

**UNION**COLLEGE

Bulletin 2021-2022

experience the all-important details



## Bulletin 2021-2022

Volume 83

Contact us www.ucollege.edu records@ucollege.edu

P 402.486.2529

Published by Union College © 2021. Union College reserves the right to change any provisions or requirements contained in this publication. 3800 S. 48th St., Lincoln, NE 68506



# **Contents**

## (Listings are hyperlinked in online document for ease of navigation)

Contact Information	3
Academic Year Calendar 2021-2022	4
This is Union College	5
Admission to the College	7
Financial Information	11
Student Life and Services	19
Academic Resources	23
Adventist Colleges Abroad	27
Academic Information	29
Graduation Requirements for Bachelor's and Associate Degrees	40
General Education	43
Professional Excellence Program	47
Master of Physician Assistant Studies	
Art	
Biomedical Science	59
Business Administration	75
Chemistry	82
Communication	86
Computing	89
Education	92
English	96
Foreign Language Studies	100
Graphic Design	102
Health and Human Performance	
History	109
International Relations	113
International Rescue and Relief	115
Leadership Minor	126
Mathematics	128
Music	131
Nursing	138
Occupational Therapy Assistant	145
Psychology	148
Religion	150
Science Education	154
Social Work	
Theology	158
Course Descriptions	161
College Organization	231
Т., Ј.,	2.42

## **Contact Information**

General Information 402.486.2600

Academic Administration 402.486.2501

Admissions and Enrollment Services 402.486.2504

enroll@ucollege.edu

Campus Ministries 402.486.2508

Student Success 402.486.2540 Disability Information 402.486.2504

Cashier 402.486.2992

Information Systems 402.486.2511

Library 402.486.2514

Records Office 402.486.2529

records@ucollege.edu

Student Employment 402.486.2502

Student Financial Services 402.486.2505

sfs@ucollege.edu

Student Housing 402.486.2507 College-owned Apartments 402.486.2502 Men's Residence Halls 402.486.2533 Women's Residence Halls 402.486.2535

Student Life 402.486.2507

## Academic Year Calendar 2021-2022

#### 2021

Aug. 18-20 New Student Orientation - uConnect
Aug. 22 All Student Registration for Fall Semester

Aug. 23 Fall Semester Classes Begin

Aug. 31 Last Day to Drop (no record)/Add Classes

Sept. 6 Labor Day Holiday (no classes)

Oct. 15 Break

Nov. 10 Pre-registration for Spring Semester Begins (JR/SR)

Nov. 11 Pre-registration for Spring Semester Begins

Nov. 11 Last Day to Withdraw from a Class/Receive a "W"

Nov. 22-26 Thanksgiving Vacation
Dec. 13-15 Fall Semester Examinations

Dec. 16 Last Day to Complete December Graduation Requirements

#### 2022

Jan. 9 Registration for Spring Semester
Jan. 10 Spring Semester Classes Begin

Jan. 17 Martin Luther King Jr. Day Holiday (no classes)
Jan. 19 Last Day to Drop (no record)/Add Classes

Feb. 10-11 Winter Break
Mar. 14-18 Spring Vacation

Mar. 30 Pre-registration for Fall Semester Begins (JR/SR)

Mar. 31 Pre-registration for Fall Semester Begins

Mar. 31 Last Day to Withdraw from a Class/Receive a "W"

May 2-4 Spring Semester Examinations

May 4 Last Day to Complete May Graduation Requirements

May 6-8 Commencement Weekend

May 9 Summer Semester Classes Begin

May 11 Last Day to Drop (no record)/Add Classes

Aug. 12 Last Day to Complete August Graduation Requirements

# This is Union College

#### Our mission

Union College is a Seventh-day Adventist community of higher education, inspired by Jesus Christ and dedicated to empowering students to learn, serve and lead.

#### Our vision

Union College mentors every student to become a highly sought graduate who serves joyfully in God's calling.

## Joyfully Living in God's Calling

We mentor every student and employee to develop a personal spiritual journey and live God's calling.

## • Student Mentorship

We make every student's success our top priority through mentors who believe in and champion them.

#### • Highly Sought Graduates

We prepare every student to be a highly sought graduate through development of soft skills such as leadership, communication, teamwork, problem solving, creativity and grit.

## Empowered Employees

We develop and support every employee as our most important asset.

#### Our core education goals

Union College is committed to providing an outstanding education experience for our students, and that commitment is reflected in our campus-wide education goals.

SPIRITUALITY Union College inspires students to value being a follower of Jesus Christ and

integrate His calling in their lives.

**LEARNING** Union College provides students with the knowledge, experience, and wisdom to

be learners now and for a lifetime.

**SERVICE** Union College equips students to live life as Jesus did, a life of service for

humanity.

**LEADERSHIP** Union College prepares students to lead as members of their families, churches,

workplaces, and communities.

HIGHLY SOUGHT GRADUATES Union College cultivates students whose reputation for excellence attracts the

attention of employers.

#### Description

Founded in 1891, Union College is a four-year college offering programs leading to baccalaureate and associate degrees in arts and sciences, professional fields and a Master of Physician Assistant Studies. Union College is owned and operated by the Mid-America Union Conference of the Seventh-day Adventist Church and located in Lincoln, Nebraska, the state capital.

Education at Union College has focused on the whole life of the student. The result is an academic style that includes small courses taught by professors, an emphasis on experiential learning, and active student leadership in spiritual and social activities. This emphasis draws hundreds of students each year from more than 45 states and nearly 30 countries. The college welcomes students of all ethnicities, cultures, and faiths.

Union's faculty and staff believe that God is the Creator, Sustainer and Savior of humankind; that human beings are the crowning act of His creation; and that each person is imbued with intelligence and assets which should be dedicated to serving and glorifying God. The ultimate aim is to help students find and fulfill their God-given calling in both personal and professional life, making a positive impact on their family, community and the world.

#### Accreditation

#### Union College is Accredited by:

The Higher Learning Commission 230 South LaSalle Street, Suite 7-500 Chicago, IL 60604 800.621.7440 www.hlcommission.org

## Union College is Recognized by:

The Accrediting Association of Seventh-day Adventist Schools, Colleges, and Universities

#### Relevant Programs are Accredited or Licensed by:

- Accreditation Council for Occupational Therapy Education Candidacy status granted
- Accreditation Review Commission on Education for the Physician Assistant, Inc.
- Commission on Collegiate Nursing Education
- Council on Social Work Education
- Council for the Accreditation of Educator Preparation
- Nebraska Department of Health and Human Services

## Union College Is a Member of:

- American Association of Colleges for Teacher Education
- American Association of Colleges of Nursing
- American Association of Collegiate Registrars and Admissions Officers
- Adventist Library Information Cooperative
- Association on Higher Education and Disability
- Association of Independent Colleges and Universities of Nebraska
- Council of Independent Colleges
- National Association of Student Financial Aid Administrators
- Nebraska Academy of Sciences
- Nebraska Association of Colleges for Teacher Education
- Nebraska Association of Collegiate Registrars and Admissions Officers
- Nebraska Association of Student Financial Aid Administrators
- Nebraska College Career Services Association
- Nebraska Council on Teacher Education
- Council of Independent Nebraska Colleges Foundation
- Network for Vocation in Undergraduate Education
- Physician Assistant Education Association
- United States Gymnastics Federation

## Union College Is Approved by:

- Nebraska Department of Education
- State of Nebraska Board of Nursing

# Admission to the College

#### **Contact Information**

Kevin Erickson, Director of Admissions and Enrollment Dick Building, Room 508A 402.486.2696 enroll@ucollege.edu

Union College welcomes applicants who desire to study in a Christian environment, who demonstrate intellectual curiosity, and who seek strength of character. The college is committed to equal education for men and women of all races and does not discriminate in its educational and admissions policies on the basis of disability, age, gender, race, color, or national origin. Admission is granted to applicants who meet admission requirements and whose principles and interests reflect the ideals and standards of the college.

Religious affiliation is not a requirement for admission. All students are expected to abide by the policies and standards of the college.

#### Admission of First-Year Students

The admission process is designed to indicate the applicant's success in high school and the ability to perform well in academic coursework.

The recommended high school curriculum includes the coursework listed below. Depending on career goals, additional study in math, science, foreign language, and other fields will improve the preparation for college.

- 4 years of English
- 2 years of algebra
- 1 year of geometry
- 2 years of laboratory sciences
- 2 years of social sciences
- 1 unit of computer applications

In completing these courses, high school applicants should meet or surpass the following minimum standards:

- A high school grade point average (GPA) of 2.50 on a 4-point scale; and
- Applicants applying on the basis of high school equivalency using the General Education Development Test (GED) must achieve an average score of 500 with no score below 450.

#### International Students

- Applications are welcomed from graduates of recognized secondary schools in other countries or who earn
  government credentials (e.g., the Hong Kong HKDSE). When lacking ACT scores, applicants may be
  evaluated by other standards for admission, although ACT or SAT math test results may still be required for
  placement in specific courses.
- For regular admission, students whose native language is not English must demonstrate current English
  proficiency by scores on a standardized test taken within the past two years. The college accepts the following
  examinations and scores:
  - O TOEFL: Internet-based (iBT) 79
  - O TOEFL: International paper-based 550
  - o IELTS 6.5
  - O ACT: English 17
  - O SAT: Writing 430 (old SAT 2400 scale) or
  - O SAT: Writing and Language 25 (new SAT 1600 scale)

Applicants not meeting the regular admission scores will be considered for provisional admission if they
possess an iBT score between 60 and 79, or an IELTS between 5.5 and 6.0. Provisional admission involves
courses preparatory to freshman composition while taking selected college courses. The regular admission
requirements must be met within two years.

## **Application Process**

Two documents are essential for the admission process:

- A completed application, which may be found online at www.ucollege.edu/apply; and
- A high school transcript. The college requires an official transcript with date of graduation prior to enrollment.
   Home school students should submit a homeschool transcript and an explanation of the home school curriculum with completion date. Official transcripts are required from any schools attended.

#### International Student Admission Process

If an applicant's original documents are not in English, a certified translation must be provided. Except for applicants from certain affiliated colleges and universities, all transcripts from foreign universities must be sent to <a href="https://www.wes.org">www.wes.org</a>.

For a Form I-20 to be issued, the applicant must provide an Affidavit of Support (available at <a href="https://www.ucollege.edu/international">www.ucollege.edu/international</a>), bank statements as proof of sufficient income, a deposit of \$5,000, and a copy of the applicant's passport photo page. For further information contact the Enrollment Office or go to <a href="https://www.ucollege.edu/international">www.ucollege.edu/international</a>.

#### **Provisional Admission**

Applicants who do not meet the published standards may receive provisional acceptance, which requires enrollment in programs through Student Success.

Ignite is a performance-based program that provides specialized academic support for students who do not meet the traditional enrollment requirement of a high school GPA at 2.5 or above.

#### **Participation**

Students accepted into the Ignite program must:

- Sign the coaching agreement;
- Meet weekly with their assigned Life Coach;
- Enroll in SPRK 100 Design Your Life in their first spring semester; and
- Take 12-17 credits per semester.

#### Major Declaration

Students in the Ignite program are matriculated under the Associate of Science in General Studies degree. In order to declare a different associate's degree or a bachelor's level degree, students must meet the following requirements:

- Complete the one semester of weekly meetings with Academic Coach;
- Complete one semester with a minimum GPA of 2.5; and
- Successfully complete 12-17 credits while enrolled as a Union College student.<sup>1</sup>

<sup>1</sup> Courses may include approved transfer courses at another institution while simultaneously enrolled at Union College, but will not include audited, incomplete, or in progress courses to meet this requirement.

### Completion of Ignite

Students complete the Ignite program when they have achieved:

- Successful course completion of 24 hours while enrolled as a Union College student<sup>2</sup>;
- Successful completion of SPRK 100 with CR (credit);
- Minimum cumulative GPA of 2.0 at the end of the first year; and
- Minimum of one semester of weekly Academic Coaching completed.

#### **Transfer Student Admission**

Students wishing to transfer from another regionally-accredited college or university must provide the following as part of the admission process:

- A completed application (available online at <a href="www.ucollege.edu/apply">www.ucollege.edu/apply</a>);
- Final official transcripts from all schools attended;
- Transfer students whose native language is not English may demonstrate their language proficiency through the standards listed for admission or by the successful completion of a full year of English composition; and
- Applicants who have attempted the equivalent of 24 semester hours including one semester of English
  composition at a regionally accredited institution with a cumulative minimum GPA of 2.00 are accepted based
  on college performance. However, ACT or SAT test scores may still be used for placement in specific courses.

## Non-Degree/Guest Students

Guest students from other institutions and individuals not seeking a degree from Union College may request to take up to six hours of courses per semester without meeting the regular admission requirements. Regular Union students have priority over guest students in gaining entrance to classes with limited enrollment.

## **Guaranteed Education Program**

The Guaranteed Education program permits individuals who earned a bachelor's degree from Union College with at least 64 hours in residence to receive free tuition when initiating a single additional undergraduate major between two years and six years after graduation. Some restrictions apply:

- Free tuition is limited to courses in the major and required cognates;
- The professional phases of Advanced Pre-Physician Assistant, Nursing, Occupational Therapy Assistant and International Rescue and Relief programs are not covered under this program;
- Because personalized and general studies degrees are not college-designed programs, their graduates are not
  covered under this program;
- Students paying regular tuition will receive priority for registration in limited-enrollment classes and laboratory sections;
- Students must maintain satisfactory academic progress each semester (2.0 minimum semester GPA) in order to continue in the Guaranteed Education program; and
- Online courses taken through consortium agreements will likely carry additional course fees that will not be covered by the Guaranteed Education program.

<sup>2</sup> Courses may include approved transfer courses at another institution while simultaneously enrolled at Union College, but will not include audited, incomplete, or in progress courses to meet this requirement.

## **Baccalaureate Bonus Program**

Union's Baccalaureate Bonus program offers qualified students who hold a bachelor's degree or its equivalent the opportunity to take additional undergraduate classes or even to complete another undergraduate degree at half the current tuition rate. Students electing to enter the program may carry either full- or part-time class loads. The following apply:

- Applicants must submit an official transcript verifying completion of the previous degree;
- The Baccalaureate Bonus program's half-tuition rate applies only to fall and spring semesters;
- Discounts are applied to tuition only and do not apply to laboratory or other fees, clinical coursework, offcampus courses, individual lessons, or the professional phases of Advanced Pre-Physician Assistant, Nursing, Occupational Therapy Assistant or the International Rescue and Relief program;
- International students who hold a degree equivalent to the American bachelor's (or higher-level degree) and meet the English language requirement may qualify for the discount;
- Students paying regular tuition will receive priority for registration in limited-enrollment classes and laboratory sections;
- Students must maintain satisfactory academic progress each semester (2.0 minimum semester GPA) in order to continue in the Baccalaureate Bonus program; and
- Online courses taken through consortium agreements will likely carry additional course fees that will not be covered by the Baccalaureate Bonus program.

## Financial Considerations for Baccalaureate Bonus or Guaranteed Education programs

Applicants to the Baccalaureate Bonus or Guaranteed Education programs must have paid in full any previous account balances held with Union College.

- The student remains responsible for summer semester tuition, other expenses, and fees, which, unlike regular
  tuition, are not reduced. The student also assumes full financial responsibility for classes taken at other colleges
  or universities.
- Students in the program are not eligible to receive any other Union College scholarships or financial awards.
- On-campus employment is not usually available to students in these programs. However, based on campus
  employment needs, the Student Finance Committee may approve a student's application for employment.
- Tuition for these programs will be covered up to the current maximum full-time credits anything over that
  will be charged at full tuition to the student.
- Other restrictions may apply. Contact the Records and Student Financial Services offices.

#### **Best of Both Worlds**

Union's Best of Both Worlds program offers students access to the social and spiritually community at Union while earning a degree we don't offer at Southeast Community College or University of Nebraska-Lincoln.

There are four Best of Both Worlds pathways to choose from:

- Live a Union while pursuing associate degrees in applied sciences and certificates in vocational programs granted by Southeast Community College;
- Live at Union while pursuing baccalaureate-degree majors not offered by Union College but available through the University of Nebraska-Lincoln;
- Earn a Union College degree with supplementary courses at other local schools; or
- Reside at Union College while pursuing graduate or professional degrees granted by the University of Nebraska-Lincoln.

To learn more about the Best of Both Worlds program, contact the Enrollment Office at <a href="mailto:enroll@ucollege.edu">enroll@ucollege.edu</a> or 402.486.2504.

## **Financial Information**

## **Contact Information**

Laurie Wheeler, Director of Student Financial Services Dick Building, Room 602A 402.486.2505 sfs@ucollege.edu

#### **Student Financial Services**

Student Financial Services assists students in determining how to pay for college. Students are required to complete their financial plans online in the My Financial Aid section of the student portal before classes begin each semester. To qualify for the maximum financial aid, the Free Application for Federal Student Aid (FAFSA) and financial aid questionnaire should be completed by May 15. To better serve students, parents, sponsors, and others who plan to travel long distances to the campus for business purposes, appointments are recommended.

## **Tuition and Fees**

Students at Union College are entitled to information on applying for, receiving and continuing with financial aid as well as educational costs, refunds, and transportation costs for students living off-campus.

A schedule of Scholarships, Tuition and Fees may be found online at www.ucollege.edu/costs.

Typically, student charges include tuition, student housing, dining, books and supplies for classes. Other charges might include health insurance, special academic attention and testing, and music lessons. Additional service charges are listed in the Miscellaneous Charges section.

## **Payment Arrangements**

Student charges and financial aid at Union College are calculated on a yearly basis. Payment for any previous balance due is expected at the beginning of each term. Families may elect to make payments using a 10-month payment plan. The payment amount will be calculated based on the yearly balance due (estimated charges minus estimated aid) divided into ten equal payment amounts due payable on the fifteenth day of each month (August through May).

All prior year balances must be paid in full in order to receive federal financial aid the following year.

International students needing an I-20 are required to pay a \$5,000 deposit. Of this deposit, \$4,000 is applied towards the first semester of attendance, and \$1,000 is withheld and is applied to the student's account at graduation. The remaining account balance will be divided into ten monthly payments due the fifteenth of each month (August-May).

## **Refund Policy**

Union College offers a 100% refund of tuition and required fees should a student drop some classes or completely withdraw from the college on or before the published "Last Day to Add/Drop Classes." After that date, required fees are non-refundable and the following refund policy applies to tuition.

Refund	Calendar Days	
100%	Up to and including Last Day to Add/Drop Classes	
80%	days 10 to 20	
60%	days 21 to 39	
40%	days 40 to 58	
20%	days 59 to 77	
None	Exceeding 77 days	

Refunds for sessions or classes with durations other than the regular 15-week semester will be prorated using the above as a guideline. Federal Financial Aid is prorated based on a calculation prescribed in federal regulation that determines the amount of federal aid the student earned while enrolled. The Federal calculation is slightly different from that used for institutional aid.

## **Keeping Current**

In order to be eligible to register for classes for the upcoming term, the account balance must be paid up to date.

If students are unable to meet their payment agreements, they must make prompt arrangements or they will forfeit the right to attend classes and their registration will be cancelled.

## Transcripts and Diplomas

The student account needs to be current in order to expedite the release of transcripts and diplomas. Payment should be made to cover any outstanding account balance when a transcript or diploma request is submitted. It is Union College policy to withhold transcripts and diplomas if a student has an unpaid account balance. Under provisions of federal loan programs, Union College withholds all academic records when Federal Student Loan payments become past due. This policy applies to all student account charges and all other educational related expenses.

#### Interest

Interest charged at one percent per month (approximately 12% per year) is added to any non-current student's account which is ninety (90) days or more past due.

#### **Credit Balances**

When a credit balance is generated on a student account (payments and credits exceed total charges due), a refund will be processed and the excess returned to the student if that is the option selected. Students select their preferred method of refund during the registration process.

## **Collection Policy**

Regardless of reason for leaving, students are responsible for any outstanding balance left on their account. Satisfactory payment arrangements must be made within ninety (90) days after the student is no longer enrolled. The college reserves the right to use third-party agencies for collections on non-current accounts more than one hundred and eighty (180) days past due.

#### Miscellaneous Charges

#### Music Lessons

College students are charged a fee each semester for each one-half hour lesson per week. If academic credit is desired, tuition is also charged. The charge for this fee is printed in the schedule of Scholarships, Tuition and Fees. There are scholarships available to qualified music majors who meet certain requirements.

#### Program Fees

Several programs have additional fees that are required to help cover the cost of program maintenance; the specific costs are listed annually on the schedule of <a href="https://www.ucollege.edu/costs">www.ucollege.edu/costs</a>:

- Communication;
- International Rescue and Relief;
- Nursing;
- Occupational Therapy Assistant; and
- Physician Assistant.

## Charges Per Usage

Art and photography lab fees will be charged to cover the cost of special laboratory services, supplies consumed and use of equipment. Laboratory usage fees are charged for damage to, or loss of, equipment, non-returnable special supplies and special laboratory services not ordinarily required.

### College Level Examination Program (CLEP)

\$ 85.00	Testing fee (per test)
\$ 15.00	Proctor fee
\$ 5.00	Cancellation fee
\$ 15.00	Recording fee (per credit)

#### Other Charges

The following charges will be made when appropriate and are subject to change: (The list below is not all inclusive)

\$ 55.00	ACT residual testing
\$ 15.00	Online course proctor fee
\$ 25.00	Diploma replacement
\$ 105.00	Residence hall room deposit
\$ 50.00	Examination rescheduling
\$ 150.00	CORE (Education majors) <sup>3</sup>
\$ 120.00-146.00	Praxis II <sup>1</sup>
\$ 25.00	Proficiency examinations (per course by program)
\$ 15.00	Recording fee (per credit)
\$ 5.50	eTranscript fee (may vary based on type of transcript ordered/delivery method)

#### Other Services and Information

#### Summer School Sessions

Union College offers summer school courses which are substantially discounted from the regular tuition rates. Some exceptions to discounted rates apply.

## Multi-Campus Enrollment

Students who are required by their program to take classes at another institution while attending Union College must (1) obtain approval from the Academic Dean's Office and (2) make financial arrangements with Student Financial Services prior to enrolling for classes. If approved, a student may have credits taken at another institution for the given term count towards their overall enrollment for the purposes of being considered full-time for financial aid. Students must be enrolled at least half-time at Union College in order to be eligible for financial aid under a Multi-Campus Enrollment contract.

## Affiliated Off-Campus Programs

Courses taken through an affiliated off-campus program (1) must have prior approval from the Academic Dean's Office and (2) will be charged the full tuition rate of Union College or the affiliated institution rate. Summer or special session rates do not apply. This policy applies to all students including those participating in individually customized degrees, cooperative, Guaranteed Education and Baccalaureate Bonus programs.

## Family Educational Rights and Privacy Act (FERPA)

Financial records are included as part of students' educational records and therefore are subject to FERPA regulations. Union College's FERPA policy is found at <a href="https://www.ucollege.edu/academic-services/records-office/ferpa">www.ucollege.edu/academic-services/records-office/ferpa</a>.

#### FAFSA and Other Resources Available

Financial assistance is available from the college and federal/state/private agencies. Most financial aid eligibility is based on results of the Free Application for Federal Student Aid (FAFSA). Students are encouraged to complete the FAFSA early to receive the maximum financial awards. The earliest date to file is October 1 for the following school year. Except in extreme cases, students should file the FAFSA using actual (not estimated) tax return information. For the 2021-2022 school year students and families will use 2019 tax and financial information.

The FAFSA may be completed prior to acceptance to the college, but the student must be officially accepted through the college's Admissions Office before receiving an offer for financial assistance. Financial aid awards are calculated on

<sup>3</sup> Charges subject to change.

the basis of full-time enrollment. Awards are credited to the student's account for each term in which the student is enrolled. Awards are made without regard to gender, race, religion, nationality, ethnic origin, age, or disability.

#### Veterans

A student who has been accepted and is eligible to receive veterans benefits under the 1966 enactment should contact the Records office for information about these benefits.

In alignment with the Veterans Benefits Transition Policy Section 103, Union College will not impose a late fee, denial of access to facilities, or other penalty against a veteran or eligible dependent due to a late payment of tuition and/or fees from VA, provided the fees are received within 90 days of the beginning of the term.

#### **Scholarships**

Students are eligible to receive scholarships from multiple sources, including external and internal scholarships.

#### External Scholarships

There are many external scholarship opportunities available. Students are encouraged to research and apply for external scholarships. It is not recommended to pay for searching and/or applying for scholarships.

#### Nebraska Foundations

Several scholarships are available yearly from Nebraska philanthropic organizations. Preference is given to upper division students who are residents of designated Nebraska counties.

#### Union College Merit Awards, Scholarships and Financial Assistance

Students enrolling at Union are eligible to earn significant awards based on academic merit, admission criteria or need. The scholarship and grant award chart can be viewed online for eligibility criteria at <a href="www.ucollege.edu/scholarships">www.ucollege.edu/scholarships</a>.

At Union, merit awards and grants are funded through institutional resources as well as numerous endowed and annual scholarships made possible by generous contributions from alumni, businesses and friends of the college. Students who meet the criteria and earn an award guarantee from Union College are required to acknowledge donors for their generosity by thanking them. This acknowledgement is a requirement for annual renewal. Scholarship recipients will be contacted by the Advancement Office to fulfill the donor acknowledgement process.

Total institutional aid (excluding loans) cannot exceed tuition.

Eligibility for Union College scholarships and financial assistance is based upon full-time enrollment (12 hours or more per semester). For detailed information on awarding policies please visit <a href="www.ucollege.edu/sfs/forms">www.ucollege.edu/sfs/forms</a>.

- Summer Camp Scholarships are for students employed in a Christian summer camp program. Summer earnings have to be applied to the student's account by December 1st to be eligible for a camp match scholarship. Union College matches applied camp earnings at 75% up to \$2,000.
- Literature Evangelism Scholarships. Union College matches 75% of earnings up to \$2,000.
- Task Force Scholarships are for Union College students who participate in qualified Task Force assignments. Scholarships of \$2,000 are awarded when the student returns to Union College.
- **Student Missionary Scholarships** of \$2,000 are awarded to participants in qualified student missionary assignments. Scholarships are awarded when the student returns to Union College.

## Eligibility for Accepting Financial Assistance

Financial aid offers are typically based on full-time (12 hours or more) enrollment. If a student enrolls for less than 12 hours each semester or drops below full-time, their award will be reduced or cancelled. Students who plan to register for less than 12 hours in a semester should contact Student Financial Services in advance to discuss the effect their enrollment will have on their financial aid eligibility.

#### Federal Financial Aid

Title IV Federal Student Financial Aid programs include Federal Pell Grants, Federal Work-Study Employment, Federal Supplemental Educational Opportunity Grants, Federal Direct Student Loans, Federal Graduate PLUS Loans and Federal Parent PLUS Loans.

In order to qualify for Title IV Federal Student Financial Aid, students must be enrolled and working toward a degree in an eligible program. Other eligibility criteria include: being a U.S. citizen or eligible non-citizen; having a valid Social Security number; making satisfactory academic progress; and, if required, registering with the Selective Service. International Students are not eligible for federal aid.

In order to determine eligibility amounts, students must file the Free Application for Federal Student Aid (FAFSA) annually online at <a href="https://www.studentaid.gov/h/apply-for-aid/fafsa">www.studentaid.gov/h/apply-for-aid/fafsa</a>. Help is available on that site or by calling 1-800-4-FED-AID (1-800-433-3243).

#### Federal Grants

Grants are awarded to students based on the results of the FAFSA application.

- **Federal Pell Grant.** A Federal Pell Grant is a federal grant awarded to undergraduate students who are United States citizens or permanent residents and have not earned a bachelor's or professional degree. Award amounts vary based on the results of the FAFSA.
- Federal Supplemental Educational Opportunity Grant (FSEOG). FSEOG awards provide assistance to students who are eligible for the Pell grant and have exceptional financial need. The amount of the award is based on the availability of funds and awarded on a first-come, first-served basis.
- State of Nebraska Grant. The Nebraska Opportunity Grant (NOG) is a state managed fund. Awards are made to qualified Nebraska residents who meet the eligibility requirements set by the state and college.
- **Federal Direct Loan.** This loan program provides eligible students access to low interest rate loans. Federal Direct Loan repayment begins approximately six months after the student is no longer enrolled at least half time in a degree seeking program. Repayment options may be found at <a href="https://www.studentaid.gov">www.studentaid.gov</a>.

Subsidized loan means the federal government pays the interest while the student is enrolled at least half time and during deferment periods. Unsubsidized loans begin accruing interest immediately upon disbursement.

- Federal Parent PLUS Loan for Undergraduate Students. Parent PLUS loans enable parents with satisfactory credit history to borrow funds to pay education expenses of their dependent undergraduate student enrolled at least half time. The maximum eligibility for a Parent PLUS loan is the cost of attendance less other financial aid received. Interest begins to accrue immediately upon disbursement. Repayment generally begins within 60 days after the final loan disbursement for the academic year, with a maximum repayment period of ten years, unless other arrangements are made. These payments may be deferred while the student is enrolled at least half time. For more information visit www.studentaid.gov.
- Federal Graduate PLUS Loan for Graduate Students. Graduate PLUS loans enable graduate students with a satisfactory credit history to borrow funds to pay educational expenses not covered by other funds. The maximum eligibility for a Graduate PLUS loan is the cost of attendance less other financial aid received. Interest begins to accrue immediately upon disbursement. Repayment is deferred as long as the student is enrolled at least half time.

#### **Employment Opportunities**

Full-time students are encouraged to participate in the Union College employment program. Earnings often are an important component of students' financial resources. Student employees are considered "at will" employees in harmony with Nebraska state laws and guidelines.

#### Finding Campus Employment

The student employment office assists students in finding on-campus work opportunities by posting employment openings online. Full-time students seeking their initial bachelor's degrees are given preference for employment. Campus employment is limited to 20 hours per week during the school year.

## Federal Work-Study Employment

This campus employment program is for those who qualify for federal financial assistance. Preference is given to qualified students with the greatest financial need. Students are paid at the legal minimum rate but may be given raises as their skill and competence increase.

## Worker's Comp Insurance

Per Nebraska law, Union College carries worker's compensation insurance to protect all employees in case of work-related accidents.

#### International Students

The U.S. Citizenship and Immigration Service only allows students on an I-20 to be employed in campus positions. International students are eligible to work 20 hours a week when enrolled in full-time classes and 40 hours a week during the summer. International students may apply for Occupational Practical Training (OPT) when coursework is completed.

## Documents for Employment

Students working on-campus must complete appropriate documents before starting work. International students must present valid visa and work documents before employment is authorized.

#### Summer Employment

Summer employment opportunities are available to students.

## Policies That Affect Financial Aid Eligibility

## Satisfactory Academic Progress to Keep Financial Aid

The United States Department of Education requires students to progress through their academic program in a timely manner in order to maintain eligibility for Title IV funds. Eligibility for Union College Institutional Funds is also based on the same standards as Federal Aid eligibility as defined below.

All students receiving Title IV financial assistance are reviewed for Qualitative, Quantitative and Maximum Timeframe standards of Satisfactory Academic Progress (SAP) on a semester basis. All students must maintain SAP toward their degree.

#### Standards of Progress Policy for students receiving veteran's benefits

A veteran and/or eligible person must make satisfactory progress toward an approved educational objective leading to employment. Veteran and/or eligible person Standard of Progress will be determined utilizing the academic sanctions, attendance, and conduct requirements as identified in this bulletin and the student handbook.

#### Undergraduate Student Guidelines

## Qualitative Standard:

• Undergraduate students who do not achieve at least a 2.0 cumulative grade point average (GPA) are no longer eligible for Federal and Institutional Financial Aid.

#### **Ouantitative Standard:**

- Students who fail to complete at least 67 percent of units attempted will not be eligible to receive Title IV and Institutional financial awards. Federal regulations require that a student complete (earn) a minimum of 67 percent of the credits they attempt in order to remain eligible to receive student financial aid.
  - o Attempted credits include:
    - All credits for courses in which a student is enrolled as of the last day to add/drop.
    - All credits for courses in which the student enrolled, but later withdrew or failed.
    - Transfer credits from another school that are accepted by Union College.
    - Credits earned through examination.
  - o Earned credits include:
    - All credits completed with grades of 'D-' or higher.
    - Transfer credits from another school that are accepted by Union College.
    - Credits earned through examination.

All Union College students must successfully complete (earn) 67 percent of the total cumulative credits attempted as a condition for continued financial aid eligibility.

#### Maximum Timeframe:

- Students may receive financial assistance up to 150 percent of the units necessary to complete their program.
   Therefore, undergraduate students may not receive aid for terms subsequent to the student reaching (or exceeding) 186 attempted hours.
- When transferring to Union College, attempted units from all other institutions where the student attended will be included when determining the total units attempted.
- When a student changed their major the units from their previous program that qualify for their new program will be calculated in the total.
- Union College allows one change of major when calculating the 150 percent.
- Units from the previous degree will be added to the total when calculating the 150 percent.

#### Graduate Student Guidelines

A graduate student must maintain an overall cumulative grade point average of at least 3.00 and must satisfactorily complete all credit hours with a grade of C or above to continue in the program. Graduate students may only receive Title IV assistance up to 150 percent of the required time to complete their graduate degree.

#### Financial Aid Warning

Students who fail to meet all SAP regulations receive a Financial Aid warning for one semester. During the warning semester, students are eligible to receive financial aid as awarded. Performance during this semester determines whether financial aid is given in future terms. Federal, state and institutional aid is terminated after the warning semester if the student fails to meet the overall SAP requirements.

#### Financial Aid Termination

A student who does not meet satisfactory academic progress standards will not be eligible for federal, state, or institutional aid until after SAP requirements are met or an appeal is approved by the Student Financial Services committee. Students who are disqualified from receiving financial aid may choose to re-enroll. However, any previous balance and all tuition and fees for the current term must be paid or guaranteed prior to enrollment.

#### Financial Aid Termination Appeal

Students have the right to appeal this decision. Appeals must be based on relevant, significant and documentable extenuating circumstances such as serious injury, illness, death of a close relative or other special circumstances. The appeal form is online and must be submitted to the SFS director at least two weeks prior to the semester. If an appeal is approved, the student will be placed on Financial Aid probation for one semester and evaluated at the end of the semester. A student on Financial Aid probation is eligible for Title IV aid and institutional aid for the approved semester. Performance during this semester determines whether financial aid is given in future terms. Federal, state and institutional aid is terminated after the probation semester if the student fails to meet the overall SAP requirements.

#### Program Timelines

- Master's Program. Students in master's program are granted 33 months to complete the program and clinical
  assignments.
- Baccalaureate Programs. Students in baccalaureate programs have 12 semesters to complete their programs.
- **Associate Programs**. Students in associate programs (minimum of 62 hours) have six semesters to complete their programs.
- Part-Time Enrollment. Students not classified as full time must satisfactorily complete a prorated number of
  credits.

#### Appealing Financial Suspension

Students may appeal denial of federal financial assistance by submitting the Satisfactory Academic Progress (SAP) Appeal Form to Student Financial Services. The appeal should include statements

- explaining the circumstances for not making satisfactory progress;
- indicating how satisfactory progress will be achieved; and
- all supporting documentation for reasons for not making satisfactory progress.

#### Drug Law Violation

According to the United States Department of Education, if a student is convicted of a drug offense after receiving Federal aid money, he or she must notify the Student Financial Services office immediately and that student will become ineligible for further federal aid and also be required to pay back any and all aid received after the conviction.

Should a conviction result, a student can take advantage of rehabilitation programs that can make him or her eligible for federal financial aid again.

#### Students Convicted of Possession or Sale of Drugs

(The following information is an excerpt from the Federal Student Aid Handbook, Volume 1 – Student Eligibility)

A federal or state drug conviction can disqualify a student for FSA funds. Convictions only count if they were for an offense that occurred during a period of enrollment for which the student was receiving Title IV aid—they do not count if the offense was not during such a period. Also, a conviction that was reversed, set aside, or removed from the student's record does not count, nor does one received when s/he was a juvenile, unless s/he was tried as an adult.

If the student was convicted of both possessing and selling illegal drugs, and the periods of ineligibility are different, the student will be ineligible for the longer period. A student regains eligibility the day after the period of ineligibility ends or when s/he successfully completes a qualified drug rehabilitation program. Further drug convictions will make him or her ineligible again. It is the student's responsibility to certify to that s/he has successfully completed the rehabilitation program.

#### Federal Verification Process

Some students who file the Free Application for Federal Student Aid (FAFSA) are selected for a process called 'Verification'. The verification selection process is dictated by the Department of Education. The Financial Aid Office has the right to select student records for the process under certain circumstances.

Verification is a quality-assurance measure used by the United States Department of Education (DOE). The college is required to confirm accuracy of the data reported on the FAFSA. Verification is completed by collecting the documents the student used to complete the FAFSA and comparing them with the information the student provided to the DOE.

Students selected for verification are notified by the DOE on the Student Aid Report (SAR). A request letter for the needed documents will be sent from the Student Financial Services office. Required documents are updated as needed and can be viewed on the Financial Aid section of the Union College Student Portal under the "To Do" tab.

#### Professional Judgment

Students who feel that the results of the Free Application for Federal Student Aid (FAFSA) do not accurately reflect the family financial circumstances correctly may file an appeal. The appeal must be based on a documentable, justified situation. Some examples include death in the family, loss of income, exceptional medical expenses, etc. In order to be considered for special circumstance appeal, students must provide documentation to substantiate their claim.

## Student Life and Services

#### **Contact Information**

Kim Canine, Vice President for Student Life Dick Building, Room 104 402.486.2573 kim.canine@ucollege.edu

#### Student Life

Union College is known as a friendly undergraduate environment that provides opportunities for learning, leadership, socializing and personal Christian growth. Saturday night activities are planned by various groups such as Student Life, Associated Student Body (ASB), Athletics, and our Campus Clubs to enhance campus involvement. The Student Center is a hub of campus life. The proximity of rivers, lakes and parks offers opportunities for group and individual activities. Clubs and organizations provide a variety of social and intellectual enrichment activities.

The college organizes intramural sports, varsity sports, and individual sports opportunities. Tennis courts, a 25-meter swimming pool, gymnasium and four-acre playing field are available on campus. The Gymnaires, the college's student gymnastics team, tour academies and regularly attend AcroFest.

Union provides for student socialization and learning in the Student Center, Woods Auditorium, Cooper's Corner, Campus Store, Student Success the Rees Hall Club Room, and Ella Johnson Crandall Memorial Library. The Student Center also provides study areas, games and television rooms. A lounge for students who live off campus is located on the second floor of the Everett Dick Administration Building.

## Student Life Agreement

The college aims for students to gain experience in making personal decisions based on Christian values. By choosing to enroll at Union College, students express a willingness to make decisions which are guided by the principles outlined in the Student Handbook.

#### Vibrant Spirituality

Love for God is shown through personal and community worship. The college believes that individual worship in a private setting is essential to Christian growth. To that end residence halls provide private meditation areas.

To enhance a sense of Christian community, Union College enables students to experience vibrant spirituality through a variety of worship opportunities. These include worships led by students or faculty, residence hall worships, spiritual emphasis weekends and Student Week of Prayer. Undergraduate students are required to attend a minimum number of these services depending on their class standing.

#### Sabbath Observance

To show love for God and His Sabbath, the seventh day is observed. The holiness of the Sabbath day is honored by giving special attention to worship, rest, Christian fellowship, service and seeking God.

## Volunteer Opportunities

To share the caring spirit of Union College, a wide variety of volunteer services are available for students. Student volunteer coordinators provide resources and find opportunities to connect students and staff with service needs in the Lincoln area.

Project Impact, Union's annual community service day, begins the school year with more than 80 percent of students and employees working in service agencies. Ongoing volunteer activities include transportation for the elderly, disaster relief, house cleaning, yard work, care for the homeless and programs for children and youth.

## Overview of Campus Conduct

As a Christian college, Union seeks to integrate Christian teachings with academic pursuits, extracurricular activities, social development and lifestyle choices. The guiding philosophy holds that the Scriptures establish a framework of

values which should guide the development of Christian character, behavior and thought. The administration, faculty and students of Union are expected to embrace these principles. Students are encouraged to deepen their commitment to Christian values and cultivate intellectual and creative powers through participation in campus worship and fellowship. For the full Code of Conduct, please refer to the Student Handbook.

## **Residence Life Policy**

Students who live on campus are more likely to graduate, experience higher satisfaction with their college experience, obtain higher grades and have more friends than those living off campus. For these reasons Union maintains a residential campus and requires undergraduates not living with their parents to live in the residence halls. The full housing policy can be found in the Student Handbook.

There are three residence halls: Rees, Prescott, and Culver Hall. Rooms are equipped for two students and furnished with Internet a bookcase, closets, two single beds, dressers, desks and chairs. Further information is available at <a href="https://www.ucollege.edu/student-life">www.ucollege.edu/student-life</a>.

#### **Room Reservations**

Room reservations can be made online at <a href="www.ucollege.edu/ortner-center/reservations">www.ucollege.edu/ortner-center/reservations</a> or by emailing <a href="mailto:guestservices@ucollege.edu">guestservices@ucollege.edu</a>.

## **College-Owned Housing**

The college owns a number of campus apartments and houses suitable for student families and students who qualify to live outside the residential halls. Monthly rental rates vary with apartment size. Correspondence concerning college-owned housing should be addressed to the Housing Manager in the Financial Administration Office well in advance of attendance at <a href="https://housingmanager@ucollege.edu">housingmanager@ucollege.edu</a> or <a href="https://www.ucollege.edu/campushousing">www.ucollege.edu/campushousing</a>.

#### Personal Effects

College carried insurance does not insure the personal effects of any individual even if it is required for use on campus. Therefore, the college recommends that students consider carrying insurance to cover such losses.

#### Campus Dining Services

Union Market provides a vegetarian menu with vegan options in a market-style setting from early morning to late evening. Cooper's Corner, a snack shop in the Student Center, provides additional food options. A food service minimum is charged per semester for residence hall students.

#### Campus Health

Campus Health, includes a registered nurse, who provides clinical services and health education. A full-time mental health counselor is also part of Campus Health. Referrals may be made to physicians and other healthcare professionals. Additional fees may apply.

To register, each student must complete a health form and provide an official record of immunizations. Union College urges all students to comply with the minimum immunization guidelines established by the Nebraska State Department of Health. These immunizations include diphtheria tetanus with a tetanus booster within the past ten years, polio, and two doses of measles vaccine. For specific information, please visit the website. Special health regulations apply to international students. For more information contact the director of admissions.

### Pharmaceutical or Chemical Trial

Union College strongly recommends that students not participate in any commercial pharmaceutical or chemical evaluations. Weekend leaves will not be approved for such purposes. Any student who participates in such testing programs voluntarily assumes all risks involved and agrees to hold the college harmless for all resulting injuries, illness or damages, direct or consequential.

## **FERPA**

In compliance with the Family Educational Rights and Privacy Act (FERPA), Union College reserves the right to notify a parent or guardian, regardless of a student's age, if a student has been admitted to the hospital; has a serious health condition; has violated any federal, state or local law or campus rule or policy governing the use or possession of alcohol

or a controlled substance; or for any conduct that poses a significant risk to the safety or well-being of that student, other students, or other members of the college community. For the official college FERPA policy see <a href="https://www.ucollege.edu/ferpa">www.ucollege.edu/ferpa</a>.

#### Health Insurance

Students attending Union College are responsible for obtaining personal health insurance. The college requires that full-time students (those taking 12 or more hours) be covered by health insurance. Upon registration students must provide documentation verifying insurance coverage, or they may elect to purchase a health insurance plan available through the college. Though health insurance is not required for students taking 11 hours or less, it is highly recommended. International students are required, by law, to purchase the optional major medical insurance. Contact Student Life if you have questions regarding health insurance.

#### **Motor Vehicles**

To park on campus, all students must register their vehicles with Campus Safety. There is no campus vehicle registration fee. Regulations governing the use of motor vehicles are outlined in the Student Handbook and the Parking Map and Regulations brochure.

## Athletics Philosophy

Union College's Christian approach to athletics develops sportsmanship, promotes academic excellence, enhances team and individual skills, cultivates teamwork and leadership abilities, and encourages service to others.

## **Intramural Sports**

Union College encourages students to become involved in the various recreational opportunities which are offered on campus. The intramural sports program provides traditional sport leagues such as basketball, flag football, floor hockey, volleyball and soccer along with other non-traditional activities. All participants are expected to follow the concepts of sportsmanship which should be displayed on a Christian campus. Students who are enrolled in at least six hours of credit and who meet insurance requirements are eligible to participate in the intramural sports program. Students competing on intercollegiate varsity athletic teams are not eligible to participate in the corresponding intramural sport if the seasons are concurrent (i.e. a varsity basketball player may not participate in the intramural basketball league).

## **Intercollegiate Sports**

Teams that represent Union College on an intercollegiate level are men's soccer, men's and women's basketball, women's volleyball, gymnastics, and men and women's golf. All varsity athletes are expected to follow the concepts of sportsmanship which should be displayed on a Christian campus.

#### Eligibility

Students must have attained a 2.50 GPA for the past semester or cumulatively and must be registered for a minimum of 12 credit hours to be fully eligible to participate on an intercollegiate team. First semester freshman academic eligibility is based on the high school GPA. A one semester probationary period may be granted to team members whose GPA falls between 2.00 and 2.50 for the past semester by appeal to the Athletic Committee. Those placed on probation may be allowed to practice, and play in games or travel with the team at the coaches' and Athletic Director's discretion. Team members who do not reach a 2.50 GPA after one semester of probation will not be eligible until they have met this requirement.

### **Policy Regarding Student Complaints**

In seeking to do what is right, Union College values student complaints as evidence of potential difficulties to be addressed. Most complaints are addressed informally, orally or electronically, with the Academic Dean, residence hall dean, work supervisor, or other responsible campus employee. However, if a student seeks further resolution of the problem, and discussion with the appropriate vice president likewise fails to satisfy the student, a formal complaint should be filed with the appropriate vice president.

Formal complaints are defined as non-trivial complaints submitted in writing, dated, signed by the student, and submitted to the vice president with the responsibility to handle the complaint. Formal complaints are kept on file, and each vice president maintains a record of each complaint filed and its resolution.

#### **Grievance Process**

Union College attempts to follow biblical principles when wrong is perceived by a student or employee. A student who feels treated unfairly or unjustly has the right to appeal according to approved procedures.

#### Informal Complaint Procedure

Most misunderstandings and difficulties are settled to mutual satisfaction when the student perceiving a wrong discusses the issue with the employee involved, whether course instructor, residence hall dean or staff member. A student who is not satisfied by discussion at this direct level should appeal to the instructor's program director or academic dean, head residence hall dean, or staff member's supervisor.

#### Formal Complaint Procedure

If not satisfied at the supervisory level, the student may file a formal grievance. The processes for a formal grievance can be found on the Academic Administration section of <a href="https://www.ucollege.edu/complaint-policy">www.ucollege.edu/complaint-policy</a>.

#### Matters Not Grievable

College policies and regulations adopted by the college and/or the Board of Trustees are not subject to the grievance process. Students may request discussion and recommend changes to such policies but this dialogue is advisory and not grievable.

This grievance policy applies to Union College issues. Where other organizations are involved, the college may not be free to act. For example, where patient safety or child protection is involved, or where state regulations and other institutional policies may supersede college guidelines, the complaint may not be grievable.

## **Academic Resources**

## Ella Johnson Crandall Memorial Library

Bliss Kuntz, Research and Instruction Librarian
Don Love Building, Room 239
402.486.2514
bliss.kuntz@ucollege.edu
www.ucollege.edu/library

The Ella Johnson Crandall Memorial Library empowers students, faculty, staff, and community members for learning, teaching, research and spiritual growth through the provision of information resources, services, and the preservation of institutional and spiritual heritage.

Within the library's 38,000-square-foot facility, librarians offer reference assistance, research instruction, collection development, and special programming. Through the Research Assistance Program, patrons can schedule a research appointment with a librarian, or receive help on a walk-in basis, by phone, email, or Instant Messaging from the library's home page. Through the Personal Librarian Program, librarians provide effective research instruction, collection development (selection of resources), material reserve services and online subject research guides (LibGuides) for each major on campus. The library's resources are highlighted through physical book displays and through special programming.

The library's collection of more than 160,000 physical items includes a variety of formats such as books, eBooks, periodicals, DVDs and audio books. Online collections include full-text access to more than 28,000 periodical titles, 170,000 electronic books, and 15,000 academic streaming videos. Both physical and electronic collections are searchable through the library's online catalog. The Lora McMahon King Heritage Room houses a large collection of Adventist books, periodicals and microforms, in addition to Union College archival materials. A selection of these materials is also available online through the Union College Heritage Collections database. The library subscribes to approximately 60 article databases accessible via the Web from services such as EBSCOhost, ProQuest, and Elsevier and OCLC. Students may log in to these databases from any campus computer or from off campus via EzProxy.

Resources in other academic libraries in the area are available through reciprocal borrowing and on a wider spectrum through interlibrary loan. The latter service provides access to materials through the more than 70,000 member libraries of OCLC. Additionally, patrons visiting the library can choose from a variety of study spaces including small group study rooms, individual study rooms, open tables, study carrels, and lounge seating. Two small group study rooms include televisions and DVD players; portable DVD units are available upon request. Students may also check out HDMI cords to connect laptops to the televisions.

### **Information Systems**

Richard Henriques, Director of Information Systems Dick Building, Room 503A 402.486.2511 richard.henriques@ucollege.edu www.ucollege.edu/information-systems

Information Systems (IS) maintains computer hardware and software owned by Union College. IS also provides a campus wide network, both wired and wireless, that gives access to learning management systems, student information systems, enterprise management software, and the Internet. Students that comply with Union College's computer policy are granted access via credentials that are issued during their registration process.

## Microcomputer Laboratory

Seth McNeill, Program Director of Computer Science and Math Krueger Center, Room 132 402.486.2600 ext. 2360 seth.mcneill@ucollege.edu www.ucollege.edu/campus-services/computer-labs

The Computer Science and Math Program maintains the largest general-use Windows-based computer lab on campus. The MicroLab is available for more than 70 hours per week during the school year. The MicroLab gives students access to the internet, a place to print out their papers for classes, as well as word processing, spreadsheets and presentation software.

## **Graphic Arts Computer Laboratory**

Bruce Forbes, Program Director of Art & Design Engel Hall, Room 104 402.486.2553 <u>bruce.forbes@ucollege.edu</u> www.ucollege.edu/campus-services/computer-labs

The graphic arts computer lab, an open lab located in Engel Hall, is maintained to support photo editing and printing, video editing, print production, graphic design, and web design. Macintosh computers run drawing, page layout, image editing, video editing, and web design software. Color and black and white printers, scanners, and type collections support graphic design, photography, and illustration work. The Internet is available for these uses.

In addition, smaller labs with more specialized software are maintained in science and math, health sciences, the library, and the Student Success Center.

#### Student Success

Taryn Rouse, Executive Director of Student Success Don Love Building, Room 218 402.486.2600 ext. 2255 taryn.rouse@ucollege.edu www.ucollege.edu/student-success

Student Success supports students to succeed in college and beyond through life coaching, disability resources, peer and group tutoring, accountability, career preparation and more.

#### Life Coaching and Academic Advising

Life coaches are assigned to all freshmen their first year at Union College for coaching and academic advising. Life coaches help students develop life goals, educational plans, and techniques to overcome barriers to success. Any student is able to request coaching.

#### Tutoting

- Peer tutoring: every student is eligible for free peer tutoring for any class they take. Request tutoring at <u>www.ucollege.edu/student-success</u> or contact Student Success.
- Life coaching: life coaches help students develop life goals, educational plans, and techniques to overcome barriers to success.

#### Career Services

- Career coaching: students provided assessments for skills, interests, abilities, strengths and personality, as well as assistance in using results to choose a major and career path.
- Career preparation: assistance available for cover letter and résumé writing, interviewing, and general business
  etiquette.

- On-campus employment: posted at <a href="https://www.ucollege.edu/student-jobs">www.ucollege.edu/student-jobs</a>.
- Off-campus employment and internships: posted through the online job board Handshake, www.ucollege.joinhandshake.com.
- Career and Graduate School Fair: employers and graduate schools hosted on campus each fall offering students information on internships, part-time and full-time employment, and university graduate programs.

#### Standardized Tests

The following tests are administered as arranged with Student Success unless otherwise noted.

- National ACT: administered by ACT on pre-scheduled Sunday dates. Union College test center number and clergyman's letter available upon request. Scores good at any school and used for acceptance and course placement. Learn more and register at <a href="https://www.ACT.org">www.ACT.org</a>.
- **Residual ACT**: for students already accepted to Union College. Scores good only at Union College and used to test out of a prerequisite class or to increase freshman scholarship. Learn more and register at <a href="https://www.ucollege.edu/act">www.ucollege.edu/act</a>.
- ALEKS Placement: for students registered for a Union College math course. Scores good only at Union
  College and used to place into higher level math or science than ACT/SAT scores allow. Learn more and
  register at <a href="https://www.ucollege.edu/aleks-placement">www.ucollege.edu/aleks-placement</a>.
- LSAT: administered by LSAT at Union College on pre-scheduled dates. Register at www.lsac.org/lsat.
- **Proctoring Services:** for students needing a test proctored from online distance education or correspondence.

## **Disability Information**

Deborah Forshee-Sweeney, Director of Disability Information Don Love Building, Room 215 402.486.2600 ext. 2080 debbie.forsheesweeney@ucollege.edu www.ucollege.edu/student-success

#### Accessibility Accommodations for Students with Disabilities

Union College is committed to providing educational opportunities and an inclusive environment for students with disabilities by honoring Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and ADA Amendments Act of 2008. These prohibit discrimination on the basis of disabilities.

Accommodations are made on an individual basis and determined in consultation with the student. Students requesting accommodations, including online courses, and for Adventist Education Alliance may contact the director of disability information for accessibility guidelines or download them from the college website.

## Personal Academic College Coaching (PACC)

In addition to accommodations and accessibility resources, students with disabilities may receive coaching for self-advocacy, academic strategies, and executive functioning skills.

## Studio for Writing and Speaking

Tanya R. Cochran, Program Director of English Dick Building, Room 408F 402.486.2600 ext. 2325 tanya.cochran@ucollege.edu
www.ucollege.edu/thestudio

The process of invention, revision and delivery resembles the process of spiritual growth. Strong writing and speaking are like sanctification: the work of a lifetime. Therefore, The Studio's purpose is to provide an environment where lifewriting and life-speaking occurs.

#### The Studio for Writing and Speaking

- assists writers and speakers—through dialogue and personalized instruction—in producing innovative, reliable and meaningful research and presentations in and across their disciplines and communities; and
- encourages writers and speakers to touch both local and global communities through writing and speaking that
  ennobles humanity and honors God.

Because any written or oral text requires time and persistence, The Studio encourages students to make an appointment at all stages of the process. Peer consultants are available to brainstorm before the writer or speaker puts one word on a notebook page or computer screen as well as to offer feedback on first, in-between, and final drafts of writing projects and oral presentations. As a later concern, consultants support instruction in grammar and mechanics. While they are not trained as editors or proofreaders, consultants help student writers and speakers identify and revise their own errors. Ideally, consultants and the students they work with develop a trusting relationship within which both hone their communication skills. Studio services are provided without charge. For more information on location and appointments, visit The Studio's Web page.

# Adventist Colleges Abroad

#### **Contact Information**

Ben Tyner, Program Director of Politics, History, and International Relations Dick Building, Room 408B 402.486.2600 ext. 2324 benjamin.tyner@ucollege.edu/www.ucollege.edu/aca

The Adventist Colleges Abroad (ACA) program at Union College allows students to immerse themselves in the culture and life of the host country and become conversant in the language; mature socially, spiritually, and intellectually; and develop sensitivity to cultural differences and a sense of responsibility for and mission to other people of the world. This opportunity is provided to qualified students for international study while completing degree requirements at their home colleges and universities.

A Bachelor of Arts degree in Foreign Language Studies with emphases in Arabic, French, German, Italian, Portuguese or Spanish may be earned (as a second major) through this program. Minors are available in Arabic, French, German, Italian, Portuguese or Spanish. Language study is also available at other various locations during the summer. (See Summer Study Abroad below.)

Union College is a member of Adventist Colleges Abroad (ACA), a cooperative arrangement between Adventist colleges and universities of the United States and participating Adventist colleges and universities in other countries. ACA is operated by the Education Department and the Higher Education Cabinet of the North American Division of the Seventh-day Adventist Church.

Because geopolitical situations can change rapidly, an ACA campus may be closed. Check with the ACA Program Director for the latest updates.

#### Academic Year Study Abroad

The following institutions are international affiliates of ACA offering academic-year programs of study:

ArgentinaUniversidad Adventista del PlataAustriaSeminar Schloss BogenhofenBrazilBrazil Adventist University

**England** Newbold College of Higher Education

France Campus Adventiste du Salève
Germany Friedensau Adventist University
Italy Istituto Adventista Villa Aurora

**Lebanon** Middle East University

**Spain** Escuela Superior de Español de Sagunto

(See Foreign Language Studies section for degree information.)

## Application Policies

For Union College to process an application for academic year study abroad, the applicant must:

- complete at least one full-time semester in residence at Union College;
- be in good and regular standing at Union College while maintaining an overall minimum GPA of 2.5;
- establish a financial payment contract with Union College Student Financial Services or pay for the program in full; and
- if pursuing a degree in Spanish, complete two high school years or one college year in prerequisite language study with a minimum GPA of 3.00, or pass the appropriate College Level Examination Program (CLEP) language exam.

#### Summer Study Abroad

ACA also offers summer terms at the following international study centers listed above in Argentina, Austria, Brazil, France, Italy, Lebanon, and Spain, and periodically in the following:

Hong Kong (Chinese) Hong Kong Adventist College Israel (Hebrew) Jerusalem Study Center

Ukraine (Russian) Ukrainian Adventist Center of Higher Education

## College Applicants

For Union College to process an application for summer study abroad, the college applicant must:

- complete at least one full-time semester in residence at Union College;
- be in good and regular standing at Union College while maintaining an overall minimum GPA of 2.5; and
- establish a financial payment contract with Union College Student Financial Services or pay for the program in full.

## High School Applicants

For Union College to process an application for summer study abroad, the high school applicant must:

- complete at least the sophomore year in high school and be at least 15 years of age;
- complete and submit the applicable form to enroll at Union College as a non-degree seeking student. This enrollment form will require verification by the high school registrar that the student's GPA is above the 3.0 minimum required; and
- submit tuition payment in full to Union College Student Financial Services.

## **Academic Information**

#### **Contact Information**

Rachael Boyd, Registrar Dick Building, Room 507B 402.486.2529 records@ucollege.edu

This section of the bulletin provides basic information for progress through college, from registration to final exams and transcripts.

## **Academic Advising**

Beyond completing the courses required for a major, earning a degree includes satisfying a variety of requirements and deadlines. To assist in meeting these requirements, each student is appointed an advisor. Besides guiding course selection and general academic planning, advisors assist a student's orientation to campus life, discuss broader personal concerns, and encourage career planning.

However, ultimate responsibility for planning the academic program and fulfilling graduation requirements lies with the student.

#### **Academic Course Load**

Union College operates on a 15-week semester system, which defines courses in semester hours. Traditionally, each hour consists of one 50-minute class period and two hours of additional study per week. A laboratory period of two to four hours equals one semester hour.

An average load of 15-16 hours per semester over four years (120 weeks total) achieves the 124 semester hours needed for a bachelor's degree. However, the minimum full-time course load of 12 hours meets the requirements of financial aid, immigration, social security and veterans' authorities. Students in the freshmen enrichment, Integrated College Experience, academic probation and academic alert programs are limited to 15 hours. The recommended freshman maximum is 16 hours.

#### Class Standing

Student classification is based on the semester hours applied to a Union College degree. The minimum number of hours for each class is:

- Freshman admitted/0 semester hours
- Sophomore 24 semester hours
- Junior 56 semester hours
- Senior —92 semester hours
- Graduate enrolled in a master's program
- Other special students, guest students and others not seeking a degree

#### **Course Numbers**

Course numbers indicate the designated level of the course from the 100-level for first-year students through the upper division levels of 300 (junior) and 400 (senior). The 500 and 600 levels are designated for master's courses. Courses numbered below 100 are considered developmental and do not apply toward graduation. Similarly, grades in these developmental courses do not affect a student's grade point average (GPA).

## **Prerequisites for All Upper Division Courses**

Registration for any 300 or 400-level course requires at least sophomore class standing.

