 - Introduction to Pastoral Service**

**Credits:** 1 | An introduction for ministerial students to the various components of the pastoral calling and practicum. Open only to Theology majors. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **Offering:** Spring | **College Code:** CAS

## RELP 200 - Religion Forum

Credits: 0 | A weekly seminar giving instruction in the many aspects of ministering in churches. Required of all theology/religion majors. Students must register for this class each semester in residence. | Grade Mode: Satisfactory (S,U,I,W) | Repeatable:

Repeatable | Schedule Type: Practicum | Offering: Fall, Spring | College Code: CAS

#### RELP 235 - Christianity in a World Context

Credits: 2 | An introduction to the status and role of Christianity and mission worldwide. Includes a brief history of Christian mission, current facts about mission needs, Christian and mission relationships to world religions, political ideologies, national development, and non-Western cultures. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **RELP 240 - Personal Witnessing**

Credits: 2 | Acquaintance with the dynamics of Christian witnessing in the neighborhood, at work, and in the friend-to-friend approach of personal Bible study. Christ's example of witnessing is highlighted. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Schedule Type: Blended Learning, Seminar | Offering: Fall | College Code: CAS

#### **RELP 240V - Personal Witnessing**

Credits: 3 | Acquaintance with the dynamics of Christian witnessing in the neighborhood, at work, and in the friend-to-friend approach of personal Bible study. Christ's example of witnessing is highlighted. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELP 325 - Preparation for Mission Service**

Credits: 2 | An orientation to the knowledge, skills, and attitudes necessary for successful student mission service. This class is required for all student missionaries (SMs). The course includes aspects of the entire student missionary experience including: preparation (before going), in-field service (while serving in mission field), and re-entry (when the student missionary returns). This class fulfills 2 credits of the General Education religion requirement. The course is offered at the special reduced student missionary tuition rate. Students must enroll in the course before leaving as a student missionary. Instructor permission required. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | Offering: Spring, Summer | College Code: CAS

#### RELP 330 - Homiletics—Introduction to Preaching

Credits: 2 | Lays the foundation for biblical sermon construction and delivery. This class is the prerequisite for all other homiletics courses and is a requirement for all religion/theology majors. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### RELP 330V - Homiletics-Introduction to Preaching

Credits: 2 | Lays the foundation for biblical sermon construction and delivery. This class is the prerequisite for all other homiletics courses and is a requirement for all religion/theology majors. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELP 335 - Foundations of Youth Ministry**

Credits: 3 | Designed for the youth specialist who wishes to work as a youth pastor, youth director, academy Bible teacher, or in any other youth-training capacity. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### **RELP 335V - Foundations of Youth Ministry**

Credits: 3 | Designed for the youth specialist who wishes to work as a youth pastor, youth director, academy Bible teacher, or in any other youth-training capacity. |
Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELP 336 - Homiletics**

Credits: 1 | Addresses the crucial nature of expository preaching, stressing proper principles of interpreting and applying the text to practical life. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELP 330. | Schedule Type: Lecture | Offering: Fall or Spring | College Code: CAS

#### **RELP 337 - Homiletics**

Credits: 1 | Explores the dynamics of effective preaching to a particular cultural group with an emphasis on the distinctive homiletical, rhetorical and cultural qualities required for the effective proclamation of the Gospel to each group. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELP 330. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **RELP 338 - Homiletics**

Credits: 1 | Addresses the needs of special preaching events such as evangelistic crusades, weddings, funerals, and dedications. | Weekly lab required | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELP 330. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **RELP 340 - Strategies for Service**

Credits: 2 | Creates the vision that all Christians can serve in mission. Shows how to witness in cross-cultural situations and introduces students to ways they can do mission in any occupation. Alternate forms of mission like tent-maker ministries, nonresident missionaries, urban ministry, and work with refugees and foreign students are addressed. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### RELP 350 - Evangelism

Credits: 3 | Students will prepare and conduct public evangelistic meetings. Different contexts will be chosen in different years. Students will study and reflect on the role of public evangelism in the mission of the church in various cultural settings. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELP 330 | Schedule Type: Lecture | College Code: CAS

#### RELP 400 - Senior Seminar: Health Professions

Credits: 3 | A capstone seminar for health profession majors which addresses theoretical and practical spiritual issues pertaining to those working in the health professions. | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **RELP 441 - Introduction to Pastoral Ministry**

Credits: 2,3 | A study of the principles of leadership as applied to pastoral ministry, in particular with regard to the minister as leader of worship, as nurturing pastor, as administrator of the church and as evangelist. Theology majors enroll for 3 credits and Religion majors for 2 credits. | Grade Mode: Normal (A-F,I,W) | Schedule Type:

Lecture | Offering: Fall | College Code: CAS

#### **RELP 441V - Introduction to Pastoral Ministry**

Credits: 3 | A study of good church administration, combining pastoral leadership with church management. Addresses the four-dimensional role of the pastor—person, administrator, church leader and priest. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELP 482 - Ministerial Candidacy Seminar

Credits: 1 | Intended to help ministerial students explore practical issues in connection with their call to pastoral ministry. It also aids in the preparation of the ministerial candidacy portfolio required of the students taking this class. Open only to Theology majors during their senior year. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Seminar | Offering: Fall | College Code: CAS

#### **RELP 485 - Pastoral Ministry**

Credits: 3 | A study of the principles of leadership as applied to pastoral ministry, in particular with regard to the minister as leader of worship, as nurturing pastor, as administrator of the church and as evangelist. This class summarizes and assesses the practical ministry portfolio developed by the student during the course of study. |

Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELP 240, RELP 330, RELP 350 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

## Religion-Theology

#### RELT 100 - God and Human Life

Credits: 3 | How God confronts human beings—includes the process of revelation, principles of interpreting Scripture and similarly inspired material, the nature of God and His expectations for humans, and the evaluation of these concepts as presented in Scripture and the classic literature of various religions. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Interactive Online | Offering: Fall, Spring, Summer | College Code: CAS

#### **RELT 100V - God and Human Life**

Credits: 3 | How God confronts human beings—includes the process of revelation, principles of interpreting Scripture and similarly inspired material, the nature of God and His expectations for humans, and the evaluation of these concepts as presented in Scripture and the classic literature of various religions. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### **RELT 207 - Issues in the Great Controversy**

Credits: 3 | Study of the controversy between Christ and Satan with particular emphasis on their characters and kingdoms, the attack against law, the implications of the sacrifice of Christ, the relationship of these issues to human lives today, and the completion of God's mission for sinners. Credit not applicable toward the theology concentration. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### RELT 216 - Workshop in Prayer

Credits: 2 | Study of faith, private prayer, family worship, conducting prayer groups, public prayer, and prayer as a ministry. Not applicable toward the theology concentration or major in religion. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Workshop | Offering: Fall, Spring | College Code: CAS

#### **RELT 225 - Doctrines of the Adventist Faith**

Credits: 3 | Defines and clarifies the Biblical doctrines of the Seventh-day Adventist faith, distinguishing them within the background of the Judeo-Christian tradition. |
Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning, Interactive Online | Offering: Fall, Spring, Summer | College Code: CAS

#### **RELT 225V - Doctrines of the Adventist Faith**

**Credits:** 3 | Defines and clarifies the Biblical doctrines of the Seventh-day Adventist faith, distinguishing them within the background of the Judeo-Christian tradition. | **Grade Mode:** Self-Paced (A-F,I,W) | **Schedule Type:** Self-Paced | **College Code:** CAS

#### RELT 250 - Personal Spirituality and Faith

**Credits:** 3 | A study of the Biblical perspective on the act of faith and the life of faith. How does a person begin and nurture one's own personal spiritual and devotional life? Also studies the meaning of spiritual nurture in various lifestyle and work settings. Personal spiritual growth is fostered through involvement in organized church

activities and/or witnessing outreach. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | Offering: Fall, Spring | College Code: CAS

#### RELT 250V - Personal Spirituality and Faith

Credits: 3 | A study of the Biblical perspective on the act of faith and the life of faith. How does a person begin and nurture one's own personal spiritual and devotional life? Also studies the meaning of spiritual nurture in various lifestyle and work settings. Personal spiritual growth is fostered through involvement in organized church activities and/or witnessing outreach. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELT 295 - Introduction to Theological Research

Credits: 1 | Introduces students to basic research concepts, tools, and methodology in the discipline. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### **RELT 308V - Gift of Prophecy**

Credits: 3 | Study of the prophetic manifestation in Bible and church to include the ministry and writings of Ellen G. White. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELT 315 - Christian Discipleship

Credits: 3 | Christians are called to be followers or disciples of Jesus. This class presents the personal and spiritual implications of the biblical concept of discipleship. Discipleship is discussed in light of personal life, biblical teachings, and historical-theological developments. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### RELT 325 - Theology I

Credits: 3 | A continuation of RELT 100. Study of nature, sources, and methods of theology; the doctrines of God and his works (the Trinity, creation, providence, law, and Sabbath), Christ, the Holy Spirit, and human beings. Research paper may be required. Student can earn general education credit in either RELT 225 or RELT 325, but not in both. | \$ - Course or lab fee (\$10) | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: RELH 400 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### RELT 326 - Theology II

Credits: 3 | Study of the doctrines of Christ and salvation (nature and works of atonement), the church (characteristics, ministry, and mission), sanctuary and Christ's heavenly ministry, and eschatology from a distinct Seventh-day Adventist perspective. Research paper may be required. | \$ - Course or lab fee (\$10) | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELT 325 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### RELT 340 - Religion and Ethics in Modern Society

Credits: 3 | Considers how the Judeo-Christian tradition confronts the moral complexities of a highly technical society. Are there universal absolutes that cross all cultural boundaries, or are all values relative? Designed to help students articulate what molded their value system and what should help to shape it. Students are expected to participate in some organized church/civic/social service activities. Student can earn general education credit in either RELT340 or RELT 390, but not in both. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### RELT 340V - Religion and Ethics in Modern Society

Credits: 3 | Considers how the Judeo-Christian tradition confronts the moral complexities of a highly technical society. Are there universal absolutes that cross all cultural boundaries, or are all values relative? Designed to help students articulate what molded their value system and what should help to shape it. Students are expected to participate in some organized church/civic/social service activities. Student can earn general education credit in either RELT340 or RELT 390, but not in both. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code:

#### RELT 348 - Christians and the Environment

Credits: 3 | A religious, philosophical, and activist approach to environmental issues, analyzing ideological causes of environmental degradation, and offering philosophical and theological perspectives which inform and sensitize the student to the Christian's environmental responsibility. Qualifies as an "S" course for General Education Service Learning. Contains a service component. | Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **RELT 385 - Bioethics and Christian Faith**

**Credits:** 3 | A capstone seminar for biology and related majors that engages the interface of biology and ethics from a biblical and Seventh-day Adventist perspective. Focused attention on select bioethical issues and their relationship to Scripture and

Christian practice, including but not limited to: biblical and environmental stewardship, the molecular revolution, genomics and genetic manipulation, human nature, communication in science, and dilemmas in the health professions. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BIOL 166,COMM 104 or higher,ENGL 215 | Schedule Type: Lecture | College Code: CAS

#### **RELT 390 - Christian Business Ethics**

Credits: 3 | Designed for the student to examine differing ethical models and to develop a personal model that will serve as the basis on which a Seventh-day Adventist Christian will make personal value decisions. The developed model is used in examining actual ethical issues which confront people in daily affairs of business life. Student can earn general education credit in either RELT 340 or 390, but not in both. (Open only to upper division BBA students). | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### **RELT 415 - Topics in Theology**

Credits: 1 | Focused attention on select theological issues and their relationship to Christian practice. The selection of topics varies with any given course offering and might include some of the following: Trinity, theodicy, sanctuary, apocalypticism, justification by faith, revelation and inspiration, and doctrine of creation. Research paper required. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): RELT 325, RELT 326 | Repeatable: Repeatable with different topics | Schedule Type: Lecture | College Code: CAS

#### **RELT 420 - Formative Thinkers in Religion**

Credits: 1 | An in-depth, seminar-style exploration of selected thinkers who have significantly impacted both Christian thought and the culture at large. Through a sustained attention of mostly primary texts, student explore the rich intersection of theology, philosophy, spirituality and ethics with the aim of probing the richness and complexity of human existence in relationship to God. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### RELT 425V - Seminar in Contemporary Theology

Credits: 3 | A study of ideas of major theologians in modern times. Underlying philosophical presuppositions are analyzed. The relationship between theology and secularism is studied. The course critically examines some primary texts and evaluates their contribution and significance. | Grade Mode: Self-Paced (A-F,I,W) | Schedule Type: Self-Paced | College Code: CAS

#### RELT 440 - Fundamentals of Spirituality & Ethics in Healthcare

Credits: 3 | Addresses religious and spiritual issues of significance for healthcare. Includes a discussion of views of the relationship between health and spirituality from different religious perspectives. Provides an overview of the philosophical and historical background for ethical systems and their significance for current ethical challenges in healthcare. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### RELT 445 - Modern Trends in Religion & Society

Credits: 1–3 | Examines a wide range of issues arising from the postmodern cultural context and their impact on Christian self-understanding, missions, and ministry in general. Special attention given to the rise of secularism, pluralism and "new atheism" and the challenges such trends present for Christian apologetics. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

# Social Work

Nethery Hall, Room 009 269-471-6196 FAX: 269-471-3686 swinfo@andrews.edu www.andrews.edu/socialwork

#### Faculty

Curtis J. VanderWaal, MSW, PhD, Chair

Alina Baltazar, MSW, LMSW, ACSW, CFLE, PhD Candidate, MSW Program Director Krista Cooper, MSW, PhD

Desiree E. Davis, MSW, LMSW, LCSW, PhD Candidate, BSW Program Director Melissa Henley, MSW, Associate Director of Field--Off-Campus BSW Site

Margaret Howell, MSW, LICSW, Dual Degree Coordinator

John Gavin, BSW Program Associate Director—Off-Campus BSW Site

Twyla E. Smith, MSW, *Director of Field Education* Shannon M. Trecartin, LMSW, PhD Candidate Jan F. Wrenn, *MSW, ACSW, LMSW* 

#### Mission

The Andrews University Department of Social Work, through excellence in teaching, research, and service, prepares students to be effective, knowledgeable, and qualified for practice in the twenty-first century. Using a person and environment perspective, graduates will enhance inividual, family, group, organizational, and community wellbeing, celebrate difference, and promote social and economic justice for vulnerable populations. As a Seventh-day Adventist Christian institution, we build and disseminate knowledge, values, and skills that positively impact local, national, and international communities; affirm faith by integrating Christian compassion in action within generalist and advanced generalist social work practice; and change the world by enhancing the quality of life for all people by upholding the traditions, values, and ethics of the social work profession.