#### **Online Courses**

Union College offers a number of online course options, with most of these courses being available during the summer term. Union offers online courses taught by Union teachers as well as through our membership with the Acadeum

College Consortium (Acadeum). Acadeum is a virtual academic consortium in which member institutions collaborate in sharing online, credit-bearing courses and programs. All consortium members are regionally accredited, independent, and not-for-profit institutions.

Online and hybrid courses may be identified as such if the following prefixes are added to course titles:

- **ONS (Online-Synchronous):** Online course requiring instructors and students to be online at the same time for portions of the course.
- ONA (Online-Asynchronous): Online course with no requirements for students to meet with the instructor/other learners at specific times online.
- HYS (Hybrid-Synchronous): A hybrid course including some level of in-person class or lab participation as well as a required time for instructors and students to be online at the same time for portions of the course.
- HYA (Hybrid-Asynchronous): A hybrid class including some level of in-person class or lab participation, but no requirement for instructors and students to be online at the same time for the online portion of the course.

Online courses can provide a quality alternative to traditional classes when necessary. Such courses must comprise less than 50 percent of any certificate or degree awarded by Union College, unless that specific certificate or degree has been approved for online delivery.

## **Auditing Courses**

Students seeking to attend a course purely out of interest may request to audit courses using the applicable request form. Audited courses cannot be used to fulfill degree or graduation requirements. No grade is assigned nor credit given, and the tuition rate is greatly reduced. Changes from credit to audit, or the reverse, must take place during the add-drop registration period each semester or during the first two days of summer sessions. Nursing courses, most laboratory courses, and some others may not be audited.

Students taking music lessons or participating in ensemble groups for no credit will be required to complete the audit paperwork. Music lessons will incur the \$350/credit charge, and if the student is taking fewer than 12 or greater than 17 credits, they will also be charged the reduced tuition rate. Auditing an ensemble group will not incur any additional fee/tuition.

#### **New Student Orientation**

New Student Orientation provides an important introduction to the college experience, extending from academic preparations to social activities, spiritual programs, and services available to students. Orientation is scheduled each fall before registration and as announced for spring semester.

First-year students are required to register for and attend the one-semester-hour introductory CORE 100 College Success course.

#### Registration

Registration is the process of arranging to take courses for a semester as well as the associated steps to pay for them and become a Union College student. To accomplish this, students register for courses through Self-Service, the college's online portal, and complete the assigned steps in the Registration Checklist. Students are registered only after the student completes all steps.

Students who consult with their advisors and reserve courses during the pre-registration periods benefit from priority access to courses. Financial clearance should also be completed before the end of the registration period. At the end of the add/drop period, reservations for courses are canceled for students who have not completed registration. Students who have not completed registration by the end of the add/drop period may incur a financial penalty.

# Changes in Registration *Add/drop*

Students who are considering changing courses should consult with their advisors and attend the new courses as soon as possible if space is available. Courses already in progress may be added or dropped only during the first seven business of classes (two days in summer session). Thereafter, permanent academic records are established and a W (withdrawal) grade will be assigned if a student chooses to drop the class later in the semester. Students benefit from confirming their class schedule on Self-Service to ensure the registered courses are those actually intended.

#### Withdrawal

Courses dropped between the add/drop deadline and the published withdrawal deadline receive the designation W (withdrawal) instead of a letter grade. If classes are dropped after this date, letter grades will be assigned based on work completed at the end of the term.

Students considering withdrawal from a course should contact Student Financial Services to determine if financial aid could be jeopardized. Withdrawal procedures must be fully completed before a withdrawal becomes official.

#### Unofficial Withdrawal Policy

Students are defined as unofficially withdrawn for Title IV federal aid purposes when they do not have any grades for the semester other than FA, a failing grade due to non-attendance. When instructors assign the FA grade, the last known date of attendance or academic activity must also be reported. At the end of each semester, any students who have all FA grades are assumed to be "unofficially withdrawn". Students who unofficially withdraw from Union College (quit attending all classes but do not follow official withdrawal procedures) may have to return all of the financial aid received for the semester. The FA grade designation is treated as F (failing) for all other policy purposes.

#### Administrative Withdrawal

The college administration may grant an administrative withdrawal (W) from a course or courses for a student suffering a medical or unexpected circumstance. Administrative withdrawals are not granted to avoid failing grades or for circumstances normally addressed by a regular withdrawal. A student receiving an administrative withdrawal in all courses must demonstrate evidence of recovery from the circumstances before returning to Union College.

#### **Transfer Credits**

All credit from another regionally accredited college or university will be transferred when the following conditions are met:

- an official transcript is received directly from the other institution;
- credits transferred have a grade of C- (1.67) or above;
- vocational and technical courses are generally not transferable, unless approved by the appropriate academic program director, by petition, or by Academic Administration;
- graduate level courses are not transferable, except by petition; and
- transfer credits from two-year institutions are monitored. At least 56 hours must be taken from a four-year institution before graduation.

Life experiences are not transferable, and credit is not granted for non-college sponsored instruction. Remedial, developmental, or other courses numbered below the 100 level, such as MATH 017, will not be transferred to Union College.

The transfer of credits does not guarantee that credits meet specific requirements, but when they are equivalent to Union College coursework, they satisfy corresponding requirements for general education, a major or a minor. If a student believes a transferred class should meet a specific requirement, an academic petition can be submitted for approval; the student is expected to provide support materials, such as the course description and/or syllabus for review

If a student wishes to remove a transferred class from their Union College record, they may submit a petition to the Records office.

In most situations, all eligible credits are transferred on a course-by-course basis with the corresponding Union College prefix and number, letter grades and credit hours (in terms of semester hours) for each transfer course. However, in some cases (e.g. international, nursing, paramedic, and second-degree-seeking students), the total number of transfer credits may be transferred with a grade of CR. If specific transfer courses are needed to fulfill the declared degree at Union College, those courses will be considered for transfer on a course-by-course basis.

#### Course Transfers from Institutions without Regional Accreditation

Courses from institutions without regional accreditation do not generally transfer. However, a student may request that such credits be transferred by filing an academic petition with the Records office. Provision of a syllabus is required for

the evaluation; other materials may be requested during the evaluation process. The academic dean must validate the equivalence.

## **Credit by Examination**

Several types of examinations are available for a student to demonstrate knowledge sufficient for academic credit, which may not exceed credit granted for similar classes offered by the college.

Credit by examination is not given if a student ever enrolled in the course, even if it was not completed, or if the student has taken a more advanced course in the same subject with or without credit. Exams may be taken only once.

CR/NC will be recorded in lieu of a letter grade and will not count towards GPA. Applications for CLEP and Proficiency Examinations are available in the Records office.

### Advanced Placement (AP)

Advanced Placement (AP) credit is granted to students who pass certain College Board AP Examinations with a score of 3 or higher. Language and Composition substitutes for Writing for General Audiences, while Literature and Composition substitutes for literature. However, no AP course may substitute for Writing for Scholarly Audiences. For more information about credits granted for certain AP tests, please visit <a href="www.ucollege.edu/transfer/transfer-credit-equivalency">www.ucollege.edu/transfer/transfer-credit-equivalency</a> and search for "The College Board AP/CLEP".

#### College Level Examination Program (CLEP)

Union College grants credit for CLEP subject examinations as recommended by the Commission on Educational Credit of the American Council on Education. Applications for CLEP exams are available in the Records office. Once a student is approved to take a CLEP exam, he/she may visit the following website to find a local testing center: <a href="https://www.clep.collegeboard.org/test-center-search">www.clep.collegeboard.org/test-center-search</a>. A recording fee is charged for credits earned on CLEP exams (see fees). For more information about credits granted for certain CLEP tests, please visit <a href="https://www.ucollege.edu/transfer/transfer-credit-equivalency">www.ucollege.edu/transfer/transfer-credit-equivalency</a> and search for "The College Board AP/CLEP".

Credit by CLEP carries the following stipulations:

- not available after a student has completed 56 hours of college credit;
- not available for Writing for General Audiences or Writing for Scholarly Audiences;
- not granted for the general tests in Humanities, College Mathematics, Natural Sciences, or Social Sciences and History; and
- will not necessarily satisfy requirements for a major or minor. The student seeking to use CLEP credit for a major or minor should obtain program approval before taking the test.

### Challenge Examinations

Proficiency examinations may be arranged for some courses. Students who want to take an exam should contact the program director. A fee will be charged for the exam's preparation and credit registration. A course already taken cannot be replaced by a proficiency examination.

#### **Alternative Programs**

## General Studies

The degree in General Studies allows students to develop academic knowledge and skills in several areas of study. The student must meet graduation requirements for bachelor's or associate's degrees, substituting a general studies curriculum for a major. Because it lacks a major, the college does not extend the Guaranteed Education option to students who graduate under this program.

Courses applying to the general studies "major" curriculum cannot be used to fulfil general education requirements for the degree.

The Bachelor of Science degree in General Studies requires a minimum of 24 semester hours earned in one area of study and 12 semester hours each from two other areas of study. All qualifying courses must be completed with a grade of C or higher with a minimum of 15 hours numbered at the 300 or 400 levels.

The Associate of Science degree in General Studies requires a minimum of 12 semester hours earned in one area of study and six semester hours each from two other areas of study. All qualifying courses must be completed with a grade of C or higher.

#### Areas of Study

- Business and Computer Science
  - o Business Administration
  - o Computing
- Emergency Management & Exercise Science
  - o Exercise Science
  - Health and Human Performance
  - o International Rescue and Relief
  - Occupational Therapy Assistant
- Fine Arts
  - o Art
  - o Graphic Design
  - Music
- Human Development
  - o Education
  - Psychology
  - o Social Work

#### Humanities

- o Communication
- English
- Foreign Language Studies
- o History
- o International Relations
- o Pre-Law
- Nursing
  - Nursing
  - o Leadership
- Religion
  - o Religion
  - Theology
- Science and Mathematics
  - Biomedical Science
  - o Chemistry
  - Mathematics

## Personalized Degree

The personalized degree option is intended for a student who, in consultation with an advisor, wishes to design and fulfill a unique program of study at the bachelor's level that achieves individual educational goals. Students and their advisors are encouraged to consider modifying current degrees with petitions in place of creating a personalized degree that is very similar to a degree already offered. Such an individually-designed program may prepare for employment or further study. However, the program carries no endorsement or recommendation for such results by the college, and the Guaranteed Education option is not available to students graduating under this program.

The student should present a proposed curriculum during the first semester of the junior year. This proposal must be approved by Academic Council.

Graduation requirements for a personalized degree are broadly the same as for a regular bachelor's degree. Variations in the general education requirements are permissible but must also be approved by Academic Council. Personalized degree students may utilize courses offered on other campuses for which the student is financially responsible. The residency requirement is that 64 of the final 80 hours of this degree or at least 100 hours total must be taken at Union College.

#### Post-Baccalaureate Professional Program

Exceptional students occasionally gain acceptance into professional graduate programs such as medicine, dentistry or law before completing a bachelor's degree. Based on Academic Administration approval, students may use graduate courses (500-600 level) to fulfill remaining Union College degree requirements. The Post-Baccalaureate Professional Program is not considered a degree itself, rather an option to complete a Union College degree. Students are financially responsible for courses offered on other campuses than Union College.

A student must select a Union College major or minor and work with their academic advisor to determine which specific graduate courses will fulfill the degree requirements. The Post-Baccalaureate Professional Program can be used with a personalized degree, but not with a General Studies degree.

The appropriate bachelor's degree will be conferred upon those who:

- submit a graduation application prior to starting the graduate coursework, detailing how the credits will be use to fulfill requirements;
- complete the general education requirements as outlined in the relevant bulletin;

- complete a minimum of 96 semester hours of undergraduate courses, including 20 or more upper division hours;
- complete 30 of the last 36 undergraduate hours in residence (not including graduate level courses);
- transfer courses within two years after successfully completing the first year of a post-baccalaureate professional program; and
- arrange verification from the professional school that the applicant has successfully completed the first year of the professional program and is eligible to continue.

#### Study Elsewhere

Students wishing to take a course at another institution while registered at Union College should first consult with their academic advisor or program director.

To ensure that the proposed coursework elsewhere will satisfy the course of study at Union College, students should verify the course by visiting Union's Credit Equivalency Tool online at <a href="https://www.ucollege.edu/transfer/transfer-credit-equivalency">www.ucollege.edu/transfer/transfer-credit-equivalency</a>. If the desired course is not listed, the student should obtain permission from the Records office by submitting a Transfer Credit Inquiry prior to registering for the course at the other institution. Failure to do so may result in a student earning credit that will not apply toward graduation.

#### **Grade Reports**

Grades and unofficial transcripts are available at the midterm and conclusion of each semester on the Self-Service website. Only the final grade is recorded on the official transcript; the midterm grade serves as an indication of progress and is not factored into a student's GPA calculation.

Students are responsible for reviewing their Self-Service accounts regularly to ensure the accuracy of the academic information on file in the Records office.

## Grade Definitions

- A The student demonstrated an excellent mastery of the material and met course objectives in an excellent manner.
- B The student demonstrated a commendable mastery of the material and met course objectives in a commendable manner.
- C The student met course objectives in a satisfactory manner. A grade of C- or below may not apply for a course in a major, minor or professional education.
- D The student has not demonstrated a satisfactory learning of the material, but met course objectives in a minimal manner. A grade of D- or higher applies as general education or elective credits

<b>Grade</b>	Grade	Points Points	Other	<u>Designations</u>
A	4.00		(These grade designations do not count towards GPA)	
A-	3.67			
B+	3.33		AU	Audit
В	3.00		CR	Passing (C or higher) in a credit/no credit course
В-	2.67		NC	Failing in a credit/no credit course
C+	2.33		W	Withdrawal after the deadline to drop classes
C	2.00		I	Incomplete (see below)
C-	1.67		IP	In Progress (see below)
D+	1.33		NR	No report from the instructor at the time the
D	1.00			grades were processed
D-	0.67			
F	0.00			
FA	0.00	Failure due to discontinued class attendance		

### Grade Point Average (GPA)

The cumulative grade point average is computed by totaling the grade points of all courses and dividing by the total semester hours of courses for which grades are received. When calculating graduation and honors requirements, GPAs are not rounded up. Thus, a student with a GPA of 1.997 does not meet the graduation requirement of 2.00; likewise, a GPA of 3.749 will not satisfy the requirements for the Dean's List (3.75).

#### Repeat Courses

When a course taken at Union College is repeated, the higher grade is used. Both the original and repeat grades are part of the student's permanent record, but only the highest grade and credits earned are computed in the cumulative grade point average and in the total credits earned.

#### Incomplete

Students may request to receive the designation of incomplete (I) in case of medical or unavoidable circumstances unrelated to the course requirements. By federal regulation, an incomplete is only available if a major portion of the course (51%) has been completed satisfactorily.

A request for an incomplete must be approved by the instructor and program director. It must be submitted before the start of final examination week. The deadline for course completion is no later than the end of the following term (not including the summer term). Failure to meet this contract deadline will result in recording of the original grade as indicated on the request. Forms are available in the Records Office.

#### In Progress

The designation "In Progress" (IP) is permitted for approved courses whose requirements likely extend beyond the given semester, typically due to length of research, clinical experiences, or internships. The deadline for completion may vary but not exceed two consecutive semesters (not including summer semester).

If the course is not completed within the designated time, a grade based upon completed work will be submitted by the instructor. IP designations must be changed to letter grades prior to the student's graduation. Courses meeting the purpose of the IP designation are recommended by the program involved and approved by Academic Council.

#### Changes of Assigned Grades

After a final grade has been recorded, an instructor may request a change in the grade if an error occurred in calculating or recording the grade. Grade changes are not appropriate for assignments turned in beyond the end of the semester.

To dispute a grade, the student should first contact the teacher and follow the appeal procedures outlined in the Student Life and Services section. Grade changes are accepted up to one year after the posting of the original grade.

## Academic Amnesty

Academic Amnesty is designed to help maturing students more accurately reflect their newly identified academic potential as they return to college. If a student meets specified criteria, grades of D+, D, D- and F from their first two terms at Union College may qualify for academic amnesty.

A student may request academic amnesty if:

- at least six regular terms have elapsed between their last enrollment in an institute of higher education and their most recent admission;
- the student has not earned a baccalaureate degree from any institution;
- the student has earned at least 24 credits during the current admission;
- their cumulative GPA for the current admission is at least 2.5; and
- the student has completed fewer than 4 terms during the current admission.

Classes covered by amnesty will still appear on the transcript, identified as "Approved for Academic Amnesty." These classes will not count toward graduation or elective credits, nor will they be included in the cumulative GPA at Union College. Once academic amnesty has been granted, it will not be rescinded. Other institutions are not required to recognize academic amnesty granted by Union College. Programs within Union College may consider all classes on the transcript in making acceptance decisions for their programs.

#### Dean's List

Students who complete a minimum of 12 hours during the semester are recognized for academic performance in these categories:

Recognition	GPA Range
Dean's Distinguished List	3.90 - 4.00
Dean's List	3.75 - 3.89

Students with designations or grades of I, NC, or below C- are not included.

#### **Academic Sanctions**

#### Academic Probation

Undergraduate students whose cumulative GPA falls below 2.00 are placed on academic probation and will remain on probation until the cumulative GPA again reaches 2.00. Academic probation is a serious matter, and students on probation will be suspended if a semester's grades fall below a GPA of 2.00.

To strengthen their scholastic performance, students on academic probation must work with a Life Coach in Student Success. This program assists students in creating a personalized contract that recognizes past failings and identifies resources for improving academic performance. Students on Academic Probation are required to:

- limit their class load to a maximum of 15 hours;
- renegotiate financial agreements in case of loss of financial aid;
- fulfill the personalized contract for improving academic performance; and
- meet with their assigned life coach twice a month.

A student whose cumulative GPA falls below 2.00 or who fails to successfully complete two-thirds of the attempted credits will lose eligibility for federal financial aid, as detailed in the Satisfactory Academic Progress paragraphs of the Financial Aid section.

#### Academic Suspension

A student on academic probation for consecutive semesters will be suspended from the college if the following semester GPA falls below 2.00. Any appeals should be directed to the Vice President for Academic Administration. A student may also be suspended after a single semester with a current GPA of less than 1.00, even when the cumulative GPA exceeds the 2.00 minimum for graduation.

Students who have been suspended for academic reasons may request readmittance to regular academic programs upon completion of a full academic load for a semester or quarter of college-level study with a B- (2.67) average or above taken at another regionally accredited institution.

#### Academic Alert

A student whose cumulative GPA remains at or above 2.00, but whose semester GPA falls below a C- level (1.67), is placed on Academic Alert. This involves limiting the subsequent semester to 15 hours and setting goals for improved performance with Student Success.

#### Academic Dismissal

A student readmitted to college after suspension who fails to maintain a satisfactory GPA is subject to dismissal, which is final.

#### **Course Cancellation**

While every attempt is made to provide classes as scheduled, the college reserves the right to cancel any course as it deems necessary. This may include courses with insufficient enrollment.

#### Attendance

The Union College faculty considers regular class attendance vital to learning, and students are expected to attend each class period. Each syllabus provides the policy for the course, which may include an automatic failing grade for absence (for whatever reason) from 20% of the regularly scheduled class periods. Individual instructors are responsible for determining the degree to which missed classroom activities and assignments can be made up.

#### Final Examination Schedule and Exceptions

The semester examination schedule found on the Union College website indicates the dates and times of final examinations. Requests for exceptions to the schedule must be made to the Vice President of Academic Administration by December 1 (fall semester) or April 15 (spring semester). A rescheduling fee is charged (see Financial Information section).

#### Prep Days for Finals

Designated "dead days" at the end of each semester provide an opportunity for students to review material and prepare for finals. Though new material may be presented during classes these days, no tests or major assignments are to be due without prior approval from Academic Administration.

#### Student Mission and Task Force Credits

Three semester hours of credit (UCSM 495 or UCTF 495) are granted for continuous service during the school year in the student mission or task force programs provided prior arrangements are made with Campus Ministries. Credit (with a grade designation of CR) is assigned on the basis of satisfactory service. No tuition is charged.

Student mission and task force workers are considered half-time students (see UCSM and UCTF in Course Descriptions section).

#### Veteran Education Benefits

Union College courses meet the standards of the Nebraska Department of Education State Approving Agency for benefits to veterans and other persons eligible under the various GI Bill® programs administered by the U.S. Department of Veterans Affairs (VA). A Certificate of Eligibility (COE) is required to certify students for veteran education benefits. For those who qualify, Yellow Ribbon benefits are available at Union College.

Enrollment in 12 or more credit hours is considered full-time training. It is the student's responsibility to report any changes in enrollment to the School Certifying Officer (SCO). The college is also required to promptly report any changes in enrollment data affecting payment by the VA, such as students who are placed on academic suspension.

For questions regarding veteran status and registration, please contact the Records office.

#### **Integrity of Scholarship**

Union College adheres to high academic and ethical standards. Inspired by the values of both the Christian and the scholar, its faculty, staff, and students commit to exhibit integrity and truth in all academic endeavors. Thus, scholarly endeavors carry the broad expectation that they have been accomplished with honesty, whether by professors in research and developing coursework or by students preparing assignments and taking examinations.

Among other examples, dishonest conduct by students includes cheating on examinations and the submission of assignments that violate expected standards of integrity. Unauthorized multiple submissions, excessive revision by someone else, unauthorized collaboration, forged signatures, plagiarism, misrepresented sources, misused copyrighted material, and the fabrication or unauthorized use of data all constitute violations of academic integrity. In addition to honesty in creating their own work, students should refrain from suspicious behavior themselves and deny others the opportunity to use their works in an unethical manner. Similarly, Union College expects professors to exhibit trustworthiness in their work, both in and out of the classroom, and to commit to working in redemptive ways with students regarding academic honesty.

Academic integrity violations range from incidental to significant to egregious. Descriptions of each level of violation, the processes and the corresponding consequences are explained in greater detail in the Academic Integrity Policy at <a href="https://www.ucollege.edu/consumer-information">www.ucollege.edu/consumer-information</a>.

The consequences of violating integrity can range from remediation to receipt of a failing grade for an assignment to dismissal from the course and even expulsion from the college.

A student who feels unjustly charged with misconduct after the appropriate process should appeal to the Vice President for Academic Administration, and if still not satisfied then to the president. Reports of academic integrity violations and their consequences are maintained by the office of Academic Administration, and serious violations may be noted in a student's permanent academic record as explained in the Academic Integrity Policy on the website.

#### Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974 provides for specific rights to students regarding the privacy of student educational records, including the right that records will only be shared with those employees who have a legitimate educational need.

The act explicitly permits colleges to disclose directory information without student consent. However, an individual student has the right to withhold disclosure of this information by notifying the Director of Records in writing.

Union College designates the following as directory information:

- name
- student ID
- home address
- hometown
- local address
- email address
- home telephone number
- local telephone number
- birthday (month and day)
- class level and major
- dates of attendance at Union College
- degrees and awards received at Union College
- academic recognition
- photograph
- institutions attended prior to admission to Union College
- participation in recognized activities and sports at Union College

Union College will not disclose the contents of students' educational records to other parties without student consent except under circumstances allowed by the Family Educational Rights and Privacy Act (FERPA). Educational records kept by any office of the college and directly related to a student are available for review by that student. A written request that identifies the record(s) a student wishes to inspect should be submitted to the director of Records or another appropriate official. Students have the right to seek amendment of his/her own education records that the student believes to be inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. Students have the right to file a complaint with the U.S. Department of Education.

#### Assessment

Student learning is the central academic focus of the Union College mission. Assessment of that learning is vital to strategic planning and to maintaining an environment where students achieve the goals of their disciplines and value lifelong learning.

The goal of the assessment program at Union College is to enhance the learning experience, to constantly improve the learning environment, and to ensure that resources for learning are adequate.

Assessment occurs in three areas:

- Course Assessment: Professors assess their courses based on established program goals and objectives formalized as student learning outcomes;
- **Program Assessment**: Each academic program conducts an annual review of program learning outcomes and their assessment. The review process assists each program in determining and implementing evidence-based changes; and

• **Program Review**: Each academic program is reviewed and compared with external programs to ensure relevancy and currency. Each program is reviewed once every ten years with a five-year mid-cycle review.

#### Student Right to Know Act Graduation Rate

In accordance with the Student Right to Know Act, Union College annually releases its graduation rate. For the 2014 Cohort, the four-year average student-right-to-know graduation rate was 37%.

#### **Transcripts**

Requests for transcripts must be made online through Parchment, <a href="www.ucollege.edu/records-office/transcript-request">www.ucollege.edu/records-office/transcript-request</a>. Transcripts are released only when the student's account has been paid in full. Transcripts may also be withheld if any payments on loans through the college are delinquent. The Financial Information section lists the current transcript fees to be paid at the time of the request.

#### **Changes to Current Bulletin**

Subject to advice by Faculty Senate, Academic Council may modify, delete or add to the current bulletin. Changes are effective prior to the publication of a new bulletin when officially announced. Both these changes and the bulletin itself are available on <a href="https://www.ucollege.edu/academics/academic-bulletin">www.ucollege.edu/academics/academic-bulletin</a>.

# Graduation Requirements for Bachelor's and Associate Degrees

#### **Contact Information**

Rachael Boyd, Registrar Dick Building, Room 507B 402.486.2529 records@ucollege.edu

The responsibility of meeting requirements for graduation rests primarily upon the student. Students should acquaint themselves with the various requirements in the bulletin and plan their college courses accordingly.

#### **Bulletin for Graduation**

Students maintaining continuous residence may meet the requirements in any bulletin published during that time of residence. Bulletin selection should be made with input from the student's advisor and approval from the Records Office. Students discontinuing residence longer than two consecutive semesters generally must meet the requirements in a bulletin valid after they return. Exceptions submitted as petitions may be granted by the registrar on a case-by-case basis weighing what is in the best interest of both the student and the institution.

#### **Bachelor's Degree Requirements**

For students graduating under this bulletin, bachelor's degrees are conferred upon students who have:

- successfully completed at least 124 semester hours, with at least 36 hours at the 300-level or above;
- fulfilled the specific requirements of a major, emphasis, and/or minor as described in this bulletin (General studies and personalized programs may present more individualized requirements);
- earned a minimum of C (2.00) for all courses specifically satisfying requirements for the major, minor, or emphasis;
- achieved a minimum cumulative grade point average of 2.00 or higher as required by the individual major;
- completed the general education program appropriate to the degree;
- met the residency requirements, including those for the major and any minors;
- participated in the assessment program as requested;
- applied for graduation three semesters before intended completion date; and
- provided all official transcripts and completed courses designated I or IP.

#### Associate Degree Requirements

For students graduating under this bulletin, associate degrees are conferred upon students who have:

- successfully completed at least 62 semester hours;
- fulfilled the specific requirements of a major and/or emphasis as described in this bulletin;
- earned a minimum of C (2.00) for all courses in the discipline of the degree forming part of the major;
- achieved a minimum cumulative grade point average of 2.00;
- completed the general education program appropriate to the degree;
- met the residency requirement;
- participated in the assessment program as requested;
- applied for graduation three semesters before the intended completion date; and
- provided all official transcripts and completed courses designated I or IP.

#### Commencement

Commencement exercises are held annually in May, although degrees are conferred in May, August and December. Prospective May and August graduates are encouraged to participate in the graduation exercises. Graduates from the previous December are invited to participate.

The deadline for undergraduates to apply to be included in the May Commencement Program is the last Friday in March. The Commencement Program is not an official document and is printed prior to spring final grades and other requirements being received. The Commencement Program lists actual December graduates and prospective May and August graduates.

#### Prospective August Graduates Participation

Students planning to complete requirements during the following summer may apply prior to the last Friday in March to participate in the May graduation ceremonies as prospective August graduates if the remaining requirements are limited to an internship, practicum or ten semester hours of coursework. Students must present documented evidence that they can complete the remaining requirements before the August graduation date. A deposit of \$200 will be charged to the student's account, and refunded or applied to any unpaid Union College charges if all graduation requirements are completed by the August graduation deadline. If the degree is not completed on time, the deposit will be forfeited.

#### Academic Recognition at Graduation

Students graduating from Union College are awarded bachelor's degrees with the following designations appropriate to the minimum cumulative grade point average earned for classes completed prior to the start of the final fall or spring semester. Rounding is not used when calculating graduation honors.

	<u>GPA</u>
Summa Cum Laude	3.90
Magna Cum Laude	3.75
Cum Laude	3.50

#### Residency Requirements<sup>4</sup>

For a baccalaureate degree, 30 of the final 36 hours, or at least 100 semester hours, must be taken in residence. A minimum of 12 upper division hours in the major must be taken in residence. For a minor, at least three semester hours of the required courses numbered at the 300-level or above must be taken in residence.

For an associate degree, 24 of the final 30 hours, or at least 50 semester hours, must be taken in residence.

#### **Second Degrees**

Graduates who have earned a bachelor's degree from a regionally accredited institution may earn baccalaureate degrees from Union College by fulfilling all requirements for the major, emphasis, and/or minor, including its specific general education requirements, and successfully completing a minimum of 30 hours in residence with a cumulative GPA of 2.00 (or higher if stipulated by the major). Students with an international bachelor's degree must meet the Union College general education requirements.

If the second-degree major requirements do not contain a religion course, students must take RELB 115, RELT 110 or RELT 141.

Students who graduate with an associate degree from a regionally accredited institution may earn an additional associate degree from Union College by fulfilling all requirements for the major and/or emphasis, including its specific general education requirements, and successfully completing a minimum of 24 hours in residence with a cumulative GPA of 2.00 (or higher if stipulated by the major). Students with an international associate degree must meet the Union College general education requirements. If the second-degree major requirements do not contain a religion course, students must take one religion course (Recommended: RELB 115, RELB 255, or RELT 110).

#### **Multiple Majors**

Students may complete multiple majors for a given degree. When different degrees are involved, both degrees will be awarded.

<sup>4</sup> Residency requirements for some degrees may be more prescriptive.

#### **Academic Minors**

Completion of an academic minor is required only if specified by a major or emphasis. Minors may be selected from the minors outlined in this bulletin. A minimum grade of C (2.00) is required for all minor courses, and at least three semester hours of the required courses numbered at the 300 level or above must be taken in residence.

Completion of a minor is not completion of a degree; therefore, a minor is not recognized separately from completion of a bachelor's degree. Academic minors are not listed on the diploma or in the commencement program.

## **General Education**

Like most American colleges and universities, Union College expects its general education and campus life programs to strengthen students' abilities to think, reason, and communicate effectively, to understand essential elements of the natural world and human society, and to engage the fine arts. These academic elements are reflected in the educational goals listed below.

Unlike most colleges and universities, Union possesses a strong commitment to ensuring that students develop values and skills essential for living, both in this world and as preparation for the life eternal promised by Scripture. Our students develop their knowledge, understanding, and abilities within a culture that exemplifies and communicates the great importance of integrity, participation in community, and the application of common sense in solving life's challenges. Our educational mission extends to assisting students to discern their individual callings, to live healthfully, to prepare for leadership, and to interact with others as thoughtful citizens.

With these objectives in mind, the general education program adopted in 2016 incorporates contemporary topics, thought-provoking courses that demonstrate the role of religion in addressing world problems, higher-level communication skills, and reduced total hours. It offers students greater choices and broader opportunities for learning.

#### **Union College Educational Goals**

- Spirituality: Union College inspires spiritually-engaged students who know and love God and, as a result, care for others as well as themselves.
- **Learning:** Union College provides students with the knowledge, experience, and wisdom to be learners now and for a lifetime.
- Service: Union College equips students to live life as Jesus did, a life of service for humanity.
- Leadership: Union College prepares students to lead as members of their families, churches, workplaces, and communities.
- Highly Sought Graduates: Union College cultivates students whose reputation for excellence attracts the attention of employers.

Union College students develop their knowledge, understanding, and abilities within a community whose culture exemplifies and communicates the great importance it places on integrity, participation in community, and the application of common sense in solving life's challenges.

#### **General Education Outcomes**

- Students will demonstrate critical thinking through examination of ideas and evidence before formulating an
  opinion or conclusion.
- Students will be encouraged to experience practices which promote physiological, psychological, and social
  well-being.
- Students will demonstrate an understanding and appreciation of cultures, faiths, and values different from their own.
- Students will demonstrate the ability to reason and develop evidence-based decisions using numerical information.
- Students will apply ethical principles to completing academic work.
- Students will communicate effectively orally and in writing to various audiences.
- Students will be encouraged to experience Biblical principles within daily life through a personal relationship with Jesus Christ.

#### General Education Requirements (4-Year)

Union College students seeking Baccalaureate degrees complete the following general education requirements to meet the total 124 credit hours (36 upper division credits). Major or minor courses may also be used as general education requirements. It is recommended that general education courses consist of a minimum of 41 credits (of the 124 total credits). Transfer courses may be accepted for each general education category in consultation with faculty and at the discretion of the registrar. Students transferring the majority or all of their general education classes should note the

residency policies, including 100 total credits at Union (or 30 out of the last 36) and at least 56 credits taken at a 4-yr college.

The general education requirements are distributed as follows:

1. Following Christ	
A. RELB 115 Encountering Jesus as Savior (3)	1 course
or RELT 110 Introduction to Christian Faith and Adventism (3)	
or RELT 141 Christian Beliefs (3)	
B. RELB (Biblical Studies) Other than category A	1 course
C. REL (Religion elective) Other than category A	1 course

#### 2. Thinking Deeply as a Christian

A. Any RELG
or PLSC/RELG 345 Global Environment and International Policy (3)
or RELH 310 History of the Seventh-day Adventist Church (3) (Education majors only)
or RELH 410 History of the Christian Church (4)
or any 300-400 level RELB or RELT course (3)

Students transferring from institutions other than Seventh-day Adventist colleges as

- Sophomores take 1 course from category 1A, 1 course from category 1B, and 1 course from either category 1C or category 2.
- Juniors take 1 course from category 1A and 1 course from either category 1B or RELT 305, RELT 306, or RELT 347.
- **Seniors** take 1 course from category 1A.

#### 3. Thinking Analytically

A. A college-level science course (e.g. BIOL, CHEM, PHYS) with a lab or BIOL 104 Insects and You (3) or BIOL 106 Human Biology (3) or SCNC 377 Origins (3)

B. MATH 111 College Algebra (3) or above (not including MATH 117 College Algebra Concise) or CPTR 226 Introduction to Programming (4)

1 course

1 course

# 4. Communicating Effectively A. COMM 105 Public Speaking (2) or COMM 205 Introduction to Interpersonal Communication (2) B. ENGL 110 Writing for General Audiences (3) C. ENGL 212 Writing for Scholarly Audiences (3) 1 course

# 5. Engaging Globally A. ANTH, ECON, GEOG, HIST, LEAD, PLSC, PSYC, or SOCI B. An additional course chosen from category 5A (must be from a different discipline) or HMNT 376 Film and Culture (3) or INRR/SOCI 300 Social Dimensions of Disaster (3) or NURS 474 Population Health (3.5) (Nursing majors only)

A. LITR (not including children's or young adult literature) or PHIL (3)	1 course
B. ART, HMNT 305, MUHL, MUTH, or PHOT (1 course)	1-4
or MUPF (ensembles) (2 courses)	courses
or MUPF 101-130 (lessons) (4 courses)	
C. HHPA 155 Concepts of Wellness (2)	1 course
or NURS 305 Health Assessment (3) (Nursing majors only)	
or INRR 321 Global Health (3) (IRR majors only)	
D. HHPA (physical activity elective) (1)	1 course
or INRR 110, 112, 114, and 116 (IRR majors only)	
7. College Success	
A. CORE 100 College Success (1)	1 course
(Required only for freshmen and transfer students with less than 24 hours)	
8. Foreign Language (Required for BA degree only)	
A. Beginning foreign language in a year-long sequence (101,102)	2 courses

#### Transfer of Courses for General Education

CLEP credit accepted with a minimum score of 50.

Transfer students who meet all the general education requirements at a regionally accredited Seventh-day Adventist college thus satisfy Union College requirements.

Union College participates in the Nebraska Transfer Initiative. Students transferring from a participating institution should contact the Records office for more information on how their credits meet general education requirements at Union.

#### General Education Requirements (2-Year)

It is recommended that general education courses consist of a minimum of 22 credits (of the 62 total credits) required for an Associate degree.

# A. RELB 115 Encountering Jesus as Savior (3) or RELT 110 Introduction to Christian Faith and Adventism (3) or RELT 141 Christian Beliefs (3) B. RELB (Biblical Studies) other than category A or RELT 305 Christian Ethics (3) or RELT 306 Biomedical Ethics (3)

Students transferring from institutions other than Seventh-day Adventist Colleges with twelve or more credits take one religion course (Recommended: RELB 115, RELB 255, or RELT 110).

#### 2. Thinking Analytically

MATH 111 College Algebra (3) or above (not including MATH 117 College Algebra Concise)

1 course

#### 3. Communicating Effectively

A. ENGL 110 Writing for General Audiences (3)

1 course

B. ENGL 212 Writing for Scholarly Audiences (3)

1 course

or COMM 105 Public Speaking (2)

or COMM 205 Introduction to Interpersonal Communication (2)

#### 4. Engaging Globally

A. ANTH, ECON, GEOG, HIST, LEAD, PLSC, PSYC, or SOCI

1 course

#### 5. Living with Purpose and Wonder

Choose from at least two categories below:

A. LITR (not including children's or young adult literature) or PHIL

B. ART, HMNT 305, MUHL, MUTH, or PHOT (1 course)
or MUPF (not including lessons) (2 courses)

C. HHPA

or OTAC 225 The OT Process for Community-Based Practice (OTA majors only)

#### 6. College Success

A. CORE 100 College Success (1)

1 course

1 course

(Required only for freshmen and transfer students with less than 24 hours)

# Professional Excellence Program

#### Mission

The Professional Excellence program seeks to provide the highest level of preparation for a career that is possible at Union College. The program takes the categories of the General Education requirements and expects students in the program to complete courses that will uniquely prepare them for professional excellence.

#### **Outcomes**

- Students will be involved in exploring excellence in being a follower of Jesus and integrating His calling in their lives (Spirituality).
- Students will be provided with the highest possible levels of knowledge, experience, and wisdom to be learners now and for a lifetime (Learning).
- Students will be equipped with a high level of skill in service to humanity (Service).
- Students will be provided with the best knowledge and skills in leadership to prepare them to lead in their families, churches, workplaces, and communities (Leadership).
- Altogether, this knowledge and these skills will gain a reputation for excellence for students and attract the attention of employers (Highly Sought Graduates).

#### **Contact Information**

Edward Allen, Program Director of Professional Excellence Dick Building, Room 412 402.486.2600 ext. 2375 ed.allen@ucollege.edu

#### Requirements

The program requires students entering and graduating from the program to have a GPA of 3.5 or above. The program does not require a study tour, but provides a scholarship toward a study tour during the student's junior or senior years. The scholarship is available for students who choose official Union College-sponsored study trips abroad including courses offered by Adventist Colleges Abroad and Student Mission experiences.

Second-semester freshman students in the program will be allowed to take 300 level courses and sophomore students will be allowed to take 400 level courses.

#### \*Examples of Study Tours that meet the below General Education requirements

HIST 325 Tolkien, Fantasy and the Middle Ages meets requirement 6B

INRR 321 Global Health meets requirement 6C

LEAD 425 Experiences in Leadership meets requirement 5A

LITR 240 or LITR 440 Travel Literature meets requirement 6A

NURS 391 Global Health Nursing meets requirement 5B

PHOT 250 or PHOT 450 Travel Photography meets requirement 6B

RELT 355 Imagination, Theology, and History meets requirement 2

# 1. Following Christ A. RELB 115 Encountering Jesus as Savior (3) 1 course or RELT 110 Introduction to Christian Faith and Adventism (3) or RELT 141 Christian Beliefs (3) B. Any 200 or 300 level RELB course (RELB 260 Interpretation of Romans recommended) 1 course C. RELT 305 Christian Ethics (3) 1 course

or RELT 306 Biomedical Ethics (3)

#### 2. Thinking Deeply as a Christian

A. RELG/PLSC 345 Global Environment and International Policy (3)

or RELH 310 History of the Seventh-day Adventist Church (3)

or RELT 347 World Religions (3)

or RELT 355 Imagination, Theology, and History\* (3)

or any 400 level REL course

Students transferring from institutions other than Seventh-day Adventist colleges as

- Sophomores take 1 course from category 1A, 1 course from category 1B, and 1 course from either category 1C or category 2.
- Juniors take 1 course from category 1A and 1 course from either category 1B or RELT 305, RELT 306, or RELT 347.
- Seniors take 1 course from category 1A.

#### 3. Thinking Analytically

A. A college-level science course (e.g. BIOL, CHEM, PHYS) with a lab 1 course 1 course

B. MATH 221 Elementary Statistics and Probability

#### 4. Communicating Effectively

A. COMM 105 Public Speaking (2) 1 course or COMM 205 Introduction to Interpersonal Communication (2)

B. ENGL 110 Writing for General Audiences (3) C. ENGL 212 Writing for Scholarly Audiences (3)

1 course

1 course

1 course

#### 5. Engaging Globally

A. ECON 235 Macroeconomics (3)

1 course

- or ECON 236 Microeconomics (3)
- or LEAD 425 Experiences in Leadership\* (3)
- or FNCE 215 Personal Finance (3)
- or FNCE 325 Business Finance (3)
- or INRR 430 Expeditionary Leadership (3)
- or NURS 433 Disaster Nursing (2) (Nursing majors only)

B. COMM 355 Advanced Speech and Oral Interpretation (3)

1 course

- or COMM 425 Intercultural Communication (3)
- or COMM 465 Interpersonal Communication (3)
- or INRR/SOCI 300 Social Dimensions of Disaster (3)
- or NURS 391 Global Health Nursing\* (2) (Nursing majors only)
- or NURS 474 Population Health (3.5) (Nursing majors only)

#### 6. Living with Purpose and Wonder

o. Diving with 1 alpose and worker	
A. LITR* (not including children's or young adult literature) or PHIL (3)	1 course
B. ART, HIST*, HMNT, MUHL, or MUTH (1 course)	1 course
or PHOT 250* or 450* (3)	
C. HHPA 155 Concepts of Wellness (2)	1 course
or NURS 305 Health Assessment (3) (Nursing majors only)	
or INRR 321 Global Health (3) (IRR majors only)	
D. HHPA (physical activity elective) (1)	1 course
or INRR 110, 112, 114, and 116 (IRR majors only)	

7. College Success	
CORE 100 College Success (1) (Required only for freshmen and transfer students with less than 24 hours)	1 course
8. Foreign Language (Required for BA degree only)	
Beginning foreign language in a year-long sequence (101,102)  CLEP credit accepted with a minimum score of 50.	2 courses

# Master of Physician Assistant Studies

#### Vision:

Prepare excellent PAs who transform lives through quality healthcare and Christian service.

#### Mission:

Matriculate high quality students from diverse backgrounds to become successful PAs by equipping them with the competency to provide excellent patient care through application of teamwork, demonstration of academic excellence, practice of clinical acumen, display of professionalism and evidence of servanthood within a Christian program.

#### Goals:

- 1. Teamwork: Graduates will proficiently perform medical care as part of an interdisciplinary team.
- Academic Excellence: Graduates will demonstrate a broad knowledge base for successful delivery of primary care medicine.
- 3. Clinical Acumen: Graduates will apply an investigatory and analytical thinking approach to clinical situations.
- Professionalism: Graduates will demonstrate an attitude of professionalism and positive values.
- 5. Servanthood: Graduates will render medical care and service with compassion.
- 6. Quality: To provide a quality educational program.
- 7. Diversity: Our admissions strategy seeks to select qualified candidates from a diverse applicant pool.

#### **Learning Outcomes:**

- 1. Demonstrate interpersonal communication skills that result in effective information exchange with patients, physicians, professional associates, and other individuals within the healthcare system to promote optimal patient-centered care.
- Utilize information technology to critically analyze medical literature to make evidence-based medical decisions that maximize diagnostic and therapeutic effectiveness.
- Apply medical knowledge to evaluate and treat patients across the lifespan by obtaining a history and
  performing a physical examination, selecting and interpreting diagnostic studies, formulating a differential and
  final diagnosis, and developing a treatment and management plan for primary care conditions.
- 4. Perform common clinical skills and procedures seen in a primary care setting.
- 5. Provide counseling, patient and family education, interventions, and appropriate referral for promotion, restoration, and maintenance of optimal levels of health for patients.
- 6. Exhibit ethical behavior and professional conduct expected of the PA in a medical practice setting while acknowledging professional and personal limitations.
- 7. Demonstrate the delivery of healthcare to disadvantaged and underserved populations.
- 8. Commit to professional and public service by carrying out compassionate and wholistic medical practice in light of a Christian faith and biblical perspective.
- Demonstrate proficient clinical-reasoning and problem-solving abilities to form an accurate diagnosis and appropriate patient management.
- 10. Integrate essential aspects of value-based health care and apply this understanding to the delivery of safe and quality patient care.

#### **Contact Information**

Megan Heidtbrink, Program Director Harris Center, Room 209 402.486.2527 main office megan.heidtbrink@ucollege.edu

Jan Lemon, Admissions Coordinator Harris Center, Room 201-A 402.486.2648 jan.lemon@ucollege.edu

#### **Faculty**

Jaycob Edwards, Megan Heidtbrink, Tim Kuntz, Dwain Leonhardt, Michelle Petersen, Doug Phelps, Austin Young

#### Adjunct Faculty

Larry Crouch, Ben Holdsworth, Katie Packard, Bronson Riley, Kristin Runge, David Shaw, or as contracted

#### Description

The 33-month curriculum leads to the Master of Physician Assistant Studies (MPAS) professional graduate degree. The program is nationally accredited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. Graduates sit for the Physician Assistant National Certifying Examination.

The program builds on an extensive base of biological, chemical, behavioral and medical science courses for the first two years. Supervised clinical practice experiences ("rotations") throughout the final year provide students with diverse and intensive patient care experience. The quality of the theoretical and clinical experiences prepares students to become proficient and competent health care providers.

#### Student Life Philosophy and Services

Based on its biblical faith and traditions of health and lifestyle, Union College is deeply committed to belief in living a life informed by Scripture and inspired by Jesus Christ. These perspectives are central to the college's philosophy of graduate student life. The college seeks to provide an environment that is not only Christ-centered, but that encourages self-discovery and development in community with other learners. Graduate students at Union College are expected to display greater maturity and focus than traditional undergraduates, and therefore be more self-directed as they prepare for professional careers. While graduate student life policies are designed to address the needs and circumstances of the graduate community, all students are expected to respect the values of Union's Seventh-day Adventist heritage.

#### **Application and Admission**

The MPAS Program invites applications for admission from individuals who have completed a baccalaureate degree from a regionally accredited college or university or who expect to do so within the next year.

Admission into the graduate curriculum of the PA Program is limited and competitive. A minimum grade point average of 3.00 or higher (on a 4.00 scale) is required for all undergraduate and graduate courses in both the cumulative and science GPAs.

#### **Application Procedure**

Application to the PA Program should be made through the Central Application Service for Physician Assistants (CASPA) at <a href="www.caspaonline.org">www.caspaonline.org</a>. All applications are reviewed without regard to age, sex, race, color, ethnicity, creed or national origin. Admission preference is given to Union College students or graduates and to graduates of other accredited North American Division Seventh-day Adventist colleges and universities. The program also gives a preference for those applicants with medium or high classification of patient care experience. The PA Program Admissions Committee admits applicants from other colleges and universities who have demonstrated a commitment to Christian principles and are best suited to meet the educational goals of the Union College PA Program.

#### **Admission Requirements**

While undergraduate academic performance is important, the PA Program seeks students who have wide potential for achievement both in and outside of the classroom. Each applicant will be evaluated on the following criteria:

- Successful completion of the prerequisite coursework listed under Required Prerequisites;
- Bachelor's Degree (with the exception of Biomedical Science Advanced Pre-PA degree) \*
- Cumulative GPA and science GPA (biology, chemistry and physics courses) of 3.00 or higher (on a 4.00 scale) for all post-secondary coursework;
- Meeting educational standards of the United States Department of Education for foreign courses;
- Demonstrated proficiency in the area described in the PA Program's Technical Standards available at www.ucollege.edu/pa;
- Three letters of recommendation;

- At least 480 hours (approximately three months) of work experience related to direct patient care;<sup>5</sup>
- PA Shadowing;
- Submission of complete application materials;
- A personal interview with PA Program admissions team;
- Completion of a required physical exam upon acceptance into the program; and
- Criminal background check clearance upon acceptance into the program.

\*Possession of a baccalaureate degree prior to entering the MPAS program is required for all applicants to the PA Program, with the exception of Union College students who are applying through the Advanced Pre-Physician Assistant emphasis of the Biomedical Sciences major. The focus of the degree may vary, but studies must include the prerequisite courses of the PA Program.

Qualified Union College students may apply for admission to the PA Program through the BS in Biomedical Science, Advanced Pre-Physician Assistant Emphasis. This allows selected students who fulfill all general education requirements of Union College, as well as the MPAS prerequisites, to obtain a Bachelor of Science degree in Biomedical Science while completing the graduate PA curriculum.

Criminal background checks are performed after the applicant is conditionally admitted and has paid the required deposit. Felony convictions or multiple misdemeanor convictions may result in denial of acceptance to the program and/or eligibility of licensure. Drug screening checks will also be required for clinical rotation placement and/or licensure.

All PA students enrolled at Union College must possess personal health insurance. Personal liability insurance is also encouraged. (See Student Life and Services, "Health Insurance.")

#### **Application Deadlines**

Completed application forms must be designated as "completed" by CASPA6 by September 1 of the year prior to the desired enrollment. Applicants who are accepted to the program will receive formal notification approximately three weeks after all candidates have been interviewed. Applicants designated as alternates or who are not accepted also receive notification by this time.

#### **International Students**

International students must complete at least three upper division science courses from a four-year college or university (rather than a community college) in the United States, achieving a letter grade of "A" in each course. Examples of these courses are Advanced Human Anatomy, Advanced Human Physiology, Endocrinology, Immunology, Cell Biology, Developmental Biology, Genetics, Molecular Biology, and Advanced Biochemistry. (These courses are traditionally numbered in the 300s or 400s.) Specific questions regarding appropriate courses should be addressed to the PA admissions coordinator.

The Union College PA Program requires 480 hours of direct patient care experience, obtained through work or volunteering, rather than as a student-in-training. International applicants must have earned these hours performing direct patient care in a medical system in the U.S. Additionally, applicants are required to shadow PAs in the U.S., preferably in several different specialties.

Students who hold undergraduate degrees from countries other than the United States must present proof of equivalency from a reputable translation company such as WES. Once a student has been academically accepted into the PA Program, all immigration procedures must be handled through the Union College admissions office. An applicant whose native language is not English and who does not present a degree from an accredited college or university in the United States that includes a full year of composition or the equivalent in English studies must demonstrate satisfactory skills in English understanding and use. Recent scores on the Test of English as a Foreign Language (TOEFL) normally suffice. Satisfactory scores are as follows:

<sup>5</sup> Hours earned as a student-in-training or in roles without direct patient care (e.g., records management, cleaning, cooking, transportation, or clerical duties) will not be accepted. 6 Applicants should allow at least six weeks for CASPA to verify a successfully submitted application.

- Internet-based TOEFL (IBT): Score of 100 with a minimum score of 20 on each section;
- A total score of 250 on the computer-based TOEFL; or
- A level 112 from the ELS Language Centers or other recognized evidence will also be considered.

Information about the TOEFL, including test dates and locations in international countries, can be obtained from Educational Testing Service (ETS) at <a href="www.ets.org">www.ets.org</a>. Photocopies of TOEFL scores are not accepted.

International applicants who have questions or would like additional information should visit <a href="https://www.ucollege.edu/pa/apply">www.ucollege.edu/pa/apply</a>. For specific questions about the admission of international students, contact the Union College admissions office at (402) 486-2504.

#### **Academic Information**

Only courses numbered 500 and above carry graduate credit toward the MPAS degree. Courses numbered under 500 signify undergraduate credit; while they may be taken as supporting or prerequisite courses, they do not count toward a graduate degree and are not computed in a graduate student's grade point average. The same grade definitions used for undergraduate courses apply to the graduate courses.

#### **Transfer of Courses**

Most students enrolled in professional graduate programs will complete all coursework for the degree at the same institution. Only courses specifically approved by the PA Program may be transferred to Union College. If transfer credits are approved, official transcripts must be received before application for a degree will be approved.

#### Suspension and Dismissal Policy

A cumulative GPA of 3.00 (on a 4.00 scale) is required for MPAS courses. Students receiving a "C-" or below on any single examination or preceptor evaluation may receive an academic warning. Students who either earn a cumulative GPA of less than 3.00 or demonstrate poor clinical performance will be placed on academic probation. Non-academic and academic sanctions are at the discretion of the Academic Affairs and Progress Committee. The complete policy can be found in the PA Student Handbook.

A student may be dismissed from the MPAS Program in any of the following circumstances (See the PA Student Handbook for the complete policy):

- Academic or non-academic probation for a maximum of two (2) school semesters without progress toward resolution of the problem/deficiency;
- Exhibition of behavior unchanged by remedial activities;
- Failure to follow or successfully complete remedial plan;
- Violation of college policies;
- Inability to pass the summative evaluation;
- Failure to complete the program within forty-eight (48) months.

In all cases the student will be notified of the dismissal in writing and will be informed of the right of appeal according to the Union College PA Student Handbook. Students receiving letters of dismissal will automatically be dropped from the program, regardless of whether they choose to appeal; fees will be refunded in accordance with college policy. A withdrawal grade will then be entered on the transcript for all graduate courses not completed in that term.

Academic dishonesty includes, but is not limited to, cheating and plagiarism. Academic dishonesty at the graduate level is considered a serious offense and may result in dismissal from the college. The PA Student Handbook outlines the procedure for actions resulting from academic dishonesty.

#### **Progression and Graduation Requirements**

Guidelines for progression and graduation include the following:

- Individual course grades must be "C" or higher;
- Overall GPA for all PHAS courses must be maintained at or above 3.00 (on a 4.00 scale);
- Students must comply with all college policies and must complete all assigned coursework and clinical rotations;
- Summative evaluation must be successfully completed;
- All program requirements must be met within 48 months of matriculation;
- Assessment activities approved by the program must be successfully completed; and
- An application for a graduate degree must be filed with the Records office by January 1 of the year preceding the anticipated graduation (i.e., three semesters before graduation).

#### Delayed Graduation

Students who need to complete program requirements during the summer following the anticipated May graduation may apply to participate in the May graduation ceremonies as a prospective summer graduate if the remaining requirements are limited to 8 credit hours. Students must present evidence that the remaining requirements can reasonably be completed prior to the August graduation date. A deposit of \$200 will be charged to the student's account, and can be refunded or applied to any unpaid Union College charges if all graduation requirements are completed by the August graduation date. If the degree is not completed on time, the deposit will be forfeited.

#### Academic Recognition at Graduation

	<u>GPA</u>
High Distinction	3.90
Distinction	3.75

#### **Academic Resources**

The following services are available to graduate students who experience academic, psychological or other difficulties:

#### Student Success

Student Success offers academic coaching, peer tutoring, supplemental instruction, and resources for disabilities. Assistance is available to all students seeking resources for academic support. The Student Success Center is located inside the library.

#### Disability Information

Union College honors section 504 of the Rehabilitation Act of 1973, 29, USC.706, which forbids discrimination against individuals with disabilities. Students seeking information and resources for disabilities may contact the director of Disability Information.

#### Academic Advising

The PA Program participates in academic advising conducted by the PA Program faculty and coordinated through the office of Academic Administration.

#### Individual Counseling

If specialized advice is required beyond that which the PA Program team can provide, counseling services are provided by the offices of Academic Administration and Student Services; the Student Success Center; the Campus Ministries office; and residence hall deans. In addition, the services of a licensed, professional counselor are available through Campus Health.

#### Program-specific Fee

For the most recent information regarding fees and financial assistance, applicants should contact Union College Student Financial Services. In addition to regular college fees, a special fee is assessed each term for all students admitted to the graduate curriculum of the PA Program. These fees are published annually on the college's website: <a href="https://www.ucollege.edu/pa">www.ucollege.edu/pa</a>.

#### PHYSICIAN ASSISTANT STUDIES, MPAS

Required courses (118 hours)

PHAS 506	Evidence-Based Literature Review & Application	3
PHAS 510	Clinical Nutrition	2
PHAS 511	Human Anatomy	5
PHAS 514	Medical History and Physical Examination Skills	4
PHAS 515	Clinical Diagnostic Procedures	3
PHAS 518	Psychiatry and Behavioral Medicine	3
PHAS 519	Differential Diagnosis and Case Development	2
PHAS 525	PA Professional Issues	2
	Clinical Medicine I	
PHAS 531		6
PHAS 532	Clinical Medicine II	6
PHAS 533	Preventive Health	1
PHAS 534	Clinical Medicine III	3
PHAS 539	Christian Health Care and Bioethics	3
PHAS 546	Clinical Skills I	4
PHAS 547	Clinical Skills II	2
PHAS 553	Diversity in Medicine	1
PHAS 557	Electrocardiography	1
PHAS 558	Medical Physiology	5
PHAS 559	Clinical Pathophysiology	4
PHAS 562	Medical Genetics	1
PHAS 564	Clinical Therapeutics	4
PHAS 584	Pharmacology	5
PHAS 594	Master's Capstone Project I	3
PHAS 595	Master's Capstone Project II	1
PHAS 619	Family Practice Rotation	8
PHAS 622	Internal Medicine Rotation	4
		4
PHAS 623	Surgery Rotation	
PHAS 624	Obstetrics and Gynecology Rotation	4
PHAS 625	Pediatrics Rotation	4
PHAS 626	Cardiology Rotation	4
PHAS 627	Emergency Medicine Rotation	4
PHAS 628	Orthopedics Rotation	4
PHAS 629	Psychiatry Rotation	4
PHAS 630	Elective Rotation	4
Paradina I Proposition (47.1 a		
Required Prerequisites (47 hou		4 4
BIOL 200, 202	General Biology I and II	4, 4
BIOL 205	Microbiology	4
BIOL 411	Advanced Human Anatomy	4
BIOL 416	Advanced Human Physiology	4
BIOL/CHEM 445	Biochemistry I	4
or BIOL/CHEM 440	Biochemistry (4)	
CHEM 151, 152	General Chemistry I and II <sup>7</sup>	4, 4
CHEM 211, 212	Organic Chemistry I and II <sup>7</sup>	4, 4
HHPT 256	Medical Terminology	1
MATH 221	Elementary Statistics and Probability	3
PSYC 215	Developmental Psychology	3
		3

<sup>7</sup> Individual colleges will determine their own chemistry sequences of preparation for Biochemistry.

#### **Additional Requirements**

- American Heart Association HeartCode BLS CPR certification<sup>8</sup>.
- Summative Completion form signed by advisor at the end of the program.
- All science classes and required labs must be taken in person, rather than online.
- Due to the rigorous nature of the graduate program, Union College prefers courses from a four-year college or university. We recommend that you take some upper division biology and chemistry courses for better preparation and to show your academic strength. Union College PA Program does not accept courses with grades less than "C".
- Even if you retake courses to get better grades, all courses are averaged when applying to the PA Program.

<sup>8</sup> CPR certification must be obtained by June 1 of the same calendar year the student begins the PA Program and must be kept current while a PA student.

9-10

### Art

#### Mission

The mission of the art program is to prepare students to appreciate, produce, and share artwork within a Christian framework.

#### Outcomes

Students graduating from the art program will be prepared to

- Demonstrate proficiency in aesthetic literacy;
- perceive formal relationships in works of art, interpret meanings, read symbols, and judge significance;
- develop observational and perceptual skill, build creative thinking practices, and solve problems;
- value the role of the arts in society; and
- recognize the impact of the arts on themselves and others.

#### **Contact Information**

Bruce Forbes, Program Director of Art and Design Engel Hall, Room 104 402.486.2600 ext. 2329 bruce.forbes@ucollege.edu

#### **Faculty**

Bruce Forbes, Alan Orrison,

#### **Adjunct Faculty**

Don Farrall, Hailey Krueger, Julia Noyes, Amy Smith, or as contracted

#### **Academic Programs**

Art, AS

Photo and Video Imaging, AS

Art Minor

Photo and Video Imaging Minor

#### ART, AS

#### Required courses (25-26 hours)

Major Core		
ART 105	Drawing I	2
ART 125	Oil Painting	2
ART 135	Pottery	2
ART 145	Watercolor	2
ART 220	Elements and Principles of Design	3
ART 235	Drawing II	2
GRPH 150	Introduction to Graphic Arts	3
	•	

Select 9-10 hours of ART, GRPH, or PHOT electives

# PHOTO AND VIDEO IMAGING, AS Required courses (30 hours)

Major Core GRPH 150 GRPH 250 GRPH 320 PHOT 151 PHOT 225 PHOT 285 PHOT 325	Introduction to Graphic Arts Digital Imaging Motion Graphics Introduction to Photography Intermediate Photography Advanced Photography Commercial Photography	3 3 3 3 3 3 3	
Major Cognates COMM 209	Digital Storytelling I	3	
COMM 211	Digital Storytelling II	3	
Select 3 hours from the following co BUAD 219 MRKT 327	Small Business Management (3) Marketing (3)	3	
ART Minor Required courses (21-22 hours)			
ART 105 ART 125 ART 135 ART 220 GRPH 150	Drawing I Oil Painting Pottery Elements and Principles of Design Introduction to Graphic Arts	2 2 2 3 3	
Select 9-10 hours of ART, GRPH, or PHOT electives (3 hours must be 300 or 400 level)		9-10	
PHOTO AND VIDEO IMAGING Minor Required courses (18 hours)			
COMM 209	Digital Storytelling I	3	
GRPH 150	Introduction to Graphic Arts	3	
GRPH 250	Digital Imaging	3 3	
PHOT 151 PHOT 225	Introduction to Photography Intermediate Photography	3	
Select 3 hours from the following co COMM 211 GRPH 320 PHOT 325	J ,	3	

## **Biomedical Science**

#### Mission

Founded upon a firm belief in the Creator and guided by a Christian worldview, the Biomedical Science program prepares students for learning, service and leadership in health-related graduate and professional programs, scientific research, and the biomedical and biotech industry.

#### **Outcomes**

Students graduating with a bachelor's degree in Biomedical Science will be prepared to

- pursue professional or graduate studies;
- demonstrate knowledge of past contributions and awareness of current progress in the biomedical sciences;
- apply knowledge acquired from varied aspects of biomedical sciences to critical thinking in research and everyday life;
- independently synthesize and communicate relevant data in the biomedical sciences;
- demonstrate familiarity with basic techniques of investigation in varied fields of biomedical research; and
- apply knowledge acquired from varied aspects of biomedical sciences to ethical decision making in stewardship and everyday life.

#### **Contact Information**

Corraine A. McNeill, Program Director of Biomedical Science Krueger Center, Room 138 402.486.2600 ext. 2368 corraine.mcneill@ucollege.edu

#### **Faculty**

Christina Burden-Page, Richard Clark, Corraine A. McNeill, Salvador Moguel, Kenneth Osborn, Carrie Wolfe

#### **Adjuncts**

As contracted

#### **Academic Programs**

Biomedical Science, BS

Biomedical Science, BS, with emphases in:

- Advanced Pre-Physician Assistant
- Biological Research
- Biotechnology
- Pre-Chiropractic Medicine
- Pre-Dentistry
- Pre-Genetic Counseling
- Pre-Medicine
- Pre-Pharmacy
- Pre-Physical Therapy
- Pre-Physician Assistant
- Pre-Public Health
- Pre-Veterinary Medicine

Biology Education, BS - Secondary Subject Endorsement

Biomedical Science, AS, with emphases in:

- Pre-Allied Health
- Pre-Cardiac Electrophysiology
- Pre-Communication Sciences & Disorders/Speech Language Pathology
- Pre-Cytotechnology

- Pre-Dental Hygiene
- Pre-Diagnostic Medical Sonography
- Pre-Medical Laboratory Sciences/Clinical Laboratory Sciences
- Pre-Nutrition and Dietetics
- Pre-Orthotics & Prosthetics
- Pre-Radiation Technology/Radiation Therapy/Radiation Sciences/Nuclear Medicine
- Pre-Respiratory Care

Biomedical Science Minor

#### Essential Qualities of a Pre-professional Student

In selecting students to clinical programs, admissions committees at other institutions look for evidence of intellectual vigor and aptitude in science as demonstrated by maintaining a high GPA and achieving high standardized test scores (MCAT, PCAT, DAT, GRE). The student will also demonstrate integrity, self-discipline, manual dexterity, and good health. A sensitive concern for the sick and a capacity for unusual devotion and personal effort are also essential.

Students interested in entering a professional school should acquaint themselves with the particular requirements of that school and should pattern their pre-professional courses to be taken at Union College in harmony with such requirements. Electives required under each emphasis should be selected with academic advisors to meet professional/graduate school pre-requisites. Advisors in the Biomedical Science program will help plan a program of study.

#### Supporting Area (18 hours)

In addition to the core and required courses for each emphasis, students should select a minor or an individualized set of coursework that either complements the professional program of choice or broadens the student's skill set in a meaningful way. A minimum of 18 hours is required. If a minor is used to fulfill this requirement, a maximum of 9 hours can overlap between the major requirements and the minor. Potential minor options include Business, Communication, International Rescue and Relief, Leadership, Music, and Psychology. The individualized sequence of courses must be approved by the student's faculty advisor and the program director. If an individualized sequence of courses is used to fulfill the supporting coursework, zero hours can overlap between the major requirements and the supporting area.

Note: All emphases except the Advanced Pre-Physician Assistant emphasis require 18-credit hour supporting coursework.

#### BIOMEDICAL SCIENCE, BS

This degree consists of a sequence of the most essential courses to prepare the student for health-related professional programs or graduate programs. Many of these courses are entrance requirements for professional programs. Recommended entrance requirements for this major: High School GPA 3.5, ACT 27 or SAT 1810 (old SAT 2400 scale) or SAT 1290 (new SAT 1600 scale). Students may not double major in biomedical science and chemistry with a biochemistry emphasis. Students can choose one of the following emphases as listed below.

#### **BIOMEDICAL SCIENCE CORE & COGNATES**

Required courses (30-31 hours)

Major Core		
BIOL 200, 202	General Biology I and II	4, 4
BIOL/CHEM 386	Research Methods: Scientific Inquiry	1
BIOL 416	Advanced Human Physiology	4
BIOM 201	Professional Shadowing and Development	2
BIOM 302	Biomedical Science Seminar	1
Major Cognates		
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 221	Elementary Statistics and Probability 3	
or MATH 331	Statistics and Probability (4)	
RELT 306	Biomedical Ethics	3

#### BIOMEDICAL SCIENCE, BS - Biomedical Science (No Emphasis)

Required courses (91-94 hours)

Major Core & Cognates		30-31
Emphasis Core		
BIOL 321	Genetics	4
or BIOL 404	Cell Biology (4)	
BIOL 357	Animal Biology for Biomedical and Veterinary Science	4
or BIOL 366	Plants and Human Health (3)	
Select 12 hours from 200-40	0 level BIOL, CHEM, or MATH electives or PHYS 152	12
Select 13 hours from 300-40	0 level BIOL electives.	13
		- <del>-</del>

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

Emphasis Cognates		
CHEM 211	Organic Chemistry I	4
MATH 119	Trigonometry 3	
or MATH 184	Calculus I (4)	
or ALEKS score of 76+9		
PHYS 151	General Physics I	4

Minor or individualized coursework<sup>10</sup>

18

#### BIOMEDICAL SCIENCE, BS - Advanced Pre-Physician Assistant Emphasis

The Advanced Pre-Physician Assistant emphasis is an accelerated emphasis for acceptance into the Union College Physician Assistant Program. This emphasis in the Biomedical Science major combines courses at the undergraduate and graduate levels to enable exceptional, qualified Union College students to enter the Master of Physician Assistant Studies (MPAS) Program after three years of undergraduate study. These students receive a Bachelor of Science in Biomedical Sciences after successfully completing the first year of the PA Program and a Master of Physician Assistant Studies upon successful completion of the full MPAS curriculum. This emphasis in the Biomedical Science degree does not require students to have an 18-credit hour supporting area.

#### **Outcomes**

Students will be able to:

- Pursue professional or graduate studies;
- Demonstrate knowledge of past contributions and awareness of current progress in the biomedical sciences;
- Apply knowledge acquired from varied aspects of biomedical sciences to critical thinking in research and everyday life;
- Independently synthesize and communicate relevant data in the biomedical sciences;
- Demonstrate familiarity with basic techniques of investigation in varied fields of biomedical research;
- Apply knowledge acquired from varied aspects of biomedical sciences to ethical decision making in stewardship and everyday life;
- Gain a solid foundation of the basic sciences in preparation for application to clinical practice;
- Demonstrate understanding of the PA Profession, including legal requirements and ethical issues pertaining to professional medical practice; and
- Demonstrate proficiency in obtaining a medical history and performing a physical examination.

<sup>9</sup> If a student places out of Trigonometry due to appropriate ALEKS, the 3 credit hours for Trigonometry are waived. 10 See Supporting Coursework under Biomedical Science, BS area

#### **Undergraduate Advisor Contact Information**

Dr. Corraine A. McNeill, Pre-PA advisor Krueger Center, Room 138 402.486.2600 ext. 2368 corraine.mcneill@ucollege.edu

#### **PA Program Contact Information**

Jan Lemon, Admissions Coordinator, PA Program Harris Center, Room 201-A 402.486.2648 jan.lemon@ucollege.edu

#### **Undergraduate Faculty**

Christina Burden-Page, Richard Clark, Corraine A. McNeill, Salvador Moguel, Kenneth Osborn, Carrie Wolfe

#### **Graduate Faculty**

Jaycob Edwards, Megan Heidtbrink, Tim Kuntz, Dwain Leonhardt, Michelle Petersen, Doug Phelps, Austin Young

#### Adjunct Faculty

Larry Crouch, Ben Holdsworth, Katie Packard, Bronson Riley, Kristin Runge, David Shaw, or as contracted

#### Admission, Progression, and Graduation Requirements

Undergraduate students may declare an Advanced Pre-Physician Assistant emphasis either as a traditional or as a transfer student. Undergraduate students will be advised by the undergraduate pre-PA advisor. During the first semester of their junior year, as long as requirements are met and maintained, students are eligible to apply to the Union College PA program. Upon admission to the PA program, accepted applicants will be assigned an academic advisor within the PA Program.

#### Progression in the Advanced Pre-Physician Assistant emphasis (Biomedical Science major):

Students must continually meet the following criteria to remain in the Advanced Pre-Physical Assistant emphasis. Students who do not meet and maintain the following criteria will be counseled to complete a four-year degree prior to applying to the PA Program:

- Maintain GPAs (cumulative and science) of 3.50 or above (on a 4.00 scale);
- Receive a "B" or higher in all science courses;
- Complete the following courses by the conclusion of the fall semester of junior year: General Chemistry I, General Chemistry II, Organic Chemistry I, General Biology I, General Biology II, and Advanced Human Physiology;
- Complete 101 semester hours before entering the graduate course sequence, including 30 of the last 36 semester hours in residence at Union College;
- Complete 240 hours of direct patient care by the time of application (with plans in place to complete an additional 240 hours before matriculation into the MPAS Program);
- Meet all admission requirements for the MPAS Program, including all general education, major, and
  prerequisite requirements—except completion of a college degree—before beginning the graduate curriculum;
- Be accepted into the MPAS Program (students who have been denied may reapply only after completion of a baccalaureate degree).

Once admitted to the PA Program, a student in the didactic portion of the curriculum will be placed on suspension if 1) any final PHAS course grade is a C- or below, or 2) up to two semesters of unresolved academic or non-academic probation exist, per PA Program policies.

If a student is suspended in the first semester of the PA Program and leaves the program, the student may be able to complete their 4-year degree in the biomedical science program provided that they finish any courses and requirements that are outstanding for that degree.

If a student is suspended in the second semester of the PA Program and leaves the program, that student may be eligible to receive a degree in the biomedical science major provided that all courses and requirements needed for the biomedical science degree are successfully petitioned by the day after midterm grads are posted.

Successful completion of the first year of the PA Program under the accelerated pre-physician assistant emphasis entitles the student to be awarded a Bachelor of Science in Biomedical Science degree with an Advanced Pre-Physician Assistant emphasis.

#### Required Courses (95-96 hours)

Major Core & Cognates		30-31
Emphasis Core		
BIOL 205	Microbiology	4
BIOL 411	Advanced Human Anatomy	4
Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
CHEM/BIOL 440	Biochemistry	4
or CHEM/BIOL 445	Biochemistry I (4)	
HHPT 256	Medical Terminology	1
PSYC 215	Developmental Psychology	3
Select 8 hours from 300-400 level	BIOL electives, BIOL/CHEM 446, or NURS 315	8
Graduate Level Core		
PHAS 511	Human Anatomy	5
PHAS 514	Medical History and Physical Examination Skills	4
PHAS 518	Psychiatry and Behavioral Medicine	3
PHAS 525	PA Professional Issues	2
PHAS 533	Preventive Health	1
PHAS 539	Christian Health Care and Bioethics <sup>11</sup>	3
PHAS 558	Medical Physiology	5
PHAS 559	Clinical Pathophysiology	4
PHAS 562	Medical Genetics	1
PHAS 584	Pharmacology	5
	C.,	

#### Additional Requirement

American Heart Association HeartCode BLS CPR certification<sup>12</sup>

#### BIOMEDICAL SCIENCE, BS - Biological Research Emphasis Required courses (92-94 hours)

Major Core & Cognates		30-31
Emphasis Core		
BIOL 205	Microbiology	4
BIOL 357	Animal Biology for Biomedical and Veterinary Sciences	4
BIOL 366	Plants and Human Health	3
BIOL/CHEM 396	Research Methods: Proposals and Protocols	1
BIOL/CHEM 496	Research Methods: Independent Research	1

<sup>11</sup> Meets undergraduate general education requirement for one religion elective

<sup>12</sup> CPR certification must be obtained by June 1 of the same calendar year the student begins the PA Program and must be kept current while a PA student.

Select 12 hours from 300-400 level BIOL electives

Strongly recommended: BIOL 321		12
$\omega$		tuono anisitas san los
	isor to select electives that meet graduate/professional school prerequisites; these	prerequisites can be
ouisiae of statea electives by petition	with approval of advisor and program director.	
Emphasia Cometas		
Emphasis Cognates	0 ' 0 ' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 4
CHEM 211, 212	Organic Chemistry I and II	4, 4
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	
or ALEKS score of 76+13	0 170 1 7 177	
PHYS 151, 152	General Physics I and II	4, 4
Minor or individualized supporti	ng coursework <sup>14</sup>	18
BIOMEDICAL SCIENCE Required courses (92-95 hours)	, BS - Biotechnology Emphasis	
Major Core & Cognates		30-31
Emphasia Com		
Emphasis Core	D	1
BIOL/CHEM 396	Research Methods: Proposals and Protocols	1
BIOL/CHEM 440	Biochemistry  District L(4)	4
or BIOL/CHEM 445	Biochemistry I (4)	4
BIOL/CHEM 496	Research Methods: Independent Research	1
Select 12 hours from 200-400 level	BIOL, CHEM, or MATH electives, or PHYS 152, or PHYS 252	12
Select 11 hours from 300-400 level		11
	isor to select electives that meet graduate/professional school prerequisites; these	prereauisites can be
	with approval of advisor and program director.	ercrequisites can oc
onistae of states electrics by petition	μιώ αρρισταί ο αποίου απά ριοξιαίν αποίου.	
Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	3
or ALEKS score of 76+13	Calculus I (4)	
PHYS 151	General Physics I	4
		4
or PHYS 251	College Physics I (5)	
S		
Supporting Coursework		4.0
BIOT	Biotechnology courses transferred from	18
	Southeast Community College	
Required courses (95-101 hours)	, BS - Pre-Chiropractic Medicine Emphasis	
Major Core & Cognates		30-31
Emphasis Core	11 177	
BIOL 411	Advanced Human Anatomy	4
or BIOL 111 and BIOL 112	Anatomy and Physiology I and II (8)	
C1 + O1	NOI CHEM MATH 1 d'	0
Select 9 hours from 200-400 level B		9
Select 6 hours from 300-400 level B		6
	isor to select electives that meet graduate/professional school prerequisites; these p with approval of advisor and program director.	prerequisites can be

12

<sup>13</sup> If a student places out of Trigonometry due to appropriate ALEKS, the 3 credit hours for Trigonometry are waived. 14 See Supporting Coursework under Biomedical Science, BS area

be

Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
HHPT 215	Emergency Health Care	2
HHPT 256	Medical Terminology	1
HHPT 370	Personal Training	3
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	
or ALEKS score of 76+15	( )	
PHYS 151, 152	General Physics I and II	4, 4
PSYC 105	Introduction to Psychology	3
Minor or individualized support	ing coursework <sup>16</sup>	18
BIOMEDICAL SCIENCE Required courses (95-97 hours)	, BS - Pre-Dentistry	
Major Core & Cognates		30-31
Emphasis Core		
BIOL/CHEM 440	Biochemistry	4
or BIOL/CHEM 445	Biochemistry I (4)	
Select 4 hours from 200-400 level F	BIOL, CHEM, or MATH electives	4
Select 8 hours from 300-400 level I		8
Recommended: Work with your adv	isor to select electives that meet graduate/professional school prereq with approval of advisor and program director.	uisites; these prerequisites can l
Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
ННРТ 256	Medical Terminology	1
INRR 101, 102	Emergency Medical Technician I and II	4, 4
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	
or ALEKS score of 76+15		
PHYS 151, 152	General Physics I and II	4, 4
PSYC 105	Introduction to Psychology	3
Minor or individualized supporting coursework <sup>17</sup>		18
BIOMEDICAL SCIENCE Required courses (96-97 hours)	, BS - Pre-Genetic Counseling Emphasis	
Major Core & Cognates		30-31

<sup>15</sup> If a student places out of Trigonometry due to appropriate ALEKS, the 3 credit hours for Trigonometry are waived.
16 See Supporting Coursework under Biomedical Science, BS area
17 See Supporting Coursework under Biomedical Science, BS area

'		
Emphasis Core		
BIOL 321	Genetics	4
BIOL 403	Molecular Biology	4
BIOL/CHEM 440	Biochemistry	4
or BIOL/CHEM 445	Biochemistry I (4)	
Select 11 hours from 200-400 le	evel BIOL electives	11
Select 10 hours from 300-400 le	evel BIOL electives	10
	advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.	isites; these prerequisites can
Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
HHPT 256	Medical Terminology	1
PSYC 105	Introduction to Psychology	3
PSYC 380	Biophysical Psychology	3
Minor (Psychology minor rec	commended) or individualized supporting coursework <sup>17</sup>	18
BIOMEDICAL SCIENG Required courses (95-97 hour	CE, BS - Pre-Medicine Emphasis	
		30-31
Required courses (95-97 hour  Major Core & Cognates  Emphasis Core		30-31
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440	Biochemistry	<b>30-31</b>
Required courses (95-97 hour  Major Core & Cognates  Emphasis Core		
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445	Biochemistry	
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445	Biochemistry Biochemistry I (4) rel BIOL, CHEM, or MATH electives	4
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your	Biochemistry Biochemistry I (4) rel BIOL, CHEM, or MATH electives	4 4 8
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequi	4 4 8
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your outside of stated electives by petin	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequi	4 4 8
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your outside of stated electives by petin	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives.  rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.	4 4 8 isites; these prerequisites can
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your ontside of stated electives by petin  Emphasis Cognates CHEM 211, 212	Biochemistry Biochemistry I (4)  el BIOL, CHEM, or MATH electives  el BIOL electives.  e advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II	4 8 isites; these prerequisites can 4, 4
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your outside of stated electives by petin  Emphasis Cognates CHEM 211, 212 HHPT 256	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II Medical Terminology	4 8 isites; these prerequisites can 4, 4 1
Required courses (95-97 hour Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 lev Select 8 hours from 300-400 lev Recommended: Work with your outside of stated electives by petia  Emphasis Cognates CHEM 211, 212 HHPT 256 INRR 101, 102 MATH 119 or MATH 184	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives.  rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II Medical Terminology Emergency Medical Technician I and II	4 8 isites; these prerequisites can 4, 4 1 4, 4
Required courses (95-97 hourses)  Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 leven Select 8 hours from 300-400 leven Recommended: Work with your outside of stated electives by petinostate of stated electives by petinostate (11, 212)  Emphasis Cognates CHEM 211, 212  HHPT 256 INRR 101, 102  MATH 119 or MATH 184 or ALEKS score of 76+18	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II Medical Terminology Emergency Medical Technician I and II Trigonometry Calculus I (4)	4 4 8 isites; these prerequisites can 4, 4 1 4, 4 3
Required courses (95-97 hourses)  Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 leven Select 8 hours from 300-400 leven Recommended: Work with your outside of stated electives by peting the selection of the sel	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II Medical Terminology Emergency Medical Technician I and II Trigonometry Calculus I (4)  General Physics I and II	4 8 isites; these prerequisites can 4, 4 1 4, 4 3
Required courses (95-97 hourses)  Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 leven Select 8 hours from 300-400 leven Recommended: Work with your outside of stated electives by petinostate of stated electives by petinostate (11, 212)  Emphasis Cognates CHEM 211, 212  HHPT 256 INRR 101, 102  MATH 119 or MATH 184 or ALEKS score of 76+18	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II Medical Terminology Emergency Medical Technician I and II Trigonometry Calculus I (4)	4 4 8 isites; these prerequisites can 4, 4 1 4, 4 3
Required courses (95-97 hourses)  Major Core & Cognates  Emphasis Core BIOL/CHEM 440 or BIOL/CHEM 445  Select 4 hours from 200-400 leven Select 8 hours from 300-400 leven Recommended: Work with your outside of stated electives by peting the selection of the sel	Biochemistry Biochemistry I (4)  rel BIOL, CHEM, or MATH electives rel BIOL electives. rel advisor to select electives that meet graduate/professional school prerequition with approval of advisor and program director.  Organic Chemistry I and II Medical Terminology Emergency Medical Technician I and II Trigonometry Calculus I (4)  General Physics I and II Introduction to Psychology	4 8 isites; these prerequisites can 4, 4 1 4, 4 3

#### BIOMEDICAL SCIENCE, BS - Pre-Pharmacy Emphasis

Required courses (95-97 hours)

Major Core & Cognates 30-31

<sup>18</sup> If a student places out of Trigonometry due to appropriate ALEKS, the 3 credit hours for Trigonometry are waived.
19 See Supporting Coursework under Biomedical Science, BS area

30-31

Emphasis Core		
BIOL/CHEM 440	Biochemistry	4
or BIOL/CHEM 445	Biochemistry I (4)	
Select 4 hours from 200-400 leve	el BIOL, CHEM, or MATH electives	4
Select 8 hours from 300-400 leve		8
	advisor to select electives that meet graduate/professional school prereq.	uisites; these prerequisites can be
	tion with approval of advisor and program director.	7 1 1
Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
HHPT 256	Medical Terminology	1
INRR 101, 102	Emergency Medical Technician I and II	4, 4
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	
or ALEKS score of 76+20		
PHYS 151, 152	General Physics I and II	4, 4
PSYC 105	Introduction to Psychology	3
Minor or individualized suppo	orting course-work <sup>19</sup>	18
minor or marvidualized supply	ording course work	10
Required courses (97-99 hour Major Core & Cognates	CE, BS - Pre-Physical Therapy Emphasis	30-31
Emphasis Core		
BIOL 411	Advanced Human Anatomy	4
Select 12 hours from 200-400 le	vel BIOL, CHEM, or MATH electives	12
Select 10 hours from 300-400 le		10
Recommended: Work with your	advisor to select electives that meet graduate/professional school prerequion with approval of advisor and program director.	uisites; these prerequisites can be
Emphasis Cognates		
Emphasis Cognates HHPT 215	Emergency Health Care	2
HHPT 256	Medical Terminology	1
HHPT 370	Personal Training	3
MATH 119		3
or MATH 184	Trigonometry Calculus I (4)	9
or ALEKS score of 76+20	Calculus I (4)	
	General Physics I and II	4.4
PHYS 151, 152 PSYC 105	Introduction to Psychology	4, 4
PSYC 215	Developmental Psychology	3
	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	
Minor or individualized suppo	orting course-work <sup>21</sup>	18
BIOMEDICAL SCIENC Required courses (95-97 hour	CE, BS - Pre-Physician Assistant Emphasis	

Major Core & Cognates

<sup>20</sup> If a student places out of Trigonometry due to appropriate ALEKS, the 3 credit hours for Trigonometry are waived. 21 See Supporting Coursework under Biomedical Science, BS area

LEAD 225

PLSC 460

PLSC/RELG 345

Emphasis Core		
BIOL 205	Microbiology	4
BIOL 411	Advanced Human Anatomy	4
BIOL/CHEM 440	Biochemistry	4
or BIOL/CHEM 445	Biochemistry I (4)	
Select 6 hours from 200-400 lev	vel BIOL, CHEM, or MATH electives	6
Select 6 hours from 300-400 lev		6
	r advisor to select electives that meet graduate/professional school prerequisites; these p tion with approval of advisor and program director.	rerequisites can be
Emphasis Cognates		
CHEM 211, 212	Organic Chemistry I and II	4, 4
HHPT 256	Medical Terminology	1
INRR 101, 102	Emergency Medical Technician I and II	4, 4
MATH 111	College Algebra	3
or MATH 184	Calculus I (4)	
PSYC 215	Developmental Psychology	3
Minor or individualized supp	oorting coursework <sup>21</sup>	18
Major Core & Cognates		30-31
Emphasis Core		
BIOL 205	Microbiology	4
BIOL 360	Human Nutrition and Disease	3
BIOL 375	Medical Ecology and Epidemiology	4
	r advisor to select electives that meet graduate/professional school prerequisites; these p	18 rerequisites can be
outside of stated electives by peti	ition with approval of advisor and program director.	
Emphasis Cognates		2
MATH 111	College Algebra	3
or MATH 119	Trigonometry (3)	
or MATH 184	Calculus I (4)	
Select 18 credits hours from the	o contract of the contract of	18
BUAD	300-400 BUAD elective (1-3)	
BUAD 310	Quality Management (3)	
COMM 241	Public Relations Principles (3)	
COMM 377	Crisis Communication Management (3)	
COMM 425	Intercultural Communication (3)	
HIST/PLSC 430	Global War and Global Migrations: Searching for a New Life (3)	
INRR 482	Project Development and Implementation (3)	
INRR 483	Cultural Perspectives in Development (3)	
INRR/SOCI 300	Social Dimensions of Disaster (3)	
LEAD 225	Creative Leadership (2)	

Creative Leadership (3)

Global Environment and International Policy (3) Global Political Economy and International Labor (3)

SOCI/SOWK 405	Social, Economic and Environmental Justice (3)
SOCI/SOWK 415	Crisis and Resilience (3)
SOWK 345	Social Work in Healthcare (3)

Minor (Psychology highly recommended) or individualized supporting coursework<sup>22</sup>

18

# BIOMEDICAL SCIENCE, BS - Pre-Veterinary Medicine Emphasis Required courses (92-94 hours)

Major Core & Cognates		30-31
Emphasis Core		
BIOL 205	Microbiology	4
BIOL 357	Animal Biology for Biomedical and Pre-Veterinary Science	4
BIOL/CHEM 440	Biochemistry	4
or BIOL/CHEM 445	Biochemistry I (4)	
Select 13 hours from 300-400 le	evel BIOL electives.	13
Recommended: Work with your	r advisor to select electives that meet oraduate troofessional school prerequisites the	se trerequisites o

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

Emp.	hasis	Cognates
_		_

CHEM 211, 212	Organic Chemistry I and II	4, 4
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	
or ALEKS score of 76+23		
PHYS 151, 152	General Physics I and II	4, 4

#### Minor or individualized supporting coursework<sup>22</sup>

18

#### **BIOLOGY EDUCATION, BS**

**Secondary Subject Endorsement** 

The teaching major in biology is designed to prepare candidates for secondary teaching by providing

- the ability to recognize the fixed, the changing and the unrelated factors to experimental situations;
- the ability to recognize cause-and-effect relationships;
- the ability to test and evaluate evidence, to recognize and make reasonable assumptions, to distinguish between fact and theory, to apply generalizations and principles and to make valid conclusions;
- an ability to accept, clarify and use ideas, to state a point of view objectively, to reflect the ideas of others, to summarize ideas presented in group discussion and to use scientific vocabulary;
- the ability to use a knowledge of factual and theoretical results with precision and accuracy;
- the ability to interpret data and to use the nature of proof;
- skill in discerning and applying mathematical relationships; and
- an ability to use scientific instruments, to dissect biological specimens and to treat live animals humanely.

#### Required courses (107 hours)

<sup>22</sup> See Supporting Coursework under Biomedical Science, BS area

<sup>23</sup> If a student places out of Trigonometry due to appropriate ALEKS, the 3 credit hours for Trigonometry are waived.

<u>Major Core</u>		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BIOL 200, 202	General Biology I and II	4, 4
BIOL 205	Microbiology	4
BIOL 357	Animal Biology for Biomedical and Veterinary Science	4
BIOL 366	Plants and Human Health	4
Major Cognates		
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 119	Trigonometry	3
PHYS 151	General Physics I	4
SCNC 377	Origins	3
Professional Education		
EDUC 418	Methods: Science Education	3
Additional Professional Education		58

It is strongly recommended that every student finish requirements for at least two subject endorsements. (See Education-Secondary Education Endorsements)

#### **BIOMEDICAL SCIENCE, AS**

Union College offers many of the courses necessary to prepare students for admission to healthcare professional programs at other institutions including, but not limited to, Loma Linda University, Kettering Medical College, and Advent Health schools. Students should consult their advisor for general education and elective courses and to verify that their program of study includes the requirements for the program they wish to enter upon completion of Union's Associate of Science in Biomedical Science.

#### Biomedical Science Core and Cognates (19-20 hours)

Major Core		
BIOL 111, 112	Anatomy and Physiology I and II	4, 4
or BIOL 200, 202	General Biology I and II (4, 4)	
BIOM 201	Professional Shadowing	2
	-	
Major Cognates		
MATH 221	Elementary Statistics and Probability	3
or MATH 111	College Algebra (3)	
or MATH 331	Statistics and Probability (4)	
PSYC 105	Introduction to Psychology	3
or SOCI 105	Introduction to Sociology (3)	
or any PSYC or SOCI course	G. 1,	
RELT 306	Biomedical Ethics	3

## BIOMEDICAL SCIENCE, AS - Pre-Allied Health (General Studies) Emphasis Required courses (44-45 hours)

Major Core & Cognates	19-20

#### Emphasis Core

#### Select 21 hours from BIOL electives

21

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

T .		
Hmn	hasis	Cognates
1/111/	nasis	Cognates

CHEM 104 Introduction to General, Organic and Biochemistry 4
or CHEM 151 General Chemistry (4)

or PHYS 151 General Physics (4)

## BIOMEDICAL SCIENCE, AS - Pre-Cardiac Electrophysiology Emphasis Required courses (48-49 hours)

#### **Emphasis Core**

Major Core & Cognates

#### Select 17 hours from BIOL electives

17

19-20

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

#### Emphasis Cognates

CHEM 151, 152 General Chemistry I and II 4, 4
PHYS 151 General Physics I 4

# BIOMEDICAL SCIENCE, AS - Pre-Communications Sciences and Disorders/Speech Language Pathology Emphasis

Required courses (48-50 hours)

#### Major Core & Cognates 19-20

#### **Emphasis Core**

#### Select 15 hours from BIOL electives

15

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

#### Emphasis Cognates

CHEM 104	Introduction to General, Organic and Biochemistry	4
HHPT 357	Motor Learning	3
or HHPT 360	Biomechanics/Kinesiology (3)	
MATH 111	College Algebra	3
or MATH 184	Calculus I (4)	
PHYS 151	General Physics I	4

#### BIOMEDICAL SCIENCE, AS - Pre-Cytotechnology Emphasis

Required courses (48-49 hours)

#### Major Core & Cognates 19-20

#### Emphasis Core

BIOL 200, 202 General Biology I and II<sup>24</sup> 4, 4
BIOL 205 Microbiology 4

#### Select 9 hours from BIOL, CHEM or PHYS electives

9

Recommended: CHEM 211 and CHEM 212 are additional prerequisites needed for LLU program

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

<sup>24</sup> Should be taken in addition to BIOL 111 and BIOL 112 from the core courses

T .	1 .	
Hm	nhacie	Cognates
1111	JIIASIS	Cognates

CHEM 151, 152 General Chemistry I and II 4, 4

# BIOMEDICAL SCIENCE, AS - Pre-Dental Hygiene Emphasis

Required courses (46-47 hours)

Major Core & Cognates 19-20

Emphasis Core

BIOL 205 Microbiology 4

Select 16 hours from BIOL electives

16

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

**Emphasis Cognates** 

CHEM 104 Introduction to General, Organic and Biochemistry 4

or CHEM 151 General Chemistry (4) or PHYS 151 General Physics (4)

SOCI 105 Introduction to Sociology<sup>25</sup> 3

# BIOMEDICAL SCIENCE, AS - Pre-Diagnostic Medical Sonography Emphasis

Required courses (48-50 hours)

Major Core & Cognates 19-20

Emphasis Core

Select 18 hours from BIOL electives

18

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

Emphasis Cognates

CHEM 104 Introduction to General, Organic and Biochemistry
or CHEM 151 General Chemistry (4)

PHYS 151 General Physics 4

MATH 111 College Algebra 3
or MATH 184 Calculus I (4)

# BIOMEDICAL SCIENCE, AS - Pre-Medical Laboratory Sciences/Clinical Laboratory Sciences Emphasis

Required courses (48-49 hours)

Major Core & Cognates 19-20

**Emphasis Core** 

Select 9 hours from BIOL, CHEM or PHYS electives

0

Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.

<sup>25</sup> Must be taken in addition to PSYC 105 from the core courses

Emphasis Cognates CHEM 151, 152 CHEM 251, 252 PHYS 151	General Chemistry I and II Organic Chemistry I and II General Physics	4, 4 4, 4 4
BIOMEDICAL SCIENCE Required courses (48-50 hours)	, AS - Pre-Nutrition and Dietetics Emphasis	
Major Core & Cognates		19-20
Emphasis Core BIOL 205	Microbiology	4
outside of stated electives by petition Emphasis Cognates	visor to select electives that meet graduate/professional school prerequisites; these p with approval of advisor and program director.	14 prerequisites can be
CHEM 151, 152 MATH 111 or MATH 184	General Chemistry I and II College Algebra Calculus I (4)	4, 4
BIOMEDICAL SCIENCE Required courses (48-49 hours) Major Core & Cognates	, AS - Pre-Orthotics and Prosthetics Emphasis	19-20
Emphasis Core		
	es visor to select electives that meet graduate/professional school prerequisites; these p with approval of advisor and program director.	17 prerequisites can be
Emphasis Cognates CHEM 151, 152 PHYS 151	General Chemistry I and II General Physics	4, 4
BIOMEDICAL SCIENCE Sciences/Nuclear Medicin Required courses (48-49 hours)	, AS - Pre-Radiation Technology/Radiation Therap e Emphasis	y/Radiation
Major Core & Cognates		19-20
Emphasis Core		
	es visor to select electives that meet graduate/professional school prerequisites; these p with approval of advisor and program director.	18 prerequisites can be
Emphasis Cognates CHEM 104 PHYS 151 MATH 111	Introduction to General, Organic and Biochemistry General Physics College Algebra	4 4 3

Select 10 hours of 200-400 level BIOL electives

## BIOMEDICAL SCIENCE, AS - Pre-Respiratory Care Emphasis Required courses (48-49 hours)

Major Core & Cognates		19-20	
Emphasis Core BIOL 205	Microbiology	4	
Select 13 hours from BIOL electives  Recommended: Work with your advisor to select electives that meet graduate/professional school prerequisites; these prerequisites can be outside of stated electives by petition with approval of advisor and program director.			
Emphasis Cognates CHEM 151, 152 PHYS 151	General Chemistry I and II General Physics	4, 4 4	
BIOMEDICAL SCIENCE Minor Required courses (18 hours)			
BIOL 200, 202	General Biology I and II	4, 4	

10

# **Business Administration**

#### Mission

The Business Administration Program prepares professionals for Christian service in the business world by providing a quality, student-oriented education that emphasizes ethics and balances practice and theory.

#### Outcomes

In addition to having a foundational understanding of business theory, students graduating from the business administration program will be prepared to

- demonstrate practical Christianity manifested in ethical decision making and service;
- apply theory to practical situations;
- build and maintain a network of professional relationships;
- use current technology in the workplace;
- work together in effective teams;
- demonstrate professional communication and business decorum; and
- analyze and creatively solve comprehensive business problems.

The program's assessment plan helps meet these goals by collecting, evaluating and responding to input from program students, internship evaluations and alumni. Student preparation for careers and graduate school will be measured by tracking graduates' job placement and scores on nationally recognized tests.

#### **Contact Information**

Lisa L. Forbes, Program Director of Business Administration Dick Building, Room 301 402.486.2600 ext. 2300 lisa.l.forbes@ucollege.edu

#### **Faculty**

Jack Dougan, Lisa Forbes, Howie Huntsman, Dave Rickard, Jodie Trana, Debbie Unterseher

#### **Adjunct Faculty**

Dan Carlson, or as contracted

#### **Academic Programs**

Business Administration, BS, with emphases in:

- Accounting
- Finance
- Management
- Marketing
- Science
- Small Business Management

Accounting, AS
Business Administration, AS
Accounting Minor
Business Administration Minor
Marketing Minor
Small Business Management Minor

#### **BUSINESS CORE & COGNATES**

Required courses (36 hours)

<u>Major Core</u>		
ACCT 211, 212	Principles of Accounting	3, 3
BSAN 220	Data Analysis Tools	3
BUAD 225	Creativity and Innovation in Business	3
BUAD 325	Business Communication	3
BUAD 428	Business Strategy	3
BUAD 445	Business Law	3
ECON 235	Principles of Microeconomics	3
ECON 236	Principles of Macroeconomics	3
FNCE 325	Business Finance	3
MRKT 327	Marketing	3
Major Cognates		
RELT 305	Christian Ethics	3
or RELT 306	Biomedical Ethics (3)	

Admission to some graduate programs may require additional courses.

#### BUSINESS ADMINISTRATION, BS - Accounting Emphasis

The accounting emphasis prepares students for careers as professional accountants in the areas of taxation, auditing, financial, managerial and not-for-profit accounting. Both managerial and certified public accountants serve as consultants and advisors to business management and public officials.

#### Required courses (69-70 hours)

Major Core & Cognates		36
Emphasis Core		
ACCT 313, 314	Intermediate Accounting	4, 4
ACCT 315	Federal Income Tax—Individual	3
ACCT 316	Federal Tax—Corporate, Partnership and Fiduciary	3
ACCT 320	Financial Statement Analysis	2
ACCT 325	Cost and Managerial Accounting	3
ACCT 420	Forensic Accounting	1
ACCT 443	Governmental and Not-for-Profit Accounting	2
ACCT 455	Auditing	4
BSAN 330	Business Analytics	3
BUAD 405	Business Ethics	1
Internship in Business		
Emphasis Cognates		
MATH 221	Elementary Statistics and Probability	3
or MATH 331	Statistics and Probability (4)	

Many students choose to obtain certification as Certified Public Accountants (CPAs). Most states require completion of an undergraduate degree in accounting before the CPA exam may be written. Nebraska and many other states have a minimum education requirement of 150 semester hours after high school.

The Union College Accounting Curriculum has been approved by the Nebraska State Board of Public Accountancy as satisfying the accounting and general business requirements for the 150 hours. Close consultation is necessary between the student and the accounting faculty to ensure that state requirements to sit for the exam are met. Students may complete this requirement by taking undergraduate class work with the option of completing a second major or emphasis or by attending graduate school. Careful planning by the student is needed to ensure compliance with the various state requirements for specific classes which must be taken to fulfill the 150-hour requirement. Courses required to sit for the CPA exam in Nebraska in addition to the business core include:

# BUSINESS ADMINISTRATION, BS - Finance Emphasis Required courses (65-66 hours)

Required courses (03-00 flours)		
Major Core & Cognates		36
Emphasis Core ACCT 313, 314 ACCT 320 BSAN 330 BUAD 405 FNCE 330 FNCE 332 FNCE 370 FNCE 415	Intermediate Accounting Financial Statement Analysis Business Analytics Business Ethics Financial Institutions and Markets Investments International Finance Corporate Finance	4, 4 2 3 1 3 3 3 3 3
Internship in Business		
Emphasis Cognates MATH 221 or MATH 331	Elementary Statistics and Probability Statistics and Probability (4)	3
BUSINESS ADMINISTRA Required courses (66-67 hours)	ATION, BS - Management Emphasis	
Major Core & Cognates		36
ACCT 313 ACCT 325 FNCE 332 Any ACCT, BUAD, FNCE or	Business Analytics Quality Management Operations and Resource Management Project Management Human Resource Management Business Ethics Conflict Management  ourses: (at least one must be ACCT 313 or 325): Intermediate Accounting (4) Cost and Managerial Accounting (3) Investments (3) MRKT elective(s) (3-6)	3 3 3 2 3 1 3
Emphasis Cognates MATH 221 or MATH 331	Elementary Statistics and Probability Statistics and Probability (4)	3
BUSINESS ADMINISTRA Required courses (67-68 hours)	ATION, BS - Marketing Emphasis	
Major Core & Cognates		36
Emphasis Core BSAN 330 BUAD 405 MRKT 333 MRKT 443 MRKT 450 MRKT 456	Business Analytics Business Ethics Professional Selling Consumer Behavior Marketing Strategy Marketing Research	3 1 3 3 3 3

#### Internship in Business

Emphasis Cognates		
COMM 241	Public Relations Principles	3
COMM 445	Public Relations Campaigns	3
MATH 221	Elementary Statistics and Probability	3
or MATH 331	Statistics and Probability (4)	
Select 6 hours from the follow	wing courses:	6
BUAD 376	Human Resource Management (3) Recommended	
COMM 316	Propaganda and Persuasion (3)	
COMM 333	Rhetoric (3)	
COMM 365	Institutional Development (3)	
GRPH 150	Introduction to Graphic Arts (3) Recommended	
GRPH 252	Computer Design (3)	
GRPH 450	Art Direction (3)	

Recommended general education course: PSYC 105 Introduction to Psychology

#### **BUSINESS ADMINISTRATION, BS - Science Emphasis**

The degree in business and science prepares the student for professional schools in the medical field and trains the student for employment in careers which encourage or require knowledge in both business and scientific principles. Students taking this major should work with both the Business program and the Biomedical Science program to plan classes that will be the most beneficial for their career goals. Students should be aware that the minimum major requirements will not prepare them for graduate school in science and courses should be chosen carefully to meet business graduate school requirements. General education classes and electives should be carefully chosen to reach the 36 hours at the 300-level or above. Pre-med students need 100-200 patient care hours (volunteering, job shadowing, or working) to be competitive on medical school applications. Research and large projects are also helpful for medical school applications.

#### Required courses (81-82 hours)

Major Core & Cognates		36
Emphasis Core		
BUAD 376	Human Resource Management	3
FNCE 332	Investments	3
Emphasis Cognates		
BIOL 200, 202	General Biology I and II	4, 4
or BIOL 111, 112	Human Anatomy & Physiology I and II (4, 4)	
CHEM 151, 152	General Chemistry I and II	4, 4
PHYS 151, 152	General Physics I and II	4, 4
or select 8 hours of 300-400 le	vel BIOL, CHEM, or PHYS elective (8)	
Select course from the following:		3-4
MATH 119	Trigonometry (3)	
MATH 184	Calculus I (4)	
MATH 221	Elementary Statistics and Probability (3)	
MATH 331	Statistics and Probability (4)	
Select 12 hours of 200-400 level BI (4 hours must be 300-400 level		12
Highly recommended course:	BIOM 201 Professional Shadowing	2

## BUSINESS ADMINISTRATION, BS - Small Business Management Emphasis Required courses (67-68 hours)

Major Core & Cognates		36
Emphasis Core		
ACCT 315	Federal Income Tax-Individual	3
ACCT 335	Accounting Information Systems	3
BSAN 330	Business Analytics	3
BUAD 219	Small Business Management	3
BUAD 310	Quality Management	3
or BUAD 430	Conflict Management (3)	
BUAD 376	Human Resource Management	3
BUAD 405	Business Ethics	1
FNCE 215	Personal Finance	3
FNCE 332	Investments	3
or BUAD 316	Operations and Resource Management (3)	
Internship in Business		
Emphasis Cognates		
COMM 241	Public Relations Principles	3
MATH 221	Elementary Statistics and Probability	3
or MATH 331	Statistics and Probability (4)	
ACCOUNTING, AS Required courses (35-36 hours)		
• • • • • • • • • • • • • • • • • • • •		
Major Core ACCT 211, 212	Deigninles of Aggregating	2 2
ACCT 211, 212 ACCT 313	Principles of Accounting Intermediate Accounting	3, 3
ACCT 314	Č	4 4
or ACCT 455	Intermediate Accounting Auditing (4)	4
ACCT 315	Federal Income Tax - Individual	3
ACCT 315 ACCT 335	Accounting Information Systems	3
BSAN 220	Data Analysis Tools	3
FNCE 325	Business Finance	3
Select 6 hours of ACCT, BSAN, B	UAN, ECON, FNCE, or MRKT electives	6
Major Cognates		
MATH 221	Elementary Statistics and Probability	3
or MATH 331	Statistics and Probability (4)	

## **BUSINESS ADMINISTRATION, AS**

This program is designed to allow some latitude in course selection to fit the needs of individual students. The courses should be selected in consultation with the student's advisor.

#### Required courses (30-31 hours)

Major Core		
ACCT 211, 212	Principles of Accounting	3, 3
BUAD 225	Creativity and Innovation in Business	3
BUAD 325	Business Communication	3
ECON 235	Principles of Microeconomics	3
or ECON 236	Principles of Macroeconomics (3)	

Select 12 hours from the fo	llowing courses:	12
BSAN 220	Data Analysis Tools (3)	
BUAD 219	Small Business Management (3)	
Or select 300-400 level	ACCT, BSAN, BUAD, FNCE, or MRKT electives	
Major Cognate		
MATH 221	Elementary Statistics and Probability	3
or MATH 184	Calculus I (4)	
or MATH 331	Statistics and Probability (4)	
ACCOUNTING Mir Required courses (19 hou		
ACCT 211, 212	Principles of Accounting	3, 3
ACCT 313	Intermediate Accounting	4
ACCT 315	Federal Income Tax - Individual	3
Select 6 hours from ACCT	electives	6
BUSINESS ADMIN	ISTRATION Minor	
Required courses (18 hou	ars)	
ACCT 211	Principles of Accounting	3
ECON 235	Principles of Microeconomics	3
or ECON 236	Principles of Macroeconomics (3)	
Select 12 hours from the following electives:		12
ACCT 212	Principles of Accounting (3)	
BSAN 220	Data Analysis Tools (3)	
BUAD 219	Small Business Management (3)	
BUAD 225 Or select 300-400 level	Creativity and Innovation in Business (3)  I ACCT, BSAN, BUAD, FNCE, or MRKT electives	
Recommended courses incl	hyda:	
BSAN 330	Business Analytics (3)	
BUAD 316	Operations Management (3)	
BUAD 376	Human Resource Management (3)	
BUAD 430	Conflict Management (3)	
BUAD 445	Business Law (3)	
FNCE 332	Investments (3)	
MRKT 327	Marketing (3)	
MARKETING Mino	r	
Required courses (18 hou		
COMM 241	Public Relations Principles	3
MRKT 327	Marketing	3
MRKT 333	Professional Selling	3
MRKT 443	Consumer Behavior	3
MRKT 450	Marketing Strategy	3
MRKT 456	Marketing Research	3

# SMALL BUSINESS MANAGEMENT Minor

# Required courses (18 hours)

ACCT 211	Principles of Accounting	3
ACCT 335	Accounting Information Systems	3
BUAD 219	Small Business Management	3
ECON 235	Principles of Microeconomics	3
Select 6 hours from the fol	llowing courses:	6
ACCT 212	Principles of Accounting (3)	
BUAD 225	Creativity and Innovation in Business (3)	
BUAD 445	Business Law (3)	
FNCE 332	Investments (3)	
MRKT 327	Marketing (3)	

# Chemistry

#### Mission

Founded upon a firm belief in the Creator and guided by a Christian worldview, the Department of Chemistry prepares students for learning, service and leadership through proficient application of chemistry-related skills.

#### **Outcomes**

Students graduating from the chemistry program will be prepared to:

- independently access and organize relevant data in the chemical sciences;
- independently synthesize and communicate relevant data in the chemical sciences;
- demonstrate familiarity with basic techniques of investigation in varied fields of chemical research;
- apply knowledge acquired from varied aspects of chemical sciences to critical thinking in research;
- apply knowledge acquired from varied aspects of chemical sciences to ethical decision making, in stewardship and everyday life;
- demonstrate knowledge of past contributions and awareness of current progress in the chemical sciences;
- engage in senior-level research; and
- be prepared to pursue graduate studies.

#### **Contact Information**

Carrie Wolfe, Program Director of General Education Krueger Center. Room 248 402.486.2600 ext. 2365 carrie.wolfe@ucollege.edu

#### **Faculty**

Richard Clark, Kenneth Osborn, Carrie Wolfe

#### Adjuncts

As contracted

#### **Academic Programs**

Chemistry, BA

Chemistry, BA, with emphases in:

- Pre-Dental, Pre-Medicine, Pre-Pharmacy
- Pre-PA

Chemistry, BS, with emphases in:

- Biochemistry
- Physical Chemistry

Chemistry Education, BS - Secondary Subject Endorsement

Chemistry Minor

#### **CHEMISTRY CORE**

Required courses (24-27 hours)

#### Major Core

General Chemistry I and II	4, 4
Organic Chemistry I and II	4, 4
Research Methods I	1
Elementary Statistics and Probability (3)	
Statistics and Probability (4)	
	Organic Chemistry I and II Research Methods I Elementary Statistics and Probability (3)

CHEM 311 CHEM 312	Analytical Chemistry Instrumental Analysis	3 3
CHEM/BIOL 386	Research Methods: Scientific Inquiry	1
CHEMISTRY, BA (No. Required courses (35-38 hour		
Major Core		24-27
Emphasis Core		
CHEM/BIOL 445	Biochemistry I	4
or CHEM/BIOL 440	Biochemistry (4)	
or CHEM 425 and	Inorganic Chemistry (2)	
CHEM/BIOL 396 and CHEM/BIOL 496	Research Methods: Proposals and Protocols (1) Research Methods: Independent Research IV (1)	
Select 3 hours from 300-400 lev	rel BIOL, CHEM, or SCNC electives	3
Emphasis Cognates		
BIOL 200	General Biology I	4
or PHYS 151	General Physics I (4)	
CHEMISTRY, BA - Pre Required courses (47-50 hour	-Dental, Pre-Medical, Pre-Pharmacy Emphasis	
Major Core		24-27
Emphasis Core		
CHEM/BIOL 445	Biochemistry I	4
or CHEM/BIOL 440	Biochemistry (4)	4
PHYS 151 PHYS 152	General Physics I	4
or CHEM or BIOL	General Physics II Electives (300 or 400-level) (4)	4
Select 3 hours from 300-400 lev	rel BIOL, CHEM, or SCNC electives	3
Emphasis Cognates		
BIOL 200, 202	General Biology I and II	4, 4
Recommended elective courses:		
	1	
CHEM/BIOL 496	Research Methods: Independent Research (1)	
BIOM 201	Professional Snadowing (2)	
CHEMISTRY, BA - Pre Required courses (52-55 hour	<u>-</u>	
Chemistry Core		24-27
Emphasis Core		
CHEM/BIOL 445	Biochemistry I	4
or CHEM/BIOL 440	Biochemistry (4)	
or CHEM or BIOL  Select 3 hours from 300-400 lev  Emphasis Cognates  BIOL 200, 202  Recommended elective courses:	Electives (300 or 400-level) (4) rel BIOL, CHEM, or SCNC electives General Biology I and II	4
Recommended elective courses:		
CHEM/BIOL 396	Research Methods: Proposals and Protocols (1)	
	1	
	1 , ,	
	1 , ,	
PSYC 105	Introduction to Psychology (3)	
BIOM 201		
BIOM 201	Professional Shadowing (2)	
	<u> </u>	
CHEMISTRY, BA - Pre	-PA Emphasis	
Required courses (52-55 hour	<u>-</u>	
Chemistry Core		24-27
* .	Riochamieter I	4
		7
or CHEM/BIOL 440	Biochemistry (4)	

**Emphasis Cognates** 

BIOL 200, 202 BIOL 205 BIOL 411	General Biology 1 and 11 Microbiology Advanced Human Anatomy	4, 4 4 4
BIOL 416	Advanced Human Physiology	4
HHPT 256	Medical Terminology	1
PSYC 215	Developmental Psychology	3
CHEMISTRY, BS - Bio Required courses (71-76 hou	• •	
Major Core		24-27
Emphasis Core		
CHEM/BIOL 445, 446	Biochemistry I and II	4, 3
CHEM 451	Physical Chemistry: Thermodynamics	4
PHYS 251, 252	College Physics I and II	5, 5
Select 2-4 hours from 300-400	level CHEM electives	2-4
Emphasis Cognates		
BIOL 200, 202	General Biology I and II	4, 4
BIOL 321	Genetics	4
BIOL 404	Cell Biology	4
MATH 184, 285	Calculus I and II	4, 4
	ysical Chemistry Emphasis	
Required courses (54-57 hou	irs)	
Major Core		24-27
Emphasis Core CHEM/BIOL 396	Research Methods: Proposals and Protocols	1
CHEM/BIOL 390 CHEM 451	Physical Chemistry: Thermodynamics	4
CHEM 452	Physical Chemistry: Quantum Mechanics and Kinetics	4
CHEM/BIOL 496	Research Methods: Independent Research	1
PHYS 251, 252	College Physics I and II	5, 5
Select 2 hours from 300-400 le	evel CHEM electives	2
Emphasis Cognates		
MATH 184, 285	Calculus I and II	4, 4
Recommended Courses		
MATH 286	Calculus III	4

#### CHEMISTRY EDUCATION, BS

#### Secondary Subject Endorsement

The teaching major in chemistry is designed to prepare the candidates for secondary teaching through a program which will:

- allow students to develop a knowledge of the major concepts of chemistry, its historical development and its significance to the individual and to society;
- give them a concept of the logic and processes of scientific inquiry;
- provide a working knowledge of the mechanics of a chemistry teaching program including: ordering of materials and supplies, organizing and operating a laboratory, handling and storage of hazardous materials and safety procedures; and
- acquaint them with professional agencies and professional journals and the value of these to their work.

# Required courses (103-105 hours)

<u>Major Core</u>		
CHEM 151, 152	General Chemistry I and II	4, 4
CHEM 211, 212	Organic Chemistry I and II	4, 4
CHEM 311	Analytical Chemistry	3
CHEM 312	Instrumental Analysis	3
CHEM/BIOL 445	Biochemistry I	4
PHYS 151	General Physics I	4
or PHYS 251	College Physics I (5)	
Emphasis Cognates		
BIOL 200	General Biology I	4
BIOL 202	General Biology II	4
or PHYS 152	General Physics II (4)	
or PHYS 252	College Physics II (5)	
MATH 184	Calculus I	4
Professional Education		
EDUC 418	Methods: Science Education	3
Additional Professional Education		58

It is strongly recommended that every student finish requirements for at least two subject endorsements. (See Education-Secondary Education Endorsements)

#### **CHEMISTRY Minor**

#### Required courses (19-20 hours)

CHEM 151, 152	General Chemistry I and II	4, 4
CHEM 211, 212	Organic Chemistry I and II	4, 4
CHEM 311	Analytical Chemistry	3
or CHEM 451	Physical Chemistry: Thermodynamics (4)	

# Communication

#### Mission

The Communication program encourages students to become active and ethical participants in shaping modern culture.

#### **Outcomes**

Students graduating from the communication program will be prepared to:

- disseminate written, spoken, digital, and visual information;
- incorporate leadership and ethics as key components to communication practice;
- write and edit effectively within a communication framework;
- understand the processes, effects, and theories of human communication;
- draw on a wide-ranging liberal arts education when engaged in the diverse demands of emerging media, public relations, or institutional development; and
- explore a variety of perspectives in the lifelong process of becoming a Christian scholar and practitioner in the field of communication.

#### **Contact Information**

Seth Pierce, Program Director of Communication Dick Building, Room 408G 402.486.2600 ext. 2322 seth.pierce@ucollege.edu

#### Faculty

Tanya R. Cochran, Lori Peckham, Seth Pierce,

#### **Adjunct Faculty**

LuAnn Davis, Mike Mennard, Jill Morstad, Hailey Rousset, Jacque Smith, or as contracted

#### **Academic Programs**

Communication, BA,

Communication, BA with emphasis in:

Public Relations

Communication Minor

Public Relations Minor

#### **Program Specific Fees**

A program fee is assessed each semester for all students in the program. Information regarding current fees can be found by contacting the Communication Program Director.

#### **COMMUNICATION CORE & COGNATES**

#### Required courses (42 hours)

Major Core		
COMM 125	Society, Culture, and Communication	3
COMM 209	Digital Storytelling I	3
COMM 211	Digital Storytelling II	3
COMM 221	Reporting	3
COMM 241	Public Relations Principles	3
COMM 246	Editing	3
COMM 292	Communication Theory and Human Interaction	3
COMM 316	Propaganda and Persuasion	3

<u>Major Cognates</u>		
BUAD 325	Business Communication	3
GRPH 150	Introduction to Graphic Arts	3
MATH 221	Elementary Statistics and Probability	3
PHOT 151	Introduction to Photography	3
PSYC 340	Research Methods I	3
SOCI 105	Introduction to Sociology	3

200 clock hours of internship in a related field are required of all communication majors.

All communication majors are expected to create and maintain their own website from their sophomore year through graduation, which will include paying for a domain name and hosting fees.

## COMMUNICATION, BA - No Emphasis

Required courses (48 hours)

Major Core & Cognates		42
Emphasis Core		
Select 3 hours of 300-400 level CO	MM electives	3
Emphasis Cognates PSYC 341	Research Methods II	3
COMMUNICATION, BA Required courses (54 hours)	- Public Relations Emphasis	
Major Core & Cognates		42
Emphasis Core COMM 365 COMM 445	Institutional Development Public Relations Campaigns	3 3
Emphasis Cognates MRKT 327	Marketing	3
Select 3 hours of 300-400 level MR	KT electives	3
COMMUNICATION Mine Required courses (21 hours)	or	
COMM 125 COMM 377 COMM 425 COMM 465	Society, Culture, and Communication Crisis Communication Management Intercultural Communication Interpersonal Communication	3 3 3 3
Select 9 hours from the following c COMM 209 COMM 221 COMM 241 COMM 246 COMM 316 COMM 333 COMM 355 COMM 445 COMM 457	Durses: (3 hours must be 300 or 400 level) Digital Storytelling I (3) Reporting (3) Public Relations Principles (3) Editing (3) Propaganda and Persuasion (3) Rhetoric (3) Advanced Speech and Oral Interpretation (3) Public Relations Campaigns (3) Feature Writing (3)	9

GRPH 150	Introduction to Graphic Arts (3)
GRPH 254	Publication Design (3)
PHOT 151	Introduction to Photography (3)

# PUBLIC RELATIONS Minor

## Required courses (18 hours)

COMM 125	Society, Culture, and Communication	3
COMM 241	Public Relations Principles	3
COMM 445	Public Relations Campaigns	3
COMM 465	Interpersonal Communication	3
GRPH 150	Introduction to Graphic Arts	3
MRKT 456	Marketing Research	3

# Computing

#### Mission

The Computer Science Program prepares students for Godly excellence in computing.

#### **Outcomes**

Computing degree graduates will:

- Have a job offer in industry or acceptance into graduate school upon graduation;
- Be self-motivated in learning and curious to know more;
- Demonstrate Christian philosophy through active engagement in community activities;
- Work together in effective teams and;
- Demonstrate professional communication and business decorum.

The program's assessment plan helps meet these goals by collecting, evaluating and responding to input from program students, internship evaluations, potential employers, and alumni. Student preparation for careers and graduate school will be measured through tracking graduates' job placement and graduate school acceptance.