#### **Bachelors**

## Social Work BSW

The Bachelor of Social Work (BSW) is a professional degree which prepares graduates for generalist professional practice and/or the opportunity to be admitted to a Master of Social Work (MSW) program with advanced standing within appropriate advanced standing GPA guidelines. In addition to the on-campus BSW program, the BSW program is offered as an off-campus program at Washington Adventist University, Takoma Park, Md. The off-campus BSW program is administered and delivered by the AU Department of Social Work and upon completion the BSW is conferred by Andrews University. The AU baccalaureate program is accredited by the Council on Social Work Education through the year 2019.

The foundation curriculum consists of 10 core competencies that are required in every BSW program: (1) Professionalism, (2) Values and Ethics, (3) Critical Thinking, (4) Diversity and Differences, (5) Human Rights and Social Economic Justice, (6) Research, (7) Human Behavior and the Social Environment, (8) Social Welfare Policy and Services, (9) Contextualization, (10) Social Work Practice, plus two (2) additional departmental competencies: (11) Global Worldview and (12) Christian perspective.

Throughout the curriculum, the program integrates concepts of professional ethics and values, critical thinking, and sensitivity to diversity, oppression, social and economic justice, and populations-at-risk. Field education is an integral component of the program.

Although students may declare themselves as social work majors in their freshman or sophomore year, they must apply for acceptance into the social work program. Application is made in January of the sophomore year for formal acceptance into the program by the end of March. Applications are available from social work academic advisors of both the on-campus and off-campus sites.

#### BSW Student Handbook

The BSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the BSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arrises.

#### Field Education

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### **Admission Criteria**

Students qualify for entry into the BSW program when they:

- Earn a minimum GPA of 2.5 overall.
- Receive grades of C- or better in all required program prerequisite and cognate courses.
- Complete SOWK 100, SOWK 101, SOWK 315, SOWK 320, SOWK 325.
   Maintain a GPA of at least 2.50 in these courses.
- Complete and submit BSW Program Application Packet.
- Receive an acceptance letter from the Undergraduate Program Director.

#### English Language Requirement

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years prior to enrollment.
  - TOEFL ITP (paper-based) A minimum score of 550
  - TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
  - MELAB 80 with a minimum of 80 on each section
  - IELTS (Academic version) 6.5
  - PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with BSW program director or designee

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required.

A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Continued Enrollment and Professional Expectations

Continued enrollment is conditional upon the following:

- Acceptable academic performance
- Ethical conduct in compliance with the National Association of Social Workers (NASW) Code of Ethics
- Adequate knowledge and practice performance in the practicum setting.
- Appropriate demonstration of Professional Expectations.

Students in the BSW and MSW Social Work programs are expected to read, know, and integrate the professional expectations listed in the *Andrews University Department of Social Work Handbook*. Consequences for violations of these expectations could include but are not limited to verbal or written warnings, denial of admission, suspension, dismissal, or expulsion from a course or the program. Student Handbook can be obtained on the departmental website at www.andrews.edu/socialwork/.

## **General Education Requirements**

See professional program requirements, see here, and note the following specific requirements:

#### Religion:

professional degree requirements

#### Language/Communication:

professional degree requirements

#### History:

- HIST 117 Civilizations and Ideas I Credits: 3
- HIST 118 Civilizations and Ideas II Credits: 3

#### Fine Arts/Humanities:

professional degree requirements

## Life/Physical Sciences:

BIOL 100 - Human Biology Credits: 4 required

#### plus a second science course with no lab

#### Mathematics:

STAT 285 - Elementary Statistics Credits: 3

### Computer Literacy:

 INFS 120 - Foundations of Information Technology Credits: 3 or pass competency exam

#### Service:

• SOWK 101 - Orientation to Human Services Credits: 2

#### Social Sciences:

fulfilled by Department of Social Work cognates

#### Fitness Education:

professional degree requirements

## **Major Requirements**

- SOWK 100 Introduction to Social Work Credits: 3
- SOWK 101 Orientation to Human Services Credits: 2
- SOWK 220 Critical Thinking Credits: 2
- SOWK 315 Values, Ethics and Diversity Credits: 2
- SOWK 320 Introduction to Counseling Skills Credits: 3
- SOWK 325 Social Welfare Institutions and Services Credits: 3
- SOWK 331 Human Behavior and the Social Environment I Credits: 2
- SOWK 332 Human Behavior and the Social Environment II Credits: 2
- SOWK 350 Social Policy Credits: 3
- SOWK 401 Foundations of Practice I Credits: 4
- SOWK 402 Foundations of Practice II Credits: 4
- SOWK 420 Social Work Methods Seminar Credits: .5, .5
- SOWK 435 Field Instruction Credits: 1
- SOWK 461 Social Work Research I Credits: 2
- SOWK 462 Social Work Research II Credits: 2
- SOWK 489 BSW Professional Seminar Credits: .5,.5

### **Cognate Courses**

- PSYC 101 Introduction to Psychology Credits: 3
- SOCI 119 Principles of Sociology Credits: 3
- BIOL 100 Human Biology Credits: 4
- PLSC 104 American Government Credits: 3
- PLSC 237 The Individual, State, and Marketplace Credits: 3 or
- ECON 225 Principles of Macroeconomics Credits: 3
- STAT 285 Elementary Statistics Credits: 3
- PSYC 180 Dealing with Your Mind Credits: 3
- SPAN 171 Elementary Spanish I Credits: 3

#### Note:

Students are also required to choose 4 credits of social work electives, in consultation with the student's advisor.

#### Field Practicum

Students are required to complete a 400-hour field placement in a local human-service agency. Students are not eligible to take SOWK 401 or SOWK 402 or SOWK 435 before being admitted into the BSW program. The practicum is normally completed during the student's senior year. Prerequisites include the following courses (which must be completed with a grade of C- or above): SOWK 331, SOWK 332, SOWK 350 and SOWK 402, and a human biology course. Students may be dropped from the program or be required to complete additional practicum hours for the following reasons:

- Inability to demonstrate the skills, knowledge, and professional responsibilities required of a baccalaureate-level social work intern
- · Clear violation of the NASW Code of Ethics

Past experience strengthens all BSW student applications. However, following Council on Social Work Education requirements, no social work course credit can be given for life experience or previous work experience.

### **Total Credits: 63**

## **Undergraduate Minors**

## Human Services Minor

## **Description**

The Human Services minor allows students to choose from a variety of core and elective social work courses. This track cannot be used for reduced credit entry into the MSW program. Although students could still be admitted into the Andrews University MSW program, they would be required to complete the full 56-credit requirement for the degree. Although core social work classes taken at the undergraduate level would not need to be repeated, another elective graduate course must be used to replace that course in the total credit load.

## **Minor Requirements**

- SOWK 100 Introduction to Social Work Credits: 3
- SOWK 320 Introduction to Counseling Skills Credits: 3

#### Choose 14 credits from the following list of courses:

- SOWK 325 Social Welfare Institutions and Services Credits: 3
- SOWK 331 Human Behavior and the Social Environment I Credits: 2
- SOWK 332 Human Behavior and the Social Environment II Credits: 2
- SOWK 350 Social Policy Credits: 3
- SOWK 410 Children and Families at Risk Credits: 2
- SOWK 424 Social Gerontology Credits: 2
- SOWK 437 International Social Work Credits: 2
- SOWK 440 Assessment and Treatment of Victims of Violence Credits: 2
- SOWK 455 Treatment of Substance Abuse Credits: 2–4
- SOWK 460 Death and Grief in Contemporary Society Credits: 2
- SOWK 461 Social Work Research I Credits: 2
- SOWK 462 Social Work Research II Credits: 2

#### **Total Credits: 20**

#### **Additional Information**

#### Accreditation

Minors in social work and human services are NOT accredited by the Council on Social Work Education. In addition, a minor in Social Work does NOT qualify the student as:

- a professional social worker;
- a member of the professional social work organization;
- eligible for licensure by the State of Michigan or other state license;
- eligible for full Advanced Standing in a graduate school of social work; or,
- Social Work practice in an employment situation.

Students who are accepted into the MSW degree program at Andrews University are eligible to reduce their Master's degree requirements by ten credits. All courses eligible for course load reduction must have a grade of B- or better or must be retaken at either the Bachelor's or Master's degree level.

#### Pre-requisites

SOWK 100 must be completed before taking SOWK320 and SOWK350. SOWK331 must be completed before proceeding to SOWK 332. SOWK 461 must be completed before proceeding to SOWK462.

Social Work practice courses (SOWK401; SOWK402), Field Placement courses (SOWK420; SOWK435), and Professional Seminar classes (SOWK489) are not available to minors

## Social Work Minor

## **Description**

The Social Work minor consists of nine courses (21-22 credit hours) and creates eligibility for reduced credit entry into the Andrews University MSW program. However, acceptance into the MSW program is NOT guaranteed by completing the minor. Students MUST complete all 21-22 credit hours to become eligible for this reduced credit entry.

## Minor Requirements

- SOWK 100 Introduction to Social Work Credits: 3
- SOWK 315 Values, Ethics and Diversity Credits: 2 (SOWK elective may be substituted)
- SOWK 320 Introduction to Counseling Skills Credits: 3
- SOWK 325 Social Welfare Institutions and Services Credits: 3 (SOWK elective may be substituted)
- SOWK 331 Human Behavior and the Social Environment I Credits: 2
- SOWK 332 Human Behavior and the Social Environment II Credits: 2
- SOWK 350 Social Policy Credits: 3
- SOWK 461 Social Work Research I Credits: 2
- SOWK 462 Social Work Research II Credits: 2

\*Students who take a research course(s) that are equivalent to, or more advanced than, the social work research sequence may substitute social work electives in place of these credits.

#### **Total Credits: 21-22**

#### Additional Information

#### Accreditation

Minors in social work and human services are NOT accredited by the Council on Social Work Education. In addition, a minor in Social Work does NOT qualify the student as:

- a professional social worker;
- a member of the professional social work organization;
- eligible for licensure by the State of Michigan or other state license;
- eligible for full Advanced Standing in a graduate school of social work; or,
- Social Work practice in an employment situation.

Students who are accepted into the MSW degree program at Andrews University are eligible to reduce their Master's degree requirements by ten credits. All courses eligible for course load reduction must have a grade of B- or better or must be retaken at either the Bachelor's or Master's degree level.

#### Pre-requisites

SOWK 100 must be completed before taking SOWK320 and SOWK350. SOWK331 must be completed before proceeding to SOWK 332. SOWK 461 must be completed before proceeding to SOWK462.

Social Work practice courses (SOWK401; SOWK402), Field Placement courses (SOWK420; SOWK435), and Professional Seminar classes (SOWK489) are not available to minors.

## **Masters**

# Social Work, Advanced Standing Plus--Two-Year Program MSW

## MSW (Master of Social Work)

The Master of Social Work (MSW) degree is a professional degree enabling the graduate to enter practice as an advanced-level practitioner. Graduates are prepared to work in a variety of interpersonal clinical or administration and development practice emphases. The foundation curriculum for the MSW consists of 12 core competencies: (1) Professionalism, (2) Values and Ethics, (3) Critical Thinking, (4) Diversity and Differences, (5) Human Rights and Social Economic Justice, (6) Research, (7) Human Behavior and the Social Environment, (8) Social Welfare Policy and Services, (9) Contextualization, (10) Social Work Practice, (11) Global Worldview, and (12) Christian Perspective. Accreditation for the MSW degree has been granted through the Council on Social Work Education through 2019.

## **Assistantships**

Students have the opportunity to apply for graduate assistantships—teaching or research. These assistantships give students the opportunity to develop their expertise. Students interested in becoming social-work educators—especially those with years of clinical experience—may teach undergraduate courses. Research assistantships offer experiences in community consulting, grant writing, and/or conducting research.

#### MSW Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Admissions Criteria

Applicants to the MSW program must meet the requirements in the Graduate Admission section of this bulletin. They must also meet the requirements outlined below.

- An overall minimum undergraduate GPA of 2.75
- All junior and senior level core Social Work courses must have a grade of B- or above or they must be repeated at the MSW level (and the grade received must be B- or above).
- \* Admissions criteria may be refined and changed as necessary to improve the process and address accreditation issues.