#### **Contact Information**

Seth McNeill, Program Director Krueger Center, Room 132 402.486.2600 ext. 2360 seth.mcneill@ucollege.edu

#### **Faculty**

Seth McNeill, Debra Unterseher

#### **Adjunct Faculty**

Aaron Rogge, or as contracted

#### **Academic Programs**

Computer Science, BS Information Technology, BS Information Technology, AS Information Technology Minor

#### **COMPUTER SCIENCE, BS**

Required courses (80-81 hours)

Major Core		
CPTR 128	Basic Networking	3
CPTR 129	Fundamentals of Databases	3
CPTR 226	Introduction to Programming	4
CPTR 230	Computer Organization	3
CPTR 240	System Administration	3
CPTR 245	Web Development Basics	3
CPTR 310	Data Structure and Algorithms	4
CPTR 335	Web Technologies	3
CPTR 405	Software Engineering	3
CPTR 451	Operating Systems Principles	3
CPTR 452	Advanced Algorithms	3
CPTR 460	Cybersecurity	3
CPTR 478	Senior Project I	3
CPTR 479	Senior Project II	3

Select 12 hours of 200-400 level CPTR electives		12
Internship in Computing		
Major Cognate MATH 184 MATH 221 or MATH 331	Calculus I Elementary Statistics and Probability Statistics and Probability (4)	4 3
MATH 240 MATH 352	Discrete Mathematics Linear Algebra	3
	vel CPTR or 200-400 level MATH vel CPTR or 200-400 level MATH or BUAD electives	3 8
INFORMATION TE Required courses (79-80 h		
Major Core CPTR 128 CPTR 129 CPTR 226 CPTR 240 CPTR 245 CPTR 320 CPTR 335 CPTR 405 CPTR 405 CPTR 420 CPTR 424 CPTR 440 CPTR 440 CPTR 478 CPTR 479 Select 9 hours of 300-400 let	Basic Networking Fundamentals of Databases Introduction to Programming System Administration Web Development Basics Advanced Networking Web Technologies Software Engineering Advanced Systems Administration Database Systems Cloud Computing Cybersecurity Senior Project I Senior Project II	3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Internship in Computing		
Major Cognate		
ACCT 211	Principles of Accounting	3
ACCT 335	Accounting Information Systems	3
BSAN 220	Data Analysis Tools	3
BUAD 316	Operations and Resource Management	3
MATH 221	Elementary Statistics and Probability	3
or MATH 331	Statistics and Probability (4)	
	vel CPTR or 200-400 level MATH BUAD, ACCT or ENCE electives	3

# INFORMATION TECHNOLOGY, AS Required courses (34-35 hours)

Major Core		
CPTR 128	Basic Networking	3
CPTR 129	Fundamentals of Databases	3
CPTR 226	Introduction to Programming	4
CPTR 240	Systems Administration	3
CPTR 245	Web Development Basics	3
CPTR 335	Web Technologies	3
Select 9 hours from 300-40	0 level CPTR courses	9
Major Cognate		
BSAN 220	Data Analysis Tools	3
MATH 221	Elementary Statistics and Probability	3
or MATH 331	Statistics and Probability (4)	
INFORMATION To Required courses (19 hou	ECHNOLOGY Minor	
CPTR 128	Basic Networking	3
CPTR 129	Fundamentals of Databases	3
CPTR 226	Introduction to Programming	4
CPTR 240	Systems Administration	3
CPTR 245	Web Development Basics	3
CPTR 335	Web Technologies	3
CI IK 333	web recimologies	3

# Education

#### Mission

The Union College education program prepares caring, exemplary teachers who possess exceptional dedication to the profession. They respond to diversity and function effectively in multiple educational settings to help all students develop to their God-given potential. The program is driven by a commitment to holistic development, scholarship and dedication to a life of service that helps others achieve. This happens when the graduate's mental, physical, social and spiritual capabilities are harmoniously developed.

#### **Outcomes**

Students graduating with a degree in education will be able to:

- demonstrate academic excellence;
- practice healthful living;
- practice spiritual and social caring in their own lives;
- demonstrate commitment to growth in the lives of their students;
- respond effectively to diversity in multiple educational settings;
- perform professional roles with a high degree of competency; and
- pursue advanced study.

#### **Contact Information**

Peter Adams, Education Program Director of Education Dick Building, Room 406A 402.486.2600 ext. 2173 peter.adams@ucollege.edu

#### Faculty

Peter Adams, Susan Byers, Pam Cotton

#### **Adjunct Faculty**

Steven Bassett, Becky Gustafson, Joann Herrington, Lisette Parks, Mary Schlieder, Jackie Simpson, or as contracted

#### **Academic Programs**

Elementary Education, BS

Secondary Education, BS or BMusic (See field and subject endorsements)

#### ELEMENTARY EDUCATION, BS

Required courses (108 hours)

<u>Major Core</u>		
EDUC 125	Introduction to Teaching	3
EDUC 218	Philosophy of Christian Education	3
EDUC 225	Seminar in Ed Diversity: Multicultural/HRT	1
EDUC 245	Physical Education in the Elementary School	2
EDUC/PSYC 270	Research Writing	1
EDUC 345	Learning Theories and Measurement	3
EDUC 346	Special Education in the Classroom	3
EDUC 350	Seminar in Classroom Management	1
EDUC 357	Literature for Children and Adolescents	2
EDUC 425	Educational Organization and Administration (K-8)	3
EDUC 446	Reading Assessment (K-8)	2
EDUC 450	Methods in Reading and Language Arts (K-8)	5

EDUC 458 EDUC 465 EDUC 475 EDUC 490	Methods in Religion, Health, Science, Social Studies (K-8) Math Methods and Materials (K-8) Student Teaching Student Teacher Seminar—Elementary	4 3 16 1
Major Cognates ART 215 CPTR 265 HHPA 155 MATH 111 MATH 320 MUED 347 PSYC 215 RELB RELH 310 RELT 141 RELT 455	School Art Educational Technology Concepts of Wellness College Algebra Mathematical Concepts for Elementary School Teachers Music in the Elementary School Developmental Psychology RELB (Biblical Studies) elective History of the Seventh-day Adventist Church Christian Beliefs Prophetic Guidance in the Advent Movements	2 3 2 3 3 2 3 3 3 3 3 3 3
Specific program requirements (pas BIOL GEOG 137 or GEOG 227 HIST 157	Biology elective Introductory Geography World Regional Geography (3) The Modern World	3 3
HIST 255 HIST 380 or HIST/PLSC 383 or HIST 386 or HIST 450	The U.S.: From Discovery to Civil War The U.S.: Crisis, Consolidation, and Expansion Modern War; The 20 <sup>th</sup> -century. North Atlantic (3) Economic History of the United States (3) American History: The 20 <sup>th</sup> Century (3)	3 3
LITR 231 or LITR 232 or LITR 240 or select 3 hours of 300-400 LI	Ancient Western Literature Modern Western Literature (3) Travel Literature (3)	3
PLSC 208 SCNC 111 SECONDARY EDUCATION	American Politics Physical Science ON. BS	3 4
Required Professional Education  Major Core		
EDUC 125 EDUC 218 EDUC 225 EDUC/PSYC 270 EDUC 345 EDUC 346 EDUC 350 EDUC 356 EDUC 412-418 EDUC 475 EDUC 476 EDUC 485	Introduction to Teaching Philosophy of Christian Education Seminar in Education Diversity: Multicultural/HRT Research Writing Learning Theories and Measurement Special Education in the Classroom Seminar in Classroom Management General Secondary Methods Special Methods—In area of Major Student Teaching Content Reading and Writing Issues in Education	3 3 1 1 3 3 1 3 16 3 1
Major Cognates CPTR 265 HHPA 155 PSYC 215 RELB RELH 310	Educational Technology Concepts of Wellness Developmental Psychology RELB (Biblical Studies) elective History of the Seventh-day Adventist Church	3 2 3 3 3

RELT 141	Christian Beliefs	3
RELT 455	Prophetic Guidance in the Advent Movements	3

#### **Required Courses for Major**

Number of hours dependent upon the content area(s). Bachelor of Science requirements are listed by major content area in program sections (see list of field and subject endorsements below).

# Field EndorsementsSubject EndorsementsEnglish Language Arts Education 7-12Biology Education 7-12Mathematics Education 7-12Chemistry Education 7-12Music Education K-12History Education 7-12Science Education 7-12Religious Education K-12Social Science Education 7-12Vocal Music Education K-12

#### **Religion Minor**

If pursuing a Religion minor, EDUC 415 Methods: Social Science and Religious Education (K-12) is required to obtain a Seventh-day Adventist Religion teaching endorsement.

#### Admission to the Teacher Education Program

Admission into teacher education at Union College is not automatic. The checkpoints of Provisional, Full and Student Teaching Admission are carefully monitored by advisors and the Teacher Preparation Committee (TPC). A self-tracking chart listing all checkpoints is supplied for the teacher candidate to monitor his or her progress.

The five levels of the teacher education program are:

- pre-admission;
- provisional admission;
- full admission;
- student teaching; and
- program completion, certification, competencies, and early career review.

#### Program Completion, Certification and Competencies

To qualify for program completion each candidate will have:

- earned a minimum of a baccalaureate degree and completed all requirements of the approved program for which recommendation is desired;
- met a minimum 2.75 cumulative GPA standard of scholarship;
- shown evidence of physical fitness, emotional maturity and moral character;
- passed the Core exam with minimum scores set by the State of Nebraska before completion of EDUC 218
- successfully completed student teaching assignment;
- completed a portfolio with a rating of 3 or above on each outcome;
- taken and passed the Praxis II—Elementary Education: Curriculum, Instruction, and Assessment; PRAXIS II—Secondary Education Content Test taken and passed prior to student teaching;
- a background free of criminal convictions as shown by a professional background check (\$40.00 per check);
- certification (\$105.00 for non-resident / \$55.00 for resident)<sup>26</sup>.

#### Nebraska State Certification

Application for certification is made through the Union College Certification Officer using the forms provided by the Nebraska Department of Education. These forms can be obtained in the division office or on the Nebraska Department of Education website at <a href="http://www.nde.state.ne.us">http://www.nde.state.ne.us</a>

To qualify for Nebraska State Certification each candidate will have:

• earned a minimum of a baccalaureate degree and completed all requirements of the approved program for which recommendation is desired;

- attained a minimum of 18 years of age;
- shown evidence of physical fitness, emotional maturity and moral character;
- met a 2.75 minimum GPA standard of scholarship;
- passed the Core with minimum scores set by the State of Nebraska;
- taken and passed the PRAXIS II—Elementary Education: Curriculum, Instruction, and Assessment; PRAXIS II—Secondary Education Content Test taken and passed prior to student teaching (Core/PRAXIS II Testing costs may vary from \$120.00 \$170.00 per test<sup>13</sup>);
- successfully completed student teaching assignment;
- completed a portfolio with rating of 3.0 or above on each outcome;
- background free of criminal convictions as shown by a background check (\$40.00 per check); and
- certification (\$105.00 for non-resident / \$55.00 for resident).

#### Seventh-day Adventist Denominational Certificate

Application for Seventh-day Adventist certification is made in the program office using the form provided by the Mid-America Union Conference (MAUC).

To qualify for Seventh-day Adventist certification in the North American Division each candidate will have:

- met all state certification requirements;
- taken RELT 141, an RELB elective, RELT 455 and RELH 310 (with a grade of C or higher in each);
- membership in good standing at a Seventh-day Adventist church; and
- affirmed a willingness to subscribe to and teach within the framework and philosophy of the church.

Upon graduating, the teacher candidate can request a Union College transcript which indicates completion of a Nebraska, NCATE and an NAD accredited bachelor's degree program in teacher education and will be recommended to the State and MAUC for certification.

The Teacher Education Program at Union College is accredited by the National Council for Accreditation of Teacher Education (NCATE), <a href="www.ncate.org">www.ncate.org</a>. This accreditation covers the undergraduate elementary and secondary teacher preparation programs at Union College only. It does not include individual education courses that the institution offers to P-12 educators for professional development, re-licensure, or other purposes.

#### **Change of Certification Requirements**

In case of changes in Nebraska state certification requirements, it may be necessary for a student who wishes to be recommended for certification to meet certain requirements different from those published in the bulletin above. This is not to be construed to abridge teacher candidates' right to graduate under any bulletin in force during the time they are in continuous residence as defined in the current bulletin. However, since certification and graduation are two different end goals, candidates for certification may encounter certification law changes they will be required to meet.

#### **Transfer Students and Credits**

Transfer students wishing to be endorsed for teaching and who meet the requirements for admission into the teacher education program must complete requirements for their chosen teaching major (Elementary, Secondary field or subject areas) in harmony with the pertinent approved program on file.

The teacher education program may selectively accept lower division (general but not professional education) transfer credit from regionally accredited two-year institutions of higher education; credit from regionally accredited four-year institutions may also be accepted.

A transferring student who expects to be recommended for certification must earn a minimum of 30 semester hours of credit at Union College, 22 for secondary and 26 for elementary shall be in Education. Exceptions to this policy may be made by action of the TPC.

# English

#### Mission

The program in English fosters students' endeavors to be resourceful and critical readers, writers, speakers, and thinkers.

#### **Outcomes**

Students who graduate from the English program will be able to

- understand and analyze the relevance of texts through the lens of literary and rhetorical criticism; and
- write effectively in a range of genres because students understand the relationship of audience, author, and subject.

•

#### **Contact Information**

Tanya R. Cochran, Program Director of English Dick Building, Room 408F 402.486.2600 ext. 2325 tanya.cochran@ucollege.edu

#### Faculty

Tanya R. Cochran, Lori Peckham, Seth Pierce

#### **Adjunct Faculty**

Jason Gildow, Mike Mennard, Jill Morstad, or as contracted

#### **Academic Programs**

English, BA, with emphases in:

- Literature
- Writing and Speaking

English Language Arts Education, BS - Secondary Field Endorsement English Minor

#### Portfolio Requirement

All English majors should begin assembling, by their sophomore year, a portfolio of selected scholarly, creative, and professional work. The completed portfolio is to be presented in the final semester before graduation. Advisors may opt for a senior assessment exam. More information is available from English advisors.

#### **ENGLISH CORE AND COGNATES**

#### Required courses (27 hours)

Major Core		
ENGL 212	Writing for Scholarly Audiences	3
ENGL 271	History of the English Language	3
ENGL 272	Grammatical Systems	3
ENGL 378	Technical Writing and Grant Proposals	3
ENGL 379	Creative Writing	3
LITR 231	Ancient Western Literature	3
or LITR 232	Modern Western Literature (3)	
LITR/RELB 366	Biblical Literature	3
Major Cognates		
COMM 333	Rhetoric	3
COMM 355	Advanced Speech and Oral Interpretation	3

#### ENGLISH, BA - Literature Emphasis

Designed for those who desire a second major or plan for graduate study in English.

#### Required courses (42 hours)

Major Core & Cognates		27
Major Core	- n	
Select 15 hours from the f	collowing courses:	15
LITR 299	Seminar in Non-Western Literature (3)	
LITR 345	Studies in Early American Literature (3)	
LITR 348	Studies in British Literature (3)	
LITR 352	Women and Minority Writers (3)	
LITR 436	Studies in American Literature (3)	
LITR 440	Travel Literature (3)	
LITR 445	Early British Literature (3)	

## ENGLISH, BA - Writing and Speaking Emphasis

Designed for students interested in law, medicine, editing, or freelance writing.

#### Required courses (44 hours)

Major Core & Cognates		27
Major Core		
Select 6 hours from the following co	ourses:	6
LITR 299	Seminar in Non-Western Literature (3)	
LITR 348	Studies in British Literature (3)	
LITR 352	Women and Minority Writers (3)	
LITR 436	Studies in American Literature (3)	
LITR 445	Early British Literature (3)	
Major Cognates		
COMM 105	Public Speaking	2
COMM 125	Society, Culture, and Communication	3
COMM 246	Editing	3
COMM 457	Feature Writing	3

#### ENGLISH LANGUAGE ARTS EDUCATION, BS

## Secondary Field Endorsement

This endorsement qualifies an individual to teach and to direct curricular and extracurricular activities in composition/language, literature, speech, drama, public media, journalism, and reading in grades 7-12.

The teaching major in English Language Arts Education is designed to prepare candidates for secondary teaching by providing them with:

- a knowledge of the evolution of the English language;
- teaching competence in traditional and transformational grammars and a general knowledge of other modern grammars;
- a knowledge of classical and modern rhetoric;
- skill in writing developed through courses in basic composition, critical, creative, and journalistic writing;
- an awareness of the impact of the mass media;
- skill in the basics of directing and presenting a stage production;
- the ability to produce school publications;
- a broad and sound knowledge of literature through selected courses, a required core of period courses in British and American literature, and a required major figures course;
- the ability to read, analyze, and discuss literature with critical intelligence;

- a knowledge of the historical context of British and American letters;
- the ability to carry on independent research in language and literature;
- the special knowledge and skills pertinent to the effective teaching of English at the secondary level, supplied through a course in the methods of teaching high school and junior high school English, a course in the oral interpretation of literature, a course in the methods of teaching reading, and a course in literature of particular interest and value to adolescents; and
- experience in the integration of faith and learning, particularly in the teaching of imaginative literature.

#### Required courses (117 hours)

Major Core		
ENGL 212	Writing for Scholarly Audiences	3
ENGL 271	History of the English Language	3
ENGL 272	Grammatical Systems	3
ENGL 378	Technical Writing and Grant Proposals	3
ENGL 370 ENGL 379	Creative Writing	3
	Ancient Western Literature	3
LITR 231		3
or LITR 232	Modern Western Literature (3)	2
LITR 299	Seminar in Non-Western Literature	3
LITR 352	Women and Minority Writers	3
LITR/RELB 366	Biblical Literature	3
LITR	300-400 level British literature	3
LITR	300-400 level American literature	3
Maior Coonatos		
Major Cognates COMM 105	Dublia Casakina	2
	Public Speaking	2
COMM 125	Society, Culture, and Communication	3
COMM 214	Drama	1
COMM 221	Reporting	3
COMM 246	Editing	3
COMM 333	Rhetoric	3
COMM 355	Advanced Speech and Oral Interpretation	3
COMM 457	Feature Writing	3
COMM 465	Interpersonal Communication	3
EDUC 357	Literature for Children and Adolescents	2
Due fersional Education		
Professional Education	M.I. I. I. A. El	2
EDUC 412	Methods: Language Arts Education	3
Additional Professional Education		55
(See Education-Secondary Educatio	n Endorsements)	
ENCLISH Minor		
ENGLISH Minor		
Required courses (18 hours)		
ENGL 271	History of the English Language	3
or ENGL 272	Grammatical Systems (3)	
Select 6 hours from the following c	ourses:	6
COMM 246	Editing (3)	
COMM 333	Rhetoric (3)	
COMM 457	Feature Writing (3)	
ENGL 378	Technical Writing and Grant Proposals (3)	
ENGL 379	Creative Writing (3)	
	5-5	

Select 3 hours from the following co	ourses:	3
COMM 355	Advanced Speech and Oral Interpretation (3)	
COMM 425	Intercultural Communication (3)	
COMM 465	Interpersonal Communication (3)	
Select 6 hours from the following co	Durses:	6
LITR 231	Ancient Western Literature (3)	
LITR 232	Modern Western Literature (3)	
LITR 240	Travel Literature (3)	
LITR 299	Seminar in Non-Western Literature (3)	
LITR 345	Studies in Early American Literature (3)	
LITR 348	Studies in British Literature (3)	
LITR 352	Women and Minority Writers (3)	
LITR/RELB 366	Biblical Literature (3)	
LITR 436	Studies in American Literature (3)	
LITR 445	Early British Literature (3)	

# Foreign Language Studies

A major in Foreign Language Studies with emphases in Arabic, French, German, Italian, Portuguese, or Spanish can be acquired through Union College's participation in Adventist Colleges Abroad. This major is designed for students who want proficient speaking skills along with an appreciation of the culture, history, and literature associated with the language. Union College scholarships do not apply for study abroad at ACA campuses.

#### Outcomes

Upon graduating students should:

- Exhibit competence in speaking a second language;
- Be able to cope with the unfamiliar, both linguistically and culturally; and
- Understand the value of diversity.

#### **Contact Information**

Benjamin Tyner, Program Director of Politics, History and International Relations Dick Building, Room 408B 402.486.2600 ext. 2324 benjamin.tvner@ucollege.edu

#### **Academic Programs**

Foreign Language Studies, BA, with emphases in:

- Arabic
- French
- German
- Italian
- Portuguese
- Spanish

Arabic Minor

French Minor

German Minor

Italian Minor

Portuguese Minor

Spanish Minor

#### FOREIGN LANGUAGE STUDIES, BA

Available as a second major only.

#### Required courses (32 semester hours - 48 quarter hours)

LANG<sup>27</sup> prefix beyond 102, 12 semester hours (18 quarter hours) of which must be at or above the 300-level, including

LANG <sup>27</sup>	History, civilization, or literature	4 SH	(6 QH)
LANG <sup>27</sup>	Language or grammar	14 SH	(21 QH)
	(3 SH/5 QH at 300 level or above)		
LANG <sup>38</sup>	Modern language electives	12 SH	(18 QH)
LANG 485 <sup>28</sup>	Research in a Foreign Culture and Language	2 SH	(3 QH)

<sup>27</sup> LANG is replaced by the language studied.

<sup>28</sup> LANG 485 is completed at Union College within one school year of a student's successful completion of a year's study abroad at an ACA campus.

#### **FOREIGN LANGUAGES Minor**

Minors in Arabic, French, German, Italian, Portuguese, or Spanish can be acquired through participation in the Adventist Colleges Abroad program by living and studying on an ACA campus.

#### Required courses (20 semester hours - 30 quarter hours)

LANG<sup>29</sup> prefix beyond 102, 6 SH (9 QH) of which must be at or above the 300-level, including

LANG <sup>29</sup>	History, civilization, or literature	3 SH (4.5 QH)
$LANG^{29}$	Language or grammar	10 SH (15 QH)
$LANG^{29}$	Modern language electives	7 SH (10.5 QH)

SH=semester hours QH=quarter hours

# Graphic Design

#### Mission

The mission of the graphic design program is to prepare students to excel in visual communication within a Christian perspective and to become competent and creative graphic designers.

#### Outcomes

Students graduating with a degree in graphic design will be prepared to

- promote creative ideas to clients;
- design in a broad spectrum of ways;
- understand the historical perspective in the visual arts;
- demonstrate professionalism and a thorough knowledge of the field; and
- apply knowledge of fundamental business and marketing practices.

#### **Contact Information**

Bruce Forbes, Program Director of Art and Design Engel Hall, Room 104 402.486.2600 ext. 2329 bruce.forbes@ucollege.edu

#### **Faculty**

Bruce Forbes, Alan Orrison

#### **Adjunct Faculty**

Cid Coto, Steve Nazario, Matt Olson, Amy Smith, or as contracted

#### **Academic Programs**

Graphic Design, AS Graphic Design, AS Graphic Design Minor

#### Auxiliary Requirements for Baccalaureate Degrees in Graphic Design

- Presentation of a senior exhibit.
- Regular attendance at professional conferences.
- Participation in portfolio reviews.
- The development of a portfolio as a capstone educational record of academic experiences.
- Completion of an internship (150 hours).

#### **GRAPHIC DESIGN, BS**

#### Required courses (75 hours)

<u>Major Core</u>		
ART 105	Drawing I	2
ART 220	Elements and Principles of Design	3
ART 225	Color Theory	2
ART 235	Drawing II	2
ART 321	Art History I	3
ART 322	Art History II	3
ART 485	Senior Exhibit	1
GRPH 150	Introduction to Graphic Arts	3
GRPH 175, 275	Graphic Design Seminar	.5, .5
GRPH 250	Digital Imaging	3
GRPH 252	Computer Design	3

11-12

GRPH 254 GRPH 260 GRPH 301 GRPH 330 GRPH 350 GRPH 358 GRPH 360 GRPH 375, 475 GRPH 401 GRPH 450 GRPH 460	Publication Design Page Layout Web Design Digital Illustration History of Graphic Design Typography User Interface/User Experience (UI/UX) Design Graphic Design Seminar Interactive Web Design Art Direction Prepress Production	3 3 3 3 3 3 .5, .5
PHOT 151	Introduction to Photography	3
Internship in Graphic Design		
Major Cognates		
CPTR 245	Web Development Basics	3
Select 12 hours from BUAD 219 BUAD 225 BUAD 376 BUAD 430 COMM 125 COMM 209 COMM 211 COMM 221 COMM 241 COMM 246 COMM 313 COMM 316 COMM 316 COMM 380 COMM 457 COMM 465 GRPH 320 MRKT 327 MRKT 333 MRKT 443 PHOT 225  GRAPHIC DESIGN, AS	Small Business Management (3) Creativity and Innovation in Business (3) Human Resource Management (3) Conflict Management (3) Society, Culture and Communication (3) Digital Storytelling I (3) Digital Storytelling II (3) Reporting (3) Public Relations Principles (3) Editing (3) Digital Storytelling III (3) Propaganda and Persuasion (3) Script Writing (3) Feature Writing (3) Interpersonal Communication (3) Motion Graphics (3) Marketing (3) Professional Selling (3) Consumer Behavior (3) Intermediate Photography (3)	12
Major Core ART 105 ART 220 GRPH 150 GRPH 252 GRPH 254 GRPH 358 GRPH 460	Drawing I Elements and Principles of Design Introduction to Graphic Arts Graphic Design Seminar (0.5 each) Computer Design Publication Design Typography Prepress Production	2 3 3 1 3 3 3 3 3

Select 11-12 hours of ART, GRPH, or PHOT electives

## **GRAPHIC DESIGN Minor**

ART 105	Drawing I	2
ART 220	Elements and Principles of Design	3
GRPH 150	Introduction to Graphic Arts	3
GRPH 252	Computer Design	3
GRPH 254	Publication Design	3
GRPH 358	Typography	3
Select 3 hours of GRPH	I Electives	3

# Health and Human Performance

#### Mission

Our mission is to develop leaders through balanced lifestyles and Christian fellowship.

#### Outcomes

- Graduates will develop a foundation of human movement, physiology, and fitness and wellness concepts.
- Graduates will understand the need for lifelong physical activity and how it benefits them by being provided with opportunities to experience:
  - o a balanced Christian lifestyle through lifetime physical activities;
  - o intramural and intercollegiate sports; and
  - a progressive exercise program.
- Graduates will be able to practice leadership, teamwork, and Christian service within athletic environments by
  - o understanding the structure, rules, and participant roles for various sports;
  - participating in internships, practicum and student teaching opportunities within various organizations; and
  - o creating, conducting, and successfully completing athletic and/or behavior modification programs.
- Graduates will acquire the knowledge and application of professionalism, ethical behavior and personal responsibility to maintain ethical standards specific to their role within their chosen profession.

#### **Contact Information**

Shawntae Razo, Program Director of Health and Human Performance Larson Lifestyle Center, Room 204 402.486.2600 ext. 2166 shawntae.razo@ucollege.edu

#### Faculty

Shawntae Razo

#### Adjunct Faculty

Maria dos Santos or as contracted

#### **Academic Programs**

Exercise Science, BS

Health and Human Performance, BS, with emphases in:

- Business/Sports Management
- Fitness and Wellness

Business/Sports Management Minor

Fitness and Wellness Minor

Personal Training Minor

#### HEALTH AND HUMAN PERFORMANCE CORE & COGNATES

#### Required courses (36 hours)

<u>Major Core</u>		
HHPA 220	Healthy Eating and Fitness	1
HHPA 235	Weight Training and Physical Conditioning	1
HHPT 215	Emergency Health Care	2
HHPT 216	Athletic Injuries	3
HHPT 345	Sports Nutrition	2
HHPT 350	Practicum	1
HHPT 356	Physiology of Exercise	3
HHPT 360	Biomechanics/Kinesiology	3

HHPT 366	Adapted Physical Education	2
HHPT 370	Personal Training	3
HHPT 437	Measurement and Evaluation in HHP	2
HHPT 485	Seminar in Health and Human Performance	1
ННРТ 486	Senior Capstone	1
Internship in Health and Human P	erformance	

## Major Cognates

BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BSAN 220	Data Analysis Tools	3

#### **EXERCISE SCIENCE, BS**

The degree in exercise science is designed for students who are planning for graduate studies in exercise physiology, athletic training, physical therapy, wellness or sports medicine. Participation in an annual fitness test is required.

#### Required courses (69 hours)

Major Core & Cognates		36
Emphasis Core		
HHPT 256	Medical Terminology	1
ННРТ 357	Motor Learning	3
Emphasis Cognates		
BIOL 200	General Biology I	4
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 221	Elementary Statistics and Probability	3
PHYS 151, 152	General Physics I and II	4, 4
PSYC 105	Introduction to Psychology	3
PSYC 215	Developmental Psychology	3
	- · · · · · · · · · · · · · · · · · · ·	

# HEALTH AND HUMAN PERFORMANCE, BS - Business/Sports Management Emphasis

Designed to prepare students to work in fitness-racquet clubs, lifestyle centers, retail sporting goods stores, YMCA/YWCA's or other recreational businesses. Students can tailor-make the selections of internship to meet their own specific goals. Participation in an annual fitness test is required.

#### Required courses (60.5 hours)

Major Core & Cognates		36
Emphasis Core		
HHPA 210	Swimming	1
or HHPA 216	Lifeguard Training (1)	
HHPT 335	Administration of Intramural Sports	1.5
Choose 4 hours from the fo	llowing courses:	4
HHPA 145	Beginning Badminton (1)	
HHPA 146	Beginning Pickleball (1)	
HHPA 147	Beginning Tennis (1)	
HHPA 149	Beginning Golf (1)	
HHPA 249	Fitness Walking (1)	
HHPA 250	Running for Fitness (1)	

Emphasis Cognates		
ACCT 211, 212	Principles of Accounting	3, 3
BUAD 219	Small Business Management	3
or BUAD 225	Creativity and Innovation in Business (3)	
or BUAD 310	Quality Management (3)	
BUAD 325	Business Communication	3
or BUAD 430	Conflict Management (3)	
BUAD 376	Human Resource Management	3
MRKT 327	Marketing	3
or MRKT 333	Professional Selling (3)	
or GRPH 150	Introduction to Graphic Arts (3)	

## HEALTH AND HUMAN PERFORMANCE, BS - Fitness and Wellness Emphasis

The emphasis in fitness and wellness is designed for students who are planning to seek employment in the fitness marketplace, work-site wellness or community health promotion. Students can tailor-make the selection of internship to meet their own specific goals. Participation in an annual fitness test is required.

#### Required courses (59.5 hours)

Major Core & Cognates		36
Emphasis Core HHPA 210 or HHPA 216	Swimming Lifeguard Training (1)	1
HHPT 335	Administration of Intramural Sports	1.5
HHPT 329	Introduction to Fitness and Wellness Management	3
HHPT 476	Wellness Methods, Materials and Management	3
Emphasis Cognates		
BUAD 219	Small Business Management	3
or BUAD 225	Creativity and Innovation in Business (3)	
or BUAD 310	Quality Management (3)	
GRPH 150	Introduction to Graphic Arts	3
GRPH 252	Computer Design	3
or CPTR 245	Web Development Basics (3)	
or GRPH 254	Publication Design (3)	
or GRPH 260	Page Layout (3)	
MRKT 333	Professional Selling	3
or BUAD 325	Business Communication (3)	
or BUAD 430	Conflict Management (3)	
or MRKT 327	Marketing (3)	
PSYC 311	Introduction to Counseling Theory and Techniques	3
or PSYC 315	Social Psychology (3)	

#### **BUSINESS/SPORTS MANAGEMENT Minor**

Participation in annual fitness test is required.

#### Required courses (24.5 hours)

<u>Core</u>		
HHPA 220	Healthy Eating and Fitness	1
HHPT 215	Emergency Health Care	2
HHPT 335	Administration of Intramural Sports	1.5
HHPT 370	Personal Training	3

<u>Cognate</u>		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BUAD 219	Small Business Management	3
or BUAD 225	Creativity and Innovation in Business (3)	
or BUAD 310	Quality Management (3)	
GRPH 150	Introduction to Graphic Arts	3
MRKT 333	Professional Selling	3
or BUAD 325	Business Communication (3)	
or BUAD 430	Conflict Management (3)	
or MRKT 327	Marketing (3)	

# FITNESS AND WELLNESS Minor

Participation in annual fitness test is required.

# Required courses (23 hours)

<u>Core</u>		
HHPA 220	Healthy Eating and Fitness	1
ННРТ 215	Emergency Health Care	2
ННРТ 329	Introduction to Fitness and Wellness Management	3
ННРТ 370	Personal Training	3
HHPT 476	Wellness Methods, Materials and Management	3
Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
GRPH 150	Introduction to Graphic Arts	3
or MRKT 333	Professional Selling (3)	
or MRKT 327	Marketing (3)	

# PERSONAL TRAINING Minor

Participation in annual fitness test is required.

# Required courses (23 hours)

BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
HHPA 220	Healthy Eating and Fitness	1
HHPA 235	Weight Training and Physical Conditioning	1
HHPT 215	Emergency Health Care	2
HHPT 216	Athletic Injuries	3
HHPT 345	Sports Nutrition	2
HHPT 356	Physiology of Exercise	3
HHPT 370	Personal Training	3

# History

#### Outcomes

Students graduating from the history program will

- possess broad knowledge of past societies, be able to think causally and comparatively about other cultures, and will understand the value and use of historical knowledge for ethical citizenship in the present;
- think critically, having been trained to analyze sources and weigh the merits of historical arguments and competing interpretations and narratives of the past;
- know how to communicate effectively and construct clear and evidence-based arguments orally and in writing;
- consequently, will be valuable to employers, prepared for graduate and law school, and of service to their communities.

#### **Contact Information**

Benjamin Tyner, Program Director of Politics, History and International Relations Dick Building, Room 408B 402.486.2600 ext. 2324 benjamin.tyner@ucollege.edu

#### Faculty

Christopher Banks, Benjamin Tyner

# **Adjunct Faculty**

Brian Baskerville, Leslie Working, or as contracted

### **Academic Programs**

History, BA

History Education, BS - Secondary Subject Endorsement Social Science Education, BS - Secondary Subject Endorsement History Minor Pre-Law Minor

## HISTORY, BA

## Required courses (35 hours)

Major Core		
GEOG 137	Introductory Geography	3
or GEOG 227	World Regional Geography (3)	
HIST 157	The Modern World	3
HIST 220	The Ancient World	3
HIST 497	History: Theory and Argument	3
PLSC 208	American Politics	3
PHIL 335	Introduction to Philosophy	3
Select 17 hours of 300-400 le	evel HIST electives	17

## HISTORY EDUCATION, BS

#### **Secondary Subject Endorsement**

The teaching major in history is designed to prepare candidates for secondary teaching by providing

- a general knowledge of American and world history;
- a basic undergraduate historical knowledge that prepares a student for graduate or law school;
- an understanding of democracy as exemplified in the political process of the government of the United States and other countries;
- the basic skills to undertake independent study and research, to be effective in the use of a library, to have the ability to analyze documents, and to be able to write fluently;
- the ability to contribute to more responsible citizenship of students through a broader understanding of history;
- a physical and human geographical approach to the world; and
- the special knowledge and skills pertinent to the effective teaching of history at the secondary level, supplied through a course in the methods of teaching high school and junior high school social studies, a course in secondary methods, and a course in methods of historical research.

# Required courses (100 hours)

Major Core		
GEOG 137	Introductory Geography	3
or GEOG 227	World Regional Geography (3)	
HIST 157	The Modern World	3
HIST 220	The Ancient World	3
HIST 497	History: Theory and Argument	3
PLSC 208	American Politics	3
PHIL 335	Introduction to Philosophy	3
Select 21 hours of 300-400 level HIS	ST electives	21
Professional Education		
EDUC 415	Methods: Social Science and Religious Education (K-12)	3
Additional Professional Education		58

#### Recommended

Beginning foreign language in a year-long sequence

It is strongly recommended that every student finish requirements for at least two subject endorsements. (See Education—Secondary Education Endorsements)

#### SOCIAL SCIENCE EDUCATION, BS

#### Secondary Field Endorsement

The teaching major in social science is designed to prepare candidates for secondary teaching by providing them with

- a general knowledge of American and world history;
- a basic knowledge that would enable students to go into advanced training such as law, teaching, or other professional fields;
- an understanding of political theory as exemplified in the political process of the governments of the United States and other nations;
- a knowledge of the social problems of the modern community through courses in sociology, geography, economics, and psychology;
- the basic skills to undertake independent study and research, which include a technical vocabulary, effective use of a library, the ability to analyze documents, and an ability to write fluently;
- an awareness of the Christian perspective toward the problems of society and its environment; and
- the special knowledge and skills pertinent to the effective teaching of social science at the secondary level.

The program for a comprehensive studies endorsement consists of seven components: economics, geography, history, political science, psychology, and sociology.

The hours shall be distributed as follows:

- A minimum of 21 hours in history; and
- A minimum of 6 hours in five remaining areas (ECON, GEOG, PLSC, PSYC, SOCI)

# Required courses (118 hours)

Major Core GEOG 137 GEOG 227 HIST 157 HIST 220 HIST 497 Select 12 hours of 300-400 level HIS	Introductory Geography World Regional Geography The Modern World The Ancient World History: Theory and Argument	3 3 3 3 3
Select 12 hours of 300-400 level file	51 electives	12
Major Cognates ECON 235 ECON 236 PLSC 208 PSYC 215 SOCI 105	Principles of Microeconomics Principles of Macroeconomics American Politics Developmental Psychology Introduction to Sociology	3 3 3 3 3
PLSC PSYC	Political Science Elective Psychology Elective	3 3
Select 3 hours from the following co SOCI/INRR 300 SOCI 315 SOCI 321	Social Dimensions of Disaster (3) Marriage and Family (3) Diversity in Society (3)	3
Select 9 hours of HIST, PLSC, PSY	C, or SOCI electives (with advisor approval)	9
Professional Education EDUC 415 Additional Professional Education (See Education-Secondary Education)	Methods: Social Science and Religious Education (K-12)	3 55
HISTORY Minor Required courses (18 hours)		
HIST 157 HIST 220 PLSC 208	The Modern World The Ancient World American Politics	3 3 3
Select 9 hours of 300-400 level HIST electives		9

# **PRE-LAW Minor**

The pre-law minor allows the student to pursue an interdisciplinary program of study, taking courses in philosophy, political science, writing, history, and business. The pre-law minor requires a minimum of 18 semester hours, 12 of which must be 300-400 level distributed as follows:

# Required courses (18 hours)

COMM 333	Rhetoric	3
HIST 497	History: Theory and Argument	3
PLSC 208	American Government	3
Select 3 hours from the following courses:		3
COMM 355	Advanced Speech and Oral Interpretation (3)	
COMM 465	Interpersonal Communication (3)	
ENGL 378	Technical Writing and Grant Proposals (3)	
Select 6 hours from the following courses:		6
BUAD 430	Conflict Management (3)	
BUAD 445	Business Law (3)	
ECON 235	Principles of Microeconomics (3)	
ECON 236	Principles of Macroeconomics (3)	
LEAD 225	Creative Leadership (3)	
PHIL 335	Introduction to Philosophy (3)	

# **International Relations**

#### Outcomes

The Bachelor of Arts in International Relations is designed to prepare the student for careers in a variety of areas:

- Careers in U.S. or international politics and government service;
- International aspects of law, business and communications;
- Church positions; and
- Graduate studies in related fields.

Upon graduation all international relations majors may sit for the U.S. Department of State Foreign Service exam in the following summer.

## **Contact Information**

Benjamin Tyner, Program Director of Politics, History and International Relations Dick Building, Room 408B 402.486.2600 ext. 2324 benjamin.tyner@ucollege.edu

#### **Faculty**

Christopher Banks, Benjamin Holdsworth, Benjamin Tyner

# **Adjuncts**

As contracted

# **Academic Programs**

International Relations, BA International Relations Minor

# INTERNATIONAL RELATIONS, BA

Required courses (48 Hours)

Major Core		
GEOG 137	Introductory Geography	3
or GEOG 227	World Regional Geography (3)	
HIST 157	The Modern World	3
PLSC 105	Introduction to International Relations	3
PLSC 208	American Politics	3
PLSC/HIST 258	Africa's Global Emergence	3
PLSC/HIST 383	Modern War: The 20th-Century North Atlantic	3
PLSC/HIST 392	The Modern Middle East	3
PLSC 460	Global Political Economy and International Labor	3

Internship - 150 hours in a political science related field

Select 6 hours from the follow	ing courses:	6
HIST/PLSC 260	Latin America and the Caribbean (3)	
HIST/PLSC 346	Russia in Global Politics (3)	
HIST/PLSC 430	Global War and Global Migrations: Searching for a New Life (3)	
HIST/PLSC 465	The U.S. War on Terror (3)	
PLSC/RELG 345	Global Environment and International Policy (3)	
PLSC 396	Walmart and You: The Political Dance of U.SChina Relations (3)	

Major Cognates		
ACCT 211	Principles of Accounting	3
ECON 235	Principles of Microeconomics	3
ECON 236	Principles of Macroeconomics	3
FNCE 330	Financial Institutions and Markets	3
FNCE 370	International Finance	3
PSYC 340	Research Methods I	3
INTERNATIONAL RELA	ATIONS Minor	
Required courses (18 Hours)		
GEOG 137	Introductory Geography	3
PLSC 105	Introduction to International Relations	3
PLSC/HIST 392	The Modern Middle East	3
PLSC 460	Global Political Economy and International Labor	3
Select 6 hours from the following c	ourses:	6
HIST/PLSC 258	Africa's Global Emergence (3)	
HIST/PLSC 260	Latin America and the Caribbean (3)	
HIST/PLSC 346	Russia in Global Politics (3)	
HIST/PLSC 383	Modern War: The 20th-Century North Atlantic (3)	
HIST/PLSC 430	Global War and Global Migrations: Searching for a New Life (3)	
HIST/PLSC 465	The U.S. War on Terror (3)	
PLSC 208	American Politics (3)	
PLSC/RELG 345	Global Environment and International Policy (3)	
PLSC 396	Walmart and You: The Political Dance of U.SChina Relations (3)	
	· ,	

# International Rescue and Relief

The International Rescue and Relief program is designed for students seeking careers in community service and the skills to serve in times of disaster and humanitarian need. There are four foundational elements of the program: 1) we believe that Jesus applied himself to physical needs before engaging in spiritual ministry, and that both must be concurrent in outreach; 2) a summer session in Colorado dedicated to survival and rescue training; 3) a semester abroad studying and providing humanitarian relief; 4) and clinical emergency training throughout the entire program. The curriculum also provides graduates with the knowledge, skills, and ability for professional certification in emergency response and management. The IRR program prepares students for a variety of career opportunities depending on their degree focus; such as in mission service, nursing, public health, public services, non-profit agencies, business, and social services. The pre-professional emphasis prepares students for graduate studies to become a doctor, dentist, PA, or physical therapist. The Public Safety emphasis prepares a graduate to work as a paramedic, in emergency medical services, emergency manager, firefighter, forest or park ranger, search and rescue, and law enforcement. The Global Community Development emphasis prepares students for careers in the mission field, humanitarian relief and development. Union College offers this program in its long-standing tradition of Christian service.

#### Mission

The International Rescue and Relief program prepares students for numerous career opportunities while providing students with the skill sets that will enable them to effectively respond to humanity's needs during disaster and tragedy. Through traditional coursework, experiential environments, and training in remote and wilderness settings, students will be prepared to lead in challenging circumstances, rescue others, provide humanitarian relief and successfully compete for professional placement and graduate study.

## **Outcomes**

Students graduating with a major in International Rescue and Relief will be prepared to:

- Demonstrate leadership skills by serving effectively, compassionately and enthusiastically in providing current humanitarian relief and development in both national or international environments;
- Competently deploy during emergencies and disasters as trained humanistic responders and certificated search and rescue technicians;
- Identify and determine the necessary emergency medical treatments for individuals experiencing a crisis in urban, rural, or austere locations; and
- Obtain an entry-level career placement in their chosen field or pursue advanced study.

# **Contact Information**

Kalie Saunders, Program Director Harris Center, Room 233 402.486.2980 kalie.saunders@ucollege.edu

#### Faculty

Kyle Kuehmichel, Andrew Saunders, Kalie Saunders, Rick Young

#### Adjuncts

As Contracted

# **Academic Programs**

International Rescue and Relief, BS International Rescue and Relief, BS, with emphases in:

- Firefighter
- Global Community Development
- Health Care Leadership
- Paramedic
- Pre-Dental, Pre-Medical

- Pre-Physical Therapy
- Pre-PA
- Public Safety

Emergency Medical Services, AS Rescue and Relief/Allied Health, AS Disaster Management Minor Global Community Development Minor Survival and Rescue Minor

# Preparatory Coursework for Admission to the Program

Recommended high school preparation for admission includes year-long courses in biology and chemistry, two years of algebra, computer applications and two years of foreign language. Students should maintain a physical fitness program to meet the challenging experiential courses in IRR.

## Admission and Progression Requirements

Admission into the International Rescue and Relief Program requires Union College enrollment and a meeting with an IRR advisor to determine the best academic program to help meet career goals.

#### Criteria for Admission to the IRR Program

- Acceptance into Union College.
- The physical, mental, and emotional capacity to function as a professional emergency responder.
- Passport for international travel.

Progression in most of the IRR programs requires the student to:

- maintain physical, mental, and emotional capacity to function as a professional emergency responder;
- maintain ability to hike, swim, run, adapt and function well in a broad range of climates and austere settings;
- comply with health policy requirements, including completion of the Hepatitis B series, an annual TB test, and annual influenza vaccine;
- complete the prerequisite CPR certification: American Heart Association Heart Code Basic Life Support during fall semester;
- maintain a successful criminal background check through the IRR program;
- obtain and maintain certifications for CPR, NREMT, and NEEMT;
- obtain all designated advanced EMT certifications; and
- successfully complete summer survival and rescue certifications before junior year.

#### **Program-Specific Fees**

Additional fees are charged for the summer training courses, and the overseas semester. A program fee is also assessed each semester for all students admitted to the program, with the exception of the overseas semester. Information regarding current fees can be found by contacting the IRR program office.

#### **Certificate Courses**

Certificate courses are identified in course descriptions.

# INTERNATIONAL RESCUE AND RELIEF CORE & COGNATE

#### Required courses (28 hours)

<u>Major Core</u>		
INRR 105	Principles of Emergency Management	3
INRR 205	Disaster Management & Leadership	3
INRR/SOCI 300	Social Dimensions of Disaster	3
INRR 314	Cultural Integration	1
or INRR 316	Jungle, Coastal and Ocean Survival (1)	
INRR 321	Global Health	3
INRR 330	Travel and Tropical Medicine	3
INRR 430	Expeditionary Leadership	3

INRR 482	Development and Project Implementation	3
INRR 483	Cultural Perspectives in Development	3
Major Cognate		
RELT 347	World Religions	3

## INTERNATIONAL RESCUE AND RELIEF, BS

Required courses (65-71 hours)

Supporting Area

	28
Emergency Medical Technician I and II	4, 4
Emergency Health Care (2)	
Search and Rescue	1
Swift Water Rescue and Flood Management	2
Technical Rope Rescue	2
Basic Survival	1
Advanced Care for EMS Providers	3
Crisis and Resilience (3)	
Clinical & Emergency Care I and II	2, 3
Development, Logistics and Analytics (3)	
Abnormal Psychology (3)	
	Search and Rescue Swift Water Rescue and Flood Management Technical Rope Rescue Basic Survival Advanced Care for EMS Providers Crisis and Resilience (3) Clinical & Emergency Care I and II Development, Logistics and Analytics (3)

Select a minor or an individualized set of coursework that either complements the professional program of choice or broadens the student's skill set in a meaningful way. If a minor is used to fulfill this requirement, a maximum of 9 hours can overlap between the major requirements and the minor. If a supporting area is used to fulfill this requirement, zero hours can overlap between the major requirements and the supporting area. The supporting area individualized sequence of courses must be approved by the student's faculty advisor and the program director of International Rescue and Relief.

21

Accounting - 19 International Relations - 18 Biomedical Science - 18 Marketing - 18 Business Administration - 18 Mathematics - 21 Business/Sports Management - 24.5 Missions - 20 Pre-Law - 18 Chemistry - 19 Psychology - 18 Communication - 21 English - 18 Public Relations - 18 Fitness and Wellness - 23 Religion - 18 Graphic Design - 20 Small Business Management - 18 History - 18 Youth Ministry - 18 Informational Technology - 19

#### INTERNATIONAL RESCUE AND RELIEF, BS - Firefighter Emphasis

Students complete the first three years at Union College. Students complete this emphasis by submitting an official college transcript showing completion of an accredited Fire Protection Technology program. Students who complete the firefighter portion of the program after the junior year at Union College may meet the residency requirement for graduation during the junior year. Thirty credit hours are accepted for the Fire Protection program and will satisfy the Union College upper division requirement. Firefighter program must be completed within two years of completing the IRR Core requirements.

## Required courses (80 hours)

Major Core & Cognate		28
Emphasis Core		
INRR 101, 102	Emergency Medical Technician I and II	4, 4
INRR 110	Search and Rescue	1
INRR 112	Swift Water Rescue and Flood Management	2
INRR 114	Technical Rope Rescue	2
INRR 116	Basic Survival	1
INRR 202	Advanced Care for EMS Providers	3
INRR 310, 311	Clinical & Emergency Care I and II	2, 3
Completion of an Accredited Fi	30	

# INTERNATIONAL RESCUE AND RELIEF, BS - Global Community Development Emphasis

This emphasis does not require the medical and rescue requirements found in other IRR programs.

## Required courses (77 hours)

Major Core & Cognate		28
Emphasis Core		2
INRR 312	Development, Logistics and Analytics	3
Emphasis Cognates		
ACCT 211	Principles of Accounting	3
ECON 236	Principles of Macroeconomics	3
HHPT 215	Emergency Health Care	2
MATH 221	Elementary Statistics and Probability	3
PLSC 105	Introduction to International Relations	3
PSYC 340	Research Methods I	3
Select 8 hours of BSAN, BUAD, CPTR, SOCI, or SOWK electives		8
Supporting Area		21

Select a minor or an individualized set of coursework that either complements the professional program of choice or broadens the student's skill set in a meaningful way. If a minor is used to fulfill this requirement, a maximum of 9 hours can overlap between the major requirements and the minor. If a supporting area is used to fulfill this requirement, zero hours can overlap between the major requirements and the supporting area. The supporting area individualized sequence of courses must be approved by the student's faculty advisor and the program director of International Rescue and Relief.

Accounting - 19	International Relations - 18
Biomedical Science - 18	Marketing - 18
Business Administration - 18	Mathematics - 21
Business/Sports Management - 24.5	Pre-Law - 18
Chemistry - 19	Psychology - 18
Communication - 21	Public Relations - 18
English - 18	Religion - 18
Fitness and Wellness - 23	Small Business Management – 18
Graphic Design - 20	Survival and Rescue - 22
History - 18	Youth Ministry - 18
Informational Technology - 19	

# INTERNATIONAL RESCUE AND RELIEF, BS - Health Care Leadership Emphasis

Students may finish their Bachelor of Science degree in International Rescue and Relief during their first year of clinical Nursing studies, after acceptance into the Nursing program. Students must maintain a cumulative GPA of 2.75 or above to apply to the nursing program during their third year before going overseas with IRR. Students would enter the nursing program in their fourth year on campus and complete the IRR and Nursing programs in 5 and a half years.

# Required courses (83 hours)

Major Core & Cognate		28
Emphasis Core		
INRR 101, 102	Emergency Medical Technician I and II	4, 4
INRR 110	Search and Rescue	1
INRR 112	Swift Water Rescue and Flood Management	2
INRR 114	Technical Rope Rescue	2
INRR 116	Basic Survival	1
INRR 202	Advanced Care for EMS Providers	3
INRR 310, 311	Clinical & Emergency Care I and II	2, 3
Emphasis Cognates		22
BIOL 111, 112	Human Anatomy and Physiology I and II (4, 4)	
BIOL 205	Microbiology (4)	
CHEM 104	Introduction to General, Organic and Biochemistry (4)	
MATH 221	Elementary Statistics and Probability (3)	
PSYC 215	Developmental Psychology (3)	
Select 11 hours of NURS electives	or advisor approved classes	11

# **INTERNATIONAL RESCUE AND RELIEF, BS - Paramedic Emphasis**

Students complete the first three years at Union College. Students complete this emphasis by submitting an official college transcript from a CAAHEP accredited institution for Paramedic training. Students who complete the paramedic portion of the program after the junior year at Union College may meet the residency requirement for graduation during the junior year. Thirty credit hours are accepted for the Paramedic program and the upper division courses in IRR, plus the Paramedic coursework will satisfy the Union College upper division requirement. Students who complete their paramedic coursework at an approved training center instead of a regionally accredited college or university will be granted 30 transfer credits with a grade of CR if they can provide an official letter of completion from the program director of the CAAHEP accredited institution. Students who will complete their paramedic training during the following summer may apply to participate in the graduation ceremonies in May as prospective summer graduates.

#### Required courses (89 hours)

	28	
gency Medical Technician I and II	4, 4	
and Rescue	1	
Water Rescue and Flood Management	2	
nical Rope Rescue	2	
Survival	1	
nced Care for EMS Providers	3	
al & Emergency Care I and II	2, 3	
Completion of an Accredited Paramedic Program		
, , ,	4, 4 1	
	gency Medical Technician I and II n and Rescue Water Rescue and Flood Management nical Rope Rescue Survival nced Care for EMS Providers al & Emergency Care I and II rogram an Anatomy and Physiology I and II cal Terminology	

# INTERNATIONAL RESCUE AND RELIEF, BS - Pre-Dental, Pre-Medical Emphasis Required courses (100-101 hours)

Major Core & Cognate		28
Emphasis Core INRR 101, 102 INRR 110 INRR 112 INRR 114 INRR 116 INRR 202 INRR 310, 311	Emergency Medical Technician I and II Search and Rescue Swift Water Rescue and Flood Management Technical Rope Rescue Basic Survival Advanced Care for EMS Providers Clinical & Emergency Care I and II	4, 4 1 2 2 1 3 2, 3
Emphasis Cognates BIOL 200, 202 BIOL 411 BIOL 416 BIOL/CHEM 445 or BIOL/CHEM 440 CHEM 151, 152 CHEM 211, 212 MATH 119 or MATH 184 PHYS 151, 152 PSYC	General Biology I and II Advanced Human Anatomy Advanced Human Physiology Biochemistry I Biochemistry (4) General Chemistry I and II Organic Chemistry I and II Trigonometry Calculus I (4) General Physics I and II A Psychology course	4, 4 4 4 4, 4 4, 4 3 4, 4 3
Required courses (99-100 hours)	CUE AND RELIEF, BS - Pre-Physical Thera	py Emphasis

# INTERNATIONAL RESCUE AND RELIEF, BS - Pre-PA Emphasis Required courses (97 hours)

Major Core & Cognate	28
Emphasis Core	
INRR 101, 102 Emergency Medical Technician I and II	4, 4
INRR 110 Search and Rescue	1
INRR 112 Swift Water Rescue and Flood Management	2
INRR 114 Technical Rope Rescue	2 2 1 3
INRR 116 Basic Survival	1
INRR 202 Advanced Care for EMS Providers	
INRR 310, 311 Clinical & Emergency Care I and II	2, 3
Emphasis Cognates	
BIOL 200, 202 General Biology I and II	4, 4
BIOL 205 Microbiology	4
BIOL 411 Advanced Human Anatomy	4
BIOL 416 Advanced Human Physiology	4
BIOL/CHEM 445 Biochemistry I	4
or BIOL/CHEM 440 Biochemistry (4)	
CHEM 151, 152 General Chemistry I and II	4, 4
CHEM 211, 212 Organic Chemistry I and II	4, 4
HHPT 256 Medical Terminology	1
MATH 221 Elementary Statistics and Probability	3
PSYC 215 Developmental Psychology	3
INTERNATIONAL RESCUE AND RELIEF, BS-Public Safety Emphasis	
Required courses (77 hours)	
Major Core & Cognate	28
Emphasis Core	
INRR 101, 102 Emergency Medical Technician I and II	4, 4
INRR 110 Search and Rescue	1
INRR 112 Swift Water Rescue and Flood Management	
INRR 114 Technical Rope Rescue	2 2 1 3
INRR 116 Basic Survival	1
INRR 202 Advanced Care for EMS Providers	3
INRR 310, 311 Clinical & Emergency Care I and II	2, 3

Supporting Area

Select a minor or an individualized set of coursework that either complements the professional program of choice or broadens the student's skill set in a meaningful way. If a minor is used to fulfill this requirement, a maximum of 9 hours can overlap between the major requirements and the minor. If a supporting area is used to fulfill this requirement, zero hours can overlap between the major requirements and the supporting area. The supporting area individualized sequence of courses must be approved by the student's faculty advisor and the program director of International Rescue and Relief.

Introduction to Psychology

Abnormal Psychology

Accounting - 19 Biomedical Science - 18 Business Administration – 18 Chemistry - 19

**Emphasis Cognates** 

PSYC 105

PSYC 415

Communication - 21 Information Technology - 19 Pre-Law - 18 Psychology - 18 3

3

26

# **EMERGENCY MEDICAL SERVICES, AS**

## Required courses (32 hours)

Major Core		
INRR 101, 102	Emergency Medical Technician I and II	4, 4
INRR 105	Principles of Emergency Management	3
INRR 110	Search and Rescue	1
INRR 112	Swift Water Rescue and Flood Management	2
INRR 114	Technical Rope Rescue	2
INRR 116	Basic Survival	1
INRR 202	Advanced Care for EMS Providers	3
INRR 205	Disaster Management	3
Major Cognates		
FNCE 215	Personal Finance	3
PSYC 215	Developmental Psychology	3
SOCI 105	Introduction to Sociology	3

# RESCUE AND RELIEF/ALLIED HEALTH, AS

An Associate of Science Degree in Rescue and Relief/Allied Health is a 2-3 year+2 year partnership between Union College and Loma Linda University that provides students with rescue certifications and the prerequisites needed to complete a Bachelor of Science Degree from Loma Linda University in the following fields: Cardiac Electrophysiology; Clinical Laboratory Science; Communication Sciences and Disorders; Cytotechnology; Health Informatics and Information Management; Nutrition and Dietetics; Orthotics and Prosthetics; and Respiratory Care.

# Required Courses (26 hours)

Major Core & Cognates

Major Core		
INRR 101, 102	Emergency Medical Technician I and II	4, 4
INRR 110	Search and Rescue	1
INRR 112	Swift Water Rescue and Flood Management	2
INRR 114	Technical Rope Rescue	2
INRR 116	Basic Survival	1
INRR 105	Principles of Emergency Management	3
INRR 205	Disaster Management & Leadership	3
Major Cognates		
PSYC 105	Introduction to Psychology	3
SOCI 105	Introduction to Sociology	3

# RESCUE AND RELIEF/ALLIED HEALTH, AS - Cardiac Electrophysiology Emphasis Required courses (49 Hours)

initial or gold of godinates		
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 111	College Algebra	3
PHYS 151	General Physics I	4

RESCUE AND	RELIEF/	ALLIED	HEALTH,	<b>AS</b> - 0	Clinical	Laboratory	Science	<b>Emphas</b>	is
Required courses						•		•	

Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
CHEM 151, 152	General Chemistry I and II	4, 4
CHEM 211, 212	Organic Chemistry I and II	4, 4
MATH 111	College Algebra	3
PHYS 151	General Physics I	4
RESCUE AND REL Disorders Emphasis	JEF/ALLIED HEALTH, AS - Communication Science	ces and
Required courses (47-48)	Hours)	
Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
CHEM 104	Introduction to General, Organic, and Biochemistry	4
MATH 111	College Algebra	3
MATH 221	Elementary Statistics and Probability	3
Select 3-4 hours from BIOI	L, CHEM or PHYS electives	3-4
RESCUE AND REL Required courses (65 Ho	JEF/ALLIED HEALTH, AS - Cytotechnology Emph	asis
Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BIOL 200, 202	General Biology I and II	4, 4
BIOL 205	Microbiology	4
CHEM 151, 152	General Chemistry I and II	4, 4
CHEM 211, 212	Organic Chemistry I and II	4, 4
MATH 111	College Algebra	3
RESCUE AND REL	JEF/ALLIED HEALTH, AS - Health Informatics and	d Information
Management Empha Required courses (41 Hor	asis	
Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
HHPT 256	Medical Terminology	1
MATH 111	College Algebra	3
Select 3 hours of ECON, G	GEOG, PLSC, or SOCI elective	3

# RESCUE AND RELIEF/ALLIED HEALTH, AS - Nutrition and Dietetics Emphasis Required courses (49 Hours)

Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BIOL 205	Microbiology	4
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 111	College Algebra	3
MAIIIIII	College Algebra	3
RESCUE AND RELIE Required courses (50 Hours)	F/ALLIED HEALTH, AS - Orthotics and Pros	thetics Emphasis
Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 331	Statistics and Probability	4
PHYS 151	General Physics I	4
RESCUE AND RELIE Required courses (53 Hours,	F/ALLIED HEALTH, AS - Respiratory Care E	mphasis
Major Core & Cognates		26
Emphasis Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BIOL 205	Microbiology	4
CHEM 151, 152	General Chemistry I and II	4, 4
MATH 111	College Algebra	3
PHYS 151	General Physics I	4
DISASTER MANAGE! Required courses (20-21 hou		
INRR 105	Principles of Emergency Management	3
INRR 205	Disaster Management	3
or NURS 433	Disaster Management Disaster Nursing (2)	3
INRR/SOCI 300	Social Dimensions of Disaster	3
		10
Select twelve hours from:	I i i i ID 1 (2)	12
COMM 365	Institutional Development (3)	
COMM 377	Crisis Communication Management (3)	
COMM 425	Intercultural Communication (3)	
INRR 482	Development and Project Implementation (3)	
INRR 483	Cultural Perspectives in Development (3)	
NURS 391	Global Health Nursing (2)	
SOCI/SOWK 337	Interventions with Groups (3)	
SOCI/SOWK 415	Crisis and Resilience (3)	

# GLOBAL COMMUNITY DEVELOPMENT Minor

# Required courses (21 hours)

ACCT 211	Principles of Accounting	3
BUAD 219	Small Business Management	3
INRR/SOCI 300	Social Dimensions of Disaster	3
INRR 482	Development and Project Implementation	3
INRR 483	Cultural Perspectives in Development	3
PLSC 105	Introduction to International Relations	3
Select one course from:		3
BUAD 316	Operations and Resource Management (3)	
ECON 235	Principles of Microeconomics (3)	
SOCI 321	Diversity in Society (3)	
SOCI/SOWK 337	Interventions with Groups (3)	

# SURVIVAL AND RESCUE Minor

# Required courses (23 hours)

INRR 101, 102	Emergency Medical Technician I and II	4, 4
INRR 105	Principles of Emergency Management	3
INRR 110	Search and Rescue	1
INRR 112	Swift Water Rescue and Flood Management	2
INRR 114	Technical Rope Rescue	2
INRR 116	Basic Survival	1
INRR 202	Advanced Care for EMS Providers	3
INRR/SOCI 300	Social Dimensions of Disaster	3

# Leadership Minor

A leader needs a wide variety of knowledge, skills, and dispositions to be effective. These attributes may be innate, or they may be learned and absorbed through observation. A wide variety of classroom and practical experiences will assist students who pursue the leadership minor to assimilate and develop Leadership qualities.