## English Language Requirement

For those applicans whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years prior to enrollment.
  - TOEFL ITP (paper-based) A minimum score of 550

- TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
- MELAB 80 with a minimum of 80 on each section
- IELTS (Academic version ) 6.5
- PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designee

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required.

A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

## Advanced Standing Plus—Two-year Program

Students who have done generally very well in their BSW program, but do not meet the 3.0 GPA admission requirement for the one-year advanced standing program, may be eligible for the two-year advanced standing program designed to remediate any areas of academic weakness. Credit requirements are increased by six credits in addition to the one-year advanced program requirements, designated by the advisor in consultation with the student to strengthen identified areas for growth.

## MSW Degree Requirements\*

Satisfactory completion of the MSW curriculum listed by programs below:

#### Advanced Standing Plus—Two-year Program

Satisfactory completion of 39 credits:

#### Core courses:

- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5

#### Field Experience:

- SOWK 637 Advanced Standing Field Experience Credits: 6 = 600 hours &
- SOWK 610 Advanced Field Seminar Credits: .5, .5

#### Electives:

15 credits

## MSW Areas of Emphasis

Students may choose to specialize in the following areas of emphasis: Administration & Development, Mental Health, School Social Work, Marriage & Family, Christian Ministry, International Social Work, Medical Social Work and Aging & Social Work. Please refer to the Department of Social Work website for further information:

www.andrews.edu/cas/socialwork/. Students are not required to choose an emphasis area.

## **Degree Requirements**

- A minimum cumulative GPA of 3.00 in Social Work Program
- No grade of D or F (or U) may count toward a graduate degree.
- The maintenance at all times of professional conduct and behaviors appropriate for a social worker according to the National Association of Social Workers' Code of Ethics.
- Defense of the professional degree portfolio. This portfolio is a demonstrative collection of professional competencies.
- Other Andrews University degree requirements as presented in the Graduate Academic Information section of this bulletin
- $\mbox{\ensuremath{^{*}}}$  Subject to change as necessary to improve the process and address accreditation issues.

Past experience strengthens all MSW student applications. However, following Council on Social Work Education requirements, no social work course credit can be given for life experience or previous work experience.

## **Total Credits: 39**

# Social Work, Advanced Standing--One-Year Program MSW

## MSW (Master of Social Work)

The Master of Social Work (MSW) degree is a professional degree enabling the graduate to enter practice as an advanced-level practitioner. Graduates are prepared to work in a variety of interpersonal clinical or administration and development practice emphases. The foundation curriculum for the MSW consists of 12 core competencies: (1) Professionalism, (2) Values and Ethics, (3) Critical Thinking, (4) Diversity and Differences, (5) Human Rights and Social Economic Justice, (6) Research, (7) Human Behavior and the Social Environment, (8) Social Welfare Policy and Services, (9) Contextualization, (10) Social Work Practice, (11) Global Worldview, and (12) Christian Perspective. Accreditation for the MSW degree has been granted through the Council on Social Work Education through 2019.

## **Assistantships**

Students have the opportunity to apply for graduate assistantships—teaching or research. These assistantships give students the opportunity to develop their expertise. Students interested in becoming social-work educators—especially those with years of clinical experience—may teach undergraduate courses. Research assistantships offer experiences in community consulting, grant writing, and/or conducting research.

#### MSW Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

## Admissions Criteria

Applicants to the MSW program must meet the requirements in the Graduate Admission section of this bulletin. They must also meet the requirements outlined below.

- An overall minimum undergraduate GPA of 3.0
- \* Admissions criteria may be refined and changed as necessary to improve the process and address accreditation issues.

## English Language Requirement

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years prior to enrollment.
  - TOEFL ITP (paper-based) A minimum score of 550
  - TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
  - MELAB 80 with a minimum of 80 on each section
  - IELTS (Academic version) 6.5
  - PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designee

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required.

A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

## **MSW Degree Requirements\***

Satisfactory completion of the MSW curriculum listed by programs below:

## Advanced Standing Program

Satisfactory completion of 33 credits:

#### Basic courses:

- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5

#### Field Experience:

- SOWK 637 Advanced Standing Field Experience Credits: 1 = 600 hours &
- SOWK 610 Advanced Field Seminar Credits: .5, .5

#### Electives:

9 credits

Credit requirements are reduced by 23 based on previous BSW foundation courses taken. In addition to the requirements for the regular two-year program, the following are required for admission into the advanced one-year program.

- Bachelors degree in Social Work no more than five years old from a
  program accredited by the Council on Social Work Education or
  international equivalent approved by CSWE. If an applicant has a degree
  older than five years, he/she must have one year of post-bachelor's
  human-service work experience for every year beyond the five-year limit.
- An overall undergraduate GPA of 3.0 and on graduate credits previously earned, and 3.2 on undergraduate Social Work classes.

#### **MSW Curriculum**

Core advanced interpersonal practice courses supplemented by optional emphasis areas of focus are offered. Students wishing to enroll in core graduate social work courses must be enrolled in the MSW Program and/or have the instructor's permission. Students in the regular two-year program are required to take all foundation year courses. All students, both regular and advanced placement, must take all core advanced year courses, as well as those listed for any specific emphasis they select and elective courses to complete the total credits required. Students who are accepted into the advanced one-year program must also take SOWK 515. Students may transfer up to 20% of the credits from one degree into the MSW program. All courses are subject to change based on accreditation needs.

## **MSW Areas of Emphasis**

Students may choose to specialize in the following areas of emphasis: Administration & Development, Mental Health, School Social Work, Marriage & Family, Christian Ministry, International Social Work, Medical Social Work, and Aging & Social Work. Please refer to the Department of Social Work website for further information: www.andrews.edu/cas/sowk/. Students are not required to choose an emphasis area.

## **Total Credits: 33**

# Social Work, Regular Standing--Two-Year Program MSW

#### MSW (Master of Social Work)

The Master of Social Work (MSW) degree is a professional degree enabling the graduate to enter practice as an advanced-level practitioner. Graduates are prepared to work in a variety of interpersonal clinical or administration and development practice emphases. The foundation curriculum for the MSW consists of 12 core competencies: (1) Professionalism, (2) Values and Ethics, (3) Critical Thinking, (4) Diversity and Differences, (5) Human Rights and Social Economic Justice, (6) Research, (7) Human Behavior and the Social Environment, (8) Social Welfare Policy and Services, (9) Contextualization, (10) Social Work Practice, (11) Global Worldview, and (12) Christian Perspective. Accreditation for the MSW degree has been granted through the Council on Social Work Education through 2019.

### **Assistantships**

Students have the opportunity to apply for graduate assistantships—teaching or research. These assistantships give students the opportunity to develop their expertise. Students interested in becoming social-work educators—especially those with years of clinical experience—may teach undergraduate courses. Research assistantships offer experiences in community consulting, grant writing, and/or conducting research.

#### MSW Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Admissions Criteria

Applicants to the MSW program must meet the requirements in the Graduate Admission section of this bulletin. They must also meet the requirements outlined below

- An overall minimum undergraduate GPA of 2.75
- \* Admissions criteria may be refined and changed as necessary to improve the process and address accreditation issues.

### English Language Requirement

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years prior to enrollment.
  - TOEFL ITP (paper-based) A minimum score of 550
  - TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
  - MELAB 80 with a minimum of 80 on each section
  - IELTS (Academic version) 6.5
  - PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designee

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required.

A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

## Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

## Regular Standing—Two-year Program

- Hold a baccalaureate degree from an accredited college or university
- Provide transcripts that demonstrate course work with a strong liberal arts background.

Required Liberal Arts Background Minimum Semester Credits

- Human Biology or Anatomy and Physiology—3 (or pass challenge exam)
- Communications/Language Skills (foreign languages, speech, grammar, linguistics, written communication, media)—6
- Social and Behavioral Science (sociology, anthropology, psychology, social psychology, diversity)—8
- Humanities/History (philosophy, religion, arts, government, political science, economics, or literature)—14
- Take STAT 285—3
- Previous computer skills, either in course work (1 credit) or extensive hands-on experience evidenced by the Computer Skills Assessment Form.
- Satisfy one of the criteria below:

- Have an overall GPA of at least 2.75 in undergraduate courses.
- Have a GPA of at least 2.75 on last 50% of undergraduate courses.
- Have a graduate GPA of at least 3.5 on 8 semester credits or more earned in courses graded A–F.
- Hold a previous master's degree.
- A professional résumé documenting related experience
- A statement of professional interest and purpose for MSW graduate study
- Two strong professional references

The faculty may request a personal interview or a third reference and/or other information.

## MSW Degree Requirements\*

Satisfactory completion of the MSW curriculum listed by programs below:

## Regular Standing Program

Satisfactory completion of 56 credits:

#### Basic courses:

- SOWK 501 Foundations of Practice I Credits: 4
- SOWK 502 Foundations of Practice II Credits: 4
- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 531 Human Behavior and the Social Environment I Credits: 2
- SOWK 532 Human Behavior and the Social Environment II Credits: 2
- SOWK 550 Social Policy Credits: 2,3
- SOWK 561 Social Work Research I Credits: 2
- SOWK 562 Social Work Research II Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
   SOWK 689 Advanced Professional Seminar Credits: .5, .5

#### Field Experience:

- SOWK 535 Generalist Field Experience Credits: 1 = 400 hours.
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 1 = 500 hours,
- SOWK 610 Advanced Field Seminar Credits: .5, .5

#### Electives:

• 10 credits

## **Degree Requirements**

- A minimum cumulative GPA of 3.00 in Social Work Program
- No grade of D or F (or U) may count toward a graduate degree.
- The maintenance at all times of professional conduct and behaviors appropriate for a social worker according to the National Association of Social Workers' Code of Ethics.
- Defense of the professional degree portfolio. This portfolio is a demonstrative collection of professional competencies.
- Other Andrews University degree requirements as presented in the Graduate Academic Information section of this bulletin.
- \* Subject to change as necessary to improve the process and address accreditation issues.

Past experience strengthens all MSW student applications. However, following Council on Social Work Education requirements, no social work course credit can be given for life experience or previous work experience.

#### **MSW Curriculum**

Core advanced interpersonal practice courses supplemented by optional emphasis areas of focus are offered. Students wishing to enroll in core graduate social work courses must be enrolled in the MSW Program and/or have the instructor's permission. Students in the regular two-year program are required to take all foundation year courses. All students, both regular and advanced placement, must take all core advanced year courses, as well as those listed for any specific emphasis they select and elective courses to complete the total credits required. Students who are accepted into the advanced one-year program must also take SOWK 515. Students may transfer up to 20% of the credits from one degree into the MSW program. All courses are subject to change based on accreditation needs.

## **MSW Areas of Emphasis**

Students may choose to specialize in the following areas of emphasis: Administration & Development, Mental Health, School Social Work, Marriage & Family, Christian Ministry, International Social Work, Medical Social Work, and Aging & Social Work. Please refer to the Department of Social Work website for further information: www.andrews.edu/cas/socialwork/. Students are not required to choose an emphasis area.

## **Total Credits: 56**

## **Masters Dual Degrees**

**Note:** Because each dual degree is listed in two schools you will find duplicates. The content is identical except for order of information.

# Master of Social Work/Master of Arts in Religious Education, Family Life Emphasis Dual Degree MSW/MARELED

## **Dual Degree Program Description**

The Dual Degree Program in Family Life and Masters in Social Work allows the student to complete two degrees in 3 years, with a tuition reduction of 33% for the MSW credits. For seminary credits, the student may apply for the MA Religious Education tuition discount.

To facilitate this objective, the two programs will reduce the total number of required credits and will share a practicum and a limited number of elective courses. Specifically, the Social Work department will reduce the required number of credits from 56 to 46 by allowing students to take their required electives in the Seminary. Sixteen credits will be shared between the two programs.

The MA in Religious Education is a 48 credit degree, but it will share 16 credits with the MSW program and accept 3 MSW credits as electives thereby reducing the MA in Religious Education credits to 45.

## **Total Credits: 80**

## **MSW Degree Requirements**

#### Core Requirements

- SOWK 501 Foundations of Practice I Credits: 4
- SOWK 502 Foundations of Practice II Credits: 4
- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 531 Human Behavior and the Social Environment I Credits: 2
- SOWK 532 Human Behavior and the Social Environment II Credits: 2
- SOWK 550 Social Policy Credits: 2,3
- SOWK 561 Social Work Research I Credits: 2

- SOWK 562 Social Work Research II Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 659 Human Sexuality Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5

## Field Experience

- SOWK 535 Generalist Field Experience Credits: 1
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 1
- SOWK 610 Advanced Field Seminar Credits: .5, .5

## **MARELED Degree Requirements**

- DSRE 503 Marriage, Family, and Interpersonal Relationships Credits: 3
- DSRE 541 Foundations of Biblical Spirituality Credits: 2,3 (3 cr. required)
- DSRE 605 Contemporary Topics in Religious Education and Discipling Credits:
   2,3 (3 cr. required)
- DSRE 610 Teaching for Discipleship Credits: 2,3 (3 cr. required)
- DSRE 620 Scholarly and Professional Development Credits: 0
- DSRE 635 Christian Perspectives on Professional Ethics Credits: 2,3 (3 cr. required)
- DSRE 655 Families in Society Credits: 3
- DSRE 657 Family Law and Public Policy Credits: 3
- DSRE 658 Internal Dynamics of Families Credits: 3
- DSRE 659 Human Sexuality Credits: 3
- DSRE 679 Parenting Education and Guidance Credits: 3
- DSRE 680 Field Practicum: Religious Education Credits: 1–6
- Religion/Theology Course
- CHMN 575 Principles of Stewardship Credits: 2,3
- EDFN 500 Philosophical Foundations for Professionals Credits: 2,3

## **Shared Credits**

- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- Or DSRE 635 Christian Perspectives on Professional Ethics Credits: 2,3
- SOWK 535 Generalist Field Experience Credits: 1
- And SOWK 635 Advanced Field Experience Credits: 1
- Replaces DSRE 680 Field Practicum: Religious Education Credits: 1–6 and includes one credit Leadership requirement.
- SOWK 550 Social Policy Credits: 2,3
- Or DSRE 657 Family Law and Public Policy Credits: 3
- SOWK 659 Human Sexuality Credits: 3
- Or DSRE 659 Human Sexuality Credits: 3
- SOWK 561 Social Work Research I Credits: 2
- And SOWK 562 Social Work Research II Credits: 2
- Or EDRM 505 Research Methods Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5
- Replaces DSRE 620 Scholarly and Professional Development Credits: 0

## **MSW Program Information**

#### **English Language Requirement**

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years priot to enrollment.
  - TOEFL ITP (paper-based) A minimum score of 550
  - TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
  - MELAB 80 with a minimum of 80 on each section
  - IELTS (Academic version) 6.5
  - PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designe

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required. A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

#### Resources

#### Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

# Master of Social Work/Master of Arts in Youth & Young Adult Ministry Dual Degree MSW/MAYYAM

## Master of Social Work Degree Requirements

#### Basic Courses - 56 Credits

- SOWK 501 Foundations of Practice I Credits: 4
- SOWK 502 Foundations of Practice II Credits: 4

- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 531 Human Behavior and the Social Environment I Credits: 2
- SOWK 532 Human Behavior and the Social Environment II Credits: 2
- SOWK 550 Social Policy Credits: 2,3
- SOWK 561 Social Work Research I Credits: 2
- SOWK 562 Social Work Research II Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3

SOWK 689 - Advanced Professional Seminar Credits: .5, .5

#### Field Experience

- SOWK 535 Generalist Field Experience Credits: 1 (4 credits required for this degree. (4) = 400 hours)
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 1 (5 credits required for this degree. (5) = 500 hours)
- SOWK 610 Advanced Field Seminar Credits: .5, .5

# MA in Youth & Young Adult Ministry Requirements

### Prerequisite - 1 credit

The student needs to pass the Biblical Literacy Exam with an 80% OR take

GSEM 525 - The Bible and Biblical History Credits: 1

#### MA YYAM Core Courses - 18 credits

- DSRE 541 Foundations of Biblical Spirituality Credits: 2,3 (2 cr req)
- CHIS 574 History of Seventh-day Adventist Theology Credits: 2
- CHMN 523 Worship: Word and Music Credits: 2,3 (2 cr req)
- A Mission course (2 cr req)
- Two Old Testament/New Testatment Courses (4 cr reg)
- Two Theology courses (2 cr req)
- One course in Conflict Management or Church Leadership from Christian Ministry (2cr req)

## MAYYAM Emphasis Courses - 14 Credits

- DSRE 534 Ministry to Youth and Young Adults Credits: 2,3 (2 cr req)
- DSRE 564 Advanced Youth and Young Adult Ministry Leadership Credits: 2,3 (2 cr req)
- DSRE 608 Youth and Young Adults in Contemporary Culture (2 cr req)
- DSRE 605 Contemporary Topics in Religious Education and Discipling Credits:
   2,3 (2 cr req)
- Or DSRE 610 Teaching for Discipleship Credits: 2,3 (2 cr req)
- DSRE 656 Counseling Youth and Young Adults Credits: 2,3 (2 cr req)
- Choose a CHMN or DSRE course (2 cr req)
- CHMN 632 Contextualized Preaching: Youth & Young Adult (2 cr req)

## **MAYYAM Dual Degree**

Andrews University has formed a collaborative between the Department of Discipleship and Religious Education in the Seminary and the Department of Social Work in the College of Arts & Sciences to prepare students for youth and young adult ministry and social work. Students choosing this program would receive both a master's in Youth and Young Adult Ministry and a master's in Social Work. The objectives of this program are to equip students for various forms of ministry in which clinical and administrative skills in social work and ministry are needed; to enable

students to integrate both ministry and social work knowledge, values and skills into a multifaceted approach to Christian service, thereby enhancing their usefulness as instruments of the Holy Spirit; and to sensitize them to nontraditional ministry opportunities byexposing them to theories and practice skills related to counseling approaches, person-in-environment, social and economic justice, human rights and global perspectives from a Christian worldview. The program is designed to give students both master's degrees within three years. The details of the program are as follows:

- The dual degree will consist of 78 credits.
- The student will need to be accepted into both programs.
- There will be shared electives between the two programs:
  - O Eight credits for the MA in Youth & Young Adult Ministry; and
  - O Ten credits for the Master of Social Work.
- Fieldwork will also be a shared experience, being cross-listed as CHMN660
   Field Practicum/SOWK535 Field Experience/ SOWK635 Advanced Field
   Experience. Nine credit hours will be required for a total of 900 clock
   hours
- One course will be cross-listed and be taken in the Department of Social Work:
  - DSRE 503 Marriage, Family, and Interpersonal Relationships with SOWK 501 - Foundations of Practice I
- GSEM 525 The Bible and Biblical History will be considered a prerequisite
  course. If the student passes the Biblical Literacy Exam, that will satisfy the
  prerequisite. If the student does not pass the exam, they will need to take
  the one-credit GSEM 525 in addition to the 78 credits for the dual degree.
- Since both, the MSW and MAYYAM programs, reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree.

See the Seminary section of this bulletin for a complete description of this dual degree.

## **MSW Program Information**

#### Admission Requirements

#### **English Language Requirement**

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years priot to enrollment.
  - TOEFL ITP (paper-based) A minimum score of 550
  - TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
  - MELAB 80 with a minimum of 80 on each section
  - IELTS (Academic version) 6.5
  - PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designe

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required. A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### **Graduate Record Examination (GRE)**

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

#### Resources

#### Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

# Master of Social Work/Master of Divinity Track 1, Dual Degree MSW/MDiv

#### **MDiv General Information**

For information regarding: Program Overview, Application, Policies and other entrance requirements -Click Here.

## **Program Description**

Andrews University has formed a collaboration between the Seventh-day Adventist Theological Seminary and the Department of Social Work in the College of Arts & Sciences to prepare students for service in occupations where social work and the pastoral mission of the church intersect. The objectives of this program are to prepare students for various forms of ministry in which clinical and administrative skills in social work and theology are needed; to enable students to integrate both theological and social work knowledge, values and skills into a multifaceted approach to Christian service, thereby enhancing their usefulness as instruments of the Holy Spirit; and to sensitize students to nontraditional ministry opportunities by exposing them to theories and practice skills related to counseling approaches, person-in-environment, social and economic justice, human rights and global perspectives from a Christian worldview. The program is designed to give students an integrated approach to both theology and social work. Students can choose either a dual degree or an emphasis in either Social Work or Christian Ministry.

Since both the MSW and MDiv programs reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree. In the event that one degree was completed prior to enrollment for the dual degree program, the requirements for the second degree would be met through completion of the requirements shown below.

# Master of Social Work Degree Requirements: 46 Credits

#### **Basic Courses**

SOWK 501 - Foundations of Practice I Credits: 4

SOWK 502 - Foundations of Practice II Credits: 4

SOWK 515 - Christian Perspectives on Professional Ethics Credits: 2

SOWK 531 - Human Behavior and the Social Environment I Credits: 2 SOWK 532 - Human Behavior and the Social Environment II Credits: 2

SOWK 550 - Social Policy Credits: 2,3

SOWK 561 - Social Work Research | Credits: 2

SOWK 562 - Social Work Research II Credits: 2

SOWK 601 - Advanced Practice I Credits: 3 SOWK 602 - Advanced Practice II Credits: 2

SOWK 605 - Advanced Clinical Assessment Credits: 3

SOWK 630 - Policy for Social Change Credits: 3 SOWK 660 - Advanced Practice Evaluation Credits: 3

SOWK 689 - Advanced Professional Seminar Credits: .5, .5

#### Feild Experience

- SOWK 535 Generalist Field Experience Credits: 1 (4 credits required for this degree. (4) = 400 hours)
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 1 (5 credits required for this degree. (5) = 500 hours)
- SOWK 610 Advanced Field Seminar Credits: .5, .5

## Master of Divinity Track 1

MDiv/MSW Track 1 program is for students who have a Bachelors degree in Theology. Students who do not have a BA in Theology will need to complete the MDiv/MSW Track 2 program.

#### MDiv Prerequisites

- GSEM 525 The Bible and Biblical History Credits: 1
   OR Biblical Literacy Exam 80% August
- CHMN 552 Foundations of Pastoral Ministry Credits: 2
   OR Church Policy Exam 80%
- NTST 551 Beginning Greek Credits: 2 (C- or higher)
   OR Beginning Greek Exam 45%
- 3 credits of NTST 552 Intermediate Greek Credits: 2,3 (C or higher)
   OR Intermediate Greek Exam 60%
- OTST 551 Biblical Hebrew I Credits: 3 (C- or higher)
   OR Hebrew Examination 45% or higher
- 2 credits of OTST 552 Biblical Hebrew II Credits: 2,3 (C+ or higher)
   OR Hebrew II Examination 65% or Higher

Placement exams must be taken within your first year in seminary.

## Interdisciplinary Courses - 14

- GSEM 510 Revelation, Inspiration and Hermeneutics Credits: 3
- 2 Credits of GSEM 530 Doctrine of the Sanctuary Credits: 2,3
- 2 Credits of GSEM 534 Issues in Ellen G. White Studies Credits: 2,3
- 2 Credits of GSEM 539 Issues in Origins Credits: 2,3
- 2 Credits of GSEM 626 Contemporary Adventist Theological Issues Credits:
   2 3
- GSEM 627 Issues in Daniel and Revelation Credits: 3

#### Christian Ministry - 16

- CHMN 539 Church Growth and the Equipping Pastor Credits: 3
- CHMN 543 Christian Leadership in a Changing World Credits: 3
- 2 Credits of CHMN 555 Pastoral Counseling Credits: 2,3
- 3 Credits of CHMN 562 Field Evangelism Credits: 3–6
- 2 credits of CHMN 631 Field Evangelistic Preaching Credits: 2
- 1 credit of CHMN 662 Field Evangelistic Preaching Practicum Credits: 1
   CHMN662 Must be taken with CHMN631
- CHMN 560 Theological Field Education Credits: 2

Prereq: CHMN505 - Biblical Preaching (Track 2 only) and CHMN552 - Foundations of Pastoral Ministry (Track 1 & 2)

Pastors who can present a letter from their Employer/Conference, to the CHMN Department Chair, verifying at least 2 years of fulltime paid pastoral experience including intentional mentoring, verified by a service record, may substitute the course with another CHMN (600 level ) course at the Department Chair's discretion (Track 1 only).

- Choose one 600 Level Preaching Course Credits: 2
- Or 2 Credits of CHMN 523 Worship: Word and Music Credits: 2,3
- 2 Credits of CHMN 566 Mobilizing Laity for the Ministry of Evangelism Credits: 2,3

- Or 2 Credits of CHMN 656 Holistic Small Groups Credits: 2,3
- 2 Credits of CHMN 553 The Church and Social Issues Credits: 2.3
- Or 2 Credits of MSSN 505 Christian Responses to Human Needs Credits: 2,3

In the semester in which students take CHMN 562 - Field Evangelism, the class load is limited to 12 credits for spring and summer and 16 credits for fall semester.

International (non-North American) students are exempt from CHMN 562 - Field Evangelism and CHMN 631 - Field Evangelistic Preaching, except as arranged. Other NADEI courses are required of international students unless the stubstitution of a course offered by the Department of World Mission is approved by the MDiv director. The 3 credits exempted from CHMN 562 - Field Evangelism must be taken in either the Christian Ministry or World Mission departments. The course CHMN 631 - Field Evangelistic Preaching must be replaced by CHMN 621 - Evangelistic Preaching or CHMN 614 - Preaching from Daniel or Revelation. If either course may be unavailable to the student, a petition may be made to the M.Div. office for another 600 Level preaching course.

## Discipleship and Religious Education - 5

- DSRE 503 Marriage, Family, and Interpersonal Relationships Credits: 3
- 3 Credits of DSRE 541 Foundations of Biblical Spirituality Credits: 2,3
   Must be taken 1st Fall semester in program.
- 2 Credits of DSRE 534 Ministry to Youth and Young Adults Credits: 2,3
- 2 Credits of DSRE 610 Teaching for Discipleship Credits: 2,3

#### Old Testament: 8

- Choose one Archeology Course Credits 2
- Choose one OT 600 Level Exegesis course Credits 3
- Choose one OT 600 Level Theology Course Credits 3

#### Theology: 6

- 2 Credits of THST 540 Doctrine of Salvation Credits: 2,3
- Choose one 600 Level Systematic Theology Course Credits 2
- Choose one 600 Level Historical Theology Course Credits 2
- Choose one 600 Level Ethics Course Credits 2

#### Church History: 6

- CHIS 674 Development of Seventh-day Adventist Theology Credits: 3
- Choose one 600 Level Church History Course Credits 3

## New Testament: 8

- Choose one 600 Level New Testament Exegesis Course Credits 3
- Choose one 600 Level New Testament Theology Course Credits 3
- Choose one 600 Level New Testament Backgrounds Course Credits 2

## World Mission: 6

- MSSN 546 Mission in Cultural and Religious Context Credits: 3
- MSSN 561 Christian Witness and World Religions Credits: 3

## **Credits for Each Program**

**MDiv:** Track 1: Graduation requirements consist of the satisfactory completion of 115 semester credits with an overall grade point average of 2.75 or better. Sixtynine credits are MDiv credits, 31.5 credits are social work credits, and 14.5 credits are shared between the two curricula in lieu of MDiv electives.