This minor is designed to be completed within four years plus one summer. Several of the required courses fulfill general education requirements for general education or requirements within a student's major discipline.

#### Mission

By providing scholarship, experiences, support and encouragement, the Leadership Minor empowers students to grow and position themselves as leaders with a commitment to service.

#### **Outcomes**

Students graduating with the Leadership Minor will:

- understand leadership theory;
- practice moral and ethical leadership;
- be effective in interpersonal communication and conflict resolution;
- evaluate information using critical thinking skills;
- appreciate the power of forgiveness and acceptance; and
- value the leadership qualities of Jesus

## **Contact Information**

Ed Allen, Program Director of Leadership Dick Building 412A 402.486.2600 ext. 2375 ed.allen@ucollege.edu

#### **Faculty**

Ben Holdsworth, Benjamin Tyner

#### Adjunct Faculty

Linda Becker, Dan Wheeler, or as contracted

# **Academic Programs**

Leadership minor

#### **LEADERSHIP Minor**

Required courses (19 hours)

HMNT/HIST 332	Historical Issues in Leadership	2
LEAD 225	Creative Leadership	3
LEAD 245	Leadership Cohort	1
LEAD 345	Leadership Cohort	1
LEAD 425	Experiences in Leadership	3
RELT 305	Christian Ethics	3
or RELT 306	Biomedical Ethics (3)	

Approved Internship

# Select 6 hours from the following courses:

BUAD 310	Quality Management (3)
BUAD 430	Conflict Management (3)
COMM 365	Institutional Development (3)
COMM 425	Intercultural Communication (3)
COMM 465	Interpersonal Communication (3)
EDUC 475	Student Teaching (16)
INRR 430	Expeditionary Leadership (3)
NURS 453	Management & Leadership (3)
NURS 499	Preceptorship (4)
RELP 361	Church Leadership I (3)
SOCI 321	Diversity in Society (3)
SOWK 475	Field Practicum (12)

6

# **Mathematics**

#### Mission

Founded upon a firm belief in the Creator and guided by a Christian worldview, the Department of Mathematics prepares students for learning, service, and leadership through proficient application of mathematical-related skills.

# **Mathematics Program Outcomes**

Students graduating from the mathematics program will be prepared to:

- read mathematical literature and communicate mathematically and statistically;
- think logically and analytically based on methods of mathematical proof;
- make sense of problems and persevere in solving them, using mathematical procedures, concepts, and heuristics;
- develop and articulate connections both within and between branches of mathematical knowledge;
- pursue further learning in mathematically related fields and circumstances; and
- value and enjoy mathematics through a growing understanding of its historical context and relationship to other disciplines.

#### **Contact Information**

Seth McNeill, Program Director of Computer Science and Mathematics Krueger Center Room 132 402.486.2600 ext. 2360 seth.mcneill@ucollege.edu

#### **Faculty**

Lesa Kean

# **Adjunct Faculty**

Haridas Chirakkal, Gail Illich, Derek Williams, or as contracted

# Academic Programs

Mathematics, BA Mathematics, BS Mathematics Education, BS - Secondary Field Endorsement Mathematics Minor

# **MATHEMATICS CORE & COGNATES**

## Required courses (39 hours)

Major Core		
MATH 119	Trigonometry <sup>30</sup>	3
MATH 184	Calculus I	4
MATH 240	Discrete Mathematics	3
MATH 285, 286	Calculus II, III	4, 4
MATH 351	Abstract Algebra	3
MATH 352	Linear Algebra	3
MATH 360	History of Mathematics	3
MATH 385	Differential Equations	3
MATH 498, 499	Mathematics Seminar	1, 1

<sup>30</sup> If a student places out of Trigonometry due to appropriate SAT/ACT or departmental placement scores, the 3 credit hours for Trigonometry are waived.

Major Cognates		
BSAN 220	Data Analysis Tools	3
CPTR 226	Introduction to Programming	4
MATHEMATICS, BA Required courses (48 hours)		
Major Core & Cognates		39
Emphasis Core		
Select 9 hours from 300-400 level MATH electives		
MATHEMATICS, BS Required courses (61 hours)		
Major Core & Cognates		39
Emphasis Core		
MATH 491	Real Analysis	3
MATH 492	Complex Variables	3
Select 9 hours from 300-400 level MATH electives		9
Recommended Electives for Ac	<del></del>	
MATH 331	Statistics and Probability	4
MATH 335	Exam P Prep	3

# MATHEMATICS EDUCATION, BS

## Secondary Field Endorsement

Administration.

The teaching major in mathematics is designed to prepare candidates for secondary teaching by providing

Also recommended that students pursuing Actuarial Science should complete an associate degree in Business

- the ability to inspire and motivate students in mathematics;
- an understanding of the cultural heritage and the place of mathematics in the school curriculum as a creative and expanding subject;
- an understanding of the interplay of mathematics and science in today's scientific society;
- the conceptualization of mathematics as a science built upon postulates;
- the investigation of the application of mathematics in order to:
  - interpret data, and
  - discern and apply mathematical relationships and understanding of the nature of proofs;
- a knowledge of the language of mathematics;
- the ability to give clear explanations of the meaning of certain fundamental concepts, statements and notations;
- the ability to read mathematical literature with understanding;
- the foresight to use present methods of teaching mathematics;
- the ability to make and test conjectures; and
- acquisition of a degree of facility with selected mathematical techniques.

#### Required courses (102 hours)

<u>Major Core</u>		
MATH 119	Trigonometry	3
MATH 184	Calculus I	4
MATH 240	Discrete Mathematics	3
MATH 285, 286	Calculus II and III	4, 4
MATH 331	Statistics and Probability	4

MATH 351	Abstract Algebra	3
MATH 352	Linear Algebra	3
MATH 409	Modern College Geometry	3
MATH 451	Mathematical Connections for Secondary Teachers	4
MATH 498, 499	Mathematics Seminar	1, 1
Major Cognate		
CPTR 226	Introduction to Programming	4
Professional Education		
EDUC 413	Methods: Mathematics Education	3
Additional Professional Ed	ucation	58
(See Education-Secondary Edu	cation Endorsements)	
MATHEMATICS M	linor	
Required courses (21-22)		
MATH 119	Trigonometry <sup>31</sup>	3
MATH 184	Calculus I	4
MATH 285, 286	Calculus II and III	4, 4
MATH 331	Statistics and Probability	4
or MATH 240	Discrete Mathematics (3)	
Select 3 hours of 300-400 le	evel MATH electives	3

<sup>31</sup> If a student places out of Trigonometry due to appropriate SAT/ACT and departmental placement scores, the 3 credit hours for Trigonometry are waived.

# Music

#### Mission

The mission of the music program is to educate, challenge, and inspire the Union College student for Christian service through excellence in music.

## **Outcomes**

Students graduating with a degree in music will be prepared to:

- show improvement in the areas of technical proficiency and artistic musicianship;
- analyze musical materials and structures;
- organize musical thoughts through composition and arranging;
- articulate historical and theoretical perspective with an understanding of stylistic trends and their evolution;
- communicate musical ideas and knowledge; and
- demonstrate proficiencies in the use of current music technologies.

#### **Contact Information**

Ed Allen, Program Director of Music Dick Building 412A 402.486.2600 ext. 2375 ed.allen@ucollege.edu

#### **Faculty**

Ramon Araujo, Ricky Little

# **Adjunct Faculty**

Evelyn Araujo, Marina Fabrikant, Daniel Martinez, Lisa Nielsen, or as contracted

#### **Academic Programs**

Music, BA (no emphasis)

Music, BA, with emphasis in

Sacred Music

Music, BS (no emphasis)

Music, BS with emphasis in

Sacred Music

Music Performance, BMusic, with emphases in:

- Instrumental
- Keyboard
- Vocal

Music Education, BMusic - K-12 Field Endorsement, with emphases in:

- Instrumental
- Keyboard
- Vocal

Vocal Music Education, BS - Subject Endorsement K-12

Music Pedagogy, AS

Music Minor

# Auxiliary Requirements for All Baccalaureate Degrees in Music

(except K-8 subject endorsements)

- Regular attendance at all program-sponsored recitals and concerts.
- Functional piano proficiency. All students will reach the required minimum proficiency level. An outline of requirements containing illustrative models is available from the piano instructors.
- Students are expected to take private lessons in a primary performance area each semester.

# **MUSIC CORE**

# Required courses (31 hours)

Required courses (31 hours)		
MUHL 351	Music History I	2
MUHL 352	Music History II	2
MUHL 353	Music History III	2
MUHL 354	Music History IV	2
MUPF 257	Introduction to Conducting	1
MUTH 151	Theory I	3
MUTH 152	Theory II	3
MUTH 161	Sight-Singing and Ear Training I	1
MUTH 162	Sight-Singing and Ear Training II	1
MUTH 163	Sight-Singing and Ear Training III	1
MUTH 164	Sight-Singing and Ear Training IV	1
MUTH 253	Theory III	3
MUTH 254	Theory IV	3
MUTH 263	Form and Analysis	2
MUTH 462	Introduction to Counterpoint	2
MUTH 465	Orchestration	2
MUSIC, BA (No Emphasis Required courses (51 hours)	s)	
Major Core		31
Emphasis Core		

Major Core		31
Emphasis Core MUPF 451	Senior Recital	1
Select 8 hours of MUPF courses – concentrated in voice or one instrument (4 hours must be 300-400 level)		8
Select 3 hours of MUPF electives		3
Select 8 hours of MUPF ensemble e	electives, one for every semester of attendance at Union College	8

# MUSIC, BA - Sacred Music Emphasis

Required courses (77 hours)

(	/	
Major Core		31
Emphasis Core		
MUAP 110	Introduction to Music Production and Technology	3
MULH 315	Music and Christian Worship	2
MUPF 451	Senior Recital	1
Select 8 hours of MUPF (4 hours must be 30	courses – concentrated in voice or one instrument 0-400 level)	8
Select 3 hours of MUPF	electives	3

Select 8 hours of MUPF ensemble electives, one for every semester of attendance at Union College		8
Emphasis Cognates: RELP 361	Church Leadership I	3
Internship		
Religion Minor		18

# MUSIC, BS (No Emphasis)

The BS degree in music is highly similar to the BA in music and contains the exact music class requirement as the BA degree. The BS differs from the BA in that the foreign language component is replaced by six hours in any other area, in consultation with academic advisor. This degree is especially intended for students pursuing pre-professional programs. These would include pre-med, pre-dent, and pre-law. It is also intended to allow music education majors to graduate with a bachelor's degree in four years. Education majors would continue with their student teaching the semester following graduation, and upon completion, would obtain a second bachelors in music education.

# Required courses (51 hours)

Major Core		31
Emphasis Core MUPF 451 Select 8 hours of MUPF courses – co (4 hours must be 300-400 level)	Senior Recital oncentrated in voice or one instrument	1 8
Select 3 hours of MUPF electives		3
Select 8 hours of MUPF ensemble el	lectives, one for every semester of attendance at Union College	8
MUSIC, BS - Sacred Music Required courses (77 hours)	Emphasis	
Major Core		31
Emphasis Core MUAP 110 MULH 315 MUPF 451  Select 8 hours of MUPF courses – co	Introduction to Music Production and Technology Music and Christian Worship Senior Recital oncentrated in voice or one instrument	3 2 1
(4 hours must be 300-400 level)		
Select 3 hours of MUPF electives		3
Select 8 hours of MUPF ensemble el	lectives, one for every semester of attendance at Union College	8
Cognates: RELP 361	Church Leadership I	3
Internship		
Required Religion Minor		18

# MUSIC PERFORMANCE, BMUSIC

Required courses (66 hours)

Major Core		31
Emphasis Core		
MUED 307	Keyboard Pedagogy	2
or MUED 317	Instrumental Pedagogy (2)	_
or MUED 327	Vocal Pedagogy (2)	
MUPF 341	Choral Conducting	1
MUPF 342	Instrumental Conducting	1
MUPF 351	Junior Recital	1
MUPF 451	Senior Recital	1
Select 4 hours from the following co	ourses:	4
MUAP 207	Brass Techniques and Materials (1)	
MUAP 217	Guitar Techniques and Materials (1)	
MUAP 227	Percussion Techniques and Materials (1)	
MUAP 237	String Techniques and Materials (1)	
MUAP 247	Vocal Techniques and Materials (1)	
MUAP 257	Woodwind Techniques and Materials (1)	
Select from MUPF electives	•	
Select five hours of MUPF electives	3 5	
Select 8 hours of MUPF ensemble 6	electives, one for every semester of attendance at Union College	8
Select one emphasis: Instrumental Emphasis Select 17 hours in MUPF cours (6 hours must be 300-400	ses – concentrated in one instrument ) level)	17
Keyboard Emphasis Select 17 hours in MUPF cours (6 hours must be 300-400		17
Vocal Emphasis		
MUPF 266	English-Italian Diction	1
MUPF 201	Voice	9
MUPF 267	German-French Diction	1
MUPF 401	Voice	6

# MUSIC EDUCATION, BMUSIC

## K-12 Field Endorsement

Students graduating with a degree in music education will be able to:

- develop a conceptual understanding of the elements of music in order to form a basis for listening, composing, performing, conducting and teaching;
- perform in a variety of ways in the role of listener, composer, performer, conductor, scholar and teacher;
- develop a repertoire in musical styles that embraces different cultures and historical periods; and
- develop an understanding of music within its historical framework, including knowledge of the major periods of music.

# Required courses (117-118 hours)

Major Core		31
Emphasis Core		
MUAP 207	Brass Techniques and Materials	1
MUAP 217	Guitar Techniques and Materials	1
MUAP 227	Percussion Techniques and Materials	1
MUAP 237	String Techniques and Materials	1
MUAP 247	Vocal Techniques and Materials	1
MUAP 257	Woodwind Techniques and Materials	1
MUED 307	Keyboard Pedagogy	2
or MUED 317	Instrumental Pedagogy (2)	
or MUED 327	Vocal Pedagogy (2)	
MUED 347	Music in the Elementary School	2
MUPF 341	Choral Conducting	1
MUPF 342	Instrumental Conducting	1
MUPF 451	Senior Recital	1
Select one emphasis: Instrumental Emphasis Select 12 hours in MUPF courses (6 hours must be 300-400 leve		12-13 12
Keyboard Emphasis Select 12 hours in MUPF courses (6 hours must be 300-400 leve	– concentrated in keyboard	12
Vocal Emphasis		
MUPF 201	Voice	6
MUPF 266	English-Italian Diction	1
or MUPF 267	German-French Diction (1)	
MUPF 401	Voice	6

Candidates are strongly encouraged to take up to six hours in a secondary performance area. Example: voice majors take instrumental, or instrumental majors take voice. They may choose to gain additional experiences in chamber ensembles.

Profe	ssion	al E	duc	ation

EDUC 414	Methods: Music Education	3
Additional Professional Education		58
(See Education-Secondary Education E	ndorsements)	

# **VOCAL MUSIC EDUCATION, BS**

K-12 Subject Endorsement

# Required courses (118 hours)

Major Core		31
Emphasis Core		
MUAP 247	Vocal Techniques and Materials	1
MUED 327	Vocal Pedagogy	2
MUED 347	Music in the Elementary School	2
MUPF 341	Choral Conducting	1
MUPF 451	Senior Recital	1
MUPF 201	Voice	4

MUPF 266	English-Italian Diction	1
MUPF 267	German-French Diction	1
MUPF 401	Voice	4
	Tolec	
Select 1 hour from the following co	nitses:	1
MUAP 207	Brass Techniques and Materials (1)	1
MUAP 217	Guitar Techniques and Materials (1)	
MUAP 227	Percussion Techniques and Materials (1)	
MUAP 237	String Techniques and Materials (1)	
MUAP 247	Vocal Techniques and Materials (1)	
MUAP 257	Woodwind Techniques and Materials (1)	
Select 8 hours of MUPF ensemble	electives, one for every semester of attendance at Union College	8
D 1 E d		
Professional Education	M.I. I.M. '. El '	2
EDUC 414	Methods: Music Education	3
Additional Professional Education		58
It is strongly recommended that eve (See Education-Secondary Education En	ery student finish requirements for at least two subject endorsements. dorsements)	
MUSIC PEDAGOGY, AS Required courses (41 hours)		
<u>Major Core</u>		
MUED 275	Music Practicum	2
MUED 307	Keyboard Pedagogy	2
or MUED 317	Instrumental Pedagogy (2)	2
or MUED 327	Vocal Pedagogy (2)	
MUTH 151		2
	Theory I	3
MUTH 152	Theory II	3
MUTH 161	Sight-Singing and Ear Training I	1
MUTH 162	Sight-Singing and Ear Training II	1
MUTH 163	Sight-Singing and Ear Training III	1
MUTH 164	Sight-Singing and Ear Training IV	1
MUTH 253	Theory III	3
MUTH 254	Theory IV	3
MUTH 263	Form and Analysis	2
Select 5 hours of MUPF courses, co (2 hours must be 300-400	oncentrated instrument, keyboard or voice level)	5
Select 4 hours of MUPF electives		4
Select 4 hours of MUPF ensemble	electives, one for every semester of attendance at Union College	4
Major Cognates		
BUAD 225	Creativity and Innovation in Business	2
	Creativity and Innovation in Business	3
PSYC 215	Developmental Psychology	3

# **MUSIC Minor**

# Required courses (22 hours)

MUHL	Select music history in consultation with advisor	2
MUPF 351	Junior Recital	1
or MUPF 451	Senior Recital (1)	
MUTH 151	Theory I	3
MUTH 152	Theory II	3
MUTH 161	Sight-Singing and Ear Training I	1
MUTH 162	Sight-Singing and Ear Training II	1
Select 6 hours of MUPF co (2 hours must be 300-	ourses, concentrated instrument, keyboard, or voice 400 level)	6
Select 5 hours of MUPF el (1 hour must be 300-4	ectives (ensembles recommended) 00 level)	5

# Nursing

Union College offers a four-year curriculum in nursing, leading to a Bachelor of Science in Nursing. The baccalaureate degree in nursing program at Union College is accredited by the Commission on Collegiate Nursing Education <a href="https://www.ccneaccreditation.org">www.ccneaccreditation.org</a>. The program is also approved by the Nebraska State Board of Nursing. Graduates are eligible to write the National Council Licensing Examination-RN (NCLEX-RN®) for professional licensure.

#### Mission

The mission of the Union College Nursing Program is to prepare students from diverse backgrounds to be competent, caring generalists in the profession of nursing. The program reflects a commitment to Christian values, professional standards, holistic care, and service as modeled by Jesus Christ.

#### **Outcomes**

Students graduating with a bachelor's degree in nursing will be prepared to:

- use Christian values as a foundation of professional practice standards to demonstrate accountable, patient-centered care, and servant leadership;
- demonstrate leadership in collaboration with the interprofessional team to design and manage patient-centered care;
- utilize current technological resources to manage information, mitigate error, foster effective communication, and support decision making in provision of safe, quality patient-centered care;
- integrate best, current evidence with clinical judgment and patient preferences to provide safe, quality care across the lifespan in a variety of health care systems;
- participate in quality improvement activities promoting individual performance and system effectiveness to achieve optimal patient outcomes;
- demonstrate knowledge, skills, and attitudes in preparation for lifelong learning required in a changing practice environment; and
- synthesize knowledge from liberal education and nursing courses to provide patient-centered care.

### **Contact Information**

Nicole Orian, Program Director of Nursing Larson Lifestyle Center, Room 415 402.486.2600 ext. 2393 nicole.orian@ucollege.edu

#### Faculty

Kelly Boyd, Larinda Fandrich, Kristine Follett, Tracy Hagele, Sharlene Martinez, Ruth Mendenhall, Elysia Ockenga, Nicole Orian, Rebecca Randa, Ellen Rose

#### **Adjunct Faculty**

Lindsay Beil, Debbie Eno, Leonard Finn Robyn Gasseling, Amy Golter, Kayla Hallock, Mirisa Hernandez, Bronna Hooper, Leah Logan, Simon Nyamongo, Renata Richardson, Molly Sass, Amber Schuler, Rebekah Trevino, Jill Weyers, or as contracted

## **Academic Programs**

Nursing, BSN

#### Admission, Progression and Graduation Requirements

The nursing profession provides competent and caring healthcare services to patients in diverse communities. Professional, ethical, legal, and safety concerns for nursing practice necessitate a holistic admission procedure.

The Nursing Program Admissions and Academic Evaluation Committee (AAEC) intends that an applicant to the Nursing Program is well prepared to successfully complete the Nursing Program curriculum. The AAEC accomplishes

this by examining evidence of scholastic preparation and potential as well as evidence of professional and personal values. Applicants are considered for admission at the recommendation of the AAEC.

A student may enter the nursing program as a traditional student, transfer nursing student, or BSN Completion student as a licensed practical nurse or registered nurse. Upon selecting nursing as a major, students will be assigned an academic advisor from the nursing program to provide guidance with the academic plan. Based on point of entry, pathways have been designed to support student learning and nursing program progression while recognizing appropriate prior course work to ensure content mastery and achievement of program outcomes.

Progression in the baccalaureate nursing program must be completed following the sequence of nursing courses in the degree completion guide. Students accepted into the nursing program will have a maximum of five years to complete the requirements for the bachelor's degree in nursing including nursing transfer nursing courses (excludes LPN-BSN and RN-BSN nursing courses). Graduates must have 65 credit hours of nursing courses. Transfer students may need to take additional nursing courses to reach the 65-credit hour requirement. Nursing courses transferred from another school are considered part of the 65-credit hour requirement.

The Nursing Program reviews complete applications for admission. Deadlines for submitting the Nursing CAS application are February 1 for fall admission and September 1 for spring admission. The Test of Essential Academic Skills (TEAS) scores are due by March 1 for fall admission and October 1 for spring admission. Acceptance into the Nursing Program is provisional, contingent upon satisfactory completion of all admission requirements. Applicants will be notified of their status by the Nursing Program.

Once admitted to the Nursing Program, students who interrupt their studies must confirm eligibility in writing to resume nursing courses by March 1 for continuation in the fall semester or October 1 for the spring semester.

# Eligibility to apply

- A cumulative GPA of 2.75 or above on a 4.00 scale for all collegiate coursework at time of application.
- In progress or completion of required prerequisite courses with a grade of C or above.

Required Prerequisites	Semester Hours
Anatomy and Physiology (with lab)	8
or equivalent anatomy and/or physiology with labs (8)	
Intro to General, Organic and Biochemistry (with lab)	4
or equivalent general chemistry with lab (4)	
Microbiology (with lab)	4
Developmental Psychology	3
Elementary Statistics and Probability	3
Writing for Scholarly Audiences (research writing)	3

International students whose native language is not English and who do not meet the minimum ACT English score of 17 (or equivalent) must demonstrate current English proficiency by scores on a standardized test taken within the past two years. The college accepts the following examinations and, for regular admission, requires minimum scores of TOEFL: Internet-based (iBT), 79; International paper-based, 550; IELTS 6.5.

#### **Application Process**

Applicants for the on-campus Nursing Program must complete the NursingCAS application by February 1 for fall admission and September 1 for spring admission including:

- One recommendation form (a current or recent teacher at the collegiate level and employer/supervisor);
- Personal statement;
- All high school and college transcripts;
- Test of Essential Academic Skills (TEAS) completed with an adjusted individual total score of 68 or above within two attempts by March 1 for fall admission and October 1 for spring admission;
- A personal interview with members of the AAEC; and
- In addition to the above requirements, students applying to transfer to the Nursing Program from another nursing program must also complete a Nursing Program Director Recommendation form.

Applicants for the BSN Completion Program (LPN-BSN and RN-BSN) must complete the NursingCAS application by February 1 for fall admission and September 1 for spring admission including:

- All high school and college transcripts;
- Personal statement;
- Unencumbered nursing license; and
- A personal interview with members of the AAEC

The AAEC recognizes practical and educational benefits of healthcare work experience. It is recommended that an applicant be a certified nursing assistant (CNA) and have some level of clinical work experience prior to applying to the Nursing Program although it is not required. Related clinical work experience that includes direct patient care and certification will benefit the applicant in the admission process.

Following acceptance to the Nursing Program students will need to complete acceptance checklist requirements including:

- Confirmation of intent to begin the Nursing Program as detailed in the nursing program acceptance letter
- Physical Examination;
   Applicants are required to have a physical exam completed by a physician, nurse practitioner, or a physician assistant;
- Health Policy requirements;
  - Nursing students are to comply with the minimum immunization guidelines established by the Union College Nursing Program in collaboration with local healthcare organizations used for clinical learning experiences. If a student does not meet the requirements specified by a healthcare organization used for clinical, the student may be unable to successfully complete the requirements of the course and the nursing curriculum thus resulting in course failure and potential termination from the Nursing Program;
- All nursing students are required to carry personal health insurance which may be purchased through Student Life;
- Current American Heart Association HeartCode BLS Provider CPR certification (only);
- General Union College admission requirements; and
- Satisfactory drug screen and background checks.

#### Progression in the Nursing Program

Nursing courses are arranged in a progressive curriculum from concrete and simple to abstract and complex. Learning begins with conceptualization, then moves to application and, finally to the abstract and complex. To facilitate student learning, the nursing program has organized a progressive curriculum. Individual student academic plans may vary depending on entry point and courses accepted in transfer. A student's academic plan is developed with the assistance of a nursing academic advisor. A student may petition the sequence based on the Nursing Program petition policy in the Nursing Student Handbook.

#### Criteria for progression in the Nursing Program

- Required prerequisite courses must be completed with a passing grade of "C" (2.0) to enter the Nursing Program.
- A grade of "C" (2.0) or above in all nursing, prerequisite and cognate courses.
- A cumulative college GPA and nursing courses GPA of 2.50 or higher.
- All nursing courses, including nursing electives, must be passed with a grade of "C" (76%) or higher in course theory (includes unit exams, final exam, and required ATI assessments). If the class has a clinical component, that portion must be passed, as well as the theory portion, with a grade of 76% and an overall course grade of 76% or higher. The course theory will account for at least 75% of the total grade with the comprehensive final contributing at least 20%.
- If a student fails a clinical portion of the course (clinical performance and/or clinical learning activities) at any time during the semester, the course will be considered an attempt. The course is also considered an attempt when the student continues in the course after the add/drop date published in the Union College Academic Calendar. According to Union College policy, if the student fails clinical prior to the withdrawal date, the student may choose to withdraw from the course and receive a "W" on the transcript; this will be considered a

nursing course attempt and failure. If the student fails clinical prior to the add/drop date, the student may choose to drop the course and the course will not be documented on the transcript; this will be considered a nursing course attempt. If the student fails clinical after the Union College withdrawal date, the student will receive an "F" on the transcript.

- If a nursing course is failed, it may be retaken the following semester if clinical/class space is available.
- If a student stops out or withdraws from all nursing courses after the Add/Drop date in the college calendar, the semester will count as one course attempt.
- A student accepted on academic probation (see statement on probation in the Nursing Student Handbook) must demonstrate academic improvement (GPA) after the first semester to be removed from probation.
- Academic probation is allowed for a total of only two semesters; non-academic probation is allowed for a total
  of only two semesters.
- Students in levels two to five must achieve a 100% on the drug administration exam within three attempts prior to the drop/add date specified in the Union College calendar to continue in the clinical course(s) at the corresponding level of the Nursing Program. Unsuccessful completion of the drug administration exam within three attempts prior to the drop/add date specified in the Union College calendar will result in clinical failure of the clinical course(s) at the corresponding level of the Nursing Program. If the student fails clinical prior to the drop/add date, the student may choose to drop the course(s) and the course(s) will not be documented on the transcript; the clinical failure(s) will be considered a nursing course attempt(s). Students in NURS 208: Fundamentals must achieve a 100% on the drug administration examination within three attempts by the date and time specified on the course calendar. In level one of the Nursing Program, failure to successfully complete the drug administration examination in three attempts will result in clinical failure of the NURS 208: Fundamentals course. Students may reenter the clinical nursing courses the following semester pending successful completion of all components of the Back to School Fair. Students will not be allowed in clinical facilities (with exception of the Union College Skills Lab and Simulation Center) prior to successful completion of the drug administration exam.
- No one nursing course may be attempted more than twice to achieve a grade of "C" (2.0). A course is considered an attempt when the student continues in the course after the last day to drop/add a course as published in the Union College academic calendar. Students may petition the AAEC if extenuating circumstances exist.
- Health policy requirements (immunizations, annual TST, etc.) must be met and appropriate documentation to verify must be uploaded to Castle Branch. See Immunizations section in the Nursing Student Handbook.
- Students are allowed a maximum of two course failures or unsuccessful attempts and then must exit the
  Nursing Program. Students who have been terminated from a nursing program (including Union College) and
  accepted (or reaccepted) to the nursing program are allowed one course failure or unsuccessful attempt and
  then must exit the Nursing Program.
- Once a student is admitted to the Union College Nursing Program, all nursing courses must be completed at Union College.
- Withdrawal from NURS 305: Health Assessment requires withdrawal from NURS 208: Fundamentals. See course syllabi for additional details.
- A course audit involves classroom theory only; no tests, quizzes, paper, or clinicals are included. Registration to
  audit a class prior to the beginning of the course is not considered an attempt.
- Students must complete all components of the Back to School Fair Expectations for their level in the Nursing Program prior to deadlines specified on the form each semester. Unsuccessful completion and/or completion after the deadline will result in an Incident Report.
- When a nursing faculty member or the Admissions and Academic Evaluation Committee (AAEC) refers a
  student to the Student Success Center (previously known as the Teaching Learning Center) for consultation, it
  is expected that the student will meet with an academic coach to determine an academic plan. This plan may
  include ongoing coaching, meeting with the director of disability information, or referral to additional
  resources.
- Students who have been accepted into the Nursing Program will have a maximum of five years to complete the
  requirements for a bachelor of science in nursing degree including transfer nursing courses (excludes LPN-BSN
  and RN-BSN nursing students). Students in the LPN-BSN and RN-BSN programs will have a maximum of
  two times the length of the full-time academic program to complete the requirements for a bachelor of science
  in nursing degree.

Graduates must have 65 credit hours of nursing courses. Transfer students may need to take additional nursing
courses to reach the 65-credit hour requirement. Nursing courses transferred from another school are
considered part of the 65-credit hour requirement.

#### Criteria for graduation and eligibility for state board licensure examination

The candidate for graduation from the Nursing Program at Union College shall comply with the following:

- Meet all general college policies for graduation;
- Meet Nursing Program academic requirements for general education and nursing courses;
- Achieve cumulative GPA of 2.50 or higher in all college level courses and an overall nursing GPA of 2.50 with no grade lower than a C (2.00) in nursing courses or cognates;
- Meet progression requirements as specified in the Nursing Student Handbook;
- If a student is on non-academic probation at the time of registering for the final semester in the Nursing Program, adequate evidence for removal of the probation status must be demonstrated during the final semester for the student to be eligible for graduation (see policy on discipline, probation, suspension, and termination);
- Be in good standing with the Nursing Program; and
- Complete 65 credit hours of nursing courses.

The Nursing Program will notify the Nebraska State Board of Nursing when the graduate has met all graduation requirements. Graduation date and diploma conferral will occur according to Union College policy.

## **Program Specific Fees**

Course fees for nursing clinical courses, course syllabi, and additional learning materials are charged through the Nursing Program as program specific fees. Information regarding current fees is available by contacting the Nursing Program Director.

# **Guaranteed Nursing Admission**

High school students with excellent academic records who are enrolling in college for the first time (advanced placement courses in high school are allowed) qualify for guaranteed admission to the Nursing Program if the following criteria are met:

- Cumulative high school GPA of 3.5 or above on a 4.00 scale; and
- Minimum score of 24 on ACT or SAT 1190 (new SAT 1600 scale)

Students can apply by indicating interest on the Union College application or contacting the Nursing Program directly.

Requirements in college to maintain Guaranteed Nursing Admission:

- Cumulative GPA 3.3 or above on a 4.00 scale;
- No pass/fail science courses;
- No courses below a "C";
- Achieve an adjusted individual total score of 68 or above within two attempts on the ATI TEAS by March 1 for fall admission and October 1 for spring admission;
- Complete the Nursing Program application process entirely, including the NursingCAS application and interview; and
- Must be a full-time student (at least 12 credit hours per semester) and follow the advised curriculum.

Failure to meet or maintain these requirements may result in the loss of guaranteed admission. Students may still apply for regular admission to the Nursing Program.

## Bachelor of Science in Nursing (BSN) Completion Program

Licensed practical nurses (LPNs), diploma, and associate degree registered nurses (RNs) must hold requisite U.S. nursing licensure to apply. Progression in the baccalaureate Nursing Program must be completed on a full-time basis. Students in the LPN-BSN and RN-BSN programs will have a maximum of two times the length of the full-time academic program to complete the requirements for a bachelor of science in nursing degree. Sequencing is varied for the BSN Completion Program and assumes that the student has completed prerequisites. Complete applications will be reviewed by the

Nursing Program, and applicants will be notified of their status by the Nursing Program. Each applicant is evaluated for placement in the program and spots are based on space available. Applicants with any disciplinary action on their LPN or RN license are not eligible for admission to the Nursing Program.

LPNs and RNs who are admitted to the BSN Completion Program must transfer their previous nursing education courses to Union College and document successful completion of the NCLEX-LPN® or NCLEX-RN®. Acceptance into the Nursing Program is provisional, contingent upon satisfactory completion of all admission requirements. Following acceptance to the Nursing Program, students will be required to complete acceptance checklist requirements.

# Licensed Practical Nurse (LPN)—Bachelor of Science in Nursing (BSN) Curriculum

Licensed practical nurses who have graduated from an accredited nursing program are eligible for credit for Fundamentals and Gerontology from their previous nursing education. Regardless of previous education or experience, all nursing courses required in the LPN to BSN curriculum must be completed at Union College.

# Registered Nurse (ADN or diploma)—Bachelor of Science in Nursing (BSN) Curriculum

Associate degree or diploma RNs who have graduated from an accredited nursing program are eligible to transfer credit for Fundamentals, Gerontology, Pathophysiology & Pharmacology I & II, Medical-Surgical I, II, and III, Maternal Child Health, Mental Health, and Transition to Professional Practice from their previous nursing education. Additional nursing courses may be petitioned for transfer.

Non-United States educated RNs not licensed in the United States must pass standardized assessments for Fundamentals, Medical-Surgical, Maternal Child Health, Mental Health, and successfully validate clinical performance in nursing courses to receive credit for previous nursing education.

# **NURSING, BSN**

Required courses (68 hours)

<u>Major Core</u>		
NURS 204	Introduction to Professional Nursing	3
or NURS 347	Nursing Program Integration (3)	
	(for BSN completion students only)	
NURS 208	Fundamentals	6
NURS 243	Evidence-Based Practice	3
NURS 305	Health Assessment	3
NURS 315	Pathophysiology & Pharmacology I	4
NURS 316	Pathophysiology & Pharmacology II	3
NURS 321	Medical-Surgical I	6
NURS 322	Medical-Surgical II	6
NURS 334	Gerontology	2
NURS 383	Mental Health	3
NURS 415	Maternal Child Health	6.5
NURS 423	Medical-Surgical III	5
NURS 433	Disaster Nursing	2
NURS 453	Management & Leadership	3
NURS 474	Population Health	3.5
NURS 495	Transition to Professional Practice	2
NURS 499	Preceptorship	4
Major Cognate		
RELT 305	Christian Ethics	3
or RELT 306	Biomedical Ethics (3)	
Recommended		
NURS 391	Global Health Nursing (2)	

In addition to the above requirements, the student will select other courses to fulfill the general education curriculum (see general education section). A minimum of 124 semester hours is necessary for a bachelor's degree at Union College (see graduation requirements section).

# Occupational Therapy Assistant

The associate-degree-level occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is <a href="www.acoteonline.org">www.acoteonline.org</a>. Graduates of the program will be eligible to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

#### Mission

The Union College OTA program seeks to engage learners and mentor them as they develop into ethical, professional, effective occupational therapy assistants, called by God to serve their community and highly sought-after by employers.

#### **Outcomes**

Graduates of the Union College OTA Program will demonstrate competency in:

- clinical skills, including addressing psychosocial issues;
- working in non-traditional and emerging practice areas in the community;
- managing ethical dilemmas;
- identifying personal life-long learning goals; and
- including mind, body and spirit in client-centered, occupation-based and evidence-based interventions.

#### **Contact Information**

Emily Rumery, Program Director of Occupational Therapy Assistant Harris Center, Room 249 Office: 402.486.2600 ext. 2480 emily.rumery@ucollege.edu

#### Faculty

Fara Adams, Emily Rumery

#### Adjunct

Kelly Bolz, Pinky Mohapatra or as contracted

#### **Academic Programs**

Occupational Therapy Assistant AS

#### Admission Requirements for Occupational Therapy Assistant

Please see admission requirements outlined in the Admission to the College: Admission of First-Year Students section of the bulletin. Students who have successfully completed prerequisite coursework may apply to the program. Transfer students may waive completion of CORE 100. See <a href="https://www.ucollege.edu/ota/apply/">www.ucollege.edu/ota/apply/</a> for OTA application process.

#### Progression in the Program

Students must achieve the following each semester to matriculate to the next semester:

- 1. A cumulative GPA of 2.50 or higher;
- Students must progress through OTA courses as outlined in the Union College Bulletin and this Handbook. A
  student may petition the sequence based upon the College petition policy. See Website or Bulletin for
  Academic Petition and corresponding form;
- 3. A student accepted on academic probation must demonstrate academic improvement (GPA) after the first semester to be removed from probation;

- 4. All courses must be passed with a letter grade of "C" (76%) or higher;
- 5. If a student fails fieldwork or lab portion of a course (fieldwork or lab performance and/or fieldwork or lab learning activities) at any time during the semester, the course will be considered an attempt\*. According to Union College policy, if the student fails fieldwork or lab prior to the withdrawal date, the student may choose to withdraw from the course and receive a "W" on the transcript; this will be considered a course attempt and failure. If the student fails fieldwork or lab after the Union College withdraw date, the student will receive an "F" on the transcript. \*A course is considered an attempt when the student continues in the course after the add/drop date as published in the Union College academic calendar;
- 6. If a student stops-out or withdraws from all OTA courses after the add/drop date in the Union College calendar, the semester will count as one course attempt;
- 7. When an OTA course is failed, it may be retaken the next available semester if fieldwork/class space is available;
- 8. No one OTA course can be attempted more than twice to achieve a grade of "C" (76%);
- 9. A course is considered an attempt when the student continues in the course after the last day to add/drop a course as published in the Union College academic calendar;
- Students may petition the OTA Admissions and Academic Advisement Committee if extenuating circumstances exist;
- Students are allowed a maximum of two course failures or unsuccessful attempts and then must exit the OTA program and must reapply for admission consideration;
- 12. If withdrawing from any one OTAC course, students must withdraw from all OTAC courses they are enrolled in:
- 13. Academic probation is allowed for a total of only one semester; non-academic probation is allowed for a total of only one semester;
- 14. Health policy requirements (immunizations, annual TST, etc.) must be met and appropriate documentation to verify must be uploaded into CastleBranch. See Immunizations;
- 15. When an OTA faculty member or OTA Admissions and Academic Advisement Committee refer a student to the Student Success Center for consultation, it is expected that the student will meet with an academic coach to determine an academic plan. This plan may include ongoing coaching, meeting with the director of disability information, or referral to additional resources; and
- 16. Once a student is admitted to the Union College OTA program, all OTA courses must be completed at Union College.

#### Timeframe for Program Completion

Once students have been accepted into the OTA program, they will have a maximum of 4 years to complete the requirements for an Associates of Science degree in OTA including all didactic courses and fieldwork requirements. Students must complete 16 weeks of Level II fieldwork within twelve months following the completion of the didactic portion of the program. Requests for extensions from the standard program sequence must be approved by the OTA Department.

#### Required Classes for Admission to the Program

BIOL 111	Human Anatomy & Physiology I	4
CORE 100	College Success	1
ENGL 110	Writing for General Audiences	3
HHPT 256	Medical Terminology	1
MATH 221	Elementary Statistics and Probability	3

# Occupational Therapy Assistant, AS Required courses (57 hours)

Major Core		
OTAC 100	Introduction to Occupational Therapy	2
OTAC 120	Clinical Conditions	2
OTAC 140	Level IA Fieldwork	1
OTAC 200	Neuroanatomy & Human Movement	4
OTAC 210	Human Occupation	3
OTAC 220	The OT Process for Rehabilitation & Disability	4
OTAC 225	The OT Process for Community-Based Practice	4

The OT Process for Children and Youth	4
The OT Process for Productive Aging	4
The OT Process for Mental Health	4
Level IB Fieldwork	1
Ethics, Reasoning and Management	2
Level IC Fieldwork	1
Professional Seminar	2
Level IIA Fieldwork	6
Level IIB Fieldwork	6
Human Anatomy & Physiology II	4
Developmental Psychology	3
	The OT Process for Productive Aging The OT Process for Mental Health Level IB Fieldwork Ethics, Reasoning and Management Level IC Fieldwork Professional Seminar Level IIA Fieldwork Level IIB Fieldwork Human Anatomy & Physiology II

In addition to the above requirements, the student will select other courses to fulfill the general education curriculum (see general education section). A minimum of 62 semester hours is necessary for an associate's degree at Union College (see graduation requirements section).

# Psychology

# Mission

The psychology program at Union College prepares students to be seekers of knowledge, and thinkers who practice service to all humanity with a Christ-centered attitude.

#### **Outcomes**

On completion of the psychology program at Union College, graduates will be able to:

- Knowledge
  - exhibit knowledge of major concepts and theoretical perspectives in the general field of psychology and its sub-fields;
  - o identify ways in which psychological research and application impact everyday functioning;
- Skills
  - o carry out the research process;
  - o critically assess data and general information;
  - o be competitive applicants for graduate programs and/or professional placement;
- Values
  - o evaluate psychological theories from a Christian perspective;
  - demonstrate interest, respect and concern for others, regardless of religion, race, gender, sexual orientation or any other differences;
  - o demonstrate an understanding of ethical behavior; and
  - o demonstrate increased self-understanding and insight into the behavior of others.

#### **Contact Information**

Trudy Holmes-Caines, Program Director of Psychology Dick Building, Room 403 402.486.2600 ext. 2312 trudy.holmes-caines@ucollege.edu

#### **Faculty**

Melanie Gabbert, Trudy Holmes-Caines

# **Adjunct Faculty**

Asheley Woodruff, or as contracted

#### **Academic Programs**

Psychology, BS Psychology Minor

#### PSYCHOLOGY, BS

Required courses (51 hours)

Major Core		
PSÝC 100	Careers in Psychology	.5
PSYC 105	Introduction to Psychology	3
PSYC 215	Developmental Psychology	3
PSYC 225	Psychology of Religion	3
PSYC/EDUC 270	Research Writing	1
PSYC 300	Career and Graduate School Preparation	.5
PSYC 337	History and Systems of Psychology	3

PSYC 340	Research Methods I	3
PSYC 341	Research Methods II	3
	Current Issues in Psychology	2
	Senior Research Project	2
Select 15 hours from the following tw	70 groups:	15
Select at least 3 hours from		
PSYC 315	Social Psychology (3)	
	Cognitive Psychology (3)	
	Biopsychology (3)	
Select at least 6 hours from	17 07 (7	
	Introduction to Counseling Theory and Techniques (3)	
	Theories of Personality (3)	
	Abnormal Psychology (3)	
	Human Sexuality (3)	
	Clinical Assessment (3)	
	Psychological Testing (3)	
Major Cognates		
	Introduction to Sociology	3
	Diversity in Society	3
Select 6 hours of PSYC or SOCI elec	tives	(
Recommended		
PSYC 455	Practicum in Psychology (1-3)	
	Marriage and Family (3)	
	Interventions with Groups (3)	
	Crisis and Resilience (3)	
Participate in department senior asses	ssment.	
PSYCHOLOGY Minor		
Required courses (18 hours)		
PSYC 105	Introduction to Psychology	3
	Developmental Psychology	3
	History and Systems of Psychology	3
Select 6 hours of PSYC electives		(
(3 hours must be 300-400 level)		
Select 3 hours from PSYC or SOCI e	lectives	3

# Religion

#### Mission

The Religion program prepares students to serve as Christian disciples and leaders through a growing relationship of salvation in Jesus Christ, equipping them to engage the Bible, demonstrating an understanding of biblical teachings, Christian church history, and the mission of the Seventh-day Adventist church. The program prepares students for graduate studies and for Christian service.

# **Outcomes**

Students graduating from the religion program will be prepared to:

- express an active faith in a life of Christian discipleship;
- exhibit scholarship in the knowledge and interpretation of the Bible;
- demonstrate substantial knowledge of the history, mission and theological beliefs of the Seventh-day Adventist church;
- display Christian character by the ability to apply ethical principles in life situations; and
- apply skills of interpersonal relationships in specified areas of ministry.

#### **Contact Information**

Ed Allen, Program Director of Religion Dick Building 412A 402.486.2600 ext. 2375 ed.allen@ucollege.edu

#### **Faculty**

Edward Allen, Ben Holdsworth, Thomas Toews

#### **Adjunct Faculty**

Harold Alomia, Richard Carlson, Michael Halfhill, Michael Henton, Michael Paradise, Lena Toews, or as contracted

#### **Academic Programs**

Religion BS

Religion BS, with an emphasis in:

- Chaplaincy
- Pastoral Care

Religious Education, BS - Subject Endorsement

Biblical Languages Minor

Missions Minor

Religion Minor

Youth Ministry Minor

#### **RELIGION CORE & COGNATES**

Required Courses (42-43 hours)

Major Core		
RELB 226	Old Testament Survey	3
or RELB 328	Books of Moses (3)	
RELB 246	Sanctuary and Salvation	3
RELB 250	Revelation	3
RELB 255	Jesus and the Gospels	3
RELB 335	New Testament Epistles	3
or RELB 260	Interpretation of Romans (3)	
RELB 348	Daniel	3
RELH 310	History of the Seventh-day Adventist Church	3

Personal Witnessing	3
Christian Beliefs	3
Christian Ethics	3
World Religions	3
Prophetic Guidance in the Advent Movements	3
The Ancient World	3
History of the Christian Church (4)	
Creative Leadership	3
Church Leadership I (3)	
	Christian Beliefs Christian Ethics World Religions Prophetic Guidance in the Advent Movements  The Ancient World History of the Christian Church (4) Creative Leadership

# RELIGION, BS (No Emphasis)

Required courses (60-61 hours)

Major Core & Cognates	42-43
Required Minor	18

# **RELIGION, BS - Chaplaincy Emphasis**

This pre-professional program enables students to pursue graduate studies and prepare for opportunities in health care institutions with careers in chaplaincy.

# Required courses (60-61 hours)

Major Core & Cognates		42-43
Emphasis Core RELG 355	Dying, Death, Grief, and Recovery	3
Emphasis Cognates		
COMM 465	Interpersonal Communication	3
LEAD 225	Creative Leadership <sup>32</sup>	3
PSYC 105	Introduction to Psychology	3
PSYC 311	Introduction to Counseling Theory and Techniques	3
SOCI 105	Introduction to Sociology	3

Approved Internship

Students taking this emphasis are encouraged to also complete a Leadership minor.

## **RELIGION, BS - Pastoral Care Emphasis**

This pre-professional program enables students to pursue graduate studies and prepare for opportunities in Christian counseling careers such as an academy dean, guidance counselor, psychologist or marriage and family counselor.

# Required courses (66-67 hours)

Major Core & Cognates		42-43
Emphasis Cognates		
COMM 465	Interpersonal Communication	3
PSYC 105	Introduction to Psychology	3
PSYC 215	Developmental Psychology	3
PSYC 225	Psychology of Religion	3
PSYC 311	Introduction to Counseling Theory and Techniques	3

<sup>32</sup> LEAD 225 may not count as both part of the Religion major cognate and part of the Chaplaincy emphasis cognate

PSYC 415	Abnormal Psychology	3
SOCI 105	Introduction to Sociology	3
SOCI 315	Marriage and Family	3

# RELIGIOUS EDUCATION, BS

#### **Secondary Subject Endorsement**

Students graduating with the religious education degree will be prepared for state and church certification for teaching biblical studies classes on the secondary level. In addition to the general goal of the Religion program, students graduating with this major will:

- demonstrate substantial knowledge of the Old and New Testaments;
- demonstrate substantial knowledge of the history, mission and doctrinal beliefs of the Seventh-day Adventist church;
- demonstrate knowledge of Christian church history;
- apply skills in communicating biblical faith and values to adolescents through teaching, preaching, and personal evangelism; and
- be prepared to pursue graduate studies.

## Required courses (89 hours)

Major Core		
RELB 226	Old Testament Survey	3
or RELB 328	Books of Moses (3)	
RELB 246	Sanctuary and Salvation	3
RELB 250	Revelation	3
RELB 255	Jesus and the Gospels	3
RELB 335	New Testament Epistles	3
RELB 348	Daniel	3
RELH 310	History of the Seventh-day Adventist Church	3
RELH 410	History of the Christian Church	4
RELP 235	Introduction to Youth Leadership	3
or RELP 335	Youth Leadership in the Seventh-day Adventist Church (3)	
RELP 321	Biblical Preaching I	3
RELT 141	Christian Beliefs	3
RELT 455	Prophetic Guidance in the Advent Movements	3
Major Cognates		
SCNC 377	Origins	3
Professional Education		
EDUC 415	Methods: Social Science and Religious Education (K-12)	3
Additional Professional Education		46

It is strongly recommended that every student finish requirements for at least two subject endorsements. (See Education-Secondary Education Endorsements)

#### **BIBLICAL LANGUAGES Minor**

# Required courses (20 hours)

RELL 171, 172	Beginning New Testament Greek I and II	4, 4
RELL 273, 274	Intermediate New Testament Greek III and IV	3, 3
RELL 385, 386	Biblical Hebrew I and II	3, 3

# **MISSIONS Minor**

# Required courses (20 hours)

COMM 425	Intercultural Communication	3
RELB 255	Jesus and the Gospels	3
RELP 361	Church Leadership I	3
or LEAD 225	Creative Leadership (3)	
RELP 465	Personal Witnessing	3
RELT 141	Christian Beliefs	3
RELT 347	World Religions	3
UCSM 205	Introduction to Overseas Service	2
or LEAD 225 RELP 465 RELT 141 RELT 347	Creative Leadership (3) Personal Witnessing Christian Beliefs World Religions	3

Two consecutive semesters of student mission service are required as part of this minor.

# **RELIGION Minor**

## Required courses (18 hours)

neganea courses (10 noa	10)	
RELB 348	Daniel	3
or RELB 250	Revelation (3)	
RELT 141	Christian Beliefs	3
RELT 455	Prophetic Guidance in the Advent Movements	3
Select 3 hours from the following courses:		3
RELB 255	Jesus and the Gospels (3)	
RELB 260	Interpretation of Romans (3)	
RELB 335	New Testament Epistles (3)	
Select 3 hours from the following courses:		3
RELB 226	Old Testament Survey (3)	
RELB 246	Sanctuary and Salvation (3)	
RELB 328	Books of Moses (3)	
Select 3 hours of RELB, RE	ELH, RELP, or RELT electives	3

# YOUTH MINISTRY Minor

Youth ministry is an enhancing minor to be combined with a major such as theology or secondary education for those who would like additional training in counseling and specific youth ministry techniques.

## Required courses (18 hours)

PSYC 105	Introduction to Psychology	3
PSYC 215	Developmental Psychology	3
PSYC 311	Introduction to Counseling Theory and Techniques	3
RELP 235	Introduction to Youth Leadership	3
RELP 335	Youth Leadership in the Seventh-day Adventist Church	3
RELP 336	Youth Leadership Practicum <sup>33</sup>	3

<sup>33</sup> Students who take the Youth Ministry minor must establish a portfolio with Campus Ministries in their first year at Union College.

# **Science Education**

#### Mission

Founded upon a firm belief in the Creator and guided by a Christian worldview, the General Education program and Education program prepares students for service and leadership.

#### **Contact Information**

Carrie Wolfe, Program Director of General Education Krueger Center, Room 225 402.486.2600 ext. 2365 carrie.wolfe@ucollege.edu

#### **Faculty**

Christina Burden-Page, Richard Clark, Lesa Kean, Corraine A. McNeill, Salvador Moguel, Kenneth Osborn, Carrie Wolfe

# Adjuncts

As contracted

# **Academic Program**

Science Education, BS - Secondary Field Endorsement

## SCIENCE EDUCATION, BS

## Secondary Field Endorsement

The teaching major in natural science is designed to prepare for secondary teaching by providing the ability to:

- demonstrate knowledge and understanding and be able to teach the concepts, skills and processes of science;
- design and manage safe and supportive learning environments for science instruction;
- apply unifying concepts to help students integrate science with the natural world and relate science to their community;
- apply the processes of scientific inquiry, including the ability to design and conduct scientific investigations and evaluate and interpret data;
- apply physical and life science facts, concepts and theories;
- establish connections between science and technology;
- apply science concepts, principles and processes to personal and social decision making; and
- understand the history and nature of science.

#### Required courses (112-113 hours)

Major Core		
CHEM 151, 152	General Chemistry I and II	4, 4
CHEM 211	Organic Chemistry I	4
PHYS 151, 152	General Physics I and II	4, 4
Select 8 hours of an earth or	space science elective with a lab	8
Select 4 hours of an additional	al lab science elective	4
Major Cognates		
BIOL 111, 112	Human Anatomy and Physiology I and II	4, 4
BIOL 200, 202	General Biology I and II	4, 4
MATH 119	Trigonometry	3
or MATH 184	Calculus I (4)	

<u>Professional Education</u>
EDUC 418 Methods: Science Education

Additional Professional Education

3

58

# **Social Work**

The Union College Social Work Program works to give students a global understanding of the field at the individual, community, and agency level along with research-based best practice interventions at each level. Consistent with its strong core principle of engagement, the Program considers that community involvement and social justice not only empower the individual, but also impact service as a whole. Union College's Social Work Program is a four-year curriculum that is accredited through the Council on Social Work Education (CSWE).

#### Mission

The Union College Social Work Program provides evidence-based education and encourages servant leadership in a Christian Seventh-day Adventist context. Grounded in a liberal arts foundation, it educates generalist BSW practitioners for effective Social Work practice and graduate studies. The Social Work Program is dedicated to the formation of culturally and morally competent social workers as change agents in both their local and global communities.

#### **Outcomes**

Students graduating from the Social Work Program:

- demonstrate ethical and professional behavior with integrity and respect for human relationships;
- engage diversity and differences in practice as God loves all people, regardless of race, ethnicity, age, class, gender, sexual orientation, cultural background, religious belief, and ability;
- advance human rights and social, economic, and environmental justice with dignity and respect for God's creation;
- Engage in evidence-based practice techniques, research and policy procedures, through the Christian servant leadership perspective; and
- apply a strengths-based generalist model to engage, assess, intervene, and evaluate social work practice with
  individuals, families, groups, organizations, and communities to promote healing and compassion for those in
  need.

#### **Contact Information**

Elizabeth Davis, Program Director of Social Work Dick Building, Room 406D 402.486.2600 ext. 2174 <a href="mailto:lizz.davis@ucollege.edu">lizz.davis@ucollege.edu</a>

#### Faculty

Elizabeth Davis, Jody Detwieler

# **Adjunct Faculty**

Jodi Gabel, or as contracted

#### **Academic Program**

Social Work, BSW Social Work Minor

#### **SOCIAL WORK, BSW**

Required courses (63 hours)

Major Core		
SOCI 105	Introduction to Sociology	3
SOCI 321	Diversity in Society	3
SOWK 115	Introduction to Social Work	4
SOWK 227	Human Behavior in the Social Environment I	3
SOWK 228	Human Behavior in the Social Environment II	3
SOWK 316	Social Welfare Policy	3
SOWK 336	Social Work Practice I	3

SOWK 337	Social Work Practice II	3
SOWK 345	Social Work in Healthcare	3
SOWK 390	Research Seminar	2
SOWK 405	Social, Economic, and Environmental Justice	3
SOWK 415	Crisis and Resilience	3
SOWK 437	Social Work Practice III	3
SOWK 475	Field Practicum	12
Major Cognates		
PSYC 105	Introduction to Psychology	3
PSYC 340	Research Methods I	3
PSYC 341	Research Methods II	3
Select 3 hours from the fol	lowing courses:	3
PSYC 311	Introduction to Counseling Theory and Techniques (3)	
PSYC 415	Abnormal Psychology (3)	
PSYC 425	Human Sexuality (3)	
SOCI 315	Marriage and Family (3)	
SOCIAL WORK Min		
Required courses (19 hor	•	
SOWK 115	Introduction to Social Work	4
SOWK 227	Human Behavior in the Social Environment I	3
SOWK 228	Human Behavior in the Social Environment II	3
SOWK 336	Social Work Practice I	3
SOWK 337	Social Work Practice II	3
Select 3 hours of SOWK e	lectives	3

# Theology

#### Mission

The degree in Theology will prepare students for gospel ministry in the Seventh-day Adventist Church. The curriculum of the Theology major is designed to educate and empower those called to ministry to reach their world for Christ with hope and wholeness. Those pastors who are most effective in this mission are proficient in the seven core qualities of ministry as identified by the Ministerial department of the North American Division of Seventh-day Adventists. These core qualities are character, evangelism, leadership, worship, management, scholarship, and relationship.

#### Outcomes

Students graduating from the theology program will be prepared to

- express an active faith in a life of Christian discipleship;
- cultivate scholarship by proficiency in Biblical languages;
- exhibit scholarship in the knowledge and interpretation of the Bible;
- demonstrate scholarship through a substantial knowledge of the history, mission and theological beliefs of the Seventh-day Adventist church;
- demonstrate scholarship through knowledge of Christian theology and church history;
- integrate skills of leadership, management, and preaching in worship and pastoral ministry;
- apply skills of interpersonal relationships in pastoral ministry;
- utilize skills in personal and public evangelism;
- display Christian character by the ability to apply ethical principles in life situations; and
- enter full-time pastoral ministry and complete the Masters of Divinity degree at the Seventh-day Adventist Theological Seminary.