MSW: MDiv students are required to complete 45 core credit hours for the two-year regular MSW program. Due to the strict requirements of the Council on Social Work Education's accrediting mandates, these core courses must all be taught or co-taught within the department by faculty holding an MSW degree. However, these courses could be co-taught with faculty from the seminary. MDIV/MSW DUAL DEGREE PROGRAM 373 Occasionally, a student who has already earned a BSW from an accredited program may apply to this program. In this case, the student would be placed in the Advanced Standing program, and take either 33 credits (Advanced

Standing) or 39 credits (Advanced Standing Plus). Students with an undergraduate GPA of 3.0 or higher are eligible to complete the Advanced Standing Program while those with a lower GPA must complete the Advanced Standing Plus requirements.

Since both the MDIV and MSW programs reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree. In the event that one degree was completed prior to enrollment for the dual degree program, the requirements for the second degree would be met through completion of the requirements shown above.

Shared Social Work credits between Social Work and MDiv equal 14.5. Shared MDiv credits between MDiv and Social Work equal 11.

- SOWK501 Foundations of Practice 1 (4 credits) is shared with DSRE503 Marriage, Family & Interpersonal Relationships (3 credits)
- SOWK510/535 Generalist Field Experience/Seminar) 2.5 credits is shared with CHMN560 Theological Field Education (2 credits)
- SOWK601 Advanced Practice I (3 credits) is shared with CHMN555 Pastoral Counseling (2 credits)
- SOWK630 Policy for Social Change (3 credits) is shared with MSSN505 Christian Responses to Human Needs (2 credits) or CHMN544 The Church and Social Issues (2 credits)
- SOWK515 Christian Perspectives on Ethics (2 credits) is shared with THST643 Christian Professional Ethics (2 credits

## **Admission Requirements**

Applicants for the MDiv/MSW dual degree program typically will have received a bachelor's degree (BA, BS, BSW) from a four-year college or university accredited by one of the nationally recognized accrediting agencies in the United States, or hold an equivalent educational credential from another country. Application must be made separately to both the Seventh-day Adventist Theological Seminary and the Department of Social Work. Acceptance into one of the programs does not guarantee acceptance into the other. Applicants must meet the admissions requirements for each program, including all required prerequisites for each degree program.

#### MDiv

Although MDiv students can transfer 11 electives into the MSW program, they can only receive a tuition reduction if they are simultaneously enrolled in the MDiv program. Students who have already completed an MDiv degree can receive the tuition reduction upon admission into the MSW program.

#### MSW:

- Students must maintain a minimum cumulative GPA of 3.0 in social work program courses;
- 2. No grade of D or F (or U) may count toward the MSW degree.

#### Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### English Language Requirement MDIV

- For those applicants whose native language is not English, the following is required:
- 2. MELAB—score of 81 (must achieve passing score on each section) or
- TOEFL (paper based)—score of 565 or (ibT Internet based)-score
  of 85. Minimum score of 20 in each section (reading, listening, speaking,
  writing).
- 4. IELTS (Academic Version)—score of 6.5
- 5. PTE (Academic Version)score of 58

Language proficiency must be met before enrolling full-time in regular coursework.

#### English Language Requirement - MSW

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years priot to enrollment
  - TOEFL ITP (paper-based) A Minimum score of 550
  - TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
  - MELAB 80 with a minimum of 80 on each section
  - IELTS (Academic version) 6.5
  - PTE (Academic version) 54
- 2. Nelson Denny scroe of 13 and
- 3. Personal interview with MSW program director or designee

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required. A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

# Master of Social Work/Master of Divinity Track 2, Dual Degree Dual Degree MSW/MDiv

## **MDiv General Infomation**

For information regarding: Program Overview, Application, Policies and other entrance requirements -Click Here.

## **Program Description**

Andrews University has formed a collaboration between the Seventh-day Adventist Theological Seminary and the Department of Social Work in the College of Arts & Sciences to prepare students for service in occupations where social work and the pastoral mission of the church intersect. The objectives of this program are to prepare students for various forms of ministry in which clinical and administrative skills in social work and theology are needed; to enable students to integrate both theological and social work knowledge, values and skills into a multifaceted approach to Christian service, thereby enhancing their usefulness as instruments of the Holy Spirit; and to sensitize students to nontraditional ministry opportunities by exposing them to theories and practice skills related to counseling approaches, person-in-environment, social and economic justice, human rights and global perspectives from a Christian worldview. The program is designed to give students an integrated approach to both theology and social work. Students can choose either a dual degree or an emphasis in either Social Work or Christian Ministry.

Since both the MSW and MDiv programs reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree. In the event that one degree was completed prior to enrollment for the dual degree program, the requirements for the second degree would be met through completion of the requirements shown below.

# Master of Social Work Degree Requirements: 46 Credits

#### **Basic Courses**

SOWK 501 - Foundations of Practice I Credits: 4

- SOWK 502 Foundations of Practice II Credits: 4
- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 531 Human Behavior and the Social Environment I Credits: 2
- SOWK 532 Human Behavior and the Social Environment II Credits: 2
- SOWK 550 Social Policy Credits: 2.3
- SOWK 561 Social Work Research I Credits: 2
- SOWK 562 Social Work Research II Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5

### Feild Experience

- SOWK 535 Generalist Field Experience Credits: 1 (4 credits required for this degree. (4) = 400 hours)
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 1 (5 credits required for this degree.
   (5) = 500 hours)
- SOWK 610 Advanced Field Seminar Credits: .5, .5

## Master of Divinity Track 2

## Interdisciplinary Courses - 15

- GSEM 510 Revelation, Inspiration and Hermeneutics Credits: 3
- GSEM 511 Daniel and Revelation Credits: 3

Prereq: Completion of Placement Exam or pass Beg Greek and Hebrew II

- GSEM 525 The Bible and Biblical History Credits: 1
- GSEM 530 Doctrine of the Sanctuary Credits: 2,3

Recommended: Completion of Hebrew 1 (OTST551)

GSEM 534 - Issues in Ellen G. White Studies Credits: 2,3

Prereq: CHIS504 Adventist Heritage

- GSEM 539 Issues in Origins Credits: 2,3
- GSEM 626 Contemporary Adventist Theological Issues Credits: 2,3

#### Christian Ministry - 20

- 2 Credits of CHMN 505 Biblical Preaching Credits: 2,3
- CHMN 536 Personal Evangelistic Ministry Credits: 2,3
- CHMN 539 Church Growth and the Equipping Pastor Credits: 3
- CHMN 543 Christian Leadership in a Changing World Credits: 3
- CHMN 552 Foundations of Pastoral Ministry Credits: 2
- CHMN 555 Pastoral Counseling Credits: 2,3
- CHMN 560 Theological Field Education Credits: 2

Prereq: CHMN505 – Biblical Preaching (Track 2 only) and CHMN552 – Foundations of Pastoral Ministry (Track 1 & 2)

Pastors who can present a letter from their Employer/Conference, to the CHMN Department Chair, verifying at least 2 years of fulltime paid pastoral experience including intentional mentoring, verified by a service record, may substitute the course with another CHMN (600 level ) course at the Department Chair's

- 3 Credits of CHMN 562 Field Evangelism Credits: 3–6
- CHMN 631 Field Evangelistic Preaching Credits: 2

discretion (Track 1 only).

- CHMN 662 Field Evangelistic Preaching Practicum Credits: 1
- 2 Credits of CHMN 523 Worship: Word and Music Credits: 2,3
   CHMN\_\_Advanced Preaching (600 Level) Credits: 2
- 2 Credits of CHMN 553 The Church and Social Issues Credits: 2,3
- 2 Credits of Or MSSN 505 Christian Responses to Human Needs Credits: 2,3

 $\label{Note: Note: In the semester in which students take CHMN562 - Field Evangelsim, the class load is limited to 12 credits.$ 

International (non-North American) students are exempt from CHMN562-Field Evangelism and CHMN631-Field Evangelistic Preaching, except as arranged. Other NADEI courses are required of international students unless the stubstitution of a

course offered by the Department of World Mission is approved by the MDiv director. The 3 credits exempted from CHMN562 must be taken in either the Christian Ministry or World Mission departments. The course CHMN631 must be replaced by CHMN621-Evangelistic Preaching or another advanced (600 Level) preaching course.

## Discipleship and Religious Education - 5

- DSRE 503 Marriage, Family, and Interpersonal Relationships Credits: 3
- 2 Credits of DSRE 610 Teaching for Discipleship Credits: 2,3
- 2 Credits of DSRE 534 Ministry to Youth and Young Adults Credits: 2,3
- Or 3 Credits of DSRE 541 Foundations of Biblical Spirituality Credits: 2,3
   Must be taken first fall semester in program.

## Church History: 12

- CHIS 504 Adventist Heritage Credits: 3
- CHIS 506 Church History to 1500 Credits: 3
- CHIS 507 Church History 1500 to Present Credits: 3
- CHIS 674 Development of Seventh-day Adventist Theology Credits: 3
   Prereq: CHIS504 Adventist Heritage

#### New Testament: 15

- NTST 551 Beginning Greek Credits: 2
- NTST 552 Intermediate Greek Credits: 2,3
- NTST 509 Intro to Exegesis and Theology 3: Pauline Writings Credits: 3
   Prereq: C in Intermediate Greek or pass exam
- NTST 510 Intro to Exegesis and Theology 1: Gospels Credits: 3
   Coreq: NTST551 or pass Beginner Greek
- 2 Credits of NTST 515 New Testament Backgrounds Credits: 2,3
- NTST 543 Intro to Exegesis and Theology 2: Acts and General Epistles Credits: 2
   Coreq: NTST552 or pass Intermediate Greek

#### Old Testament: 15

- OTST 551 Biblical Hebrew I Credits: 3
- 2 Credits of OTST 552 Biblical Hebrew II Credits: 2,3
- OTST 555 Prophets Credits: 3

Coreq: OTST552 or pass Hebrew placement exam

- OTST 558 Writings Credits: 2
  - Coreq: OTST552 or pass Hebrew placement exam
- OTST 565 Pentateuch Credits: 3
- 2 Credits of ANEA 510 Archaeology and the Bible Credits: 2,3
- Or 2 Credits of ANEA 514 Bible Lands and Their Explorations Credits: 2,3
- Or 2 Credits of NTST 615 New Testament Archaeology Credits: 2,3

## Theology: 8

- 2 Credits of THST 510 Understanding the Christian World Credits: 2,3
- THST 521 Christian Theology I Credits: 2,3
- THST 522 Christian Theology II Credits: 2,3
- THST 550 Principles of Christian Ethics Credits: 2,3

#### World Mission: 6

- MSSN 546 Mission in Cultural and Religious Context Credits: 3
- MSSN 561 Christian Witness and World Religions Credits: 3

## **Credits for Each Program**

**MDiv**: Track 2: Graduation requirements consist of satisfactory completion of 142 semester hours with an overall grade point average of 2.75 or better. Ninety-six credits are MDiv credits, 31.5 credits are Social Work credits, and 14.5 credits are shared between the two curricula.

MSW: MDiv students are required to complete 45 core credit hours for the two-year regular MSW program. Due to the strict requirements of the Council on Social Work Education's accrediting mandates, these core courses must all be taught or co-taught within the department by faculty holding an MSW degree. However, these courses could be co-taught with faculty from the seminary. MDIV/MSW DUAL DEGREE

PROGRAM 373 Occasionally, a student who has already earned a BSW from an accredited program may apply to this program. In this case, the student would be placed in the Advanced Standing program, and take either 33 credits (Advanced Standing) or 39 credits (Advanced Standing Plus). Students with an undergraduate GPA of 3.0 or higher are eligible to complete the Advanced Standing Program while those with a lower GPA must complete the Advanced Standing Plus requirements.

Since both the MDiv and MSW programs reduce total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree. Although MDiv students can transfer 11 electives into the MSW program, they can only receive a tuition reduction if they are simultaneously enrolled in the MDiv Program.

**Shared Social Work credits** between Social Work and MDiv equal 14.5. Shared MDiv credits between MDiv and Social Work equal 11.

- SOWK501 Foundations of Practice 1 (4 credits) is shared with DSRE503 Marriage, Family & Interpersonal Relationships (3 credits)
- SOWK510/535 Generalist Field Experience/Seminar) 2.5 credits is shared with CHMN560 Theological Field Education (2 credits)
- SOWK601 Advanced Practice I (3 credits) is shared with CHMN555 Pastoral Counseling (2 credits)
- SOWK630 Policy for Social Change (3 credits) is shared with MSSN505 Christian Responses to Human Needs (2 credits) or CHMN544 The Church and Social Issues (2 credits)
- SOWK515 Christian Perspectives on Ethics (2 credits) is shared with THST643 Christian Professional Ethics (2 credits

## **Admission Requirements**

Applicants for the MDiv/MSW dual degree program typically will have received a bachelor's degree (BA, BS, BSW) from a four-year college or university accredited by one of the nationally recognized accrediting agencies in the United States, or hold an equivalent educational credential from another country. Application must be made separately to both the Seventh-day Adventist Theological Seminary and the Department of Social Work. Acceptance into one of the programs does not guarantee acceptance into the other. Applicants must meet the admissions requirements for each program, including all required prerequisites for each degree program.

#### MDiv:

Although MDiv students can transfer 11 electives into the MSW program, they can only receive a tuition reduction if they are simultaneously enrolled in the MDiv program. Students who have already completed an MDiv degree can receive the tuition reduction upon admission into the MSW program.

#### MSW:

- 1. Students must maintain a minimum cumulative GPA of 3.0 in social work program courses:
- 2. No grade of D or F (or U) may count toward the MSW degree.

#### Student Handbook

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

### English Language Requirement MDIV

- For those applicants whose native language is not English, the following is required:
- MELAB—score of 81 (must achieve passing score on each section) or
- TOEFL (paper based)—score of 565 or (ibT Internet based)-score of 85. Minimum score of 20 in each section (reading, listening, speaking, writing).
- IELTS (Academic Version)—score of 6.5
- PTE (Academic Version)score of 58

Language proficiency must be met before enrolling full-time in regular coursework.

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years priot to enrollment
- TOEFL ITP (paper-based) A Minimum score of 550
- TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
- MELAB 80 with a minimum of 80 on each section
- IELTS (Academic version) 6.5
- PTE (Academic version) 54
- 2. Nelson Denny scroe of 13 and
- 3. Personal interview with MSW program director or designee

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required. A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction
300	10% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

## **MDiv Emphases Options**

Students enrolled in the MDiv program may choose from a number of 12-credit emphases. Students must apply for an emphasis during the first year of their program. More specific details may be obtained from each department regarding these areas of emphasis.

Choosing an emphasis may prolong the length of a student's program. Please consider the possibility of adding a semester to your MDiv program when attempting to complete an emphasis. Regular master's tuition is charged for courses taken after an MDiv student has completed their program coursework.

Christian Ministry	Old Testament
African American Ministry	Old Testament
Chapliancy	Archaeology & History of Antiquity
Church Growth and Evangelsim	Jewish Studies
Church Leadership	Biblical and Cognate Languages
Pastoral Care	(Ancient Near Eastern)
Preaching	

Church History	Theology and Christian Philosophy
Church History	Christian Ethics
Adventist Studies	Historical Theology
Church and State	Systematic Theology
Reformation	

#### Discipleship and Religious Education World Missions

Campus Spiritual Leadership Missions Studies
Discipleship and Biblical Spirituality Social Work
Family Life Education

Youth & Young Adult

Backgrounds and Languages

New Testament	Health
Exegesis and Theology	Health Promotion and Education

# Master of Social Work/Master of Science in Community and International Development, Dual Degree MSW/MSCID

## **Dual Degree Program Description**

Andrews University has chosen to explore a collaborative between the Community & International Development Program (CIDP) and the Department of Social Work in the College of Arts & Sciences to prepare students for service in occupations where social work and international development intersect. Social Workers, particularly those in the areas of Administration and Development and International Social Work, may have an interest in international work. In such situations, the MSCID could equip them with a complementary skill set. Likewise, development and relief workers often find themselves in situations where social work skills in counseling and therapy would be useful. In addition, the MSCID/MSW collaborative allows for a greater breadth of employment opportunities for students.

Since both the MSW and MSCID programs reduce the total credits in order to reduce costs and achieve a more streamlined and efficient program, both degrees must be received simultaneously in order to fulfill the requirements of either degree. In the event that one degree was completed prior to enrollment for the dual degree program, the requirements for the second degree would be met through completion of the requirements shown below.

## **MSW Degree Requirements**

#### **Basic Courses**

- SOWK 501 Foundations of Practice I Credits: 4
- SOWK 502 Foundations of Practice II Credits: 4
- SOWK 515 Christian Perspectives on Professional Ethics Credits: 2
- SOWK 531 Human Behavior and the Social Environment I Credits: 2
- SOWK 532 Human Behavior and the Social Environment II Credits: 2
- SOWK 550 Social Policy Credits: 2,3
- SOWK 561 Social Work Research I Credits: 2
- SOWK 562 Social Work Research II Credits: 2
- SOWK 601 Advanced Practice I Credits: 3
- SOWK 602 Advanced Practice II Credits: 2
- SOWK 605 Advanced Clinical Assessment Credits: 3
- SOWK 630 Policy for Social Change Credits: 3
- SOWK 660 Advanced Practice Evaluation Credits: 3
- SOWK 689 Advanced Professional Seminar Credits: .5, .5

#### Field Experience

- SOWK 535 Generalist Field Experience Credits: 4 = 400 hours
- SOWK 510 Generalist Field Seminar Credits: .5, .5
- SOWK 635 Advanced Field Experience Credits: 5 = 500 hours
- SOWK 610 Advanced Field Seminar Credits: .5, .5

#### Electives - 10 Credits

## **MSW Emphasis Options**

## Administration & Development Emphasis

CIDS 520 - Development Theory and Practice Credits: 3

#### Choose one of the following courses

CIDS 515 - Organization and Human Resources Credits: 3 OR BSAD 515 Organizational Behavior & Leadership Credits: 3 OR BSAD 530 - Leadership &
 Management of Not-for-Profit Organizations Credits: 3

## International Social Work Emphasis

- CIDS 536 Development Design & Evaluation Credits: 3 (Satisfies SOWK 675 Topics: Grantwriting Credits: 1)
- SOWK 537 International Social Work Credits: 2

## **MSCID Degree Requirements - 39-40 Credits**

#### CIDP Core Courses - 11 Credits

- CIDS 520 Development Theory and Practice Credits: 3
- SOCI 508 Emergency Preparedness Credits: 2
- ANTH 517 Cultural and Developmental Anthropology Credits: 2
- Remaining 3 credit hours satisfied by SOWK 630 Policy for Social Change

### Development Management - 10 Credits

- CIDS 530 Needs Assessment, Capacity Mapping & Program Planning Credits: 3
- CIDS 536 Development Design & Evaluation Credits: 3
- CIDS 535 Budgeting, Fundraising & Grantsmanship Credits: 2

Choose one of the following three courses:

- CIDS 515 Organization and Human Resources Credits: 3
- BSAD 530 Leadership & Management of Not-for-Profit Organizations Credits: 3
- BSAD 515 Organizational Behavior & Leadership Credits: 3

#### Research Tools & Skills - 6-7 Credits

- SOCI 533 Research Methods III: Advanced Research Design-Experimental and Survey Credits: 2
- SOCI 534 Research Methods IV: Advanced Statistical Analysis & SPSS Credits: 2
- CIDS 670 Comprehensive Exam Credits: 0
- CIDS 698 Research Project Credits: 2,3 OR CIDS 699 Master's Thesis Credits: 3,4

#### Practicum - 1 Credit

Field experience must be planned in consultation with both programs in order to satisfy all requirements.

Satisfied by: SOWK 635 - Advanced Field Experience Credits: 1

#### Concentration Electives - 12 Credits

- SOWK 660 Advanced Practice Evaluation
- SOWK core credits may be applied to a CIDP concentration at the discretion of the CIDP Program Director.

## **Collaborative Program Objectives**

- To prepare students for various forms of work in which clinical and administrative skills in development and social work are needed;
- To enable students to integrate development and social work knowledge, values, and skills into a multifaceted approach to service, thereby enhancing their value in the world.

## Distinctive Features of the Program

The program is designed to give students an integrated approach to both international development and social work. Students who take a social work emphasis in Administration and Development and International Social Work can choose a dual degree with CIDP.

#### Admission Requirements

Applicants to the MSCID/MSW dual degree program typically will have received a bachelor's degree (BA, BS, BSW) from an accredited four-year college or university in the U.S., or hold an equivalent educational credential from another country. Application must be made separately to both the MSDIC and MSW programs. Acceptance into one program does not guarantee acceptance into the other. Applicants must meet the admissions requirements for each program, including all required prerequisites for each degree. Students in both programs must meet the following minimum requirements:

- Students must maintain a minimum cumulative GPA of 3.0;
- No grade of D or F (or U) may count toward either degree.

300 10% tuition reduction

MSCID students are required to complete 39-40 credit hours for the two-year regular program, which includes 12 elective credits (minimum of 4 courses). Students with certain prerequisites may qualify for the 30-credit advanced standing program. The two-year regular MSW degree requires 46 core credit hours, plus 10 elective hours. Due to the strict requirements of the Council on Social Work Education's accrediting mandates, these core courses must all be taught or co-taught within the department by faculty holding an MSW degree. Occasionally, a student who has already earned a BSW from an accredited program may apply to this program. In this case, the student would be placed in the Advanced Standing program, and take either 33 credits (Advanced Standing) or 39 credits (Advanced Standing Plus). Students with an undergraduate GPA of 3.0 or higher are eligible to complete the Advanced Standing Plus

These program models create a curriculum that allows for the integration of 21–24 Social Work and CIDP credits, giving students the advantage of being able to reduce their total credit load. Since both MSCID and MSW programs already share courses in order to reduce costs and achieve a more streamlined and efficient program, the course work for both degrees must be taken either simultaneously or within one academic year of completion of one of the degrees in order to fulfill the requirements of either degree.

Because of CSWE requirements, students in the MSCID/MSW SOCIAL WORK COURSES 215 dual degree program would register for social work core classes in lieu of certain CIDP courses and would take an emphasis in either Administration & Development or International Social Work. Students will take shared courses as outlined below.

## **MSW Requirements**

#### Student Handbook

requirements.

The MSW Student Handbook has been designed as the social work student's aid in understanding the program requirements, Social Work Department, and relevant policies of Andrews University. Inside the handbook you will find information such as expectations of students, the MSW curriculum, departmental policies, and other relevant information.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### Field Manual

The Field Manual has been designed as your aid in understanding field education requirements, your role as a student in a field agency, and relevant policies of Andrews University.

You are responsible for the information found in this handbook, so please take the time to familiarize yourself with the handbook and know where to find questions and answers if the need arises.

#### English Language Requirement

For those applicants whose native language is not English, the following is required:

- 1. Demonstration of English proficiency by obtaining at least a minimum score on any one of the following exams. Exam must be taken within two years prior to enrollment.
- TOEFL ITP (paper-based) A minimum score of 550
- TOEFL iBT (internet-based) 80 with a minimum of 20 on each section
- MELAB 80 with a minimum of 80 on each section
- IELTS (Academic version) 6.5
- PTE (Academic version) 54
- 2. Nelson Denny score of 13 and
- 3. Personal interview with MSW program director or designee.

Applicants who fail to meet any of the above may be admitted only after committee consideration of the specific circumstances. Additional course work in English may be required. A student who graduated from a four-year English-speaking high school, college or university may be exempted from all or parts of the above requirements.

#### Graduate Record Examination (GRE)

Students who are applying for admission to the MSW program have two options related to the Graduate Record Examination (GRE). For those students who are seeking a graduate scholarship, the GRE must be taken. The amount of a potential scholarship is related to the score achieved on the GRE as follows:

GRE Score	Scholarship
320	50% tuition reduction
310	25% tuition reduction

For students who do not seek a graduate scholarship based on the GRE score, the GRE examination is not required.

## Social Work

#### SOWK 100 - Introduction to Social Work

Credits: 3 | The professional activity of social workers in the U.S., including a brief history of the social-work profession, its knowledge, values, and skills base, and its cross-cultural aspects. Emphasis on the response of social work to varied populations and diverse cultures. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 101 - Orientation to Human Services

Credits: 2 | This course explores various personal and professional values and skills needed for working in human services. It provides a theoretical and practical knowledge base for understanding and meeting community needs. It also includes a brief orientation to the BSW program. Fifty (50) hours of documented volunteer service is required. | Course Attribute: Service course | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Schedule Type: Lecture | College Code: CAS

#### SOWK 220 - Critical Thinking

Credits: 2 | In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Content will challenge students to think abstractly by examining the construction of social work theory and applying theory in practice. Topics include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, the characteristics of various types of arguments and critical analysis. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 315 - Values, Ethics and Diversity

Credits: 2 | Special attention is given to core values and professional ethics expected of outstanding social workers. Emphasizing a Christian world view, students develop appreciation for diversity and sensitivity toward issues related to culture, race, gender, class, age, and sexual identity. | Grade Mode: Normal (A-F,I,W) |
Prerequisite/Corequisite: Pre/Corequisite: SOWK 100 or permission of instructor. |
Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 320 - Introduction to Counseling Skills

Credits: 3 | Exposes students to basic engagement, listening, assessment, and interviewing skills. Students gain beginning skills to explore the problems of various client systems. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 100, SOWK 315, PSYC 101 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### SOWK 325 - Social Welfare Institutions and Services

Credits: 3 | An analysis of the factors which determine the manner in which social-welfare services are currently being delivered in the U. S. Factors include the value base, the historical development, and the organization of the social welfare system. |

Course Attribute: Service course | Grade Mode: Normal (A-F,I,W) | Corequisite(s):

PLSC 104 | Prerequisite(s): SOWK 100 | Schedule Type: Lecture | Offering: Fall |

College Code: CAS

#### SOWK 331 - Human Behavior and the Social Environment I

Credits: 2 | Ecological model for studying human behavior and an overview of normal individual development from conception through early childhood. Psychosocial, learning, and social-role theories constitute the theoretical basis for the course. Special attention paid to the impact of gender, health, and minority status upon human development. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 100, BIOL 100. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 332 - Human Behavior and the Social Environment II