#### **Contact Information**

Ed Allen, Program Director of Religion Dick Building 412A 402.486.2600 ext. 2375 ed.allen@ucollege.edu

#### **Faculty**

Edward Allen, Ben Holdsworth, Thomas Toews

#### **Adjunct Faculty**

Harold Alomia, Richard Carlson, Michael Halfhill, Michael Henton, Michael Paradise, Lena Toews, or as contracted

# **Academic Programs**

Theology, BA Biblical Languages Minor

#### Candidacy for Ministry

A call to gospel ministry is a divine calling from God, affirmed by the church, and demonstrated in the practical skills of ministry. This calling develops a high level of spiritual commitment and an exemplary lifestyle. The Bachelor of Arts degree with a theology major helps to prepare students to fulfill their call to gospel ministry. Because ministry involves more than the completion of a course of study, the Religion program has established a series of measures whereby a student becomes a candidate for ministry. Participation in the candidacy program includes:

- Freshman year: In Introduction to Ministry class, students begin the religion program portfolio;
- Sophomore year: In the second semester of the sophomore year, students formally apply for candidacy to
  ministry. In evaluating applicants, faculty will consider spiritual commitment, academic progress, emotional
  stability, and social and professional skills in order to determine the student's overall potential for success in
  ministry. Transfer students with sophomore standing or above must apply to enter the candidacy program
  during the second semester of their college residency;

- Junior year: In Biblical Preaching and Church Leadership classes, students are assigned to local congregations for observation and practical experience;
- Senior year: Students will participate in the capstone Leadership in Ministry experience. This semester-long program is designed to immerse the student pastor in pastoral ministry; and
- Completion of the Bachelor of Arts degree with a major in theology with a cumulative GPA of 2.5 is required for recommendation to seminary.

If after being admitted into the candidacy program a student fails to meet the criteria of a candidate for ministry, the candidate forfeits the standing and privilege of being recommended for pastoral ministry.

# **Program Specific Fees:**

Course fees for RELL 171 and 172 New Testament Greek; and RELP 322, RELP 362, RELP 465, RELP 466, and RELP 490 Leadership in Ministry courses are charged through the Religion Program as program specific fees. Information regarding current fees is available by contacting the Director of the Religion Program, Dr. Ed Allen.

#### THEOLOGY, BA

The general education requirement for categories 1 (Following Christ) and 2 (Thinking Deeply as a Christian) are met by fulfilling the required Core courses for this major. The language requirement is met by the required Biblical languages minor.

A student may not receive both a Theology BA degree and a Religion BS degree.

#### Required courses (77 hours)

. . . .

Major Core		
RELB 226	Old Testament Survey	
RELB 250	Revelation	3
RELB 255	Jesus and the Gospels	3
RELB 328	Book of Moses	3
RELB 335	New Testament Epistles	3
or RELB 360	Interpretation of Romans (3)	
RELH 310	History of the Seventh-day Adventist Church	3
RELH 410	History of the Christian Church	4
RELP 125	Introduction to Pastoral Ministry	2
RELP 321, 322	Biblical Preaching I and II	3, 4
RELP 361, 362	Church Leadership I and II	3, 4
RELP 465	Personal Witnessing	3
or RELP 466	Public Evangelism (3)	
RELP 490	Senior Seminar	1
RELT 305	Christian Ethics	3
RELT 337, 338	Christian Theology I and II	3, 3
RELT 455	Prophetic Guidance in the Advent Movements	3
Biblical Languages Minor		20
Cognates		
PSYC 105	Introduction to Psychology	3
PSYC 311	Introduction to Counseling Theory and Techniques	3
or COMM 465	Interpersonal Communication (3)	

#### Additional Courses Recommended

FNCE 215	Personal Finance (3)
HIST 220	The Ancient World (3)
LITR/RELB 366	Biblical Literature (3)
RELB 246	Sanctuary and Salvation (3)
SOCI 315	Marriage and Family (3)

# **BIBLICAL LANGUAGES Minor**

# Required courses (20 hours)

RELL 171, 172	Beginning New Testament Greek I and II	4, 4
RELL 273, 274	Intermediate New Testament Greek III and IV	3, 3
RELL 385, 386	Biblical Hebrew I and II	3, 3

# **Course Descriptions**

			Music		
Accounting	ACCT	<u>162</u>	Applications	MUAP	<u> 201</u>
Art	ART	<u>163</u>	Education	MUED	<u> 202</u>
Astronomy	ASTR	<u>164</u>	History and Literatu	re	
Biology	BIOL	<u>165</u>		MUHL	<u> 203</u>
Biomedical Science	BIOM	<u>168</u>	Performance Studies	MUPF	<u>204</u>
Business Administration	BUAD	<u>169</u>	Theory	MUTH	<i>205</i>
Business Analytics	BSAN	<u>169</u>	Nursing	NURS	<u> 206</u>
Chemistry	CHEM	<u>171</u>	Occupational Therapy As	sistant	
Communication	COMM	<u>173</u>	1 13	OTAC	<i>209</i>
Computing	CPTR	<u>176</u>	Philosophy	PHIL	215
Core	CORE	<u>175</u>	Photography	PHOT	215
Economics	ECON	<u>178</u>	Physician Assistant Studi	ies	
Education	<i>EDUC</i>	<u>178</u>	9	PHAS	211
NAD Certification	<i>EDUC</i>	<u>181</u>	Physics	PHYS	216
English	<b>ENGL</b>	<u>183</u>	Political Science	PLSC	217
Finance	<i>FNCE</i>	<u>184</u>	Psychology	PSYC	218
Foreign Language Studies	ī		Religion		
	LANG	<u>195</u>	Biblical Languages	RELL	<u>223</u>
Geography	GEOG	<u> 185</u>	Biblical Studies	RELB	<i>220</i>
Graphic Design	GRPH	<u> 185</u>	General Studies	RELG	<u>222</u>
Health and Human Perfe	ormance		Professional Training	RELP	<u>223</u>
Activity	HHPA	<u> 187</u>	Religious History	RELH	<i>222</i>
Theory	HHPT	<u> 188</u>	Theological Studies	RELT	<u>225</u>
Varsity	HHPV	<u>190</u>	Science	SCNC	226
History	HIST	<u>190</u>	Social Work	SOWK	227
Humanities	HMNT	<u>192</u>	Sociology	SOCI	<u>226</u>
International Rescue & F	Relief		Spanish	SPAN	<u>229</u>
	INRR	<u>192</u>	Spark	SPRK	<u>229</u>
Leadership	LEAD	<u>195</u>	Union College Student M	ission Service	
Literature	LITR	<u>196</u>	0	UCSM	<i>229</i>
Marketing	MRKT	<u>200</u>	Union College Task Forc	e Service	<del></del>
Mathematics	MATH	<u>197</u>	J	UCTF	<u>230</u>

# Accounting

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **ACCT 211 Principles of Accounting**

3

Provides a foundation for a life-long understanding of financial topics. Students will learn generally accepted accounting principles for maintaining accounting records and preparing basic financial statements including the Income Statement, Statement of Owner's Equity, and Balance Sheet. *Fall semester*.

# **ACCT 212 Principles of Accounting**

3

Prerequisite: ACCT 211 (minimum grade of C)

A continuation of ACCT 211 with additional discussion of basic accounting principles. Students gain further experience in setting up and maintaining basic accounting records, as well as preparing financial statements (including the statement of cash flows) with coverage of corporations and partnerships. Financial statement analysis is also introduced. *Spring semester*.

# **ACCT 313 Intermediate Accounting**

4

Prerequisite: ACCT 212 (minimum grade of C)

Covers accounting principles involved in the preparation and interpretation of financial statements. Topics include cash, receivables, inventory, property, depreciation, intangible assets and revenue recognition. Accounting research using the FASB Codification is also introduced. *Fall semester*.

#### **ACCT 314 Intermediate Accounting**

4

Prerequisite: ACCT 313 (minimum grade of C)

A continuation of ACCT 313. Students learn to apply and understand generally accepted accounting principles for the following areas: current and long-term liabilities, corporate equity, earnings per share, investments, deferred income taxes, pensions, leases and the statement of cash flows. *Spring semester*.

#### ACCT 315 Federal Income Tax - Individual

3

An introductory course in U.S. income taxation of individuals. Upon successful completion of this course the student will have a fundamental understanding of the tax laws and regulations affecting individuals. The class focuses on preparation of a variety of income tax returns allowing the student to become acquainted with various scenarios common in the public accounting tax world. *Fall semester*.

# ACCT 316 Federal Tax - Corporate, Partnership and Fiduciary

3

Prerequisite: ACCT 315 (minimum grade of D-)

Study of U.S. income taxation of corporations, partnerships, estates, and trusts. Examines the federal internal revenue code and income tax regulations as they apply to basic federal gift and estate tax principles, corporation and partnership formation and operation, and the restructuring of organizations. Emphasizes tax planning, including the timing of transactions, the election of methods when alternative tax methods are available, and other means to minimize the impact of taxation. *Spring semester*.

# **ACCT 320 Financial Statement Analysis**

2

Prerequisite: ACCT 313 (minimum grade of D-)

Focuses on analytic and diagnostic tools to interpret numbers in the financial statements, to compare companies financially, understand cash flow, and grasp profitability issues and risk analysis concepts. In-depth ratio analysis is included. *Fall semester*.

#### **ACCT 325 Cost and Managerial Accounting**

Prerequisite: ACCT 212 (minimum grade of C)

Concentrates on a manager's use of financial information. This class introduces and practices tools and methods for internal cost analysis, budgeting, financial analysis, and decision making for internal team leaders, supervisors, and manager *Spring semester*.

3

3

1

2

#### **ACCT 335 Accounting Information Systems**

Prerequisite: ACCT 211 (minimum grade of C)

Study of the concepts of accounting information systems, especially those pertaining to managerial decision-making and internal control. Students are provided with hands-on experience in setting up and operating commercial accounting software packages. *Spring semester*.

# **ACCT 420 Forensic Accounting**

Prerequisite: ACCT 314 (minimum grade of D-)

Covers basic forensic accounting techniques, including gathering, interpreting, and documenting evidence. Also examines the investigative techniques used by accountants to conduct forensic examinations as well as the common schemes and techniques used to commit fraud. *Fall semester*.

#### ACCT 443 Governmental and Not-for-Profit Accounting

Prerequisite: ACCT 314 (minimum grade of D-)

Study of fund accounting according to GASB principles for governmental entities, as well as FASB principles related to not-for-profit organizations. Financial statement reporting requirements under both models are also studied. Fall semester.

#### ACCT 455 Auditing 4

Prerequisite: ACCT 313 (minimum grade of C) Recommended preparation: ACCT 314

Study of generally accepted auditing standards and rules of professional conduct as they relate to planning an audit, performing tests of controls and substantive tests, and issuing audit reports. Students will complete a case-study audit. *Spring semester*.

# Art

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# ART 105 Drawing I

Hands on exploration of The 7 Elements of Art. The elements of art are the components used to create, or build, a work of art. They include: line, shape, form, value, texture, color and space. Students demonstrate a basic ability in perceptual drawing using a variety of materials. Subject matter includes the figure, landscape, still-life, portraits, etc. Fall and Spring semesters.

#### ART 125 Oil Painting 2

Exploration of the basic techniques and elements of painting in oil. Students demonstrate their mastery of such principles as style, line, color, texture, value and composition in a variety of paintings. May be repeated for additional credit. Scheduled as needed.

#### ART 135 Pottery 2

Introduction to ceramics. Students learn how to throw on the potter's wheel and hand build using a variety of techniques. Projects include cups, bowls, mugs, plates etc. May be repeated for additional credit. Scheduled as needed.

ART 145 Watercolor 2

Beginning techniques and mechanics in working with watercolor as a transparent medium are stressed. A series of exercises is used for this purpose. Various techniques of watercolor painting are demonstrated in finished paintings. May be repeated for additional credit. *Scheduled as needed*.

ART 215 School Art

An exploration of the theory and practice of teaching art to children. Discussions and readings constitute a portion of the study. Students explore various media, resulting in a body of both two- and three-dimensional projects appropriate for teaching art in K-12 educational settings. *Fall semester*.

# ART 220 Elements and Principles of Design

3

Principles of design such as proportion, balance, rhythm, emphasis and unity are studied together with elements of design such as line, form, space, time, movement, texture, light and color. Projects are done in a variety of media. Fall semester.

#### **ART 225 Color Theory**

2

Prerequisite: GRPH 150 (minimum grade of D-)

Study of color as a communicator. Varied projects accompany the theory of color and how it affects the viewer, to determine the effects of value, intensity, ground, etc. in the visual experience. *Spring semester, odd years*.

# ART 235 Drawing II

2

Prerequisite: ART 105 (minimum grade of D-)

Hands on exploration of The Principles of Art - the means an artist uses to organize elements (line, shape, form, value, space, color, texture) within a work of art. The Principles covered in this course include: balance, emphasis, movement/rhythm, repetition/pattern, contrast and unity. Spring semester, even years.

## ART 321 Art History I

3

A chronological survey of visual art from ancient times to the Renaissance. Emphasis is on art as a product of culture and society. Focus is also given to techniques of visual analysis. Fall semester, even years.

#### ART 322 Art History II

3

A chronological survey of visual art from the Renaissance to postmodernism. Emphasis is on art as a product of culture and society. Focus is also given to techniques of visual analysis. Fall semester, odd years.

#### ART 485 Senior Exhibit

1

The final event in an art major's college experience. Students exhibit a body of work and develop a statement of philosophy and a résumé. Fall and Spring semesters.

# **Astronomy**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### **ASTR 111 Astronomy**

4

Prerequisite: MATH 111 (minimum grade of D-) or ALEKS score of 46

An introduction for the general student to the basic elements of astronomy. Emphasis is placed on the scientific method as the structure and contents of the universe is explored. Classroom lectures cover the history of astronomy, the solar system, stellar evolution, galaxies, and cosmology. Laboratory activities emphasize personal observations of various astronomical objects, as weather permits. Three lectures and one evening laboratory weekly. *Scheduled as needed.* 

# **Biology**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# BIOL 104 Insects and You 3

An introductory entomology course designed for students who are non-science majors. This course will focus on the basic structure and function of insects, how insects interact with other insects, their environment and people. This course will also introduce the beneficial and damaging impacts that insects have on their environment, how insects were/are important to people not only in Biblical, folklore and current cultures, but also as pollinators, parasites, vectors of disease, pests of agriculture and urban areas, bio-control agents, environmental quality indicators, and crime-solving forensic agents. Does not apply toward a major or minor offered in the Biomedical Science program. *Spring semester*.

# **BIOL 106 Human Biology**

3

A survey of the human body and focusing on the structure and function of each physiological system. This course is designed for those not requiring the depth offered in BIOL 111 and BIOL 112. Does not apply toward a major or minor offered in the Biomedical Science program. May not be taken for credit if BIOL 111 or 112 previously taken. *Fall semester*.

#### **BIOL 111 Human Anatomy and Physiology I**

4

Recommended preparation: One year of high school chemistry

An introduction to the fundamentals of anatomy and physiology including the chemistry of life, cytology, histology, cellular respiration, skeletal, muscular, integumentary, and nervous systems of the body. Three lectures and one three-hour laboratory per week. Does not apply toward a biology major or minor. *Fall semester*.

### **BIOL 112 Human Anatomy and Physiology II**

4

Prerequisite: BIOL 111 (minimum grade of C)

Anatomy and physiology of the endocrine, digestive, respiratory, circulatory, excretory and reproductive systems of the human body. Three lectures and one three-hour laboratory per week. Does not apply toward a biology major or minor. *Spring semester*.

#### **BIOL 200 General Biology I**

4

Prerequisites: BIOL 111 (minimum grade of C) or [MATH 111 or above (minimum grade of C)] or [ALEKS score of 46 or ACT MATH Score of 20 or SAT MATH score of 430 (old SAT 2400 scale) or SAT Math score of 470 (new SAT 1600 scale)] or sophomore standing Strongly recommended: One year of high school chemistry

An introduction to the science of biology including the chemistry of life, cell biology, cellular respiration, photosynthesis, Mendelian, population and molecular genetics, speciation and macroevolution versus creation as models for origins. Three lectures and one three-hour laboratory per week. *Fall semester*.

## **BIOL 202 General Biology II**

4

Prerequisite: BIOL 200 (minimum grade of C)

A continuation of topics in BIOL 200 with coverage of protist diversity, plant and animal diversity; anatomy, physiology and reproduction in plants; animal anatomy and physiology including digestive, circulatory, respiratory, endocrine, nervous, reproductive, and immune systems; sensory specializations of humans and animal development. Three lectures and one three-hour laboratory per week. *Spring semester*.

# **BIOL 205 Microbiology**

4

Prerequisite: CHEM 104 (minimum grade of C) and [BIOL 106 or BIOL 111 or BIOL 112 or BIOL 200 (minimum grade of C)]

A survey of major groups of microbes with relationships to health and disease. Basic principles of microbial nutrition, metabolism, genetics, ecology, microbial control and microbe-human interactions are also considered. The laboratory introduces a variety of procedures, including asepsis, culture, isolation and identification of microorganisms, especially bacteria. Three lectures and one three-hour laboratory per week. *Fall and Summer semester*.

# **BIOL 309 Medical and Veterinary Entomology**

Prerequisite: BIOL 202 (minimum grade of C)

Many of the world's significant diseases (Malaria, Dengue, Yellow Fever, Lyme disease, West Nile and Zika viruses) are transmitted by insects - some of the deadliest animals on earth. Students taking this course will be introduced to medically significant arthropod pests and disease agents that impact human and animal health causing worldwide suffering and death. This course is designed for students interested in medicine, veterinary medicine, public health, or any aspect of vector biology. Two lectures per week. *Scheduled as needed*.

#### **BIOL 312 Parasitology**

1

3

Prerequisite: BIOL 202 (minimum grade of C)

This course is a comparative survey of the primary parasites of human and veterinary importance with an emphasis on morphology, life cycles, epidemiology, pathogenesis and the interface between the parasite and the host immune system. Students will develop a global perspective of the burden of parasitic diseases and will analyze current literature in molecular parasitology topics. (Offered through the Adventist Educational Alliance – distance learning) *Spring semester*, odd years

# BIOL 321 Genetics

Prerequisite: BIOL 202 (minimum grade of C) and [CHEM 152 or CHEM 104 (minimum grade of C)]

A study of classical and population genetics. Topics include the physical and chemical nature of genes, inheritance patterns, chromosome anomalies, behavior of genes in populations and speciation. One three-hour laboratory per week. *Fall semester*.

#### **BIOL 338 Principles of Entomology**

3

Prerequisite: BIOL 202 (minimum grade of C)

Provides an introduction to the study of insects that addresses fundamental concepts such as insect classification, control, life history, structure, ecology, and basic physiology. This course will delve into areas of entomology included but not limited to medical and veterinary entomology, urban entomology, and agricultural entomology. Two lectures and one three-hour lab per week. Lab sessions will involve field trips, weather permitting. *Scheduled as needed*.

# BIOL 357 Animal Biology for Biomedical and Veterinary Science

4

Prerequisite: BIOL 202 (minimum grade of C)

A survey of comparative anatomy, physiology, ecology, and behavior of animal species relevant to medicine, veterinary medicine, and biological research. Emphasis is placed on animals transmitting or causing disease in humans and other animals, animals frequently in need of veterinary care, and animals frequently used in biomedical research laboratories. Three lectures and one three-hour laboratory per week. *Spring semester, even years* 

#### **BIOL 358 Animal Development**

1

Prerequisites: BIOL 112 (minimum grade of C) or BIOL 202 (minimum grade of C)

An in-depth study of the developmental processes involved generating new functionally complete adult organisms. Focus will be centered on both normal and abnormal developmental processes with respect to how genetic mutations, diseases, and environmental conditions interfere with these developmental processes. Examples will include animal species that have served as model systems for understanding animal and human developmental processes. Three lectures and one three-hour laboratory each week. *Scheduled as needed*.

#### **BIOL 360 Human Nutrition and Disease**

3

Prerequisites: BIOL 112 (minimum grade of C) or BIOL 202 (minimum grade of C)

An in-depth examination of the nutritional needs of the human body and the diseases that result when those nutritional needs are not met or grossly exceeded. Emphasis will be placed on the holistic perspective of balanced nutritional intake and its effect on the human body. Three lectures each week. *Fall semesters* 

#### **BIOL 366 Plants and Human Health**

Prerequisites: [BIOL 202 and CHEM 104 (minimum grade of C)] or [BIOL 202 and CHEM 212 (minimum grade of C)]

This course focuses on the role and importance of plants on human health. It surveys the importance of plants in human diet, the connection between plants and medicine, poisonous and allergy plants, plants with mind-altering properties, plants used to create stimulating beverages, and herbs and spices used in both cooking and medicine. *Fall semester*.

#### **BIOL 375 Medical Ecology and Epidemiology**

Prerequisite: BIOL 202 (minimum grade of C)

An analysis of the factors that influence the distribution and abundance of medically relevant plant and animal species (e.g. disease vectors and poisonous organisms) and the spread of human disease. Emphasizes the relationships of environmental factors to the spread and development of human diseases and organisms causing serious human injury. Three lectures and one three-hour laboratory per week. *Spring semester, odd years*.

#### BIOL/CHEM 386 Research Methods: Scientific Inquiry

Prerequisites: [BIOL 200 or CHEM 151 or PHYS 251 (minimum grade of C)] and [CHEM 296 or MATH 221 (minimum grade of C)]

An introduction to the methods and mechanics of the research process. Topics include the nature, methods, literature, funding, limitations and strengths of scientific research. A proposal and literature search are required. *Spring semester*.

#### BIOL/CHEM 396 Research Methods: Proposals and Protocols

Prerequisite: BIOL/CHEM 386 (minimum grade of C)

Emphasizes research design. The student will interview science faculty to learn about potential research projects and will choose a project to work on with a faculty member. A research project is proposed, a literature review undergone, a research plan developed for the project and, depending upon the nature of the study, research initiated. *Fall semester*.

## **BIOL 403 Molecular Biology**

Prerequisite: BIOL 321 (minimum grade of C)

A study of DNA and RNA structure and function at the molecular level, understanding gene regulation and DNA technology and analysis. This course is organized in four parts: (1) Nucleic acid structure; (2) Molecular mechanisms related to both the flow of genetic information and regulation of gene expression (3) Genetic Recombination; and (4) DNA technology. Three lectures and one three-hour laboratory per week. *Spring semester*.

#### **BIOL 404 Cell Biology**

4

4

3

4

Prerequisites: BIOL 321 (minimum grade of C) and {CHEM 104 or [CHEM 212 (can be taken concurrently)] (minimum grade of C)]

A study of cell structures and functions with an emphasis on cell signaling and regulation at the molecular level. The course is organized in four parts: (1) methods of cellular research, (2) cell composition and organization; (3) cell and organelle structure and function; (4) cell signaling and regulation; and (5) cell cycle regulation and cancer. Three lectures and one three-hour laboratory per week. *Spring semester*.

#### **BIOL 411 Advanced Human Anatomy**

4

Prerequisite: BIOL 112 (minimum grade of C) or BIOL 202 (minimum grade of C)

A study of the structure and organization of the human body with particular emphasis on macroscopic anatomy. Three lectures and one three-hour laboratory per week. Cadaver work included. *Spring semester*.

#### **BIOL 416 Advanced Human Physiology**

4

Prerequisite: BIOL 112 (minimum grade of C) or BIOL 202 (minimum grade of C)

Studies the physiology of the musculo-skeletal, nervous, endocrine, cardiovascular, respiratory, digestive, reproductive, and renal systems and metabolism with emphasis on regulatory mechanisms and integration. Three lectures and one three-hour laboratory per week. *Fall semester*.

#### **BIOL/CHEM 440 Biochemistry**

Prerequisites: BIOL 200 (minimum grade of C) and CHEM 212 (minimum grade of C)

Study of the fundamental principles of enzyme kinetics, enzyme mechanisms and enzyme regulation based on the structure and chemistry of biomolecules including amino acids, carbohydrates, lipids, proteins, nucleotides, nucleic acids, and biological membranes. This course is designed for pre-professional students. Does not include a lab. (Offered through Andrews University – distance learning.) Summer semester.

#### **BIOL 441 Neuroscience**

Prerequisites: BIOL 416 (minimum grade of C)

A survey of the structure and function of the nervous system, especially in the function of neural circuits in processing information and decision-making. Focus will be placed on how the nervous system detects stimuli and produces relevant behaviors. Two lectures each week. Scheduled as needed.

# **BIOL/CHEM 445 Biochemistry I**

Prerequisites: BIOL 200 (minimum grade of C) or CHEM 212 (minimum grade of C)

A study of the chemical properties and biological functions of amino acids, proteins, enzymes, carbohydrates, and lipids. Covers metabolism including glycolysis, Krebs cycle and oxidative phosphorylation. The laboratory includes basic techniques and instruments used for biochemical research and biotechnology. Three lectures and one four-hour laboratory per week. Fall semester.

#### **BIOL/CHEM 446 Biochemistry II**

Prerequisites: BIOL/CHEM 440 (minimum grade of C) or BIOL/CHEM 445 (minimum grade of C)

A continuation of CHEM 445 Biochemistry I. Includes a review of glycolysis, gluconeogenesis, TCA cycle and oxidative phosphorylation. An in-depth study of metabolism including the catabolism and biosynthesis of glycogen and fatty acids, and the pentose phosphate pathway and lipid synthesis. In addition, the class examines other aspects of biochemical systems. Spring semester, odd years.

#### **BIOL 455 Immunology**

3

Prerequisites: BIOL 202 (minimum grade of C) and BIOL 321 (minimum grade of C)

Basic concepts of the innate and adaptive immune systems are covered including details about the molecules, cells and organs involved. Emphasis will be placed on mechanisms of immune system development, response to pathogens, and the classic experiments performed to make key discoveries in immunology. (Offered through the Adventist Educational Alliance - distance learning.) Scheduled as needed.

#### BIOL/CHEM 496 Research Methods: Independent Research

Prerequisite: BIOL/CHEM 396 (minimum grade of C) and ENGL 212 (minimum grade of C)

Emphasizes active research and both oral and written reporting of the results of research. The project proposed in BIOL/CHEM 396 is carried out and both written and oral presentations of the research are made. Spring semester.

# **Biomedical Science**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### **BIOM 201 Professional Shadowing and Development**

2

This course provides students with opportunities to job shadow health professionals. Students will gain an understanding of their chosen profession and relate their experiences to each other during class time. This course must be taken no later than the spring of the sophomore year, or for students changing their major to biomedical science, within one year of their transfer into the major. Spring semester.

#### **BIOM 302 Biomedical Science Seminar**

Prerequisite: BIOL 112 (minimum grade of C) or BIOL 202 (minimum grade of C)

Previously BIOL 310 (Biology Seminar), Biomedical Science Seminar is designed to promote critical evaluation and discussion of past and current scientific findings within the biomedical and biological discipline, develop student's oral presentation techniques, and have students learn how to summarize biological literature. Seminar topics can be presented by Union College faculty, students, and by guests. Students receiving seminar credit will also present a seminar. Students will also learn about different biomedical career pathways, understand the criteria that biomedical schools use to evaluate candidates, and how to be competitive for these programs. May be repeated for credit. *Fall semester*.

# **Business Analytics**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

### **BSAN 220 Data Analysis Tools**

3

Hands-on experience in beginning and intermediate Excel formatting, formulas and analysis, as well as introduction to basic SQL queries and Tableau. Fall and Spring semesters.

#### **BSAN 330 Business Analytics**

3

Prerequisite: BSAN 220 (minimum grade of D-) Recommended: Laptop computer for use in class

Provides an introduction to big data analytics for business, including using data to describe, predict, and inform business decisions. Develops basic data literacy and an analytic mindset that will help students make strategic decisions based on data. *Spring semester*.

# **Business Administration**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### **BUAD 219 Small Business Management**

3

Explores the multidisciplinary demands of small business management. Students will explore concept feasibility and start up management. Whether starting a business, working within a small business, or joining an innovative corporate division, this course prepares students to think like entrepreneurs *Spring semester*.

# **BUAD 225 Creativity and Innovation in Business**

3

This course uses practical, hands-on activities to prepare students to contribute in a unique and creative way in the functional areas of business. Students will boost individual flexibility and originality of thought and will explore approaches to organizational creativity for successful problem-solving. Students will also learn how to contribute to and manage a team throughout the process. *Spring semester*.

# **BUAD 310 Quality Management**

3

Prerequisite: ENGL 110 (minimum grade of D-)

Familiarizes the student with ideas on how to be an innovative and effective manager. Students study a variety of management styles and learn principles to prepare for leadership positions. Fall semester.

#### **BUAD 316 Operations and Resource Management**

3

Analysis of various decision-making models useful in making efficient managerial decisions. Topics covered include productivity, resource allocation, linear programming, inventory management, and queuing theory. Methods include the use of correct models and software. *Spring semester*.

## **BUAD 325 Business Communication**

Prerequisites: [COMM 105 or COMM 205 (minimum grade of D-)] and ENGL 110 (minimum grade of D-)

Instruction in the principles, techniques and tools of effective written and oral communication in business. Considers both individual and group communication skills. Includes the process of résumé writing, interview preparation, and professional wardrobe selection. *Fall semester*.

#### **BUAD 350 Project Management**

2

3

Familiarizes the student with the basic concepts of project management through studying both theory and application. Provides experience using some basic tools. *Spring semester*.

#### **BUAD 376 Human Resource Management**

3

Prerequisite: Sophomore standing

Emphasizes the basics of human resource management in business organizations and considers a variety of topics in human relations, personnel management, and organizational behavior. *Spring semester*.

#### **BUAD 401 Life After College**

1

Designed to help students as they transition from college to the workforce. The focus will be on providing an overview of practical topics that everyone has to deal with in life including debt, budgets, investing, taxes, law, insurance, job search and benefits. The course is offered on a CR/NC basis. *Spring semester*.

#### **BUAD 405 Business Ethics**

1

Prerequisite: RELT 305 (minimum grade of D-) or RELT 306 (minimum grade of D-)

Using class discussion format, introduces the student to ethical concepts relevant to identifying and resolving ethical issues in business while developing a personal code of ethics. *Spring semester*.

#### **BUAD 428 Business Strategy**

3

Prerequisites: ENGL 212 (minimum grade of D-) and 30 hours of business courses and Senior standing

Designed as the capstone class for business administration majors. Includes study of the specific functions of top management with a particular focus on the elements of strategic planning. Students integrate the various functional areas of business through case study analysis and a comprehensive business simulation. *Spring semester*.

#### **BUAD 430 Conflict Management**

3

Prerequisites: ENGL 110 (minimum grade of D-) and Junior standing

Provides a framework for how to effectively manage conflict in the workplace. Time is spent contrasting situations involving both positive and negative conflict. Topics include building effective teams, biblical approaches to conflict, negotiation and effective accountability. *Fall semester*.

#### **BUAD 445 Business Law**

3

Prerequisite: Junior standing

A study of: legal institutions and origins; laws of contracts; agency; employment; negotiable instruments; personal property; bailments; transportation; suretyship and guaranty; partnerships; corporations; real property; mortgages; leases; trusts; decedents' estates; bankruptcy; business torts and crimes. *Fall semester*.

#### **BUAD 455 Advanced Human Resource Management**

2

Prerequisites: BUAD 376 (minimum grade of D-) and ENGL 110 (minimum grade of D-)

Implementation of topics covered in BUAD 376 through a project-based structure. Topics covered include job descriptions, hiring, managing and evaluating employees, designing compensation plans, creating employee policies, and structuring orientation/training programs. *Fall semester*.

# Chemistry

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### CHEM 104 Introduction to General, Organic and Biochemistry

4

Prerequisite: MATH 111 (minimum grade of C or concurrent enrollment) or ALEKS score of 46 or [ACT Math score of 18 or SAT Math score of 430 (old SAT 2400 scale) or SAT Math score of 470 (new SAT 1600 scale)]

Comprehensive study of the basic principles of chemistry applicable to the health science professions. Topics covered include measurements, the scientific method, atomic structure, the use of radiation in cancer treatment, stoichiometry, pH, acids, bases and buffers in the body, organic functional groups and reactions, glycolysis, the citric acid cycle, oxidative phosphorylation and the biochemical functions of carbohydrates, protein structure and function, nucleic acids, fats and proteins in the body. One laboratory per week. Does not apply toward a program major or minor. *Fall and Spring semesters*.

#### **CHEM 151 General Chemistry I**

4

Prerequisite: MATH 111 or higher (minimum grade of C or concurrent enrollment) or ALEKS score of 46 or [ACT math score of 20 or SAT Math score of 480 (old SAT 2400 scale) or SAT Math score of 510 (new SAT 1600 scale)]

A comprehensive introduction to the fundamental principles of chemistry for chemistry majors and pre-professional students (medical, dental, etc.). Topics include chemical nomenclature, unit analysis, reactions, the mole, stoichiometry, thermochemistry, atomic theory and structure, periodicity, molecular structure and bonding, gas laws, and kinetic theory. One laboratory per week. *Fall and Spring semesters*.

#### **CHEM 152 General Chemistry II**

4

Prerequisite: CHEM 151 (minimum grade of C)

A continuation of CHEM 151. Topics include intermolecular forces, crystal structure, solutions, chemical kinetics, chemical equilibrium, acid-base chemistry, reaction thermodynamics, electrochemistry, and nuclear chemistry. One laboratory per week. *Spring and Summer semester*.

#### CHEM 211 Organic Chemistry I

4

Prerequisite: CHEM 152 (minimum grade of C)

A systematic study of the important classes of carbon compounds including their nomenclature, preparation, characteristic reactions and reaction mechanisms. For chemistry majors and pre-professional students (medical, dental, etc.). One laboratory per week. *Fall semester*.

#### **CHEM 212 Organic Chemistry II**

4

Prerequisite: CHEM 211 (minimum grade of C)

A continuation of CHEM 211. A systematic study of the physical and chemical properties of organic functional groups including aldehydes through amines and aromatic compounds. Includes an introduction to the theory and practice of infrared spectroscopy, NMR, and mass spectrometry. One laboratory per week. *Spring semester*.

#### CHEM 296 Research Methods I

1

Prerequisite: MATH 111 (minimum grade of C) or ALEKS score of 46 or [ACT Math Score of 20 or SAT Math score of 480 (old SAT 2400 scale) or SAT Math score of 510 (new SAT 1600 scale)]

An introduction to the fields of descriptive and inferential statistics. Data sampling techniques, hypothesis testing and some applications of probability theory to science situations are examined. Fall semester.

# **CHEM 311 Analytical Chemistry**

3

Prerequisite: CHEM 152 (minimum grade of C)

An introduction to the principles and processes of chemical analysis with emphasis on classical techniques. Topics include solution concentration unit manipulation, analytical applications of statistics, gravimetric and volumetric analysis, calibration techniques, activity equilibria, titration equilibria, simultaneous equilibria, and basic electrochemistry. Labs employ gravimetric, volumetric, spectrophotometric, and potentiometric techniques. One laboratory per week. *Fall semester, as needed.* 

#### CHEM 312 Instrumental Analysis

Prerequisites: CHEM 311 (minimum grade of C) and ENGL 212 (minimum grade of C)

A continuation of CHEM 311. A study of the analytical process emphasizing instrumentation. Topics include applications of electronics, spectrometric, chromatographic, and electrochemical methods. Writing is emphasized through laboratory reports. One laboratory per week. Spring semester, as needed.

#### CHEM/BIOL 386 Research Methods: Scientific Inquiry

Prerequisites: [BIOL 200 or CHEM 151 or PHYS 251 (minimum grade of C)] and [CHEM 296 or MATH 221 (minimum grade of C)]

An introduction to the methods and mechanics of the research process. Topics include the nature, methods, literature, funding, limitations and strengths of scientific research. A literature search and proposal are required. Spring semester.

#### CHEM/BIOL 396 Research Methods: Proposals and Protocols

Prerequisite: CHEM/BIOL 386 (minimum grade of C)

Emphasizes research design. The student will interview science faculty to learn about potential research projects and will choose a project to work on with a faculty member. A research project is proposed, a literature review undergone, a research plan developed for the project and, depending upon the nature of the study, research initiated. Fall semester.

#### **CHEM 425 Inorganic Chemistry**

Prerequisite: CHEM 152 (minimum grade of C)

An introduction to the descriptive chemistry of the main group elements, coordination chemistry, molecular symmetry, and bio-inorganic chemistry. The course includes several "mini-labs" (done during class time) where inorganic materials are synthesized and/or investigated. Spring semester, even years.

#### CHEM/BIOL 440 Biochemistry

Prerequisites: BIOL 200 (minimum grade of C) and CHEM 212 (minimum grade of C)

Study of the fundamental principles of enzyme kinetics, enzyme mechanisms and enzyme regulation based on the structure and chemistry of biomolecules including amino acids, carbohydrates, lipids, proteins, nucleotides, nucleic acids, and biological membranes. This course is designed for pre-professional students. Does not include a lab. (Offered through Andrews University – distance learning.) Summer semester.

#### CHEM/BIOL 445 Biochemistry I

Prerequisites: BIOL 200 (minimum grade of C) and CHEM 212 (minimum grade of C)

A study of the chemical properties and biological functions of amino acids, proteins, enzymes, carbohydrates, and lipids. Covers metabolism including glycolysis, Krebs cycle and oxidative phosphorylation. The laboratory includes basic techniques and instruments used for biochemical research and biotechnology. One laboratory per week. Fall semester.

#### CHEM/BIOL 446 Biochemistry II

Prerequisites: CHEM/BIOL 440 (minimum grade of C) or CHEM/BIOL 445 (minimum grade of C)

A continuation of CHEM 445 Biochemistry I. Includes a review of glycolysis, gluconeogenesis, TCA cycle and oxidative phosphorylation. An in-depth study of metabolism including the catabolism and biosynthesis of glycogen and fatty acids, and the pentose phosphate pathway and lipid synthesis. In addition, the class examines other aspects of biochemical systems. Spring semester, odd years.

# CHEM 451 Physical Chemistry: Thermodynamics

Prerequisites: CHEM 152 (minimum grade of C) and MATH 285 (minimum grade of C) and PHYS 252 (minimum grade of C)

Chemical thermodynamics is developed to describe energy and entropy changes in ideal and real gases and extended to a range of chemical systems. Manipulation of multiple variables is achieved by use of partial differential equations, and skill in identifying the conditions of the problem to derive the appropriate equations for a particular application are developed. Attention is given to the results of applying Gibbs Energy and other thermodynamic constructs to a variety of uses including electrochemistry and phase equilibria. Three lectures and one laboratory per week. Fall semester, odd years.

3

2

4

# CHEM 452 Physical Chemistry: Quantum Mechanics and Kinetics

Prerequisites: CHEM 152 (minimum grade of C) and MATH 285 (minimum grade of C) and PHYS 252 (minimum grade of C)

Introductory course in quantum mechanics including wave-particle duality, time-independent Schrödinger equation, harmonic oscillators, matrix treatment, and the wave treatment of the hydrogen atom. Uses and applications of differential equations and matrices are developed along with a historical perspective of the development of our understanding of quantum mechanics. Kinetics: The dynamics of chemical reactions are studied, as well as methods to determine rates, and common interpretations of mechanisms of chemical reactions from rate data. Four lectures per week *Spring semester, even years*.

#### CHEM/BIOL 496 Research Methods: Independent Research

1

4

Prerequisites: CHEM/BIOL 396 (minimum grade of C) and ENGL 212 (minimum grade of C)

Emphasizes active research and both oral and written reporting of the results of research. The project proposed in CHEM/BIOL 396 is carried out and both written and oral presentations of the research made. *Spring semester*.

# Communication

Students can also request instructor permission to take a course, if they don't meet the stated prerequisites; in some cases, instructor permission is specifically listed as a required prerequisite.

# **COMM 105 Public Speaking**

2

Combines basic theories of public speaking, listening, and interpersonal communication with actual speaking experiences in the classroom. Fall and Spring semesters.

# COMM 125 Society, Culture, and Communication

3

Examines the effect and influence of mass media on contemporary life and society by surveying both the historical evolution of mediums such as print, radio, film, and television as well as considering contemporary developments and issues related to mediums such as the Internet and social media. Includes an introduction to communication theory and research. *Fall semester*.

# **COMM 205 Introduction to Interpersonal Communication**

2

Introduces students to the psychology of communication and human relations on an interpersonal level. Fall and Spring semesters.

#### **COMM 209 Digital Storytelling I**

3

Prerequisites: PHOT 151 (minimum grade of C)

The purpose of this course is to translate storytelling and writing skills to a variety of digital media. Students will gain an understanding of the strengths and weaknesses of each medium and how to best use them individually and together to reach an audience and tell a story. Students will complete projects using audio story/interview, audio with stills/slideshows, and video shorts. Projects will employ a holistic approach taking students through the entire storytelling process: planning content, creating content, editing content, and presenting content. *Spring semester*.

# COMM 211 Digital Storytelling II

3

Prerequisite: COMM 209 (minimum grade of C)

This course will build on skills learned in COMM 209, applying them to longer, more involved projects. The focus will be DSLR guerilla filmmaking, advanced editing techniques, and Hollywood style film production process. *Fall semester*.

# COMM 214 Drama

Prerequisite: Permission of Instructor

This course is designed to give students an overview of producing a play for live theatre. Scheduled as needed.

3

3

3

3

#### **COMM 221 Reporting**

Prerequisite: Sophomore standing

Introduces the student to basic reporting for news media. Students are encouraged to submit articles to *The Clocktower* and other news outlets. *Spring semester*.

# **COMM 241 Public Relations Principles**

Prerequisite: Sophomore standing

Examines the philosophy, objectives and methods of an effective public relations program, with an emphasis on the role of public relations in a formal setting. Uses tools and techniques of communication which build positive relationships with an organization's various publics. Provides opportunities for practical experiences. *Fall semester*.

## COMM 246 Editing

Covers principles of editing, copy editing, layout, headline writing, handling of graphic elements, and achieving editorial balance and integrity. Students concentrate on practical applications for actual publications. *Fall semester*.

#### **COMM 292 Communication Theory and Human Interaction**

This course introduces and explores communication theory and its practical ability to shape and name a variety of dynamics in human interaction. Students learn the seven traditions of theory and study the idea of social constructivism (how we create social reality with communication). Several theories are discussed with the student selecting two to study in depth with an eye to creating an original piece of theoretical research in the future. Fall semester.

#### **COMM 313 Digital Storytelling III**

3

Prerequisite: COMM 211 (minimum grade of C)

Prerequisite: ENGL 110 (minimum grade of C)

Recommended: Have at least 1 years' experience in video production or editing via an internship, work, or personal development.

Learn advanced video concepts, production, and post-production. Emphasizes technical skills with Adobe Premiere Pro and After Effects. Gain experience in client work, higher-end productions, professional editing, color grading and motion graphics. *Schedule as needed*.

## **COMM 316 Propaganda and Persuasion**

3

This course explores persuasion and propaganda history and theory as it relates to advertising, politics, fake news, and social compliance gaining. Students will develop a working knowledge of how persuaders influence, manipulate, and shape society. Additionally, students will learn persuasive writing concepts used in advertising and conduct social experiments using persuasive frameworks. Students will be given the option to create and test an original piece of propaganda, advertising, or a social experiment as a final. *Fall semester, even years*.

# COMM 333 Rhetoric

Introduces students to the history, theory, and practice of rhetoric, particularly through examining the narrative impact of contemporary texts. Social, political, and popular mediated artifacts (such as film, music and television) are the focus of rhetorical analysis and critique, making the course relevant to a wide range of majors. Fall semester, odd years.

## **COMM 355 Advanced Speech and Oral Interpretation**

3

3

Prerequisite: COMM 105 (minimum grade of C)

Emphasizes: understanding and employment of effective rhetoric in public speaking events; and improving skills in oral interpretation of varied texts through enhancing personal versatility in body language, vocal control, and content delivery. *Spring semester, odd years, as needed.* 

# **COMM 365 Institutional Development**

Prerequisite: COMM 241 (minimum grade of C)

A practical approach to the basic principles of fundraising for nonprofit organizations. Familiarizes students with annual giving programs, capital campaigns, deferred giving plans, and common sources of financial support. Includes specific instruction on writing direct mail appeals, maintaining donor records, conducting personal solicitation, and planning special events. *Spring semester, odd years.* 

# **COMM 377 Crisis Communication Management**

3

3

This looks at how to manage crises from a communication and public relations perspective. Case studies, theoretical frameworks, and table-top exercises in real time, all contribute to equipping students to manage conversations and messaging during crises from the interpersonal to the mass media level. *Fall semester*, *odd years*.

#### **COMM 425 Intercultural Communication**

3

This course explores cultural, verbal, and non-verbal communication dynamics necessary to function in increasingly multicultural setting. Special attention is paid to learning terminology and research approaches to develop student's abilities to assess intercultural artifacts and social situations. Special guests will expose students to different voices and perspectives; and issues such as racism, prejudice, and other challenges are explored through a peacemaking lens. Spring semester, odd years.

# **COMM 457 Feature Writing**

3

Prerequisite: COMM 221 (minimum grade of C)

Covers techniques for writing and marketing publishable articles on secular and religious topics. Students are encouraged to submit at least three articles for publication. *Spring semester*.

#### **COMM 445 Public Relations Campaigns**

3

Prerequisite: COMM 241 (minimum grade of C)

Practical applications of public relations principles including: case studies, planning of campaigns and special events, and specific communication techniques for internal and external audiences. Students create material for newsletters, media publicity, and audio-visual pieces that contribute to portfolio development. *Spring semester*.

#### **COMM 465 Interpersonal Communication**

3

Prerequisite: COMM 105 (minimum grade of C) or COMM 205 (minimum grade of C)

Explores traditional and contemporary models of communication theory, with particular application to the psychology of communication and human relations on an interpersonal level. *Spring semester*.

#### **COMM 499 Senior Capstone**

4

Prerequisite: COMM 292 (minimum grade of C) and PSYC 340 (minimum grade of C)

This course is the culmination of the communication major. It involves researching and executing an original public relations campaign or producing an original research paper for submission to an academic conference or journal. The instructor will mentor the class through the process. Each student's work will be featured in academic posters on camps. Additionally, each student will also attend the annual National Communication Association conference as a part of this course (cost covered in program fee). *Fall semester*.

# Core

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **CORE 100 College Success**

1

While learning fundamental concepts and methods for academic achievement in higher education, students experience the world within their chosen major. A course expected for all freshmen. Graded CR/NC. Fall semester.

# Computing

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### **CPTR 128 Basic Networking**

3

Introduces students to networking concepts ranging from cabling, network layers, and the basics of switches and routers. *Spring semester*.

#### **CPTR 129 Fundamentals of Databases**

3

Introduces students to the concepts of a database, SQL, and basic queries. Spring semester.

# **CPTR 226 Introduction to Programming**

4

Corequisite: MATH 111 or higher (minimum grade of C)

Introduction to computer science, programming, and problem solving. Structured and object-oriented programming techniques are presented and applied through the creation of programming assignments. Fall semester.

#### **CPTR 230 Computer Organization**

3

Prerequisite: CPTR 128 (minimum grade of C) and CPTR 226 (minimum grade of C)

Introduces students to the computer operations below the operating system level. Fall semester.

#### **CPTR 240 Systems Administration**

3

Prerequisite: CPTR 128 (minimum grade of C) and CPTR 226 (minimum grade of C)

An introductory course to systems administration. Topics include user management, computing systems management, server management, security, file management, backup management and scripting. Also covers how to communicate with customers/users. Fall semester.

## **CPTR 245 Web Development Basics**

3

An introduction to static web pages. Major emphasis is placed on designing and creating web pages using HTML5 with Cascading Style Sheets. *Fall semester*.

#### **CPTR 265 Educational Technology**

3

Prerequisite: Education majors only

This course is an introduction to the effective use of computer technology as an integral part of teaching and learning in the elementary and secondary classroom. Teacher candidates are instructed in the appropriate standards, frameworks and current, content-area applications that align with those expectations. A joint effort between the music department and the instructor provides for a special unit for music education majors who need an introduction to music software and best practice instruction in that content area especially. The course consists of classroom and lab instruction and is primarily project-based. *Spring semester*.

## **CPTR 310 Data Structures and Algorithms**

4

Prerequisite: CPTR 226 (minimum grade of C) and MATH 240 (minimum grade of C)

Advanced programming principles and problem-solving techniques are applied in an object-oriented programming environment. Abstraction and data structures (stacks, queues, linked lists, etc.) are explored along with algorithms and programmatic efficiency. *Spring semester*.

#### **CPTR 320 Advanced Networking**

3

Prerequisite: CPTR 128 (minimum grade of C)

Teaches students advanced networking principles. A student finishing this course should be able to set up, analyze, and debug a network for a small o mid-size organization. *Spring semester*.

#### **CPTR 335 Web Technologies**

Prerequisites: CPTR 226 (minimum grade of C) and CPTR 245 (minimum grade of C)

Introduction to website publishing. Topics may include PHP, JavaScript, Ajax, database connectivity, application security and other related topics. Major emphasis is placed on designing and creating dynamic web sites. The course includes a group project to build an application for a website. *Spring semester*.

#### **CPTR 405 Software Engineering**

3

3

Prerequisite: CPTR 226 (minimum grade of C) and CPTR 336 (minimum grade of C) and Junior status or higher

Previously CPTR 327; Teaches management and implementation of programming projects. Topics include project management, scheduling, and control, specifications, testing, documentation, system implementation, and evaluation. *Fall semester*.

# CPTR 420 Advanced Systems Administration

3

Prerequisite: CPTR 240 (minimum grade of C)

Continuation course of CPTR 240 that focuses on directory services, project management, security issues, advanced scripting, and advanced interactions between services such as DNS, DHCP, web server, SQL and Mail Server. Emphasizing upfront design considerations, redundancy, scalability and total cost of ownership. *Spring semester*.

## **CPTR 424 Database Systems**

3

Covers both a theoretical and practical understanding of database management systems. Emphasizes the relational database model. The Data Definition Language (DDL) of SQL is covered. Implementation of a database application that uses a relational database and SQL is required. *Fall semester, as needed.* 

# **CPTR 440 Cloud Computing**

3

Prerequisite: CPTR 320 (minimum grade of C)

Introductory course to cloud computing. Topics explored may include distributed data crunching, cloud and datacenter file systems, virtualization, security & privacy, and interactive web-based applications. *Spring semester, odd years*.

#### **CPTR 451 Operating Systems and Principles**

3

Prerequisite: CPTR 226 (minimum grade of C)

Introduction to the design and internal operation of operating systems. Topics will include things such as processes, threads, mutual exclusion, CPU scheduling, deadlock, memory management, file systems, synchronization, and distributed system support. *Fall semester*.

#### CPTR 452 Analysis of Algorithms

3

Prerequisite: CPTR 310 (minimum grade of C)

Algorithms are the soul of computing. This course is a continuation of CPTR 310 focused on a deeper understanding of algorithms as well as more complicated algorithms. Fall semesters, odd years.

# **CPTR 460 Cybersecurity**

3

Prerequisite: CPTR 320 (minimum grade of C)

Covers various topics of computer security, which may include: network security, database security, security auditing, data encryption, operating system security, vulnerabilities, user authentication, access control, malicious software, secure software development techniques, firewalls and intrusion detection, site security, legal and ethical security issues, and risk management. *Spring semester, even years*.

# **CPTR 478 Senior Project I**

3

Prerequisite: Senior Class Standing

This class is an independent, student-driven, multi-semester project that uses the ideas, principles and capabilities learned throughout this degree. Fall semester.

#### **CPTR 479 Senior Project II**

Prerequisite: CPTR 478 (minimum grade of C)

A continuation of CPTR 478. Spring semester.

# **Economics**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### **ECON 235 Principles of Microeconomics**

3

3

Prerequisites: MATH 111 or higher (minimum grade of D-) or ALEKS score of 46 or [ACT Math Score of 20 or SAT Math score of 480 (old SAT 2400 scale) or SAT Math score of 510 (new SAT 1600 scale)]

Emphasizes basic economic concepts and problems, the capitalistic system, markets, price systems, allocation of resources, production, consumption, and employment. *Fall semester*.

# **ECON 236 Principles of Macroeconomics**

3

An introduction to the principles of economic analysis, economic institutions and issues of economic policy. Emphasizes aggregative economics, including national income, monetary and fiscal policy and international trade. *Spring semester*.

# Education

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **EDUC 125 Introduction to Teaching**

3

Includes a study of the historical and philosophical backgrounds, aims, curriculum, organization, educational laws, finance and current issues of American public and nonpublic education. Also provides training in the use of audiovisual equipment/technology. Twenty hours of field experience required. Praxis Core Test must be taken during this class. *Fall and Spring semesters*.

#### **EDUC 218 Philosophy of Christian Education**

3

Prerequisites: ENGL 212 (minimum grade of D-) and provisional admission to the teacher preparation program and CORE test passed

Includes a survey of the traditional and modern philosophies and their influence on educational practices, and the relationship of educational theories to their philosophic sources. Helps students understand the need for and develop a personal philosophy of Christian education. The missions of the Seventh-day Adventist Church and Union College influence the content of this course. Fifteen hours of field experience required. *Spring semester*.

#### EDUC 225 Seminar in Education Diversity: Multicultural/HRT

1

Pre- or corequisite: EDUC 125 (minimum grade of C)

Focuses on three major areas: the ability to recognize personal and societal dehumanizing biases including, but not limited to, sexism, racism, prejudice and discrimination; the ability to recognize the ways these biases may be reflected in instructional materials and processes; and the ability to translate this knowledge into attitudes and strategies which result in favorable experiences for all students. Gives education majors opportunity to interact with diverse school and community populations, especially those of other cultures. Twenty hours of field experience required. *Fall semester*.

# EDUC 245 Physical Education in the Elementary School

2

Prerequisite: EDUC 125 (minimum grade of C)

Investigates the sequence of development of fundamental motor patterns and perceptual motor skills, factors influencing this development, assessment and evaluation, and methods, activities and technology for developing these skills. Twenty hours of field experience required. *Spring semester*.

#### EDUC/PSYC 270 Research Writing

Prerequisite: Permission of Instructor

This class introduces students to elements of research writing using the format and style from the Publication Manual of the American Psychological Association. Students will be exposed to writing papers for empirical studies and literature reviews. They will apply the principles in writing a paper for a class in their discipline. *Spring semester*.

#### **EDUC 345 Learning Theories and Measurement**

3

Prerequisites: EDUC 218 (minimum grade of C) and PSYC 215 (minimum grade of C) and successfully passed the CORE test and full admission to the teacher preparation program

An interdisciplinary approach to fundamentals of learning and measurement. Includes a survey of behavioral, cognitive, social learning, constructivist, and humanistic learning theories; teaching, motivational strategies, management and discipline, and assessment. Twenty (elementary) to thirty (secondary) hours of field experience required. *Fall semester*.

# EDUC 346 Special Education in the Classroom

3

Prerequisite: EDUC 345 (minimum grade of C)

Causes of developmental patterns, behavioral characteristics and educational alternatives associated with specific exceptionalities which include students with visual impairments, speech and language impairments, orthopedic handicap and other health impairments, mental handicaps, learning disabilities, behavior disorders, students who are gifted and talented, children whose first language (and home culture) is not English, and those who are abused and/or neglected or at-risk for school failure are all briefly studied. Overview of PL 94-142 is included. Course does not apply toward psychology minor. Twenty hours of field experience required (15 hours special needs; 5 hours gifted). *Spring semester*.

#### **EDUC 350 Seminar in Classroom Management**

1

Prerequisite: EDUC 218 (minimum grade of C)

Focuses on current theories, strategies and research that teachers could apply in forming their own personal approach to classroom management. Includes an emphasis on teacher expectations, communication styles, classroom rules, procedures, consequences, bullying technology, and legal issues culminating in a major presentation that synthesizes the variety of theories from which to choose in developing their classroom management approach. *Fall and Spring semesters*.

#### **EDUC 356 General Secondary Methods**

3

Prerequisite: EDUC 345 (minimum grade of C)

Designed to help the teacher candidate translate teaching/learning theory into practice. Includes study of lesson planning, instruction, management, assessment, selected instructional strategies, legal responsibilities, state and denominational standards, and working with education's various publics. Students demonstrate micro-teaching competence. Thirty to thirty-five hours of field experience required. *Spring semester*.

# EDUC 357 Literature for Children and Adolescents

2

Pre- or corequisite: EDUC 345 (minimum grade of C)

A survey of youth literature and teaching strategies to encourage application of languages and literacy genre, to foster personal-social growth and to encourage life-long enjoyment of literature. *Fall semester*.

#### **EDUC 412 Methods: Language Arts Education**

3

Prerequisite: EDUC 345 (minimum grade of C)

A study of various teaching methods appropriate for the secondary classroom. Attention is given to planning, motivation, instruction, assessment, technology, textbook and resource selection. Includes 10 to 20 hours of classroom experiences. *Spring semester*.

#### **EDUC 413 Methods: Mathematics Education**

3

Prerequisite: EDUC 345 (minimum grade of C)

Includes the theoretical and practical aspects of secondary mathematics education. Students study current journals, teaching and assessment strategies, textbook selection and use of technology. Includes 10 to 20 hours of classroom experiences. *Spring semester*.

## **EDUC 414 Methods: Music Education**

Prerequisite EDUC 345 (minimum grade of C)

Goals, objectives, organization, interrelationships between music and the entire curriculum. Includes 10 to 20 hours of classroom experiences and use of technology. *Spring semester*.

## EDUC 415 Methods: Social Science and Religious Education (K-12)

3

3

Prerequisite: EDUC 345 (minimum grade of C)

An exploration of secondary social science, teaching strategies, textbook selection criteria, planning and assessment. Also emphasizes techniques for teaching K-12 religion. Students will be trained on the Encounter program from the North American Division. Includes 10 to 20 hours of classroom experiences and use of technology. *Spring semester*.

## **EDUC 418 Methods: Science Education**

3

Pre- or corequisite: EDUC 345 (minimum grade of C)

An exploration of secondary science teaching strategies, materials, textbooks, planning, assessment, ethics and preparation and supervision techniques for selected laboratory activities. Includes 10 to 20 hours of classroom experiences and use of appropriate technology. *Spring semester*.

# EDUC 425 Educational Organization and Administration (K-8)

3

Prerequisite: EDUC 345 (minimum grade of C)

An overview of curriculum development: basic concepts and principles of educational organization and administration, classroom management and pupil adjustment, and legal aspects of teaching. Fall semester.

# EDUC 446 Reading Assessment (K-8)

2

Prerequisite: EDUC 345 (minimum grade of C)

Instruction in assessing the reading abilities and progress of elementary students. Emphasizes stages of literacy and techniques of informal reading, spelling and writing assessment. Students gain experience by conducting assessments and planning literacy activities in field-based, one-on-one sessions with elementary learners. *Fall semester*.

# EDUC 450 Methods in Reading and Language Arts (K-8)

5

Prerequisite: EDUC 345 (minimum grade of C) and Praxis II must be taken during this class.

Emphasis is placed on elementary (K-8) language arts skills (viewing, listening, reading, speaking, visually representing, and writing) and reading skills (reading proficiencies, readiness, vocabulary instruction, word skills, phonics, fluency, comprehension, questioning, management, diagnostic skills, and assessment). Spelling, grammar, and handwriting are specifically included. A survey of Pathways 2.0 is included. Opportunity is given to plan and use varied instructional approaches in development of oral language, reading and writing. Traditional and constructivist approaches are studied. An evaluation and use of technology and the Internet will be included. Microteaching consisting of 20 hours of field experience is included. Fall semester.

# EDUC 458 Methods in Religion, Health, Science and Social Studies (K-8)

4

Prerequisite: EDUC 345 (minimum grade of C)

Instruction and practice in teaching Bible, health, science and social studies to grades K-8. Students learn to use scope and sequence charts and curriculum guides. Students will be trained on the Encounter program from the North American Division. Students develop lesson plans, use technology and learn a variety of teaching and assessment techniques. Students demonstrate micro teaching competence. Twenty hours of field experiences are included. *Spring semester*.

### EDUC 465 Math Methods and Materials (K-8)

3

Prerequisite: EDUC 345 (minimum grade of C)

K-8 math content taught in conjunction with appropriate teaching strategies utilizing technology. For each concept presented, a variety of interpretations and possible applications are given, followed by related activities for children that develop specific concepts and skills. A microteaching module is included. *Fall semester*.

# **EDUC 475 Student Teaching**

1-16

Prerequisite: Student Teaching Authorization from Teacher Preparation Committee **and** Passing Praxis II content test scores must be submitted to the Education Program prior to registration.

Real-life experiences in a wide variety of settings providing creative conventional and nontraditional hands-on teaching/learning opportunities for those planning to enter the helping professions. May be repeated for additional credit. Secondary - Fall semester. Elementary - Spring semester.