Credits: 2 | Ecological model for studying human behavior and an overview of normal individual development from middle childhood to late adulthood. Psychosocial, learning, and social-role theories constitute the theoretical basis for the course. Special attention paid to the impact of gender, health, and minority status upon human development. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 331 | Schedule Type: Lecture, Blended Learning | Offering: Spring | College Code: CAS

#### SOWK 350 - Social Policy

Credits: 3 | Develops basic knowledge and skills for policy analysis, formulation and critical challenge within local and international contexts. Examines the determining factors affecting public policy in the United States as compared with other systems. Provides framework for analysis of social problems and policies, as they impact development and social service practice. | Course Attribute: Service course | Grade

Mode: Normal (A-F,I,W) | Prerequisite(s): PLSC 104. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### SOWK 366 - Drugs and Behavior

Credits: 3 | An introduction to how drugs affect mood, sensation, consciousness, and other psychological and biological functions. We will look at concepts such as the short and long term effects of use and abuse of drugs, classification, and laws regulating the use of drugs, the relationship of drug use on societal issues, different approaches to drug treatment, as well as debates on controversial topics in the field of drugs. |

Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 | Schedule Type: Lecture |

College Code: CAS

#### SOWK 378 - Study Tour

Credits: 0 | Travel to destinations relevant to individual programs of study. Classes will be selected from department(s) offerings. Fee may be required. | \$ - Course or lab fee | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### SOWK 401 - Foundations of Practice I

Credits: 4 | Designed to develop the theory, knowledge, and skills essential in generalist social work practice. Various methods are offered for developing communication, assessment, planning, intervention, termination, and evaluative skills necessary in social work practice. Focus on skills necessary for practice with individuals, families and groups in a variety of settings. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 420 | Prerequisite/Corequisite: SOWK 331 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 402 - Foundations of Practice II

Credits: 4 | Designed to develop the theory, knowledge, and skills essential in generalist social work practice. Various methods are offered for developing communication, assessment, planning, intervention, termination, and evaluative skills necessary in social work practice. Focus on skills necessary for practice with individuals, families and groups in a variety of settings. | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: Prerequisite: SOWK 401 and Corequisites: SOWK 331, SOWK 332, SOWK 420. | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### SOWK 405 - Medical Social Work

Credits: 2 | Introduces and develops the skills needed for social work in health care settings: hospitals, hospices, homecare and nursing homes. Skills include case management, discharge planning, medical terminology, documentation, advocacy, understanding cultural diversity, individual and family interviewing, and understanding psychosocial issues related to each setting. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 408 - Introduction to Emergency Preparedness

Credits: 2 | Provides an introduction to basic philosophy and concepts of Emergency Preparedness as required by FEMA (Federal Emergency Management Agency) and most states which certify staff. Includes use of FEMA-provided modules in the Professional Development Series which are accepted prerequisites for advanced classroom courses. A passing grade is required on each module for a Satisfactory grade and receipt of a Professional Development Series Certificate of Completion. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 410 - Children and Families at Risk

Credits: 2 | This course explores factors that put children and families at risk for various social problems in American society. Special attention is placed on institutions, services, policies, and laws that impact families, set within a historical context of child welfare laws and services. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

#### SOWK 415 - Substance Use in American Society

Credits: 2 | An overview of substance-use terminology, historical issues, definitions, epidemiology, consequences, and drugs of abuse within an American cultural and historical framework. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### SOWK 420 - Social Work Methods Seminar

Credits: .5, .5 | Provides opportunity for students to develop their basic social work skills through integrating social work knowledge and theory into field practice. Several aspects of field will be discussed. Is taken concurrently with the student's field placement. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Corequisite(s): SOWK 401 or SOWK 402 | Repeatable: Repeatable up to 1 credit | Schedule Type: Seminar | Offering: Fall, Spring | College Code: CAS

#### SOWK 424 - Social Gerontology

Credits: 2 | A study of aging and ageism in the United States, including demographic trends, societal attitudes, problems of the elderly, and national policies relating to senior citizens in the cultural context of American society. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Normally offered even years | College Code: CAS

#### SOWK 425 - Emergency Planning

Credits: 2 | Principles of emergency planning used in any type of disaster. Includes working with volunteers, handling special events, evacuation, mass fatalities, planning for schools, and homeland security planning. Required course for Michigan Professional Emergency Management (PEM) certification. Includes satisfactory completion of FEMA-provided modules in Professional Development Series. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 408. | Schedule Type: Lecture | College Code: CAS

#### SOWK 435 - Field Instruction

Credits: 1 | A lab course to give students experience and practice in a community agency under qualified supervision. A total of 400 clock hours required. Repeatable to 4 credits. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): SOWK 401 and SOWK 420 | Prerequisite(s): SOWK 401 and SOWK 420 | Repeatable: Repeatable up to 4 credits | Schedule Type: Practicum | Offering: Fall, Spring, Summer | College Code: CAS

#### SOWK 437 - International Social Work

Credits: 2 | This course reviews the concepts, issues and organizations related to international social work. It gives students the historical perspective of the involvement of social workers in international action including both development and human rights efforts. The course includes a discussion of international ethics, global policy and international exchange. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 438 - Workshop:\_\_\_\_\_

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 4 credits | Schedule Type: Workshop | College Code: CAS

#### SOWK 440 - Assessment and Treatment of Victims of Violence

Credits: 2 | Examination of assessment issues, approaches, and barriers to effective treatment when working with victims of domestic violence, adult survivors of sexual abuse, victims of rape, incest survivors, and child sexual-assault victims. Interpretation of assessment findings included. Short- and long- term therapy options including specific techniques are explored. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 401 and SOWK 402 or SOWK 501 or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### SOWK 444 - International Social Work Services and Programs

Credits: 2–4 | Students will travel within the USA and/or abroad to develop through immersion cultural competency in the areas of research, policy and practice, and to gain practical experience from an international social work perspective. Additionally, this course will provide students with networking opportunities with various humanitarian organizations working in national and international settings. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable | Schedule Type: Lecture | College Code: CAS

#### SOWK 445 - Counseling and Spirituality

Credits: 3 | This course provides an introduction to counseling and spirituality. Working from a Christian worldview, students will integrate current therapeutic practice models with a variety of spiritual counseling principles and skills. Students will assess their own spiritual wellness and examine how it impacts their work with clients. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 | Schedule Type: Lecture | College Code: CAS

#### SOWK 446 - Crisis Intervention

**Credits:** 2 | Survey of brief treatment models. Direct application of various crisis intervention models to population in crisis. Juniors and seniors only. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### SOWK 449 - Disaster Response and Emergency Operations

Credits: 2 | Study of the phases of disaster response and recovery with attention to local, state, and national roles and expectations. Models of emergency management operations including communication, coordination, and chief executive decision-making under conditions of disaster response will be emphasized. Attention will be given to the problems and concerns of recovery on victims and communities and the implications of disaster recovery efforts. Required course for PEM certification. | Swing course | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): BSAD426/526. Evidence of satisfactory completion of PDS modules, IS244 Developing and Managing Volunteers, IS546/547 Continuity of Operations, and IS(7)00 National Incident Management System. | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### SOWK 455 - Treatment of Substance Abuse

Credits: 2–4 | An overview of treatment techniques and basic prevention strategies including specific training in assessment and therapeutic techniques, examining the relationship between etiology and treatment. Treatment evaluation discussed. At-risk, vulnerable populations receive special consideration. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 460 - Death and Grief in Contemporary Society

Credits: 2 | Designed to help the student understand cultural and societal perspectives on death as well as develop an increased awareness and sensitivity to the personal and interpersonal dynamics of death, dying, and loss. The student's personal encounters with dying, death, and loss, as well as the experiences of guest speakers, provides topics for class discussion. The "art of condolence" is discussed for helping people deal with uncomplicated death and loss issues. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 461 - Social Work Research I

Credits: 2 | Course includes research tools available to social workers to assist them with the integration of research-based evidence into their practice. Discusses an overview of the research process, theoretical review, ethics, cultural competence, hypothesis and problem formulation, instrument construction and research design. SPSS will be used by students to design a research project addressing a social problem. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 220, STAT 285 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 462 - Social Work Research II

Credits: 2 | Course includes research tools for social workers, including: data collection methods, survey research, data analysis, qualitative research methods and writing research reports. Students will complete a research project addressing a social problem, analyze the data using SPSS, and write a research report. | Grade Mode: Normal (A-F,I,W) | Prerequisite/Corequisite: SOWK 461 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### SOWK 475 - Topics in:\_\_\_\_\_

Credits: 1 | Students are able to select offerings from various contemporary social-work topics. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning, Independent | College Code: CAS

#### SOWK 477 - Community Assessment and Capacity Mapping

Credits: 2 | Introduction to various methods for assessing community needs and mapping community capacity to address those needs. Includes damage assessment for emergency situations. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 478 - Principles & Practice of Hazards Mitigation

Credits: 3 | Study of preparedness as related to hazards in the local community with attention to means of mitigation as well as planning measures. Includes IS modules IS271 Anticipating Hazardous Weather & Community Risk and IS340 Hazardous Materials Prevention. | Swing course—Approved 400–499 courses qualify for graduate-level credit for graduate students | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Evidence of satisfactory completion of PDService course. modules IS5 Intro to Hazardous Materials and IS55 Hazardous Materials Guide for Citizens. | Schedule Type: Lecture | College Code: CAS

#### SOWK 489 - BSW Professional Seminar

Credits: .5,.5 | Introduces and monitors professionalism as evidenced in student's portfolio, scholarship skills, and their ability to exhibit positive behaviors that will ensure success in social work practice. Fall portfolios presented and graded in the spring. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Corequisite(s): SOWK 435 | Repeatable: Repeatable up to 1 credit | Schedule Type: Seminar | Offering: Fall, Spring | College Code: CAS

#### SOWK 495 - Independent Study/Project/Teachings

Credits: 1–4 | Consent of the instructor required. Undergraduate/Graduate Swing Electives | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### SOWK 501 - Foundations of Practice I

Credits: 4 | Designed to develop the theory, knowledge, and skills essential in generalist social-work practice. Various methods are offered for developing communication, assessment, planning, intervention, termination and evaluative skills necessary in social work practice. Focus on skills necessary for practice with individuals, families and groups in a variety of settings. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 510 | Prerequisite(s): SOWK 531 or SOWK 532 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 502 - Foundations of Practice II

Credits: 4 | Designed to develop the theory, knowledge, and skills essential in generalist social-work practice. Various methods are offered for developing communication, assessment, planning, intervention, termination and evaluative skills necessary in social work practice. Focus on skills necessary for practice with individuals, families and groups in a variety of settings. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 510 | Prerequisite(s): SOWK 501 | Schedule Type: Lecture | Offering: Fall, Spring | College Code: CAS

#### SOWK 505 - Medical Social Work

Credits: 2 | Introduces and develops the skills needed for social work in health care settings: hospitals, hospices, homecare and nursing homes. Skills include case management, discharge planning, medical terminology, documentation, advocacy, understanding cultural diversity, individual and family interviewing, and understanding psychosocial issues related to each setting. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 510 - Generalist Field Seminar

Credits: .5, .5 | Provides opportunity for students to develop their basic social work skills through integrating social work knowledge and theory into field practice. Several aspects of field will be discussed. Is taken concurrently with the student's field placement. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Corequisite(s): SOWK 501 or SOWK 502 | Repeatable: Repeatable up to 1 credit | Schedule Type: Seminar | Offering: Fall, Spring | College Code: CAS

#### SOWK 514 - Children & Families at Risk

Credits: 2 | This course explores factors that put children and families at risk for various social problems in American society. Special attention is placed on institutions, services, policies, and laws that impact families, set within a historical context of child welfare laws and services. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 515 - Christian Perspectives on Professional Ethics

Credits: 2 | Students will examine their personal beliefs and values in relation to ethical and diversity issues. Students will also apply a professional code of ethics to practice dilemmas they may face in the fields of social work and family life using a Christian theological framework. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

## SOWK 520 - Web & Media for Not-for-Profit

Credits: 2 | This course emphasizes interpersonal competence, various professional standards and use of presentation and archival technologies for use in professional interviews. Electronic Portfolio, Web Development and CDROM Authoring technologies are presented. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

### SOWK 524 - Social Gerontology

Credits: 2 | A study of aging and ageism in the United States, including demographic trends, societal attitudes, problems of the elderly, and national policies relating to senior citizens in the cultural context of American society. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Normally offered even years | College Code: CAS

#### SOWK 531 - Human Behavior and the Social Environment I

Credits: 2 | Ecological model for studying human behavior and an overview of normal individual development from conception through early childhood. Psycho-social, learning, and social-role theories constitute the theoretical basis for the course. Special attention paid to the impact of gender, health, and minority status upon human development. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 532 - Human Behavior and the Social Environment II

Credits: 2 | Ecological model for studying human behavior and an overview of normal individual development from middle childhood to late adulthood. Psycho-social, learning, and social-role theories constitute the theoretical basis for the course. Special attention paid to the impact of gender, health, and minority status upon human development. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture, Blended Learning | Offering: Spring | College Code: CAS