# **EDUC 476 Content Reading and Writing**

3

Corequisite: EDUC 345 (minimum grade of C)

Designed to help prepare secondary classroom instructors to utilize reading and writing to enhance the teaching of their subject areas. Included are affective learning, vocabulary, comprehension and study skills, instructional strategies for individual content areas, and use of multiple resources. Students apply literacy strategies in field settings and through microteaching. *Fall semester*.

## **EDUC 485 Issues in Education**

1

Prerequisite: EDUC 345 (minimum grade of C)

This course for secondary education majors includes discussion of contemporary educational trends and issues and certification procedures. *Spring semester*.

# **EDUC 490 Student Teaching Seminar-Elementary**

1

Corequisite: EDUC 475 (minimum grade of C)

This course for elementary education majors includes discussion of classroom practice and management experiences, teaching methodology and materials, and current educational issues. *Spring semester*.

# **Education - NAD Certification Courses**

These courses are only for NAD certification for practicing teachers.

## **EDUC 342 Human Relations**

1

Prerequisite: Practicing teacher

Focuses on three major areas: the ability to recognize personal and societal dehumanizing biases including, but not limited to, sexism, racism, prejudice and discrimination; the ability to recognize the ways these biases may be reflected in instructional materials and processes; and the ability to translate this knowledge into attitudes and strategies which result in favorable experiences for all students. *Summer semester*.

## **EDUC 355 Secondary Methods**

2

Prerequisite: Practicing teacher

Helps the teacher translate teaching/learning theory into practice on the secondary level. Includes study of lesson planning, scheduling, managing the learning environment, discussion techniques, legal responsibilities, state and denominational standards and working with various publics. A choice of up to two subject area methods courses from EDUC 361-370 may be taken concurrently with this course. *Summer semester*.

### EDUC 358 Special Child in the Classroom

3

Prerequisite: Practicing teacher

Causes of developmental patterns, behavioral characteristics, utilizing technology, and educational alternatives associated with specific exceptionalities which include students with visual impairments, speech and language impairments, orthopedic handicap and other health impairments, mental handicaps, learning disabilities, behavior disorders, students who are gifted and talented, children whose first language (and home culture) is not English, and those who are abused and/or neglected or at-risk for school failure are all briefly studied. Overview of PL 94-142 is included. Course does not apply toward psychology minor. Twenty hours of field experience required (15 hours special needs; 5 hours gifted). Summer semester.

## **EDUC 360 General Elementary Methods**

2

Prerequisite: Practicing teacher

Helps the teacher translate teaching/learning theory into practice. Includes study of lesson planning, scheduling, managing the learning environment, discussion techniques, legal responsibilities, state and denominational standards and working with education's various publics. A choice of up to two subject area methods courses from EDUC 361-370 may be taken concurrently with this course. *Summer semester*.

# **EDUC 361 Art Methods** Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 362 Health Methods** 1 Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 363 History Methods** Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. EDUC 364 Language Arts/Reading Methods 1 Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 365 Math Methods** Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 366 Music Methods** Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 367 Elementary Reading Methods** Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 368 Religion Methods** 1 Prerequisite: Practicing teacher Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C) Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester. **EDUC 369 Science Methods**

Prerequisite: Practicing teacher

Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C)

Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester.

## **EDUC 370 Social Science Methods**

Prerequisite: Practicing teacher

Pre- or corequisite: EDUC 355 (minimum grade of C) or EDUC 360 (minimum grade of C)

Directed specific assignments in subject area as applications of EDUC 355 or 360. Summer semester.

# **EDUC 477 Secondary Reading Methods**

Prerequisite: Practicing teacher

Designed for the in-service teacher, this course explores using metacognition, interactive reading and writing strategies, and current research on vocabulary development, comprehension, and graphic organizers in 7-12 classrooms. *Summer semester*.

# **English**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## **ENGL 110 Writing for General Audiences**

3

2

Recommended: Students entering ENGL 110 need to have a strong command of spoken and written English, including competence in grammar and punctuation as well as reading comprehension. Though not required for enrollment in the course, typical standardized test scores that can indicate preparedness for ENGL 110 include the following: ACT English and Reading scores of 17 or higher; or SAT Writing and Reading scores of 430 or higher (old SAT 2400 scale) or SAT Writing and Language and Reading test scores of 25 or higher (new SAT 1600 scale); or an IELTS Academic Writing score of 7 or higher; a TOEFL PBT Structure/Writien Expression and Reading scores of 55 or higher; or a TOEFL iBT or PDT Writing and Reading scores of 24 and 22, respectively, or higher.

The writing of clear, concise and well-developed exposition. All aspects of the writing process, including generating ideas, selecting a topic, drafting, offering peer feedback, revising, editing, proofreading, formatting, and presenting the final product; all with an intended audience in mid. Critical thinking and reading, evaluating models for writing, and composing and editing skills are emphasized. *Fall and Spring semesters*.

# **ENGL 212 Writing for Scholarly Audiences**

3

Prerequisites: ENGL 110 (minimum grade of C) and Sophomore standing.

The rigorous application of rhetorical principles to further expository and persuasive writing and sharpening of skills in general research writing. Readings, class discussions, and assignments foster critical thinking skills (including the recognition of logical fallacies) and acquaint students with scholarly language, as well as related expectations of academic audiences. Includes instruction in information literacy as well as various styles of documentation, among them APA< CMS/Turabian, and MLA. The course culminates in a substantial argumentative paper driven by a research question and supported with primary, secondary, and tertiary sources. *Fall and Spring semesters*.

### ENGL 271 History of the English Language

3

Pre- or corequisite: ENGL 212 (minimum grade of C)

Introduces the student to the origin, history, and development of the English language, including morphemes, phonemes, parts of speech, and basic diagramming. Fall semester, even years.

## **ENGL 272 Grammatical Systems**

3

Prerequisite: ENGL 212 (minimum grade of C)

Introduces the student to various grammatical systems, including structuralism, transformational grammar, and prescriptive grammar for writing formal documents. *Spring semester, odd years*.

# **ENGL 378 Technical Writing and Grant Proposals**

3

Prerequisite: ENGL 212 (minimum grade of C)

Provides intensive instruction in the essentials of technical writing including instructional and manual writing, report writing, letter writing, electronic documentation, managerial communication, and grant-proposal writing. *Spring semester, even years.* 

## **ENGL 379 Creative Writing**

Prerequisite: ENGL 212 (minimum grade of C)

Explores and encourages the creative process through a study of basic theories of creativity and the writing of creative works. Spring semester, odd years.

# **Finance**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **FNCE 215 Personal Finance**

3

Prerequisite: Sophomore standing

Emphasizes practical financial planning dealing with the day-to-day issues that confront an individual or family, such as budgeting, taxes, housing, credit, insurance, savings, investments, wills, and retirement planning. Fall semester.

## **FNCE 325 Business Finance**

3

Prerequisites: ACCT 212 (minimum grade of D-) and {MATH 111 or higher (minimum grade of D-) or ALEKS score of 46 or [ACT Math Score of 20 or SAT Math score of 480 (old SAT 2400 scale) or SAT Math score of 510 (new SAT 1600 scale)]} Recommended: Excel proficiency or BSAN 220

This course gives business majors an extensive look into the role of business finance managers. Students will practice reading financial statements to evaluate a business's financial health and will learn capital budgeting, capital structuring, stock and bond valuation, and working capital management using engaging activities and team-based projects Fall semester.

# **FNCE 330 Financial Institutions and Markets**

3

Prerequisites: ACCT 211 (minimum grade of D-) and ECON 236 (minimum grade of D-)

A study of capital markets and financial institutions such as banks, mutual funds and insurance companies. The study of capital markets focuses on understanding a wide range of instruments available for financing, investing, and controlling risk. Fall semester.

# **FNCE 332 Investments**

A study of investment alternatives and investment objectives for the individual. Major types of investments studied in detail include stocks, bonds, money market instruments, mutual funds, and tax-sheltered investments. Approaches studied and contrasted for the review of equities include an analysis of company fundamentals and broad market indicators, as well as an examination of mathematical models. Tools and methodologies employed include an analysis of risk and return, time value of money, online sources, asset allocation and portfolio management. Spring semester.

### **FNCE 370 International Finance**

3

Prerequisite: ENGL 110 (minimum grade of D-) and {MATH 111 or higher (minimum grade of D-) or ALEKS score of 46 or [ACT Math Score of 20 or SAT Math score of 480 (old SAT 2400 scale) or SAT Math score of 510 (new SAT 1600 scale)]} Recommended: ACCT 212 and ECON 236

A study of the international financial environment and operation of multinational enterprises, with major focus on trade, balance of payments, foreign exchange, money and capital markets, investment decisions and comparative financial systems. Spring semester.

## **FNCE 415 Corporate Finance**

3

Prerequisite: FNCE 325 (minimum grade of D-)

Explores advanced corporate financial management topics, including investments, capital budgeting, capital structure, dividend policy, working capital, acquisitions and valuations. Fall semester.

3

# Geography

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **GEOG 137 Introductory Geography**

3

A study of the basic concepts in contemporary geography. Includes population patterns, mapping techniques, locational analysis, spatial diffusion, landforms, climates, modeling, and urban and environmental concerns. Fall semester.

## GEOG 227 World Regional Geography

3

The study of contemporary concepts of geography with emphasis on the cultural-systematic approach. Major concern given to humans' relationships with the land in a spatial analysis of world regions. *Spring semester*.

# **Graphic Design**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **GRPH 150 Introduction to Graphic Arts**

3

An introduction to the field of graphic design and to the three major types of computer applications used in print design. Students use Adobe Illustrator, Photoshop and InDesign applications to create corporate logos, business materials, photo collages and print projects. *Fall and Spring semesters*.

## **GRPH 175 Graphic Design Seminar**

.5

First in a series of courses designed to guide graphic design majors through the ongoing process of building and developing a portfolio. Related issues include career guidance, networking and self-promotion, interviewing, and portfolio presentation. See GRPH 275, 375 and 475. Spring semester.

## **GRPH 250 Digital Imaging**

3

Prerequisite: GRPH 150 (minimum grade of D-)

Focuses on image manipulation and enhancements using Adobe Photoshop, the industry standard for digital imaging. Students learn image enhancement and retouching, color correction, combining images and text, collaging, and high-quality digital output. *Fall semester, even years*.

## **GRPH 252 Computer Design**

3

Prerequisite: GRPH 150 (minimum grade of D-)

Building on basic computer and design skills, this course allows students to master Illustrator and Photoshop while making real-world design applications such as posters, logos, corporate identity, photo manipulation and compositing. *Spring semester*.

## **GRPH 254 Publication Design**

3

Prerequisite: GRPH 150 (minimum grade of D-)

Further study of design principles and page layout software. Includes production of print projects such as programs, brochures, magazine spreads and newsletters. *Spring semester*.

## **GRPH 260 Page Layout**

3

Prerequisite: GRPH 150 (minimum grade of D-)

Reviews fundamental skills and stresses intermediate and advanced skills using computer-based page layout software on the Macintosh platform. Students learn the use of master pages, style sheets, typographic controls, and to flow and format text, to place and manipulate images, to combine images and text, to create tables, gradients and PDF's, and to create interactive PDF files, correctly prepare digital files for offset printing. Fall semester, odd years.

# **GRPH 275 Graphic Design Seminar**

See GRPH 175 for description. Spring semester.

# **GRPH 301 Web Design**

3

.5

Prerequisite: CPTR 245 (minimum grade of D-)

Introduction to the visual design and management of web sites. Includes the basics of site set up, user-centered design and integration of rich media. Spring semester, odd years.

# **GRPH 320 Motion Graphics**

3

Prerequisites: GRPH 150 (minimum grade of D-)

An introduction to motion graphics, with an emphasis on the use of refined movements and animations to deliver effective messages and compelling stories. Students will learn basic principles of motion design, storyboarding, composition, timing and drama while creating short animations, title sequences, broadcast packages and other industry-relevant projects. *Spring semester, odd years.* 

## **GRPH 330 Digital Illustration**

3

Prerequisites: ART 105 (minimum grade of D-) and GRPH 150 (minimum grade of D-)

A study of intermediate to advanced digital illustration techniques, with an emphasis on the creation of vector graphics for a variety of design applications. Included is an introduction to the use of pen tablets. *Spring semester, even years*.

# **GRPH 350 History of Graphic Design**

3

A study of the historical development of graphic design and its influence on design trends today, including national and international styles, influences, major artists/designers, and their influence on current design trends. *Spring semester, even years.* 

# **GRPH 358 Typography**

3

Prerequisites: GRPH 150 (minimum grade of D-) and GRPH 252 (minimum grade of D-)

A study of the history, terminology, and use of letterforms and type in graphic design. Emphasis given to typographic layout, typeface selection, and type design. *Spring semester, even years.* 

# GRPH 360 User Interface/User Experience (UI/UX) Design

3

Prerequisites: GRPH 150 (minimum grade of D-) and GRPH 252 (minimum grade of D-)

The study of the graphic designer's role in interface design along with an introduction to principles of user experience design. Focus will be given to concepting and prototyping apps and other digital content. *Spring semester, odd years*.

## **GRPH 375 Graphic Design Seminar**

.5

See GRPH 175 for description. Spring semester.

# **GRPH 401 Interactive Web Design**

3

Prerequisites: CPTR 245 (minimum grade of D-) and GRPH 301 (minimum grade of D-)

This course teaches the principles of user interaction design and how to apply them to the web using HTML, CSS, and JavaScript. Students will gain experience designing, testing, and developing highly interactive websites and web applications. *Fall semester, odd years*.

## **GRPH 450 Art Direction**

3

Prerequisites: GRPH 150 (minimum grade of D-) and GRPH 252 (minimum grade of D-)

A focus on developing creative problem-solving skills. Students will practice writing creative briefs and navigating client communication issues. Long-term projects will challenge students to work within a visual brand to develop an integrated marketing campaign. Fall semester, odd years.

## **GRPH 460 Prepress Production**

Prerequisite: GRPH 254 (minimum grade of D-)

A technical look at how graphic materials are traditionally and electronically prepared for the printing process. Emphasizes preparation for offset lithography including ink and paper selection. Students develop a working knowledge necessary to successfully communicate with a service bureau or printer. *Fall semester, even years*.

## **GRPH 475 Graphic Design Seminar**

.5

3

See GRPH 175 for description. Spring semester.

# Health and Human Performance Activity

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

HHPA credits may be repeated for additional credit with permission of instructor.

# **HHPA 145 Beginning Badminton**

1

Instruction and practice of the fundamental skills and techniques essential for successfully playing badminton. Students provide their own equipment. Fall and Spring semesters.

## **HHPA 146 Beginning Pickleball**

1

Instruction and practice of the fundamental skills and techniques essential for successfully playing Pickleball. Students provide their own equipment. Fall and Spring semesters.

# **HHPA 147 Beginning Tennis**

1

Instruction and practice in the fundamental skills involved in playing tennis. Students provide their own equipment. Scheduled as needed.

# HHPA 149 Beginning Golf (Fee)

1

Instruction and practice in the skills essential to playing golf. Expenses in addition to tuition are necessary for greens fees. Students provide their own equipment. *Fall semester*.

#### HHPA 151 Beginning Volleyball

1

Instruction and practice of basic skills for volleyball team participation. Scheduled as needed.

## **HHPA 155 Concepts of Wellness**

2

Assists students in developing a practical theory of general and cardiovascular fitness. Reviews the principles of health instruction as cited in the Scriptures and counsels of Ellen White. Application in aerobics, aquatics, calisthenics, running and weight training accomplishes improved fitness. Individual programs are made so that students with disabilities can develop better fitness. May not be repeated for additional credit. Laboratory required. *Fall and Spring semesters*.

## **HHPA 210 Swimming**

1

Basic instruction in the six swimming strokes, treading water, turns, surface dives and other skills in the Red Cross Program. Fall and Spring semester.

## **HHPA 216 Lifeguard Training**

1

Focuses on the development and refinement of skill for individuals who have good swimming techniques, first aid and CPR background. Leads to the Red Cross, Lifeguarding, First Aid and CPR Certification upon successful completion of the class requirements. *Spring semester*:

## HHPA 220 Healthy Eating and Fitness

Prerequisite: HHPA 155 (minimum grade of D-)

A comprehensive approach to weight loss that focuses on healthy eating, physical activity and exercise. Students will learn a simple, fun, whole-diet approach that shows how to make gradual changes to improve healthy living. Scheduled as needed.

# HHPA 235 Weight Training and Physical Conditioning

1

Designed to give instruction for knowledge and experience in weight training relative to total fitness. *Fall and Spring semesters*.

# **HHPA 249 Fitness Walking**

1

Designed to assist walkers of any age, background, or fitness level to acquire the knowledge, skills, and attitudes necessary for participation in a lifelong program of fitness walking. *Scheduled as needed*.

## **HHPA 250 Running for Fitness**

1

Designed to increase cardiovascular fitness and a practical knowledge of the healthy benefits of running as a lifestyle. Fall and Spring semesters.

# Health and Human Performance Theory

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **HHPT 215 Emergency Health Care**

2

Leads to certification in CPR/AED for the Professional Rescuer and Responding to Emergencies First Aid. Provides hands-on experience for the knowledge and skills necessary in an emergency to help sustain life and to minimize pain and the consequences of injury or sudden illness until professional medical help arrives. *Fall semester*.

# **HHPT 216 Athletic Injuries**

3

Focuses on skills for the treatment and care of athletic and recreational injuries. Spring semester.

## **HHPT 256 Medical Terminology**

1

This self-study module enables students to pace their learning of medical terms. Fall and Spring semesters.

## HHPT 329 Introduction to Fitness and Wellness Management

3

An introduction to the fitness marketplace with emphasis in administration. Laboratory experience includes selected aspects of fitness including fitness screenings, weight management programs and fitness assessments. Visitation to hospitals, private clubs and corporate clubs are included. This course requires ten (10) hours of field-based experience. *Fall semester, odd years*.

## **HHPT 335 Administration of Intramural Sports**

1.5

Designed to provide instruction and develop skills necessary to administer a successful intramural program.-Laboratory experience required in administering, supervising and officiating intramural sports activities. *Spring semester, even years.* 

# **HHPT 345 Sports Nutrition**

2

Prerequisites: BIOL 111 (minimum grade of D-) and BIOL 112 (minimum grade of D-)

Examines the interrelationships among nutrition, health, and exercise performance. General principles include: eating disorders, weight management, hydration, and ingested ergogenic aids, all of which are common among physically active individuals. *Fall semester, odd years*.

# HHPT 350 Practicum 1

Prerequisite: Permission of instructor

Affords the opportunity to observe practical work in a student's chosen field, and to assist in the organization and administration of the program (on-campus). Approximately 45 hours per credit hour are spent in the completion of all aspects of the practicum experience. *Fall and Spring semesters*.

## **HHPT 356 Physiology of Exercise**

3

Prerequisites: BIOL 111 (minimum grade of D-) and BIOL 112 (minimum grade of D-)

Covers training, sedentary lifestyle and the study of the physiological factors related to human movement. Fall semester, odd years.

## **HHPT 357 Motor Learning**

3

Prerequisites: BIOL 111 (minimum grade of D-) and BIOL 112 (minimum grade of D-)

Covers neurological and psychological factors affecting the learning of movement skills. Spring semester, odd years.

# HHPT 360 Biomechanics/Kinesiology

3

Prerequisites: BIOL 111 (minimum grade of D-) and BIOL 112 (minimum grade of D-) and MATH 111 or above (minimum grade of D-)

Designed so the student may learn and apply the anatomical and mechanical principles relative to human movement. Spring semester, even years.

# **HHPT 366 Adapted Physical Education**

2

Covers the physical educator's role in identifying and providing appropriate activities for individuals who have structural, physical, neurological or psychological disorders. Fall semester, even years.

## **HHPT 370 Personal Training**

3

Prerequisites: BIOL 111 (minimum grade of D-) and BIOL 112 (minimum grade of D-) and HHPT 215 (minimum grade of D-)

Designed to develop the skills necessary for being a personal trainer. Completion of this course prepares students for the National Council on Strength and Fitness (NCSF) personal training certification. *Spring semester, even years*.

## HHPT 437 Measurement and Evaluation in HHP

2

Prerequisite: MATH 111 or above (minimum grade of D-)

Covers elementary statistics applicable to test construction, evaluation and grading. Students develop appropriate measurement and evaluation techniques essential for all professionals in the exercise and sport science and physical education fields. *Fall semester, even years*.

## HHPT 476 Wellness Methods, Materials and Management

3

A course in planning, implementing and evaluating worksite and community health promotion activities, including stress management, smoking cessation, cardiovascular fitness, body composition and cholesterol testing. Oral presentation required. *Fall semester, even years.* 

## HHPT 485 Seminar in Health and Human Performance

1

A study of health and human performance from a cultural perspective-past and present. Spring semester.

# **HHPT 486 Senior Capstone**

1

All Health and Human Performance and Exercise Science majors are required to apply the principles of research design by selecting, designing and, depending upon the nature of the study, initiating research in a project directly applicable to health and human performance. Each student produces a report presenting their research process and findings. Additionally, a significant portion of the grade includes explanation of the completed portfolio. *Spring semester*.

# Health and Human Performance Varsity

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

Varsity athletics do not apply toward the Human Health and Performance Activity general education requirements but count as elective credit toward the total hours for graduation.

## **HHPV 145 Varsity Sports I**

0.5

Prerequisite: Permission of Instructor

Intercollegiate golf (men), intercollegiate soccer (men), and intercollegiate volleyball (women). Registration must be concurrent with participation on intercollegiate team. Credit available either semester but not both. Graded CR/NC. Fall and Spring semesters.

# **HHPV 170 Varsity Sports II**

1

Prerequisite: Permission of Instructor

Intercollegiate basketball and college gymnastics team. Registration must be concurrent with participation on intercollegiate team. Credit available either semester but not both. Graded CR/NC. Fall and Spring semesters.

# **History**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## HIST 157 The Modern World

3

This course is an introductory survey of the world since 1500, focusing on the emergence and globalization of modern western power around the north Atlantic. Students will also practice critically thinking about historical context, interpret primary sources, and consider how the past can be used in service of the present. Fall and Spring semesters

## HIST 220 The Ancient World

3

Introduction to the birth of the earliest civilizations and examination of the development of classical Greece and Rome with special emphasis on the development of biblical civilizations. *Spring semester*.

# HIST 255 The U.S.: From Discovery to Civil War

3

American history from the Age of Exploration to the advent of the Civil War, including exploration, colonization, the struggle for independence, and development of American culture and society in the early nineteenth century. Fall semester.

# HIST/PLSC 258 Africa's Global Emergence

3

Prerequisite: ENGL 212 (minimum grade of D-)

Focuses on the political relevance of the African continent in global affairs, particularly during the wars of colonization, World Wars I and II, the Cold War, and the present global war on terror. Fall semester, odd years.

## HIST/PLSC 260 Latin America and the Caribbean

3

Prerequisite: ENGL 212 (minimum grade of D-)

The politics and history of Central and South America and the Caribbean from the era of the Monroe Doctrine (c. 1823) to the present-day. Fall semester.

# HIST 325 Tolkien, Fantasy, and the Middle Ages

3

Tours the medieval places, texts, and events in England and Wales which rooted the fantastic imagination of J.R.R. Tolkien. *Summer semester*:

# HIST/HMNT 332 Historical Issues in Leadership

This course promotes study in logic, rhetoric, ethics, and critical thinking skills as prerequisites for good leadership and examines how various leaders in history pursued their goals and confronted challenges. *Spring semester*.

## HIST/PLSC 346 Russia in Global Politics

3

2

Prerequisite: ENGL 212 (minimum grade of D-)

This course reviews and analyzes the place of Russia in modern global affairs, especially U.S.-Russian geopolitical cooperation and contests from the Soviet era into present-day politics under Putin. Spring semester, odd years.

## HIST 380 The U.S.: Crisis, Consolidation, and Expansion

3

Prerequisite: ENGL 212 (minimum grade of D-)

Events of the nineteenth century transformed the United States, shaping the modern nation. Students will study the coming of the Civil War, the establishment and failure of Reconstruction, the settlement of the American West, and the growth of a nation transformed by technology. *Spring semester*.

## HIST/PLSC 383 Modern War: 20th-century North Atlantic

3

Prerequisite: ENGL 212 (minimum grade of D-)

Focuses on the culture and societies of the United States and Europe during the World Wars, the Holocaust, the Civil Rights movement, and the Cold War. *Spring semester*.

# HIST 386 Economic History of the United States

3

Prerequisite: ENGL 212 (minimum grade of D-)

An economic and business history of the U.S. that emphasizes events during and following the Civil War, the Depression, and the growth of the U.S. as a major international economic power. *Spring semester, odd years.* 

### HIST/PLSC 392 The Modern Middle East

3

Prerequisite: ENGL 212 (minimum grade of D-)

The history and the politics of the modern Middle East, from the Tanzimat period of the Ottoman Empire to the present period. Analysis of the various past and present conflicts in the Middle East. *Spring semester*.

# HIST/PLSC 430 Global War and Global Migrations: Searching for a New Life

3

Prerequisite: ENGL 212 (minimum grade of D-)

Focuses on the history of internal and international migrations and their effects as mitigating critical resources—water, employment, arable land, etc. – and also as critical determining factors of political instability with various countries. Fall semester, even years.

## HIST 450 American History: The 20th Century

3

Focuses on the major and critical historical movements and events of the United States within the 20th Century. Reviews the historical developments that helped to define the United States from World Wars I and II to the onset of the George W. Bush presidency. *Fall semester, odd years*.

# HIST/PLSC 465 The U.S. War on Terror

3

Prerequisite: ENGL 212 (minimum grade of D-)

The recent U.S. and global politics surrounding the commencement of the U.S. war on terror in 2001 until the present-day. Fall semester, even years.

# HIST 497 History: Theory and Argument

3

Prerequisites: Permission of instructor

Examines historical schools of thought with special attention to theory, research methods, and effective written argument. Fall semester.

# **Humanities**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## **HMNT 305 Arts and Ideas**

2

In this course, students practice identifying unique styles and developing aesthetic preferences while studying painting and other fine arts from the last 500 years. Fall semester.

## HMNT/HIST 332 Historical Issues in Leadership

2

This course promotes study in logic, rhetoric, ethics, and critical thinking skills as prerequisites for good leadership and examines how various leaders in history pursued their goals and confronted challenges. *Spring semester*.

### **HMNT 376 Film and Culture**

3

Applies critical thinking to help participants understand the language of film, become conversant with various genres of film, and engage with the historical and regional contexts in which the films were made. *Spring semester, odd years*.

# International Rescue and Relief

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

Certificate courses are identified in course descriptions.

## INRR 101 Emergency Medical Technician I

4

Prerequisites: Completion of criminal background check and (annual TB test, hepatitis B vaccine, and current influenza vaccine) and current American Heart Association Heart Code BLS CPR certification and instructor permission.

Prepares students to deliver basic emergency care and transportation to patients at the scene of an accident or medical emergency. Emphasizes patient exam, assessment, and treatment; accurate observation, evaluation of emergency situations, effective communications with the medical network, scene safety, critical thinking, and high skill proficiency. *Fall semester*.

## **INRR 102 Emergency Medical Technician II**

1

Prerequisites: INRR 101 (minimum grade of C) and completion of criminal background check and (annual TB test, hepatitis B vaccine, and current influenza vaccine) and current American Heart Association Heart Code BLS CPR certification and instructor permission.

Prepares students to deliver basic emergency care and transportation to patients at the scene of an accident or medical emergency. Emphasizes patient exam, assessment, and treatment; accurate observation, evaluation of emergency situations, effective communications with the medical network, scene safety, critical thinking, and high skill proficiency. After successful completion of both EMT I & II students are eligible to take the national registry certification examinations from the National Registry of Emergency Medical Technicians (NREMT). Certificate course. *Spring semester*.

# **INRR 105 Principles of Emergency Management**

3

An overview of the major principles vital to emergency responders that includes mitigation, preparedness, response, and recovery. This class primarily focuses on the basics of emergency management related to response. Also includes the role of major stakeholders, response agencies, and the components of an effective emergency response organization. (Previously INRR 210) *Fall semester*.

## INRR 110 Search and Rescue

Prerequisite: INRR 101 (minimum grade of C) and INRR 102 (minimum grade of C)

Provides knowledge concerning the general responsibilities, skills and equipment needed by persons who would be participating in wilderness search and rescue missions. The course provides opportunities for skill development in practical search missions. The course provides instruction in three main areas: survival and support, search, and rescue. Certificate course. Summer semester.

## INRR 112 Swift Water Rescue and Flood Management

Prerequisite: INRR 101 (minimum grade of C) and INRR 102 (minimum grade of C)

The course meets NFPA 1670 and 1006 standards for swift water rescue. The initial emphasis is on self-rescue skills. Other objectives include an in-depth look at water dynamics, handling hazards and obstacles, using basic rescue equipment, setting up technical rope systems, controlling in-water contact rescues. Also covers pre-planning, rescue and recovery management, specific problems which arise with floods, rescue from class I-VI whitewater, raising/lowering systems, a Search and Rescue (SAR) night scenario, and other subjects. Certificate course. Summer semester.

### **INRR 114 Technical Rope Rescue**

Prerequisite: INRR 101 (minimum grade of C) and INRR 102 (minimum grade of C)

Students are trained in pre-planning and size-up of rope rescue operations; knots, hitches and anchor systems; belay operations; ascending and descending; raising and lowering systems; and patient packaging and litter attending. Also covers advanced problem solving and highline systems. Safety of the rescuer, rescue team, patient and bystanders is stressed at all times. TRR meets NFPA 1670 standards. Certificate course. Summer semester.

### **INRR 116 Basic Survival**

Prerequisite: INRR 101 (minimum grade of C) and INRR 102 (minimum grade of C)

Instructs and trains students to: prioritize the basic needs for survival; build a foul weather fire using a spark and wet wood; construct a natural shelter without rope, cord or nails; identify, prepare and eat indigenous wild edible plants; navigate on land using natural aides. Certificate course. Summer semester.

## **INRR 202 Advanced Care for EMS Providers**

Prerequisites: INRR 101 (minimum grade of C) and INRR 102 (minimum grade of C) and current NREMT Certification and current American Heart Association Heart Code BLS CPR certification.

Instructs and trains students in state-approved Peripheral Intravenous (IV) access and monitoring and Intravenous Fluid Monitoring. This course also includes Pre-Hospital Trauma Life Support (PHTLS) certification, a program designed to reduce death and disability for patients who suffer traumatic injuries such as accidents, drowning, and other injuryrelated illnesses. Additionally, instructing and training in managing and assisting advanced cardiac life support and advanced medical life support. Certificate Course. Fall semester.

## INRR 205 Disaster Management & Leadership

Prerequisite: INRR 105 (minimum grade of C)

Explores and researches current concepts of disaster management leadership. An emphasis is placed on recovery needs, covering natural and man-made disasters. Students explore the roles of the local, state and federal agencies during disasters and mass casualty events. Spring semester.

# INRR/SOCI 300 Social Dimensions of Disaster

Explores how broad concepts such as social conflict and social inequality are manifested in disasters throughout the world. Topics include demographics and disaster behavior distinctions, disaster culture, individual versus group response to disasters, and the link between social vulnerability and sustainable development. More broadly, students will examine the relationship between the social sciences and public policies in emergency management. (Previously INRR 220.) Certificate course. Fall semester.

2

3

3

3

# INRR 310 Clinical & Emergency Care I

2

Prerequisites: [BIOL 106 or BIOL 111 or BIOL 151 (minimum grade of C)] and [INRR 101 and INRR 102 and INRR 110 and INRR 112 and INRR 114 and INRR 116 and INRR 202 (minimum grade of C) and current NREMT Certification and current Nebraska State EMT License and current American Heart Association Heart Code BLS CPR certification

Part one of medical care for those in rural communities, developing nations, disaster situations or other austere situations. Students learn how to treat patients when there are limited medical supplies and resources available. To prepare students for their overseas semester, they are taught suturing, basic pharmacology, women's health, village healthcare, prevention, and holistic treatment modalities. In addition, students are prepared for the cultural, social and political realities of overseas travel and the country where they will be stationed. *Fall semester*.

## **INRR 311 Clinical & Emergency Care II**

3

Prerequisite: INRR 310 (minimum grade of C)

The second part of clinical and emergency care for those in rural areas, disaster situations and the wilderness environment. Students learn to treat themselves and patients when there are limited medical supplies and resources available. Classes will include lecture and didactic components with possible clinical experiences in primary care, medical emergencies, wound and fracture management, pediatric care, obstetrics and medical administration. Overseas - *Spring semester*.

## INRR 312 Development, Logistics and Analytics

3

Prerequisite: INRR 482 (minimum grade of C) and INRR 483 (minimum grade of C) and Global Community Development Emphases and permission of instructor

This class will focus primarily on the Implementation and ongoing assessment of projects running in the field. Those able to plan and carry out the mechanics of clinics and information evaluation and analysis will be able to successfully run and operate either humanitarian responses or long-term development projects. The logistics that go into making everything run smoothly and according to plan is a full-time job. Similarly, being able to gather pertinent information and analyze the findings appropriately help ensure the highest quality projects are being implemented in the community. Overseas - *Spring semester*.

## **INRR 314 Cultural Integration**

1

Prerequisite: INRR 482 (minimum grade of C) **and** INRR 483 (minimum grade of C)

The Class will seek to introduce the student to their overseas semester host culture. The student will learn basic local traditions and history and how that has influenced the development of local culture. Students will also receive a brief introduction to the local languages and how best to consider cross cultural communication during their time overseas. Overseas - *Spring semester*.

# INRR 316 Jungle, Coastal and Ocean Survival

1

Prerequisite: INRR 482 (minimum grade of C) and INRR 483 (minimum grade of C)

Jungle survival covers shelter, fire, food and water needs in the jungle setting. Includes instruction in identification and avoidance of dangerous plants and venomous creatures.

Coastal survival covers the same topics as the Basic Survival course with a special emphasis on a coastal environment situation. Students learn how to find fresh water, as well as how to successfully obtain a wide variety of foods. Fire-craft, shelter building, signaling and all other topics from the Basic Survival class are reviewed. While emphasis is placed on the coastal environment, discussion includes how to adapt the skills for any environment.

Ocean survival covers survival of a downed aircraft or capsized boat. The experience includes not only testing of physical limits but also mental and emotional limits. Students will not only learn practical use of signaling devices, rationing of food and water, but how to survive together as a team using their skills, experience, and wits to thrive during a grueling 24 hours anchored at sea. Overseas - *Spring semester*.

#### INRR 321 Global Health

3

Prerequisite: INRR 482 (minimum grade of C) and INRR 483 (minimum grade of C)

Topics include: assessing local health needs and conditions; recognition and treatment of diseases; prevention of the spread of disease; developing and implementing strategies to improve health (nutrition, hygiene, water purification, waste control and safe living conditions); environmental toxicology. Overseas - *Spring semester*.

## **INRR 330 Travel and Tropical Medicine**

Prerequisite: INRR 482 (minimum grade of C) and INRR 483 (minimum grade of C)

This class covers the health risks of travel from dengue fever to jet lag. Emphasizes safe travel and how to avoid and treat diseases primarily found in developing countries. Overseas - Spring semester.

## **INRR 430 Expeditionary Leadership**

Prerequisite: INRR 482 (minimum grade of C) and INRR 483 (minimum grade of C)

This class will focus on helping students understand their own unique leadership style. As a leader it is imperative to be aware of your strengths as well as your weaknesses in order to be most effective. Students will be exposed to some of the intricacies of being a leader through practical and hands on experience. Students will be given the opportunity to take charge of planning and implementing portions of the trip, such as planning travel, being responsible for schedules and timelines, being aware of group dynamics and being responsible for group morale. Overseas - *Spring semester*.

## **INRR** 482 Development and Project Implementation

Prerequisite: Junior or Senior standing

This class examines the skills and tools needed to adjust to life and work in a development or humanitarian aid project. Cultural sensitivity and integration are emphasized in the context of sensible, sustainable development. Students are tasked with developing critical thinking skills in the project management cycle from conception to evaluation stages. *Fall semester*.

# **INRR 483 Cultural Perspectives in Development**

A class that examines the skills and tools needed to adjust to life and work in a developing country. Cultural sensitivity and integration are emphasized in the context of sensible, sustainable development. Students are asked to examine critical shifts between their primary cultural perspective and the social dynamics of cultures around the world. Being informed about a country and its history helps to encourage understanding of that culture. We will be exploring the history of Nicaragua in order to prepare students, in a practical manner, for the overseas semester. *Fall semester*.

# Foreign Language Studies

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# LANG 485 Research in a Foreign Culture and Language

Students conduct independent research in the culture, language, and/or history of the region of their Adventist Colleges Abroad experience. The final product is a paper that incorporates the foreign language in which the student is majoring to a significant degree. Fall semester.

# Leadership

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## **LEAD 225 Creative Leadership**

3

Through the study of personal assessments and major leadership models, students will understand their personal leadership strengths and incorporate them into a personal philosophy of leadership. They will develop a personal leadership portfolio, complete a citizen leadership project, and complete a servant leadership project as a group. Fall semester.

3

3

3

3

## **LEAD 245 Leadership Cohort**

Prerequisite: LEAD 225 (minimum grade of D-)

Cohort members develop leadership skills by reading leadership literature, discussing leadership issues and visiting local leaders. Credit/No Credit. Fall and Spring semesters.

# **LEAD 345 Leadership Cohort**

Prerequisite: LEAD 245 (minimum grade of D-)

Cohort members develop leadership skills by reading leadership literature, discussing leadership issues and visiting local leaders. Credit/No Credit. Fall and Spring semesters.

## LEAD 425 Experiences in Leadership

3

Prerequisite: LEAD 225 (minimum grade of D-) and permission of instructor

Based on leadership theories and models, students will apply their knowledge in group and individual leadership projects. They will test one model in a leadership situation and participate in a leadership experience. Previous experiences have varied, including an extended canoe trip, visits with political leaders in Washington D.C., and service projects. Summer semester.

# Literature

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## LITR 231 Ancient Western Literature

3

A chronological approach to major works of literature influencing Western culture from major genres. The course covers the ancient Greek and Roman worlds through the Renaissance. A chief aim is the appreciation and enjoyment of various cultures. Either this class or LITR 232 will meet the general education requirement for educational certification. *Fall and Spring semesters.* 

## LITR 232 Modern Western Literature

3

A chronological approach to major works of literature influencing Western culture from major genres. The course covers the seventeenth century through today including non-U.S. Western Hemisphere. Either this class or LITR 231 will meet the general education requirement for educational certification. *Spring semester*.

## LITR 240 Travel Literature

3

Prerequisite: Permission of instructor

Explores texts that reveal authors in relation to an environment that is foreign. Activities include close reading of texts, thinking about, discussing, and writing about those texts with attention to genre, historical period, and employment of various literary techniques. Offered as part of Central America Study Tour (tour application and fees apply). Summer semester, odd years.

## LITR 299 Seminar in Non-Western Literature

3

An overview of major non-Western writers, including African, Indian, Chinese, Japanese, Middle Eastern, et al. Encouraged for students interested in international service. *Fall semester, even years.* 

## LITR 345 Studies in Early American Literature

3

Prerequisites: ENGL 212 (minimum grade of C) and [LITR 231 or LITR 232 or LITR 299 (minimum grade of C)]

Configuration varies each time the course is offered, with alternate concentration on the Colonial (1620-1820) or the Romantic Period (1820-1865). Recommended for students with some experience in literature. May be repeated for credit with permission of instructor. *Spring semester, even years.* 

## LITR 348 Studies in British Literature

Prerequisites: ENGL 212 (minimum grade of C) and [LITR 231 or LITR 232 or LITR 299 (minimum grade of C)]

Configuration varies each time the course is offered, with alternate concentration on the Enlightenment, Romantic, and Victorian Eras. May be repeated for credit with permission of instructor. Fall semester, odd years.

## LITR 352 Women and Minority Writers

3

3

Prerequisites: ENGL 212 (minimum grade of C) and /LITR 231 or LITR 232 or LITR 299 (minimum grade of C)]

A consideration and evaluation of works by women and minority writers in the US from the eighteenth century to the present in conjunction with an overview of feminist and minority critical stances. *Fall semester*, *odd years*.

# LITR/RELB 366 Biblical Literature

3

Prerequisites: ENGL 212 (minimum grade of C) and [LITR 231 or LITR 232 or LITR 299 (minimum grade of C)]

A survey of the Bible's literary masterpieces from an archetypal perspective. Literary patterns, techniques, and terminology are applied to Bible writers and their writings. May be used to meet LITR or RELB general education requirements but not both. *Fall semester, even years*.

#### LITR 436 Studies in American Literature

3

Prerequisites: ENGL 212 (minimum grade of C) and [LITR 231 or LITR 232 or LITR 299 (minimum grade of C)]

A consideration and evaluation of significant literary works of American Realism, Naturalism, and Modernism, Post-Civil War through the twentieth century. Recommended for students with some experience in literature. *Fall semester, even years*.

## LITR 440 Travel Literature

3

Prerequisites: ENGL 212 (minimum grade of C) and [LITR 231 or LITR 232 or LITR 299 (minimum grade of C)] and permission of instructor

Explores texts that reveal authors in relation to an environment that is foreign. Activities include close reading of texts, thinking about, discussing, and writing about those texts with attention to genre, historical period, and employment of various literary techniques. Readings in critical theory are also assigned. Offered as part of Central America Study Tour (tour application and fees apply). Summer semester, odd years.

### LITR 445 Early British Literature

3

Prerequisites: ENGL 212 (minimum grade of C) and [LITR 231 or LITR 232 or LITR 299 (minimum grade of C)]

Presents major authors and traditions from the Anglo-Saxon period through the seventeenth century. Configuration varies each time course is offered, with alternate concentration on separate periods. May be repeated for credit. *Spring semester, odd years.* 

# **Mathematics**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

When a MATH course that is higher in a sequence has been passed with a grade of a C or above, that course will meet the requirements of a lower MATH course in the same sequence. No credit will be given for taking a lower course in the sequence after a higher course has been passed with a grade of C or above. MATH 111 and 119 are a sequence; MATH 184, 285, and 286 are a sequence; and MATH 221 and 331 are a sequence.

# MATH 111 College Algebra

3

Study of the properties of the real and complex number systems, linear and quadratic equations, factoring, exponents, inequalities, and polynomials. Emphasizes functions (algebraic, exponential, and logarithmic). A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Does not apply toward a mathematics major or minor. Fall and Spring semesters.

# MATH 117 College Algebra Concise

Corequisite: MATH 119 (minimum grade of C)

Study of the properties of the real and complex number systems, linear and quadratic equations, factoring, exponents, inequalities, and polynomials. Emphasizes functions (algebraic, exponential, and logarithmic). A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Does not apply toward a mathematics major or minor. Does not apply to General Education Thinking Analytically (3B) requirements. Fall semester.

## **MATH 119 Trigonometry**

Prerequisites: MATH 111 (minimum grade of C) or MATH 117 (taken concurrently) or ALEKS score of 55 or [ACT Math score of 22 or SAT Math score of 520 (old SAT 2400 scale) or SAT Math score of 550 (new SAT 1600 scale)] Recommended: Two years of high school algebra and a year of high school geometry

Study of the identities and applications of trigonometry, including definitions of the six trigonometric functions, the unit circle, reciprocal identities, Pythagorean identities, reduction formulas, sum and difference formulas, the laws of sines and cosines, and other trigonometric topics typically covered in standard trigonometry classes. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Fall semester.

## **MATH 184 Calculus I**

Prerequisites: MATH 121 (minimum grade of C) or MATH 119 (minimum grade of C) or (ALEKS score of 76 and ACT Math score of 25)

Provides instruction and experience that enable the student to apply calculus, related mathematics, and a graphical calculator to structure an understanding of the world around us and to investigate related questions. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Spring semester.

## MATH 221 Elementary Statistics and Probability

3

Explores basic frequency distributions, probability, sampling, estimations, testing hypotheses, correlation, regression, chi-square and analysis of variance. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Does not apply toward a mathematics major or minor. Fall, Spring, and Summer semesters.

### **MATH 240 Discrete Mathematics**

3

Prerequisite: MATH 111 or higher (minimum grade of C)

Concerned with finite processes, sequences of individual steps, and sets that can be listed (e.g. whole numbers). Course content focuses on logic, sets, and proof strategies. Fall semester (may have additional availability).

# MATH 285 Calculus II

Prerequisite: MATH 184 (minimum grade of C)

Continuation of MATH 184 with emphasis on methods of integration in rectangular and polar coordinate systems, indeterminate forms, and infinite sequences and series. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Fall semester.

# MATH 286 Calculus III

4

Prerequisite: MATH 285 (minimum grade of C)

Continuation of the Calculus sequence. Includes multivariable functions, partial derivatives, multiple integrals, vector differential operators, line integrals and Green's theorem. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Spring semester.

3

2

# MATH 320 Mathematical Concepts for Elementary School Teachers

Prerequisite: MATH 111 (minimum grade of C) or ALEKS score of 61

Corequisite: EDUC 345

Builds upon previous mathematics courses as well as classroom observation. Standards for mathematics published by the National Council of Teachers of Mathematics (NCTM) form the basis for the selection of topics: number, operations, and elementary algebra. This course is directed toward thorough comprehension of elementary mathematics and interconnections among mathematical ideas and grade levels. Cooperative learning teams prepare, present, and critically reflect on lessons—to guarantee their students will gain in-depth understanding of mathematics. *Fall semester*.

## MATH 331 Statistics and Probability

4

3

Corequisite: MATH 286 (minimum grade of C)

A calculus-based introduction to basic concepts in statistics (such as the Central Limit Theorem and hypothesis testing) and classical probability theory. Includes Bayes' rule, bivariate distributions, and moment generating functions. Application of several discrete distributions (such as Poisson, binomial and hypergeometric) and continuous distributions (such as exponential and normal). A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. *Fall semester, even years (may have additional availability)*.

## MATH 335 Exam P Prep

3

Prerequisite: MATH 331 (minimum grade of C)

A preparatory class for Society of Actuaries' Exam P – Probability. Develops knowledge of the fundamental probability tools for quantitatively assessing risk. Furthermore, the use of these tools in actuarial science applications is highly emphasized. Spring semester, odd years (may have additional availability).

# MATH 351 Abstract Algebra

3

Prerequisite: MATH 240 (minimum grade of C)

Introduction to the basic concepts of abstract algebra presenting the elements of the theory of number systems, groups, fields, etc. Spring semester, even years (may have additional availability).

## MATH 352 Linear Algebra

3

Prerequisite: MATH 184 (minimum grade of C)

Provides instruction and experience that enable students to: solve systems of linear equations; apply the properties of vectors spaces, inner product spaces, and linear transformations to real-world problems; and answer various questions in engineering, computer science, and statistics. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. *Spring semester*.

# MATH 360 History of Mathematics

3

Prerequisites MATH 111 or higher (minimum grade of C) and ENGL 212 (minimum grade of D-)

A brief history of the origins of current mathematical practices. Topics may include an introduction to primitive number systems, the origins of our current mathematical notation systems, and key mathematical discoveries in their historical contexts. *Spring semester, even years (may have additional availability).* 

## **MATH 385 Differential Equations**

3

Prerequisite: MATH 286 (minimum grade of C)

Ordinary differential equations with emphasis on the solutions and analysis of systems of first- and higher-order differential equations drawn from fields of physics, chemistry, geometry and engineering. Fall semester, odd years (may have additional availability).

# MATH 386 Partial Differential Equations

3

Prerequisite: MATH 385 (minimum grade of C)

Partial differential equations, Fourier series, boundary value problems, Bessel functions, Legendre polynomials. Fall semester, even years, as needed.

## MATH 409 Modern College Geometry

Prerequisite: MATH 285 (minimum grade of C) or experience teaching secondary geometry

Studies advanced Euclidean geometry and introduces modern geometrical concepts in non-Euclidean geometry. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. Fall semester, odd years (may have additional availability).

### MATH 451 Mathematical Connections for Secondary Teachers

4

3

Prerequisites: EDUC 475 (minimum grade of C) or 27 of the 37 MATH hours required for the BS in Mathematics Education

Provides a capstone experience for prospective mathematics teachers enabling them to build insightful connections between the advanced mathematics of their college courses and the high school mathematics they will be teaching. A TI-84 (highly recommended) or other graphing calculator with comparable features is required for this course. *Spring semester, even years, as needed.* 

# MATH 486 Numerical Analysis

3

Prerequisites: CPTR 226 (minimum grade of C) and MATH 285 (minimum grade of C)

Numerical techniques to model physical phenomena. Topics cover error analysis, matrices, numerical solutions of linear and nonlinear equations, polynomial approximations, numerical differentiation and integration and interval algebra. *Scheduled as needed.* 

## MATH 491 Real Analysis

3

Prerequisite: MATH 240 (minimum grade of C) and MATH 286 (minimum grade of C)

Studies properties of real numbers and sets of real numbers, limits of sequences and functions, series, modes of convergence and their consequences (such as continuity). Introduction to elementary topological notion of the real line. Theory of the Riemann Integral. Fall semester, even years (may have additional availability).

# MATH 492 Complex Variables

3

Prerequisite: MATH 286 (minimum grade of C)

An introduction to the theory of analytic functions of a complex variable, including mappings by elementary functions, complex integration, Cauchy's integral formula, power series, Laurent series, theory of residues and conformal mapping. Spring semester, odd years (may have additional availability).

## **MATH 498 Mathematics Seminar**

1

Prerequisite: Permission of instructor

A series of topics not necessarily covered in other mathematics classes offered at Union College. Topics will vary from year to year, but may include introduction to number theory, topology, ring theory, use of Mathematica and/or Maple, game theory. Fall semester, odd years (may have additional availability).

## **MATH 499 Mathematics Seminar**

1

Prerequisite: Permission of instructor

A continuation of MATH 498. Spring semester, even years (may have additional availability).

# Marketing

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# MRKT 327 Marketing

3

Prerequisite: ENGL 110 (minimum grade of D-)

A general survey of major marketing methods, institutions and practices, and their effects on producers and consumers. Students integrate marketing concepts through case study analysis and a business simulation. *Fall semester*.

## MRKT 333 Professional Selling

3

Examination and practice of the sales process from prospecting to successful closing of the sale and effective follow up. Also considers ethical issues. *Spring semester, even years.* 

## MRKT 443 Consumer Behavior

3

Prerequisites: ENGL 110 (minimum grade of D-) and [MRKT 327 or PSYC 105 (minimum grade of C)]

Studies people's actions as they relate to obtaining, consuming, and disposing of products and services. Includes consumer decision processes and their relevance for marketing decision-making. *Spring semester, odd years.* 

# MRKT 450 Marketing Strategy

3

Prerequisites: MRKT 327 (minimum grade of D-)

Presents the analytical and decision-making processes involved in formulating, implementing, and controlling a strategic marketing program. Includes discussions of customer, competitor, and environmental analysis, market segmentation and targeting, competitive positioning, implementation and control. *Fall semester, even years*.

# MRKT 456 Marketing Research

3

Prerequisites: ENGL 110 (minimum grade of D-) and [COMM 241 or MRKT 327 (minimum grade of D-)]

Focuses on planning investigations, gathering and interpreting data, and presenting findings in a professional manner. *Fall semester, odd years*.

# **Music Applications**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# MUAP 110 Introduction to Music Production and Technology

2-3

An introduction to various music technologies and skills necessary for music production. Topics in technology include signal flow, microphones, digital/audio recording, midi sequencing, sound synthesis, and notation software. Production topics will cover basic chord progressions, song and lyric writing, and music marketing. Copyright, royalties, and music business will also be covered. See MUAP 310. Students may receive credit for both MUAP 110 and MUAP 310. Fall semester.

## MUAP 207 Brass Techniques and Materials

1

Designed to give future teachers experience with the various techniques of, and the materials for, teaching brass instruments to beginning and intermediate students. Class members also gain a basic proficiency in playing a variety of brass instruments. Fall semester, as needed.

## MUAP 217 Guitar Techniques and Materials

1

Designed to give future teachers experience with the techniques of, and the materials for, teaching guitar to beginning and intermediate students. The members of this class also gain a basic proficiency in playing the guitar. Spring semester, as needed.

# MUAP 227 Percussion Techniques and Materials

1

Designed to give future teachers experience with the various techniques of, and the materials for, teaching percussion instruments to beginning and intermediate students. The members of this class also gain a basic proficiency in playing a variety of percussion instruments. *Spring semester, as needed.* 

# MUAP 237 String Techniques and Materials

1

Designed to give future teachers experience with the various techniques of, and the materials for, teaching stringed instruments to beginning and intermediate students. The members of this class also gain a basic proficiency in playing a variety of stringed instruments. *Spring semester, as needed.* 

# MUAP 247 Vocal Techniques and Materials

Develops a foundation of vocal principles which can be applied to teaching the young (ages 15 to 22) singing voice. Includes fundamental anatomy and physiology of the singing voice, acoustics, resonance, and articulation concepts necessary for efficient and healthy vocal production. Choral singing, solo singing, the adolescent voice, the aging voice, the speaking voice, and vocal hygiene are discussed. Students are also exposed to basic resources for vocal literature and methodology. *Fall semester, as needed.* 

# MUAP 257 Woodwind Techniques and Materials

1

Designed to give future teachers experience with the various techniques of, and the materials for, teaching woodwind instruments to beginning and intermediate students. The members of this class also gain a basic proficiency in playing a variety of woodwind instruments. *Fall semester, as needed.* 

# MUAP 310 Introduction to Music Production and Technology

2

See MUAP 110 for description. Students may receive credit for both MUAP 110 and MUAP 310. Fall semester.

# **Music Education**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

### **MUED 275 Music Practicum**

1

Prerequisite: Permission of instructor

Teach private music lessons under the supervision of the instructor. Participate in other hands-on activities of a music teacher. Each hour of credit represents 45 clock hours of contact time. This contact time will be divided between instructor time and student teaching time. May be repeated for additional credit. *Scheduled as needed*.

## MUED 307 Keyboard Pedagogy

2

Prerequisite: Permission of instructor

A survey of methods and materials for effective piano teaching starting with the child beginner and proceeding through the high school student. Particular emphasis given to age appropriate techniques, literature, and musicianship development. Includes observations and practical experience with professional piano teachers from the community. *Scheduled as needed.* 

### **MUED 317 Instrumental Pedagogy**

2

Prerequisite: Permission of instructor

Designed to give future teachers experience with a variety of more advanced techniques for teaching instrumentalists of all skill levels, through normal classroom study as well as supervised practicum. Scheduled as needed.

## MUED 327 Vocal Pedagogy

2

Prerequisite: Permission of instructor

Develops a comprehensive understanding of the singing voice. Students learn the introductory skills necessary to teach efficient and healthy singing in both the choral and solo setting. Principles of respiration, phonation, resonation, and articulation are presented and applied in a supervised teaching practicum. A written project is required as well as the teaching practicum. Fall semester, as needed.

# MUED 347 Music in the Elementary School

2

Prerequisite: EDUC 218 (minimum grade of D-) and CORE Test passed and permission of instructor

Prepares future elementary teachers for teaching music at the K-8 level by teaching how to set goals and objectives for the music program and how to organize and institute a music program. Studies the various methods and techniques available to the elementary music teacher and considers the interrelationship between music and the entire curriculum. *Fall semester*.

# Music History and Literature

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## MUHL 260 Music in the Western World

2

Focuses on the development of music in Western civilization. Students become acquainted with important styles and genres of art music, as well as influential composers and specific pieces from Medieval to contemporary times. *Fall semester*.

## MUHL 261 Traditional and World Music

2

Designed to increase cultural awareness through an overview of traditional music styles and performance practices from around the world. The cultural and historical context for each musical tradition is examined. *Spring semester*.

## MUHL 315 Music and Christian Worship

2

A survey of congregational song and its use in Christian worship. Emphasis is placed on relationships between church history, theology, scripture, music and literature, criteria for planning and evaluation. *Scheduled as needed*.

## MUHL 351 Music History I

2

Prerequisite: Permission of instructor

Western music from early Christian times through the Medieval period and the early Renaissance. Fall semester, even years.

## MUHL 352 Music History II

2

Prerequisite: Permission of instructor

Western music from late Renaissance through the Baroque period. Spring semester, odd years.

## **MUHL 353 Music History III**

2

Prerequisite: Permission of instructor

A study of the Classical and early Romantic periods. Fall semester, odd years.

## MUHL 354 Music History IV

2

Prerequisite: Permission of instructor

Music from the late Romantic period to the present, including an overview of jazz. Spring semester, even years.

# **Music Performance Studies**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## **Private Lessons**

Private lessons with studio classes as required. May be repeated for additional credit. Thirteen 30-minute lessons per semester and daily practice amounting to at least four periods per week shall yield one hour of academic credit. Credit will not be given until these requirements are met. All new students in music performance register at the 100 level. Upon successfully passing a jury examination, music majors, minors and other advanced students may be transferred to the 200 level. Upper-division students who have studied at the 200 level for four semesters may, upon a successful jury examination, move to the 400 level. The 300 level is reserved for upper-division students who are not music majors. Fall and Spring semesters.

MUPF 101, 201, 301, 401 Voice	1-3
MUPF 105, 205, 305, 405 Flute	1-3
MUPF 106, 206, 306, 406 Oboe	1-3
MUPF 107, 207, 307, 407 Clarinet	1-3
MUPF 108, 208, 308, 408 Bassoon	1-3
MUPF 109, 209, 309, 409 Saxophone	1-3
MUPF 111, 211, 311, 411 Piano	1-3
MUPF 112, 212, 312, 412 Organ	1-3
MUPF 113, 213, 313, 413 Harpsichord	1-3
MUPF 114, 214, 314, 414 Harp	1-3
MUPF 115, 215, 315, 415 Trumpet	1-3
MUPF 116, 216, 316, 416 Horn	1-3
MUPF 117, 217, 317, 417 Euphonium (Baritone Horn)	1-3
MUPF 118, 218, 318, 418 Trombone	1-3
MUPF 119, 219, 319, 419 Tuba	1-3
MUPF 121, 221, 321, 421 Percussion	1-3
MUPF 125, 225, 325, 425 Violin	1-3
MUPF 126, 226, 326, 426 Viola	1-3
MUPF 127, 227, 327, 427 Cello	1-3
MUPF 128, 228, 328, 428 String Bass	1-3
MUPF 129, 229, 329, 429 Guitar	1-3
MUPF 130, 230, 330, 430 Composition	1-3
MUPF 131, 231, 331, 431 Theory	1-3

### Band, Orchestra, Choir and Ensembles

May be repeated for additional credit. Fall and Spring semesters.

Prerequisite: Permission of instructor

MUPF 175, 375 Symphonic Concert Band	1
MUPF 176, 376 Chamber Orchestra	1
MUPF 177, 377 Chamber Choir	1
MUPF 185, 385 Advanced Choir (Unionaires)	1
MUPF 191, 391 Brass Ensemble (Brass Union)	1
MUPF 192, 392 Guitar Ensemble	1
MUPF 193, 393 Handbell Ensemble	1
MUPF 194, 394 Keyboard Ensemble	1
MUPF 195, 395 String Ensemble (Golden Cords)	1
MUPF 196, 396 Vocal Ensemble	1
MUPF 197, 397 Woodwind Ensemble	1

# **MUPF 257 Introduction to Conducting**

Prerequisite: Permission of instructor

Spring semester.

Lab course to accompany Theory II. Spring semester.