#### SOWK 535 - Generalist Field Experience

Credits: 1 | In this practicum, students will apply course-based knowledge and skills by working in a social service setting. A minimum of 400 clock hours are required. |
Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): SOWK 510 and SOWK 501 or SOWK 502 | Repeatable: Repeatable up to 4 credits | Schedule Type:
Practicum | Offering: Fall, Spring, Summer | College Code: CAS

#### SOWK 536 - Generalist Social Work/Theological Field Experience

Credits: 1 | In this practicum, students will apply course-based knowledge and skills by working in a social service setting. A total of 400 clock hours are required. Cross-listed with CHMN560. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 501, SOWK 510 | Repeatable: Repeatable up to 4 credits | Schedule Type: Practicum | College Code: CAS

#### SOWK 537 - International Social Work

Credits: 2 | This course reviews the concepts, issues and organizations related to international social work. It gives students the historical perspective of the involvement of social workers in international action including both development and human rights efforts. The course includes a discussion of international ethics, global policy, and international exchange. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 543 - Assessment and Treatment of Victims of Violence

Credits: 2 | Examination of assessment issues, approaches, and barriers to effective treatment when working with victims of domestic violence, adult survivors of sexual abuse, victims of rape, incest survivors, and child sexual-assault victims. Interpretation of assessment findings included. Short- and long- term therapy options including specific techniques are explored. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 545 - Counseling and Spirituality

Credits: 2 | This course provides an introduction to counseling and spirituality. Working from a Christian worldview, students will integrate current therapeutic practice models with a variety of spiritual counseling principles and skills. Students will assess their own spiritual wellness and examine how it impacts their work with clients. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): MSW student or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### SOWK 550 - Social Policy

Credits: 2,3 | Develops basic knowledge and skills for policy analysis, formulation and critical challenge within local and international contexts. Examines the determining factors affecting public policy in the United States as compared with other systems. Provides framework for analysis of social problems and policies, as they impact development and social service practice. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### SOWK 559 - Death & Grief in Contemporary Society

Credits: 2 | Designed to help the student understand cultural and societal perspectives on death as well as develop an increased awareness and sensitivity to the personal and interpersonal dynamics of death, dying, and loss. The student's personal encounters with dying, death, and loss, as well as the experiences of guest speakers, provides topics for class discussion. The "art of condolence" is discussed for helping people deal with uncomplicated death and loss issues. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 561 - Social Work Research I

Credits: 2 | Course includes research tools available to social workers to assist them with the integration of research-based evidence into their practice. Discusses an overview of the research process, theoretical review, ethics, cultural competence, hypothesis and problem formulation, instrument construction and research design. SPSS will be used by students to design a research project addressing a social problem.

| Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 531 | Prerequisite(s): SOWK 531 | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 562 - Social Work Research II

Credits: 2 | Course includes research tools for social workers, including: data collection methods, survey research, data analysis, qualitative research methods and writing research reports. Students will complete a research project addressing a social problem, analyze the data using SPSS, and write a research report. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 561,SOWK 532 | Prerequisite(s): SOWK 561,SOWK 532 | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### SOWK 567 - Drugs and Behavior

Credits: 2 | An introduction to how drugs affect mood, sensation, consciousness, and other psychological and biological functions. We will look at concepts such as the short and long term effects of use and abuse of drugs, classification, and laws regulating the use of drugs, the relationship of drug use on societal issues, different approaches to drug treatment, as well as debates on controversial topics in the field of drugs. |

Grade Mode: Normal (A-F,I,W) | Prerequisite(s): PSYC 101 | Schedule Type: Lecture |

College Code: CAS

#### SOWK 568 - Treatment of Substance Abuse

Credits: 2 | An overview of treatment techniques and basic prevention strategies including specific training in assessment and therapeutic techniques, examining the relationship between etiology and treatment. Treatment evaluation discussed. At-risk, vulnerable populations receive special consideration. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 578 - Study Tour

Credits: 0 | Travel to selected areas of social work interest combined with lectures, directed readings and assignments. The amount of credit and geographic location are designated at the time a study tour is announced. | Grade Mode: Noncredit (NC,W) | Repeatable: Repeatable | Schedule Type: Blended Learning | College Code: CAS

#### SOWK 601 - Advanced Practice I

Credits: 3 | Develops interpersonal practice skills on an advanced level. The course gives special consideration to developing proficiency in cognitive-behavioral therapy. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 610. | Prerequisite(s): Completion of SOWK 502 or admission to Advanced Standing. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 602 - Advanced Practice II

Credits: 2 | Develops practice skills on an advanced level. The course gives special consideration to Social Work leadership as it relates to human and financial resource management. | Grade Mode: Normal (A-F,I,W) | Corequisite(s): SOWK 610. |
Prerequisite(s): Advanced-year status or permission of instructor. | Schedule Type:
Lecture | Offering: Spring | College Code: CAS

#### SOWK 605 - Advanced Clinical Assessment

Credits: 3 | Advanced assessment theories of and recent research into the etiology and psychopathology of social variance. Emphasis on developing differential diagnostic skills and holistic assessment from a strengths perspective. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Advanced-year status or permission of instructor. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 610 - Advanced Field Seminar

Credits: .5, .5 | This seminar builds on the student's generalist foundational knowledge. It is designed to help the student further integrate social work knowledge and theory to field practice. Several aspects of field will be discussed. Is taken concurrently with the student's field placement. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Corequisite(s): SOWK 601 or SOWK 602. | Repeatable: Repeatable | Schedule Type: Seminar | Offering: Fall, Spring | College Code: CAS

#### SOWK 614 - Migrant & Refugee Issues

Credits: 2 | This course will study fundamental theories and concepts regarding voluntary migration (migrant issues) and forced migration (refugee issues). It will also address the main political, social, economic and environmental push and pull factors that influence immigration and emigration within the framework of globalization. |

Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 620 - School Social Work

Credits: 2 | Required for students who wish to practice social work in a school setting. Various aspects of practice included: the students, the community, the school staff, and innovative social-work-practice techniques. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | Offering: Alternate years | College Code: CAS

#### SOWK 624 - Evidence-Based Therapies

**Credits:** 2 | This survey course will explore evidence-based practice models that are commonly used in clinical settings. Students will have opportunities to observe and practice these models in a classroom setting in preparation for application in field settings. | **Grade Mode:** Normal (A-F,I,W) | **Schedule Type:** Lecture | **College Code:** CAS

#### SOWK 626 - Therapy with Children & Adolescents

Credits: 2 | This course prepares students to work with children and adolescents. Information on therapeutic modalities and specific interventions are included. The major psychological disorders in children and adolescents are addressed, as well as special issues they may have. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Advanced-year status or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### SOWK 628 - Treatment of Adult Mental Disorders

Credits: 2 | Exposure to the primary clinical social goals of assessment, diagnosis, and treatment by examining the common adult mental disorders. Emphasis placed on assessment factors, including cultural, psychosocial and evaluation of symptoms.

Specific treatment techniques for each diagnosis explored. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 501, SOWK 502 or advanced placement. | Schedule Type: Lecture | College Code: CAS

#### SOWK 630 - Policy for Social Change

Credits: 3 | Students explore theory and apply it to community organizing, coalition building, and advanced-policy analysis; assess existing policies within various systems and study the impact of these policies; and plan and implement a social-action project. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): Advanced-year placement. | Schedule Type: Lecture, Blended Learning | College Code: CAS

#### SOWK 635 - Advanced Field Experience

Credits: 1 | In this practicum, students will apply advanced course-based knowledge and skills by working in a social service setting. A minimum of 500 clock hours is required. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): Successful completion of SOWK 535, SOWK 610,SOWK 601 or SOWK 602 | Prerequisite(s): Successful completion of SOWK 535, SOWK 610,SOWK 601 or SOWK 602 | Repeatable: Repeatable up to 5 credits | Schedule Type: Practicum | Offering: Fall, Spring, Summer | College Code: CAS

#### SOWK 637 - Advanced Standing Field Experience

Credits: 1 | In this practicum, students will apply advanced course-based knowledge and skills by working in a social service setting. A minimum of 600 hours are required. | Grade Mode: Satisfactory w/DG (S,U,I,W,DG) | Corequisite(s): SOWK 610, SOWK 601 or SOWK 602 | Prerequisite(s): SOWK 610, SOWK 601 or SOWK 602 | Repeatable: Repeatable up to 6 credits | Schedule Type: Practicum | Offering: Fall, Spring, Summer | College Code: CAS

#### SOWK 638 - Leadership in Social Work

Credits: 2 | Focus on leadership theories and strategies. Students develop the capacity to apply these theories and strategies adaptively in leadership situations within organizational and community context. Students explore how leadership styles, communication, planning, organizing, decision making, and marketing impact organizational and community change. | Grade Mode: Normal (A-F,I,W) |
Prerequisite(s): Completion of SOWK 502, admission to Advanced Standing, or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### SOWK 640 - Interventions in Marital Conflict

Credits: 2 | Explores models and techniques to uncover and utilize counselee's strengths to improve marital communication and satisfaction. Research-based techniques applied through role-playing and other experiential activities. | Grade Mode: Normal (A-F,I,W) | Prerequisite(s): SOWK 402 or SOWK 501 or an equivalent graduate course in social-work methods or counseling. | Schedule Type: Lecture | College Code: CAS

#### SOWK 646 - Trauma and Advanced Crisis Intervention

Credits: 2 | This course is designed to enhance students' empathic understanding of the nature of a traumatic experience from the child's perspective, and how traumatic experiences and their aftermath may influence the child's life. This focus on the impact of trauma on the child and family provides a foundation for assessment, crisis intervention, and intervention planning leading to the provision of effective, individually-tailored services that reflect the client's unique needs and strengths, cultural background, developmental level, and life circumstances. Real case studies as they actually unfold in practice are utilized. | Grade Mode: Normal (A-F,I,W) |

Prerequisite(s): SOWK 501 | Schedule Type: Lecture, Blended Learning | College Code:

#### SOWK 648 - Workshop:\_\_\_\_\_

Credits: 1 | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable up to 4 credits | Schedule Type: Workshop | College Code: CAS

#### SOWK 649 - Advanced Family Therapy

Credits: 2 | This course prepares students to work with families. Major family therapy modalities are included, as well as an exposure to therapeutic family concerns. |

Grade Mode: Normal (A-F,I,W) | Prerequisite(s): Advanced-year status or permission of instructor. | Schedule Type: Lecture | College Code: CAS

#### SOWK 651 - Foundations of Biblical Counseling

Credits: 2–3 | This course equips students to apply biblical principles of counseling and psychological insights to human challenges in the emotional, spiritual, cognitive, and behavioral aspects of life. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

## SOWK 655 - Organizational/Community Assessment

Credits: 2 | The basic underpinnings of organizational dynamics. Students explore the historical influences on and current challenges faced by social-work managers. The basics of management-assessment skills and human issues that impact organization explored. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): Advanced-year placement. | Schedule Type: Lecture | Offering: Fall | College Code: CAS

#### SOWK 659 - Human Sexuality

Credits: 3 | An understanding of the development and main tenets of interpersonal relationships, and a study of the character and quality of human social conduct. Also examines human sexuality, and studies the physiological, psychological, emotional and social aspects of sexual development and the Christian response to this God-given gift. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 660 - Advanced Practice Evaluation

Credits: 3 | Prepares students to examine their own practice's quality. Attention given to selecting appropriate measurement tools. The latest evaluation techniques are presented, offering students resources for 21st-century practice. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite/Corequisite: Co/Prerequisites: SOWK 635 and advanced-year placement or permission of instructor. | Schedule Type: Lecture | Offering: Spring | College Code: CAS

#### SOWK 665 - Program Continuation

Credits: 0 | Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) classes with advisor approval only. | \$ - Course or lab fee | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### SOWK 667 - Interventions in Gerontology

Credits: 2 | This course will utilize bio-psychosocial knowledge about older adults to assess and apply advanced interventions in a variety of practice settings. Using case examples and practice activities, evidence-based therapeutic models and interventions will be examined to address these issues. | Grade Mode: Normal (A-F,I,W) | Schedule Type: Lecture | College Code: CAS

#### SOWK 670 - Project Continuation

Credits: 0 | Students may register for this title while clearing deferred grade (DG) and/or incomplete (I) classes with advisor approval only. Registration for this title indicates full-time status. | \$ - Course or lab fee | Course Attribute: Full-time status | Grade Mode: Satisfactory (S,U,I,W) | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS

#### SOWK 675 - Topics in:

Credits: 1 | Students are able to select offerings from various contemporary social-work topics. | Grade Mode: Normal (A-F,I,W) | Repeatable: Repeatable with different topics | Schedule Type: Lecture, Blended Learning, Independent | College Code: CAS

#### SOWK 689 - Advanced Professional Seminar

Credits: .5, .5 | Facilitates MSW closure prior to graduation. Students prepare and defend their portfolios. Each student reviews and documents his/ her learning and personal goal attainment. Exploration of issues related to career development and lifelong learning. | Grade Mode: Normal with DG (A-F,I,W,DG,DN) | Prerequisite(s): Advanced Standing or permission of instructor. | Repeatable: Repeatable up to 1 credit | Schedule Type: Seminar | Offering: Fall, Spring | College Code: CAS

#### SOWK 690 - Independent Study/Research

Credits: 1 | Open to qualified students who show ability and initiative. See the department policy for specific requirements. | Grade Mode: Normal w S/DG (A-F,I,S,U,DG,W) | Prerequisite(s): Permission of Graduate Program Director and instructor. | Repeatable: Repeatable | Schedule Type: Independent | College Code: CAS