MUPF 266 English-Italian Diction
Prerequisite: Permission of instructor
Fall semester, even years.
MUPF 267 German-French Diction
Prerequisite: Permission of instructor
Spring semester, odd years.
MUPF 341 Choral Conducting  Prerequisites: MUPF 257 (minimum grade of D-) and permission of instructor
Spring semester, as needed.
MUPF 342 Instrumental Conducting  Prerequisites: MUPF 257 (minimum grade of D-) and permission of instructor
Scheduled as needed.
MUPF 346 Service Playing
Prerequisite: Permission of instructor
The role of the organist in the church service; practical procedures. Scheduled as needed.
MUPF 351 Junior Recital
Prerequisite: Permission of instructor
Scheduled as needed.
MUPF 451 Senior Recital Prerequisites: MUTH 254 (minimum grade of D-) and permission of instructor
Scheduled as needed.
Music Theory
Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifical listed as a prerequisite.
MUTH 151 Theory I
Prerequisite: Permission of instructor
Emphasis of fundamentals, nonharmonic tones, figured bass and melody harmonization techniques in 4-part style, and melody writing. Fall semester.
MUTH 152 Theory II
Prerequisite: MUTH 151 (minimum grade of C)
Continuation of MUTH 151 with emphasis on part-writing, analysis, keyboard harmonization and music composition. Specific topics covered are seventh chords, secondary dominants and modulation techniques. <i>Spring semester</i> .
MUTH 161 Sight-Singing and Ear Training I
Corequisite: MUTH 151 (minimum grade of C)
Lab course to accompany Theory I. Fall semester.
MUTH 162 Sight-Singing and Ear Training II
Prerequisite: MUTH 161 (minimum grade of D-) Corequisite: MUTH 152

3

MUTH 163 Sight-Singing and Ear Training III  Prerequisite: MUTH 162 (minimum grade of D-)  Corequisite: MUTH 253	1
Lab course to accompany Theory III. Fall semester.	
MUTH 164 Sight-Singing and Ear Training IV  Prerequisite: MUTH 163 (minimum grade of D-)  Corequisite: MUTH 254	1
Lab course to accompany Theory IV. Spring semester.	
MUTH 253 Theory III Prerequisites: MUTH 152 (minimum grade of C) and MUTH 162 (minimum grade of C)	3
Continuation of MUTH 152 with emphasis on 19th-century chromaticism. Score reading, analysis and original composition. <i>Fall semester</i> .	
MUTH 254 Theory IV	3
Prerequisite: MUTH 253 (minimum grade of C)	
Continuation of MUTH 253 with emphasis on 20th-century techniques and materials. Score reading, analysis and original composition. <i>Spring semester</i> .	
MUTH 263 Form and Analysis	2
Corequisite: MUTH 253 (minimum grade of D-)	
Advanced tonal and structural analysis. Scheduled as needed.	
MUTH 462 Introduction to Counterpoint	2
Prerequisite: MUTH 254 (minimum grade of D-) Recommended: MUHL 352	
Introduction to contrapuntal procedures from the 18th century. Fall semester, as needed.	
MUTH 465 Orchestration	2
Prerequisite: MUTH 254 (minimum grade of D-)	

Introduction to writing for orchestral and band instruments. Competence in transpositions, ranges and elementary ensemble writing. *Spring semester, as needed.* 

# Nursing

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **NURS 204 Introduction to Professional Nursing**

Prerequisites: Admission to the nursing program and successful completion of prerequisite courses

Focuses on the role of the professional nurse in the current system of healthcare delivery. Sociological theories are included. Basic concepts of communication, safety, quality patient-centered care, and clinical judgment are introduced. Fall and Spring semesters.

## **NURS 208 Fundamentals**

6

Prerequisites: Admission to the nursing program and successful completion of prerequisite courses Corequisite: NURS 305

Introduces basic psychomotor skills and other concepts of physiologic and psychosocial integrity. Nutritional concepts and basic medical terminology are included. Students provide safe care to one adult patient per clinical experience in a variety of healthcare settings. Withdrawal from NURS 305 requires withdrawal from NURS 208. Failure of NURS 305 requires an altered clinical experience for NURS 208. Fall and Spring semesters.

# **NURS 243 Evidence-Based Practice**

3

Prerequisites: Admission to the nursing program and successful completion of prerequisite courses Corequisites: NURS 204 and NURS 208 and NURS 305

Focuses on the process of evidence-based research and its relationship to the profession of nursing. Students learn the components of the research process and the basic concepts and terms associated with research. Emphasis is placed on evaluation of published research studies for use in evidence-based nursing practice. *Fall and Spring semesters*.

#### **NURS 305 Health Assessment**

3

Prerequisites: Admission to the nursing program and successful completion of prerequisite courses Corequisite: NURS 208

Introduces skills, concepts, and medical terminology necessary to obtain a health history, perform a physical examination, and accurately document findings. Emphasis is placed on how to differentiate between normal and abnormal findings for patients of varying ages and cultural backgrounds. Withdrawal from NURS 305 requires withdrawal from NURS 208. *Fall and Spring semesters*.

# NURS 315 Pathophysiology & Pharmacology I

4

Prerequisites: NURS 208 (minimum grade of C) and NURS 305 (minimum grade of C) Corequisite: NURS 321

Examines normal physiology and pathophysiologic responses that accompany commonly occurring acute and chronic illnesses. Discussion includes physiologic responses that begin at the cellular level and progress to individual and related organ systems. Pathophysiologic alterations to disease management and prevention to promote quality patient-centered care are included. The nursing application of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics of drugs related to health promotion and treatment of disease processes is emphasized. Withdrawal from NURS 315 requires withdrawal from NURS 321. Fee applicable for non-nursing students. *Fall and Spring semesters*.

## NURS 316 Pathophysiology & Pharmacology II

3

Prerequisite: NURS 315 (minimum grade of C)

Corequisite: NURS 322

Builds upon the concepts of Pathophysiology & Pharmacology I and continues the examination of normal physiology and the pathophysiologic responses that accompany commonly occurring acute and chronic illnesses. Discussion includes physiologic responses that begin at the cellular level and progress to individual and related organ systems. Pathophysiologic alterations to disease management and prevention to promote quality patient-centered care are included. The nursing application of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics of drugs related to health promotion and treatment of disease processes is emphasized. Withdrawal from NURS 316 requires withdrawal from NURS 322. Fee applicable for non-nursing students. *Fall and Spring semesters*.

#### **NURS 321 Medical-Surgical I**

6

Prerequisites: NURS 208 (minimum grade of C) and NURS 305 (minimum grade of C) Corequisite: NURS 315

Introduces the application of concepts necessary to provide safe, patient-centered care to adults with commonly occurring acute and/or chronic illnesses. Students provide safe care for one or more patients per clinical experience in an acute care environment. Fall and Spring semesters.

## NURS 322 Medical-Surgical II

Prerequisite: NURS 321 (minimum grade of C)

Corequisite: NURS 316

Expands on the application of advanced concepts necessary to provide safe, patient-centered care to adults with acute and/or chronic illnesses of more complex body systems. Students manage safe care for two or more patients per clinical experience in an acute care environment. *Fall and Spring semesters*.

# **NURS 334 Gerontology**

2

6

Corequisite: NURS 321 (minimum grade of C)

Focuses on foundational concepts and issues important for the care of older adults. Nutritional concepts, psychological and sociological theories related to the elderly are included. Nursing care implications related to the physiologic and psychosocial changes of aging are explored. *Fall and Spring semesters*.

# **NURS 347 Nursing Program Integration**

3

Prerequisite: Admission to the nursing program as a transfer nursing student or BSN Completion student.

Focuses on the role of the professional nurse in the current system of healthcare delivery and facilitates Union College Nursing program integration while addressing gaps in content knowledge for the transfer nursing or BSN Completion student. Sociological theories are included. Basic concepts of communication, safety, quality patient-centered care, and clinical judgment are introduced. Fall and Spring semesters.

#### **NURS 383 Mental Health**

2

Prerequisites: NURS 315 (minimum grade of C) **and** NURS 321 (minimum grade of C) **and** NURS 334 (minimum grade of C) **and** PSYC 215 (minimum grade of C)

Corequisite: NURS 316

Builds upon sociological and psychological concepts in the promotion of mental health. Exploration of the therapeutic nurse/patient relationship to promote optimal mental health in individuals experiencing disorders that affect thinking, cognition, behavior, and communication is included. *Fall and Spring semesters*.

#### **NURS 391 Global Health Nursing**

2

Prerequisite: NURS 322 (minimum grade of C) Corequisite: NURS 415 or permission of instructor

Introduces the nursing student to principles and practices of healthcare on the frontiers of developing countries. Students may have the opportunity as part of a multidisciplinary healthcare team to provide patient-centered care with cultural humility in a global community. Limited enrollment and an additional fee for field experience. Elective course. *Spring semester*.

## **NURS 415 Maternal Child Health**

6.5

Prerequisites: NURS 316 (minimum grade of C) and NURS 322 (minimum grade of C) and NURS 383 (minimum grade of C) and PSYC 215 (minimum grade of C)

Focuses on family-centered care from the development of a family through adolescence. Nutritional, psychological, and sociological concepts related to this stage of life are included. Students care for one or more patients and their families per clinical experience in acute and ambulatory settings to promote wellness and restore health. Fall and Spring semesters.

## **NURS 423 Medical-Surgical III**

5

Prerequisites: NURS 316 (minimum grade of C) and NURS 322 (minimum grade of C) and NURS 383 (minimum grade of C)

Focuses on the application of critical care concepts necessary to provide safe, patient-centered care to critically ill adults with multisystem or complex healthcare needs. Students provide safe care for one to two patients per clinical experience in an acute care environment. Fall and Spring semesters.

## **NURS 433 Disaster Nursing**

2

Prerequisites: NURS 243 (minimum grade of C) and NURS 305 (minimum grade of C) and NURS 315 (minimum grade of C) and NURS 316 (minimum grade of C)

Focuses on emergency preparedness and disaster response management concepts with an emphasis on essential safety, communication, collaboration, and leadership skills. Clinical judgment and decision-making skills are evaluated for appropriate, safe nursing care during a mock disaster and mass casualty event. Sociological theories related to disaster management are included. *Fall and Spring semesters*.

## NURS 453 Management & Leadership

3

Prerequisites: NURS 415 (minimum grade of C) and NURS 423 (minimum grade of C)

Focuses on the nurse as a leader and manager of care in professional practice. An awareness of complex healthcare systems and the impact of power, politics, policy, and regulatory guidelines in a changing environment will be developed. *Fall and Spring semesters*.

# **NURS 474 Population Health**

3.5

Prerequisites: NURS 383 (minimum grade of C) and NURS 415 (minimum grade of C) and NURS 433 (minimum grade of C)

Focuses on family and community health promotion including disease and injury prevention. Indicators of global and population health are studied in vulnerable groups across the lifespan with application of clinical prevention strategies and inter-professional collaboration. Clinical experiences are in the community setting. Nutritional and sociological concepts related to the community are included. *Fall and Spring semesters*.

#### **NURS 495 Transition to Professional Practice**

2

Prerequisite: Completion or concurrent registration of all required NURS courses except NURS 499

Focuses on workplace and new graduate issues including interviewing, résumés, licensure, and professional practice standards. Synthesis of knowledge and skill is demonstrated by successful completion of an NCLEX-RN® readiness assessment. Fall and Spring semesters.

## **NURS 499 Preceptorship**

4

Prerequisite: Completion or concurrent registration of all required NURS courses

The capstone experience for students to demonstrate competencies consistent with Union College Nursing Program New Graduate Outcomes. The clinical immersion experience refines clinical reasoning, fosters self-confidence, and promotes a sense of belonging in the nursing profession. Students manage care for multiple patients under the guidance of a qualified preceptor. Fall and Spring semesters.

# Occupational Therapy Assistant

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

## OTAC 100 Introduction to Occupational Therapy

2

Prerequisite: Acceptance into the OTA program

This course offers a complete overview of the profession of occupational therapy (OT) and the role of the occupational therapy assistant. At the culmination of this course students will have a foundation in the history, philosophy and theories, models and practice frameworks the profession is built upon, as well as be able to identify practice settings across the lifespan. Learners will also be introduced to the Occupational Therapy Practice Framework, evidence-based practice, client-centered practice and the OT Code of Ethics. *Spring semester*.

# **OTAC 120 Clinical Conditions**

2

Prerequisite: Acceptance into the OTA program

This course will introduce learners to conditions commonly treated by occupational therapy practitioners in traditional healthcare settings. Learners will get an overview of condition etiology, incidence, signs and symptoms, medical management, prognosis and the impact of these conditions on occupation. *Spring semester*.

### **OTAC 140 Level 1A Fieldwork**

Prerequisite: Acceptance into the OTA program

This course is designed to apply the learning from OTAC 120 course work by providing opportunities for learners to experience the clinical setting through simulation or in the community under the supervision of a qualified fieldwork educator. This course will require hours outside of class time. *Spring semester*.

## OTAC 200 Neuroanatomy & Human Movement

4

Prerequisite: OTAC 120 (minimum grade of C)

This course provides a foundational understanding of neuroanatomy, kinesiology, range of motion and manual muscle testing. Summer semester.

## **OTAC 210 Human Occupation**

3

Prerequisite: OTAC 120 (minimum grade of C)

This course introduces activity analysis, evidence based-practice, creative and critical thinking, interpersonal communication and documentation of occupational therapy services. At the culmination of the course, students will be able to conduct occupation-based intervention planning and implementation. Documentation skills will be developed utilizing the S.O.A.P note method. *Summer semester*.

## OTAC 220 The OT Process for Rehabilitation & Disability

4

Prerequisite: OTAC 120 (minimum grade of C)

This course provides learners with an understanding of the occupational therapy process of contributing to evaluation, intervention planning and implementation, and outcomes in physical disabilities resulting from illness, disabling conditions, or injury and how this impacts occupation across the adult lifespan. *Fall semester*.

## OTAC 225 The OT Process for Community-Based Practice

4

Prerequisite: OTAC 120 (minimum grade of C)

This course addresses the role of the OTA in community-based practice including theoretical frameworks and intervention approaches. Students will develop an understanding of the various aspects of community-based practice including health and wellness, work and industry, emerging practice areas and technology, and community-based settings across the lifespan. Learning is applied to the concurrent Level IB Fieldwork experience in a community practice setting. Summer semester.

## OTAC 230 The OT Process for Children and Youth

4

Prerequisite: OTAC 120 (minimum grade of C)

This course addresses foundational theories, practice models, intervention approaches and practice arenas for occupational therapy practice with children. This may include but is not limited to sensory integration, developmental, and motor learning as well as neurodevelopmental treatment. *Fall semester*.

# OTAC 240 The OT Process for Productive Aging

4

Prerequisite OTAC 120 (minimum grade of C)

This course addresses theories, standardized assessments, interventions and outcomes for working with older adults. Students will apply the OT process to common clinical conditions impacting older adults, and identify methods to promote wellness, function and quality of life for this population. *Fall Semester* 

## OTAC 260 The OT Process for Mental Health

4

Prerequisite: OTAC 120 (minimum grade of C)

This course outlines the scope of practice in mental health occupational therapy across the developmental continuum. Group process is addressed and learning is applied to the student's concurrent level 1 fieldwork experience. *Fall semester*.

## OTAC 265 Level IB Fieldwork

Prerequisite: OTAC 140 (minimum grade of C)

This course is designed to apply the learning from OTAC 225 course work by providing opportunities for learners to experience the nontraditional setting through simulation or in the community under the supervision of a qualified fieldwork educator. This course will require hours outside of class time. *Summer semester*.

## OTAC 270 Ethics, Reasoning and Management

2

Prerequisite: OTAC 120 (minimum grade of C)

This course addresses ethical practice, leadership, advocacy, clinical reasoning and managerial roles in occupational therapy *Summer semester*.

## **OTAC 300 Level IC Fieldwork**

1

Prerequisite: OTAC 265 (minimum grade of C)

This course is designed to apply the learning from OTAC 260 course work by providing opportunities for learners to experience the mental health setting through simulation or in the community under the supervision of a qualified fieldwork educator. This course will require hours outside of class time. *Fall Semester*.

### **OTAC 310 Professional Seminar**

2

Prerequisite: OTAC 270 (minimum grade of C)

This course is designed to facilitate the transition from student to practitioner by preparing students for professional employment and the certification exam. Students will explore licensure processes and state regulations; complete a job search; create a professional development plan; and review test-taking strategies and application of learning to prepare for the certification exam. Spring semester.

## **OTAC 320 Level IIA Fieldwork**

6

Prerequisite: OTAC 300 (minimum grade of C)

This course is designed to enhance the learning from coursework by providing opportunities for learners to experience a setting under the supervision of a qualified OT professional. (8 weeks). Spring semester.

## **OTAC 330 Level IIB Fieldwork**

6

Prerequisite: OTAC 300 (minimum grade of C)

This course is designed to enhance the learning from coursework by providing opportunities for learners to experience a second practice setting under the supervision of a qualified OT professional. (8 weeks); *Spring semester*.

# Physician Assistant Studies

Prerequisite for all PHAS courses: Admission to the PA Program

## PHAS 506 Evidence-Based Literature Review & Application

3

This course focuses on methods for finding, interpreting and evaluating medical literature in order to prepare the student to make evidence-based medical care decisions as well as to apply the evidence towards individualized patient care. Experience is gained in framing research questions as they relate to health care problems. Common research concepts, clinical research methods, and interpretation of basic biostatistical methods are explored through the course. This course will prepare the student for performance of the capstone project through selection of capstone topic, writing a single-study summary, and communicating a single-study oral presentation among peers. Students will explore concepts related to application of medical evidence, and consider how patient values and preferences will contribute towards evidence-based clinical decision making. Summer semester.

# **PHAS 510 Clinical Nutrition**

2.

Students will learn the basics of nutritional science, digestion, the importance of vitamins and minerals, nutrition during the lifecycle, prevention of and medical nutrition therapy for a variety of chronic disease states (including diabetes and cardiovascular disease), weight management, eating disorders, and sports nutrition. The student will become a good nutritional resource and be able to counsel patients to provide better care in medicine. *Fall semester*.

### PHAS 511 Human Anatomy

5

Recommended preparation: Undergraduate anatomy

A focused study of the structure and organization of the human body with particular emphasis on macroscopic anatomy. Lecture and laboratory with cadaver work are required. *Fall semester*.

# PHAS 514 Medical History and Physical Examination Skills

4

Students learn communication skills related to obtaining a comprehensive medical history followed by instruction on the techniques required in performing a thorough and technically correct physical examination. Forms and descriptive language used to compile patient medical reports are utilized. The course emphasizes normal and typical adult findings on examination, and selected normal and abnormal variants are reviewed. Additionally, specific aspects of neonatal/pediatric, obstetric, and geriatric examinations are included. *Fall semester*.

# **PHAS 515 Clinical Diagnostic Procedures**

3

The indications for the use and interpretation of fundamental diagnostic tests are presented, including blood cell counts, complete metabolic profile, serum chemistries, HIV tests, urinalysis, bone and organ radiography, culture and sensitivity tests, Pap smears, and other common pathologic reports. Indications for specialized procedures, such as MRI, CT, ultrasound, echocardiogram, stress EKG, mammography, colonoscopy, and endoscopy, are reviewed. This course also explores pathological conditions and how they affect radiographic images by comparing and contrasting various diagnostic radiologic procedures. Emphasis is placed on the indications, contraindications, and risks/side-effects of various therapies, as well as technical proficiency. *Fall semester*.

# PHAS 518 Psychiatry and Behavioral Medicine

3

Provides understanding and development of interviewing, diagnostic, and treatment skills of the following psychiatric disorders: mood, (depressive and bipolar), anxiety, schizophrenia, cognitive, pediatric, geriatric, sleep, personality, somatization, eating, dissociative, impulse control, and gender identity disorders. It is heavily weighted on the psychopharmacotherapy of the disorders. Additional topics include human development and life-cycle changes (normal and abnormal); human sexuality; issues of death, dying, and loss; response to illness, injury, and stress; principles of violence identification and prevention; substance abuse; suicide; hospice; and ethical and legal issues. This course involves the acquisition of counseling skills necessary in communicating with and educating patients facing common psychological, psychiatric, and behavioral conditions. *Spring semester*.

# PHAS 519 Differential Diagnosis and Case Development

2

Emphasizes problem-based learning with applied exam skills required to properly diagnose various diseases. Clinical cases are presented, and students integrate the given information with physical exam clues leading to appropriate and prioritized differential diagnoses. Application of diagnostic testing modalities is highlighted and treatment regimens discussed. The course is designed to demonstrate that the student has achieved proficiency in multiple didactic and clinical disciplines prior to beginning rotations. *Summer Semester*.

### PHAS 525 PA Professional Issues

2

The history and practice issues of the PA profession are explored, including the present-day scope and roles of PA practice. Legal and ethical issues confronting the profession, enabling legislation at the state and federal levels, medical economics, and quality of care issues are discussed. Includes oral presentations and student debates to hone communication skills. *Spring semester*.

## PHAS 531 Clinical Medicine I

6

With PHAS 532 and 534, provides a comprehensive review of the different organ systems of the body, their normal function, and the diseases that affect them. Emphasis is given to the diagnosis, differential diagnosis, and management of various disease states. *Fall semester*:

### PHAS 532 Clinical Medicine II

6

Continuation of PHAS 531. Spring semester.

## PHAS 533 Preventive Health

1

Students will utilize medical knowledge to provide preventive health across the lifespan of the patient; incorporate guidelines for screening for and prevention of various disease states; describe the principles of risk assessment; review public health programs; and learn how to participate in disease surveillance, reporting, and intervention. Emphasis is placed on the role of the practitioner in tailoring successful preventive health goals for patients of all ages. Students will study and practice the principles of motivational interviewing that support patients in making positive changes in their lives. Students will also participate in system-based objective simulated clinical exams (OSCEs) five times during the semester; these are designed to help students maintain their clinical examination skills throughout the semester and learn how to do more focused exams. *Spring semester*.

### PHAS 534 Clinical Medicine III

3

Taught concurrently with PHAS 532, Clinical Medicine III focuses on clinical concerns specific to pediatrics and women's health. *Spring semester*.

### PHAS 539 Christian Health Care and Bioethics

3

This course examines bioethics in interaction with the healing ministry of Jesus Christ and a Christian worldview. The health care ethics principles of autonomy, beneficence, nonmaleficence, justice, fairness, and dignity, as used with the PA profession, are applied to clinical and professional situations and dilemmas within the shift to population health and precision medicine. *Fall semester*.

## PHAS 546 Clinical Skills I

4

Specific skill instruction is provided in universal/standard precautions, sterile technique, injections and infusions, wound assessment, suturing, specialized wound care, airway management, nasogastric tube placement, splinting, casting, joint procedures, catheterizations, special procedures, biopsies, foreign body removal and specialty practice procedures. Students receive special training in Basic Disaster Life Support. The class includes exposure to clinical case presentations and discussions of appropriate clinical skills in order to provide a high level of hands-on experience. *Fall semester*.

# PHAS 547 Clinical Skills II

2

Emphasizes application of clinical skills in the actual clinical arena, with students performing physical examinations in real and simulated health care settings under the guidance of physicians and PAs. In the classroom students become experienced with common physical examination skills in the patient care setting, provide thorough pediatric, obstetric/gynecologic, geriatric, and genitourinary examinations (using models and facilitators), and gain skills in writing history and physicals, SOAP notes, and hospital orders. Dictation of notes and diagnostic coding are also covered. *Spring semester*.

## PHAS 553 Diversity in Medicine

1

This course is designed to help students develop an awareness of the differences in race, gender, class, sexual preference, and physical ability. Students will experience a variety of opportunities to develop skills, knowledge, and attitudes that will enable them to demonstrate an understanding of and a respect for the values, beliefs, and expectations of their patients. *Spring semester*.

# PHAS 557 Electrocardiography

1

Specific instruction is provided in understanding electrophysiology of the heart, preparing the student to discriminate among normal, variations of normal, and abnormal electrocardiographic studies (six-second strips and 12-lead EKGs). There is a strong emphasis on identification of acute myocardial infarction. *Fall semester*.

## PHAS 558 Medical Physiology

5

Provides an advanced understanding of human physiology with in-depth study of the physiology of the cardiovascular, respiratory, renal, endocrine, and reproductive systems. Emphasis will be placed on the normal functions of these systems. *Fall semester*.

# PHAS 559 Clinical Pathophysiology

4

Studies the pathophysiology of cellular, immune, nervous, endocrine, cardiovascular, respiratory, renal, reproductive, genomic, musculoskeletal, hepatic and gastrointestinal systems with an emphasis on mechanisms which move the body away from homeostasis. Particular focus is given to correlation of theoretical material with clinical case studies. *Spring semester*.

## **PHAS 562 Medical Genetics**

1

Designed to give the student an advanced understanding of human genetics, this course will study inheritance patterns, polymorphisms, mutations, and genetic tests. Emphasis will be given to the clinical application of these concepts. *Spring semester*.

# **PHAS 564 Clinical Therapeutics**

4

Using problem-based learning principles, concepts in disease management are explored using standardized treatment designs based on scientific, economic, and human strategies that ensure appropriate utilization and high-quality care across the continuum. Topics include routine clinical disease syndromes but emphasize chronic, costly disease states with high comorbidity as well as acute, catastrophic episodes of care. Rational drug therapy is reviewed with actual patient drug treatment plans and outcomes. The course is designed to provide sufficient depth of material to prepare students to develop a foundation for a life of learning in medical care of patients. Students are required to pass the Advanced Cardiovascular Life Support (ACLS) course. Spring semester.

# PHAS 584 Pharmacology

5

Introduces the PA student to a wide variety of pharmacological agents used in the practice of medicine. Drugs are categorized into various classes according to their primary actions with emphasis on prototypical drugs to treat disease and on relevant clinical information. An introduction to prescription writing is also presented. *Spring semester*.

## PHAS 594 Master's Capstone Project I

3

Corequisites: PHAS 506 (minimum grade of C)

A continuation of PHAS 585, students work independently, under faculty advisement, to complete research on their assigned topics and write a thesis paper describing their findings. *Summer Semester*.

## PHAS 595 Master's Capstone Project II

1

Prerequisites: PHAS 506 (minimum grade of C) and PHAS 594 (minimum grade of C)

The culmination of skills learned in Medical Literature Review, Master's Research Seminar, and Master's Capstone Project I. This project provides the environment for students to present the results of their individual research projects. Students work with assigned faculty advisors. *Fall semester*.

## PHAS 619 - 630 Clinical Rotations

Prerequisite: Completion of didactic program of studies in the PA Program

During clinical rotations with assigned preceptors, the PA student will elicit a problem-oriented medical history, perform a pertinent physical examination, obtain and assess the results of indicated diagnostic studies, formulate a management plan and assist in providing the appropriate therapy for common problems encountered in a variety of disciplines. In addition to the required rotations listed below, four weeks of elective rotations (PHAS 630) are required for graduation. Examples of potential disciplines available are Dermatology, ENT, Trauma, Radiology, Sports Medicine, or any additional rotation from the list of required rotations. *Fall, Spring, and Summer semesters* 

PHAS 619 Family Practice Rotation	8
PHAS 622 Internal Medicine Rotation	4
PHAS 623 Surgery Rotation	4
PHAS 624 Obstetrics and Gynecology Rotation	4
PHAS 625 Pediatrics Rotation	4
PHAS 626 Cardiology Rotation	4
PHAS 627 Emergency Medicine Rotation	4
PHAS 628 Orthopedics Rotation	4
PHAS 629 Psychiatry Rotation	4
PHAS 630 Elective Rotation	4

# Philosophy

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# PHIL 335 Introduction to Philosophy

3

Introduces logic and critical thinking and applies them in a survey of western philosophy from the pre-Socratics to the present. *Spring semester*.

# **Photography**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# PHOT 151 Introduction to Photography

3

A study of the basic techniques and principles of photography, including camera usage, photographic technique, natural and studio lighting, composition and aesthetic concerns. *Fall semester*.

# PHOT 225 Intermediate Photography

3

Prerequisites: GRPH 150 (minimum grade of D-) and PHOT 151 (minimum grade of D-)

A study of photography using digital tools, technology, and output. Students will review the core concepts of photography and how to manage a digital workflow, with emphasis on practical control of image making for application such as journalism, commercial photography, and fine art photography. Digital camera required, DSLR preferred. *Spring semester, odd years*.

## PHOT 250 Travel Photography

3

Emphasizes practical applications of photographic technique in areas such as landscape, portraiture, photojournalism, nature, and wildlife photography with emphasis on development of a personal vision. Participants are required to contribute to a book project and to a class exhibition. Summer semester, odd years.

# PHOT 285 Advanced Photography

3

Prerequisites: GRPH 150 (minimum grade of D-) or PHOT 151 (minimum grade of D-) or PHOT 225 (minimum grade of D-) or PHOT 325 (minimum grade of D-)

Advanced work in studio and product lighting, portraiture, location work, advertising/illustration, and still life photography. *Spring semester, odd years*.

# PHOT 325 Commercial Photography

3

Prerequisites: GRPH 150 (minimum grade of D-) and PHOT 151 (minimum grade of D-) and PHOT 225 (minimum grade of D-)

The study and practice of techniques for producing commercially viable images in studio and on location. Emphasis on using necessary skills and techniques to achieve client's desired results, in areas such as product, architecture, and portrait photography. Fall semester, even years.

# PHOT 450 Travel Photography

3

Prerequisites: Previous photography experience or coursework and permission of instructor

Emphasizes practical applications of photographic technique in areas such as landscape, portraiture, photojournalism, nature, and wildlife photography with emphasis on development of a personal vision. Participants are required to contribute to a book project and to a class exhibition. *Summer Semester, odd years*.

# **Physics**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# PHYS 151 General Physics I

4

Prerequisite: MATH 119 (minimum grade of C) or MATH 184 (minimum grade of C)

An algebra-based physics course to fulfill the requirements for various pre-professional programs. Introduces linear and rotational mechanics including energy and momentum considerations, thermodynamics, and waves. Includes discussion of the historical development of our understanding along with references to environmental and social impacts of applied technology. Three lectures and one three-hour laboratory per week. Credit not given for both this course and PHYS 251. Fall semester.

# PHYS 152 General Physics II

1

Prerequisite: PHYS 151 (minimum grade of C) or PHYS 251 (minimum grade of C)

A continuation of PHYS 151 covering electricity, magnetism, simple circuits, optics, special relativity and modern physics. Discussion of the historical development of our understanding, along with references to environmental and social impacts of applied technology. Three lectures and one three-hour laboratory per week. Credit not given for both this course and PHYS 252. *Spring semester*.

# PHYS 251 College Physics I

5

Prerequisite: MATH 184 (minimum grade of C)

A calculus-based physics course designed for science majors. Introduces linear and rotational mechanics including energy and momentum considerations, thermodynamics, and waves. Includes discussion of the historical development of our understanding along with references to environmental and social impacts of applied technology. Four lectures and one three-hour laboratory per week. *Fall semester*.

# PHYS 252 College Physics II

5

Prerequisite: PHYS 251 (minimum grade of C)

A continuation of PHYS 251 covering electricity, magnetism, simple circuits, optics, special relativity and modern physics. Discussion of the historical development of our understanding, along with references to environmental and social impacts of applied technology. Four lectures and one three-hour laboratory per week. *Spring semester*.

# **Political Science**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### PLSC 105 Introduction to International Relations

3

An introduction to the study of international relations: the basic theories and conceptual foundations of the discipline. *Fall semester*.

#### **PLSC 208 American Politics**

3

Analysis of the organic development and construction of American politics, including the making and functioning of the United States Constitution, the functioning of the Supreme Court, the U.S. Congress, and the Presidency. *Spring semester*.

# PLSC/HIST 258 Africa's Global Emergence

3

Prerequisite: ENGL 212 (minimum grade of D-)

Focuses on the political relevance of the African continent in global affairs, particularly during the wars of colonization, World Wars I and II, the Cold War, and the present global war on terror. Fall semester, odd years.

# PLSC/HIST 260 Latin America and the Caribbean

3

Prerequisite: ENGL 212 (minimum grade of D-)

The politics and history of Central and South America and the Caribbean from the era of the Monroe Doctrine (1820s) to the present-day. Fall semester.

# PLSC/RELG 345 Global Environment and International Policy

3

Prerequisite: ENGL 212(minimum grade of D-)

This course examines the intersection of the Christian worldview, climate change causes, current and future climate and social impacts, and the international efforts to address those impacts through governmental and non-governmental policy and relations. *Fall semester*.

#### PLSC/HIST 346 Russia in Global Politics

3

Prerequisite: ENGL 212 (minimum grade of D-)

This course reviews and analyzes the place of Russia in modern global affairs, especially U.S.-Russian geopolitical cooperation and contests from the Soviet era into present-day politics under Putin. *Spring semester, odd years*.

# PLSC/HIST 383 Modern War: The 20th-century North Atlantic

3

Prerequisite: ENGL 212 (minimum grade of D-)

Focuses on the United States and Europe during the turbulent period of the World Wars, the Holocaust, the Civil Rights movement, and the Cold War. Spring semester.

#### PLSC/HIST 392 The Modern Middle East

3

Prerequisite: ENGL 212 (minimum grade of D-)

The history and the politics of the modern Middle East, from the Tanzimat period of the Ottoman Empire to the present period. Analysis of the various past and present conflicts in the Middle East. *Spring semester*.

## PLSC 396 Walmart and You: The Political Dance of U.S.-China Relations

3

Prerequisite: ENGL 212 (minimum grade of D-)

U.S. and China: together forever? Understand the Communist government of China and also how and why U.S. political and economic relations with China continues to matter in your daily life. *Spring semester, even years*.

# PLSC/HIST 430 Global War and Global Migrations: Search for a New Life

Prerequisite: ENGL 212 (minimum grade of D-)

Focuses on the history of internal and international migrations and their effects as mitigating critical resources – water, employment, arable land, etc. – and also as critical determining factors of political instability with various countries. *Fall semester, even years.* 

#### PLSC 460 Global Political Economy and International Labor

3

3

Prerequisite: ENGL 212 (minimum grade of D-)

This capstone course in the International Relations major focuses on how wealthy countries depend on international labor for their economic growth and how poor countries are deprived of this resource. Spring semester, even years.

#### PLSC/HIST 465 The U.S. War on Terror

3

Prerequisite: ENGL 212 (minimum grade of D-)

The recent U.S. and global politics surrounding the commencement of the U.S. War on Terror in 2001 until the present-day. Fall semester, even years.

# Psychology

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **PSYC 100 Careers in Psychology**

0.5

Exposes students to the variety of careers available in the field of psychology and gives instruction about the academic choices to be made in order to be qualified for the various careers. Credit/no credit. Does not apply to general education requirements. Fall semester.

#### **PSYC 105 Introduction to Psychology**

3

Explores the science of psychology, its theories, basic concepts, and research methods. Students are introduced to the major subfields in psychology. Fall and Spring semesters.

#### **PSYC 215 Developmental Psychology**

3

Studies the physical, emotional, cognitive and psycho-social development through each of the life stages, prenatal through old age. Fall and Spring semesters.

# PSYC 225 Psychology of Religion

3

An examination of the psychological processes involved in religious experiences from personal, developmental, social and emotional perspectives. *Fall semester*.

#### PSYC/EDUC 270 Research Writing

1

Prerequisite: Permission of instructor

This class introduces students to elements of research writing using the format and style from the Publication Manual of the American Psychological Association. Students will be exposed to writing papers for empirical studies and literature reviews. They will apply the principles in writing a paper for a class in their discipline. *Spring semester*.

#### **PSYC 300 Career and Graduate School Preparation**

0.5

Prerequisite: Junior standing

Helps students examine their personal career goals and make choices best aligned with those goals. Students are also provided with information needed to prepare for choosing appropriate graduate programs, making graduate applications and preparing for graduate testing. Credit/no credit. *Fall semester*.

# PSYC 311 Introduction to Counseling Theory and Techniques

Prerequisite: PSYC 105 (minimum grade of C)

Provides a comprehensive study of various theories of counseling examined from a Christian perspective. Students participate in skill development activities. *Fall semester*.

# **PSYC 315 Social Psychology**

3

3

Prerequisite: PSYC 105 (minimum grade of C)

A general study of the individual in relationships to other people. Includes such topics as social thinking, social influence and social relations. *Spring semester*.

# PSYC 337 History and Systems of Psychology

3

Prerequisite: PSYC 105 (minimum grade of C)

Examines the theories and historical aspects of the major psychological schools of thought. Spring semester.

# **PSYC 338 Cognitive Psychology**

3

Prerequisite: PSYC 105 (minimum grade of C)

A study of the processes involved in human memory and cognition. Topics include attention and perception, information processing models, development of language and comprehension, and processes of thinking and reasoning. *Spring semester, even years.* 

#### **PSYC 340 Research Methods I**

3

Prerequisite: PSYC 105 (minimum grade of C)

An integrated approach to the study of the basic statistical procedures used in behavioral science research along with basic research methods they support. Principles of research design and ethics related to behavioral research are also covered. *Fall semester*.

#### **PSYC 341 Research Methods II**

3

Prerequisite: PSYC 340 (minimum grade of C) Corequisite: PSYC/EDUC 270

A continuation of PSYC 340, covering experimental and descriptive research methods. A research proposal is required for completion of this class. *Spring semester*.

#### **PSYC 375 Theories of Personality**

3

Prerequisite: PSYC 105 (minimum grade of C)

Involves examination of the factors that influence personality development and introduces students to major psychological theories of personality. *Fall semester, odd years.* 

#### PSYC 380 Biopsychology

3

Prerequisite: PSYC 105 (minimum grade of C) or PSYC 215(minimum grade of C)

An introduction to the biological basis of behavior. Students will be presented with information on the basic functioning of the nervous system and the physiological basis of behaviors including such topics as sleep, sex, aggression, learning and memory, and psychopathology. *Spring semester, even years.* 

#### **PSYC 415 Abnormal Psychology**

3

Prerequisite: PSYC 105 (minimum grade of C)

Investigates the causes, symptoms and treatment of psychological disorders. Spring semester.

#### **PSYC 425 Human Sexuality**

3

Prerequisites: PSYC 105 (minimum grade of C) and Junior standing

Multiple aspects of sexual behavior are examined from the perspectives of varying methods of investigation and within a Christian framework. *Fall semester, even years.* 

# **PSYC 427 Clinical Assessment**

Prerequisites: PSYC 105 (minimum grade of C) and PSYC 215 (minimum grade of C)

Trains the student to think clinically about persons they interact with in their professional role. Students are introduced to a wide range of objective instruments as means of assessment as well as the role of the professional's subjective experience in the process of assessment. *Spring semester, even years*.

#### **PSYC 450 Psychological Testing**

3

3

Prerequisites: PSYC 105 (minimum grade of C) and PSYC 340 (minimum grade of C) and PYSC 341 (minimum grade of C)

Introduction to psychometric methods and the practice involved in individual and group testing of ability, personality, interest and achievement. Spring semester, odd years.

# **PSYC 455 Practicum in Psychology**

1-3

Students participate in supervised practicum activities in professional psychology, human service or research settings. Students complete 45 clock hours of practicum for one hour of credit. Fall and Spring semesters

# **PSYC 460 Forensic Psychology**

3

This course provides a basic overview to the field of forensic psychology, focusing primarily on the application of the findings of research in psychology within the American civil and criminal justice systems. Mental health issues that impact law enforcement and judicial practice are also examined. *Spring semester, odd years.* 

# PSYC 475 Current Issues in Psychology

2

Prerequisite: PSYC 105 (minimum grade of C)

Investigates the research and dialogue surrounding issues that are current in the field of psychology. Students are required to do in-depth investigations on issues and to develop a personal position on the issues investigated. *Fall semester*.

# **PSYC 476 Senior Research Project**

2

Prerequisite: PSYC 341 (minimum grade of C)

Students design, carry out, and statistically analyze an empirical study which deals with an aspect of behavior. Research findings are shared in a poster presentation and paper. Fall semester.

# Religion - Biblical Studies

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **RELB 115 Encountering Jesus as Savior**

3

Prerequisite: Freshmen only

Encountering Jesus as Savior and Lord through a study of the Gospels and an intentional devotional experience. Intended to help a student develop an intimate relationship with Jesus that is real and personal. General Education credit is not given for both this course and RELT 110 or RELT 141. *Fall semester*.

# RELB 135 Heroic Characters of the Bible I

3

A study of the Old Testament as a story with a focus on the journeys and interactions of the major characters and the lessons that can be applied to life today. Attention will be given to Biblical engagement through historical and geographical content and processes for developing approaches for a lifelong study of the Bible. *Fall semester*.

# RELB 136 Heroic Characters of the Bible II

3

A study of the New Testament as a story with a focus on the journeys and interactions of the major characters and the lessons that can be applied to life today. Attention will be given to Biblical engagement through historical and geographical content and processes for developing approaches for a lifelong study of the Bible. *Spring semester*.

# **RELB 226 Old Testament Survey**

3

A survey of the Old Testament providing an overview of the significant historical events and people of the Hebrew Bible. Emphasis is placed on the creation and fall of humans, the calling of Israel with its covenant relationship, and developing an appropriate understanding of the God who saves as revealed in this time period. *Spring semester*.

# **RELB 246 Sanctuary and Salvation**

3

A study of the biblical teaching of salvation in the books of Leviticus, Daniel, Hebrews, and Revelation through the events and offices of the earthly sanctuary and their relationships to the sacrifice of Christ and the heavenly fulfillments in Christ's ministry. *Fall semester*.

#### RELB 250 Revelation

An introduction to apocalyptic literature and an inductive study of the book of Revelation within the context of Christian history and the church today. *Spring semester*.

# RELB 255 Jesus and the Gospels

3

3

A study of the life, ministry and teachings of Jesus, with applications for daily living, based upon an inductive study of the four gospels. Fall and Spring semesters.

# **RELB 260 Interpretation of Romans**

3

Prerequisites: ENGL 212 (minimum grade of D-) and non-Theology majors only

Examines the interpretation of Romans and other selected Pauline Epistles within their sociocultural context. This includes interpretation by the initial readers and theological interpretation of Romans in relation to our contemporary world. *Spring semester*.

#### **RELB 328 Books of Moses**

3

Prerequisite: ENGL 212 (minimum grade of D-)

An introduction to the Pentateuch (the first five books of the Old Testament). Attention will be given to the structure, themes, theology, historical setting, and significance of this literature for Christians. *Fall semester*.

#### **RELB 335 New Testament Epistles**

3

Prerequisite: ENGL 212 (minimum grade of D-)

An inductive study of the book of Acts and the letters of the New Testament using selected passages to illustrate themes of New Testament thought. *Spring semester*.

# RELB 348 Daniel

An introduction to the narrative and prophetic portions of the book of Daniel rooted in its historical context, emphasizing the spiritual and prophetic applications relevant to Christian leadership and life. *Fall semester*.

#### **RELB 360 Interpretation of Romans**

3

Prerequisites: ENGL 212 (minimum grade of D-) and Theology majors only

Examines the interpretation of Romans and other selected Pauline Epistles within their sociocultural context. This includes interpretation by the initial readers and theological interpretation of Romans in relation to our contemporary world. *Spring semester*.

#### RELB/LITR 366 Biblical Literature

Prerequisites: ENGL 212 (minimum grade of C) and |LITR 231 or LITR 232 or LITR 299 (minimum grade of C)|

A survey of the Bible's literary masterpieces from an archetypal perspective. Literary patterns, techniques, and terminology are applied to Bible writers and their writings. May be used to meet RELB or LITR general education requirements but not both. *Fall semester, even years*.

# **Religion - General Studies**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### RELG/PLSC 345 Global Environment and International Policy

3

3

Prerequisite: ENGL 212 (minimum grade of D-)

This course examines the intersection of the Christian worldview of creation care and eschatology, causes of climate change and its current and future climate and social impacts, and the international efforts to address those impacts through governmental and nongovernmental policy and international relations. *Fall semester*.

# RELG 350 Flourishing in the Christian Life

3

Prerequisite: ENGL 212 (minimum grade of D-) or acceptance into the Professional Excellence program.

Examines worldview perspectives on flourishing, Jesus' unique teaching on flourishing, a Christian perspective on flourishing mental health, Christian ethical principles for flourishing, and flourishing in an Adventist setting. Taught in a seminar format with an emphasis on class discussion of significant texts on these topics. *Fall semester*.

# RELG 355 Dying, Death, Grief, and Recovery

3

Prerequisite: ENGL 212 (minimum grade of D-)

A survey that integrates religious perspectives with psychological and medical perspectives on the process of dying, death, grief, and recovery from grief. Includes religious and philosophical reflections on the nature of humanity, death, and suicide. *Fall semester*.

# **Religion - Religious History**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# RELH 310 History of the Seventh-day Adventist Church

3

Prerequisite: ENGL 212 (minimum grade of D-)

A study of the Advent movement of the early 19th century and the subsequent growth of the Seventh-day Adventist Church. *Spring semester*.

#### **RELH 410 History of the Christian Church**

4

Prerequisite: ENGL 212 (minimum grade of D-)

History of the development of the Christian church from the first century to modern times. Spring semester.

# Religion - Biblical Languages

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **RELL 171 Beginning New Testament Greek I**

4

The elements of Greek grammar and basic vocabulary. Translation from the New Testament combined with a systematic approach to vocabulary building and the rules of biblical Greek syntax. Four lectures and one tutorial session per week. *Fall semester*.

# **RELL 172 Beginning New Testament Greek II**

4

Prerequisite: RELL 171 (minimum grade of D-)

Continuation of RELL 171. Four lectures and one tutorial session per week. Spring semester.

# RELL 273 Intermediate New Testament Greek III

3

Prerequisite: RELL 172 (minimum grade of D-)

Extensive translation of various portions of the New Testament and introduction to the science of exegesis, with emphasis on the acquisition of those skills and tools which will make Greek a useful aid in pastoral work and study. *Fall semester*.

#### **RELL 274 Intermediate New Testament Greek IV**

3

Prerequisite: RELL 273 (minimum grade of D-)

Continuation of RELL 273. Spring semester.

#### **RELL 385 Biblical Hebrew I**

3

A study of the fundamentals of the Hebrew language. The emphasis is on translating portions of the Old Testament by applying vocabulary, grammar, and syntax learned in the class. *Fall semester*.

#### **RELL 386 Biblical Hebrew II**

3

Prerequisite: RELL 385 (minimum grade of D-)

Continuation of RELL 385. Spring semester.

# Religion - Professional Training

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **RELP 125 Introduction to Pastoral Ministry**

2

Prerequisite: Theology majors

A study of the principle elements in pastoral ministry and biblical discipleship through class discussion, observation and report writing. *Spring semester*.

#### **RELP 149 Dynamics of Christian Living**

3

A small group-based class designed to introduce students to the inter-dynamics of personal relationships with others, the power of a relationship with God, and the joys of a life of assurance in salvation. *Spring semester*.

# **RELP 175 How to Study the Bible**

3

Introduces the principles of interpreting the Bible including practical skills in using concordances, Bible dictionaries and commentaries, instruction in how to evaluate and choose a Bible translation, and Bible study for application in personal life. Does not apply toward religion or theology major or minor. *Fall and Spring semester*.

# **RELP 235 Introduction to Youth Leadership**

3

A survey of youth ministry, examining youth culture, the theology of youth ministry, and specific skills to equip and empower students to be effective in ministry to young people. *Spring semester, even years*.

# **RELP 321 Biblical Preaching I**

3

Prerequisite: COMM 105 (minimum grade of D-)

A study of sermon methodology designed to train students to be Biblical preachers. Preaching skills are developed through theory, class, and field experience. Emphasizes narrative and expository preaching. *Spring semester*.

# **RELP 322 Biblical Preaching II**

4

Prerequisite: RELP 321 (minimum grade of D-)

Continuation of RELP 321. Taken in conjunction with the capstone Leadership in Ministry senior year. Fall semester.

# RELP 335 Youth Leadership in the Seventh-day Adventist Church

3

Developing an understanding of youth culture and a theology of youth ministry, this course focuses on the implementation and practice of youth ministry. Its design is to better prepare those interested in lifelong youth ministry, both professional and volunteer. *Spring semester*, *odd years*.

# **RELP 336 Youth Leadership Practicum**

3

Prerequisites: RELP 235 (minimum grade of D-) and RELP 335 (minimum grade of D-)

Internship in Union College Campus Ministries and/or externships in a local academy, Youth Sabbath School, Pathfinder organization, summer camp, or conference office. Open only to Youth Ministry minors. Fall, Spring, and Summer semester, as needed.

# **RELP 361 Church Leadership I**

3

Combines a study of the theology and the practice of church leadership Course topics include: Empowering the church to strategically pursue mission; equipping, motivating, and empowering church members; models of leadership; financial oversight; skills of church governance; visitation; and technology in ministry. Taken in conjunction with RELP 321. *Spring semester*.

# **RELP 362 Church Leadership II**

4

Prerequisite: RELP 361 (minimum grade of D-)

Continuation of RELP 361. Taken in conjunction with the capstone Leadership in Ministry senior year. Fall semester.

# **RELP 465 Personal Witnessing**

3

Designed to help students gain the knowledge and skills needed to share their faith through personal influence, conversation, and Bible studies. Examines the beliefs of other churches and compares them with Adventist beliefs. Laboratory required. Theology majors take in conjunction with the capstone Leadership in Ministry senior year. *Fall semester*.

#### **RELP 466 Public Evangelism**

3

Prerequisite: RELP 321 (minimum grade of D-)

Studies public evangelism practices and develops skills through the preaching, planning, conducting, and follow-up of an evangelism series. Laboratory required. Taken in conjunction with the capstone Leadership in Ministry senior year. Fall semester.

#### **RELP 490 Senior Seminar**

1

As part of the capstone for all Theology majors, this course gives students the opportunity to review and report the competencies they have learned in their academic experience. Specific attention is given to résumé preparation, preparation for job interviewing, and development of a portfolio. Taken in conjunction with the capstone Leadership in Ministry senior year. *Fall semester*.

# Religion - Theological Studies

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### RELT 110 Introduction to Christian Faith and Adventism

3

Prerequisite: Permission of instructor or the Religion program director

The teaching of the Seventh-day Adventist church in the context of other belief systems, designed specifically for those not familiar with or newly introduced to the Seventh-day Adventist church. General education credit is not given for both this course and RELB 115 or RELT 141. Fall and Spring semesters.

#### **RELT 141 Christian Beliefs**

3

Surveys fundamental Biblical doctrines of the Christian Church from a Seventh-day Adventist perspective. General education credit is not given for both this course and RELB 115 or RELT 110. Fall and Spring semesters.

#### **RELT 305 Christian Ethics**

3

Prerequisite: ENGL 212 (minimum grade of D-)

An introduction to the systems and methods used in making ethical decisions viewed from the perspective of the Christian faith. Discusses questions of current interest in the area of personal and social ethics. *Spring and Summer semesters*.

#### **RELT 306 Biomedical Ethics**

3

Prerequisite: ENGL 212 (minimum grade of D-)

An introduction to the worldviews of religion and science in regard to origins, history, and scientific method as they relate to medical and biomedical ethics and decision-making in healthcare and biomedical sciences within a Christian perspective. *Fall semester*.

#### **RELT 337 Christian Theology I**

3

Prerequisite: Theology majors

A systematic study of the major theological tenets of Christianity within the Seventh-day Adventist perspective, informed by their Biblical foundations, their historical formulations, and their contemporary applications. Fall semester.

#### **RELT 338 Christian Theology II**

3

Prerequisite: RELT 337 (minimum grade of D-)

Continuation of RELT 337. Spring semester.

# **RELT 347 World Religions**

3

3

A study of the major religions of the world including traditional religions, Hinduism, Buddhism, the religions of China, Judaism, Islam, and Christianity. The relationship of Christianity to these religions is discussed, including the Christian mission to the world. *Fall semester*.

# RELT 355 Imagination, Theology, and History: The C.S. Lewis & J.R.R. Tolkien Study Tour

A tour that explores the role of imagination in theology as evidenced in the works of C.S. Lewis and J.R.R. Tolkien, as well as a tour of some of the historic locations in England and Wales that influenced their works. Special attention will be given to creatively communicating faith and apologetic principles. *Summer Semester*.

# **RELT 455 Prophetic Guidance in the Advent Movements**

3

Study of the gift of prophecy as a method of divine communication. Special attention is given to the life and writings of Ellen G. White. *Spring semester*.

# Science

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **SCNC 111 Physical Science**

4

Prerequisite: MATH 111 (minimum grade of C) or ALEKS score of 46

Course intended to give the non-science major an insight into the physical world. Emphasis is placed on the scientific method as topics in physics, chemistry, astronomy, meteorology, and geology are explored. One three-hour laboratory per week. This course is designed for elementary education majors. Does not apply toward a science major or minor. *Spring semester*.

#### **SCNC 377 Origins**

3

Prerequisite: Junior standing

A consideration of issues in science and religion as they relate to origins. Consideration is given to interpretation of inspiration and scripture relating to evidence from nature and the scientific method. Data from the biological and physical sciences are evaluated as they relate to earth history and the origin of life. Evidence for change, mechanisms of change, speciation, the fossil record and issues of time are considered. *Spring semester, even years*.

# Sociology

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **SOCI 105 Introduction to Sociology**

3

Introduces the fundamental principles and concepts of sociology. Studies forms and processes of societal organization and social institutions. Teaches sociological theory from a functionalist, conflict and symbolic interactionist perspective. Traditional theorists are discussed. Sociological topics include culture, socialization, stratification, class structure, education, minority groups, and family. *Fall and Spring semesters*.

#### SOCI/INRR 300 Social Dimensions of Disaster

3

Explores how broad concepts such as social conflict and social inequality are manifested in disasters in the United States and internationally. Topics include demographics and disaster behavior distinctions, disaster culture, individual versus group response to disasters and community social systems in relation to pre- and post-disaster situations. More broadly, students will examine the relationship between the social sciences and public policies in emergency management. *Fall semester*.

# **SOCI 315 Marriage and Family**

3

Assists students in their understanding of relationships by examining friendships, courtship, marriage, and family life. Discusses the issues of divorce, single parenting, sexuality, death and dying, finances and pre-marital counseling from a sociological perspective. *Fall semester*.

#### **SOCI 321 Diversity in Society**

3

Prerequisite: SOCI 105 (minimum grade of D-)

This course surveys diversity in society from a sociological perspective. Concepts such as privilege, prejudice, racism, institutional discrimination, and assimilation and pluralism are applied to understanding minority-majority relations in society. A strong emphasis is placed on community engagement through the exploration of course topics. *Fall semester*.

# SOCI/SOWK 337 Interventions with Groups

Prerequisite: PSYC 105 (minimum grade of D-)

Assists students in developing generalist skills in work with couples, families and group levels of practice. Students practice relationship building, problem solving, interviewing, assessment, intervention, termination, and documentation. Special focus is given to the evaluation process with the introduction of qualitative research methods to evaluate and improve practice. *Spring semester*.

# SOCI/SOWK 405 Social, Economic, and Environmental Justice

Prerequisite: ENGL 212 (minimum grade of C)

Basic human rights such as freedom, safety, privacy, an adequate standard of living, health care, and education are examined. Explores the forms and mechanisms of oppression and discrimination. Uses a strength's perspective to advocate for human rights and social and economic needs of vulnerable populations. Includes engagement in practices that advance social and economic justice within local, national and international communities. Spring semester, odd years.

#### SOCI/SOWK 415 Crisis and Resilience

3

3

3

Developing generalist practice skills in crisis management. Fundamentals of crisis including violence, rape, suicide, natural disasters and terrorism with an emphasis on ability not only to survive, but thrive after a crisis. Prepares the student to develop creative coping skills, and promote crisis resolution within themselves as well as with individuals, groups and communities. *Spring semester*.

# Social Work

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **SOWK 115 Introduction to Social Work**

4

Prerequisite: SOCI 105 (minimum grade of D-)

Survey of the field of professional social work. Introduces the history of social work and its professional roles, knowledge base, values, and skills. Explores a variety of professional areas in social work generalist practice to understand the processes, challenges, and joys of social service delivery. Laboratory required. *Spring semester*.

#### SOWK 227 Human Behavior in the Social Environment I

3

Prerequisite: SOWK 115 (minimum grade of D-)

First of a two-course sequence that considers the interaction between humans and the social environment across the lifespan, utilizing multi-dimensional frameworks that underpin generalist social work practice. Through a critical examination of empirically-based theories, students gain an appreciation for the inherent strengths, complexities, and variations in the human experience. Content includes social systems from birth to young adulthood with emphasis on the biological, psychological, social, and spiritual developments. *Fall semester*.

#### SOWK 228 Human Behavior in the Social Environment II

3

Prerequisite: SOWK 227 (minimum grade of D-)

Second of a two course sequence that considers the interaction between humans and the social environment across the lifespan, utilizing multi-dimensional frameworks that underpin generalist social work practice. Through a critical examination of empirically-based theories, students gain an appreciation for the inherent strengths, complexities, and variations in the human experience. Content includes social systems from middle adulthood to late adulthood with emphasis on the biological, psychological, social, and spiritual developments. *Spring semester*.

#### **SOWK 316 Social Welfare Policy**

3

Prerequisite: SOWK 228 (minimum grade of D-)

Studies the history of social welfare and the purpose of social welfare policy at the federal, state, local, and institutional level. Additionally, teaches methods to analyze policy and methods for policy change. Strategies to analyze, formulate, and advocate for policies are demonstrated. *Spring semester, even years.* 

#### **SOWK 336 Social Work Practice I**

Prerequisite: SOWK 228 (minimum grade of D-)

Utilizing a generalist framework for social work with individuals, students integrate knowledge of human behavior and the social environment to deepen their understanding of engagement, assessment, intervention, and evaluation skills on a micro-level. Includes simulations, community engagement projects, and personal reflection. *Fall semester*.

#### SOWK/SOCI 337 Social Work Practice II

3

Prerequisites: SOWK 228(minimum grade of D-) and SOWK 336 (minimum grade of D-)

Building on the knowledge, values, and skills introduced in Practice I, this course assists students in developing generalist skills in work with couples, families, and group levels of practice. Students integrate knowledge of human behavior and the social environment to deepen their engagement, assessment, intervention, and evaluation skills on a mezzo-level. Includes simulations, community engagement projects, and personal reflection. *Spring semester*.

#### SOWK 345 Social Work in Healthcare

3

Prerequisite: SOWK 228 (minimum grade of D-)

Provides basic orientation to the new generalist practitioner preparing to work as a medical social worker in a hospital, nursing home or outpatient setting. Surveys the field of medical social services and the various groupings of illnesses, including their impact on individual, family, and community systems. Fall semester, even years.

#### **SOWK 390 Research Seminar**

2

Prerequisite: PSYC 341 (minimum grade of C)

Students will apply the principles of research design learned in the Research Methods classes to design and carry out a research project, analyze resulting data and write a project report following the APA guidelines for scholarly manuscripts. Students will also create a poster presentation of their projects and present them at a relevant venue. *Fall semester*.

# SOWK/SOCI 405 Social, Economic, and Environmental Justice

3

Prerequisite: SOWK 228 (minimum grade of D-) and ENGL 212 (minimum grade of C)

Basic human rights such as freedom, safety, privacy, an adequate standard of living, health care, and education are examined from a social work perspective. Explores the forms and mechanisms of oppression and discrimination. Uses a strength's perspective to advocate for human rights and social and economic needs of vulnerable populations. Includes engagement in practices that advance social and economic justice within local, national and international communities. Spring semester, odd years.

#### SOWK/SOCI 415 Crisis and Resilience

3

Prerequisite: SOWK 228 (minimum grade of D-)

Students develop generalist practice skills in crisis management. Fundamentals of crisis including violence, rape, suicide, natural disasters and terrorism with an emphasis on ability not only to survive, but thrive after a crisis. Prepares the student to develop creative coping skills through self-care, and promote crisis resolution within themselves as well as with individuals, groups and communities. *Spring semester*.

#### **SOWK 437 Social Work Practice III**

3

Prerequisite: SOWK 336 (minimum grade of D-)

This course is designed to teach entry level macro practice skills from a generalist perspective. Students are introduced to the knowledge base, values, and skills in research-informed community and organizational practice to advance social, economic, and environmental justice. Includes simulations, community engagement projects, and personal reflection. Laboratory required. *Fall semester*.

# SOWK 475 Field Practicum

1-12

Prerequisites: SOWK 228 (minimum grade of C) and SOWK 336 (minimum grade of C) and full admission into the social work program

The field practicum serves as a link between knowledge gained in the classroom and the practice of social work from a generalist perspective. The course is designed to enhance the student's ability to apply social work values, theory, skills and knowledge to a broad range of systems. Students complete a total of 480 hours in a field placement. Placements are completed over a one or two semester plan in the senior year. Attendance at the weekly seminar is required. *Fall and Spring semesters*.

# Spanish

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# **SPAN 101 Beginning Spanish**

3

Introduction to basic Spanish conversation, structure, vocabulary, and culture. Includes dictations, simple readings, written exercises, with the emphasis on oral communication. Laboratory required. Fall semester.

# SPAN 102 Beginning Spanish

3

Prerequisite: SPAN 101 (minimum grade of D-)

Continuation of SPAN 101. Spring semester.

# Spark

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

# SPRK 100 Design Your Life

1

This structured group coaching course is for students interested in learning more about themselves to create a meaningful life. Students will engage in a series of reflective activities over the course of the semester to help them know themselves, serve profoundly, and find their purpose. These activities are designed to help identify ways to "Build a Better You". *Spring semester*.

# **Union College Student Mission Service**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### UCSM 205 Introduction to Overseas Service

2

An orientation course limited to those who have applied as student missionaries that prepares them for service by focusing on cross-cultural mission ministry. Does not apply toward religion general education requirement. *Spring semester*.

#### **UCSM 490 Student Mission Service I**

6

Prerequisite: Permission of Religion Program Director or Vice President for Spiritual Life

Credit for service as a student missionary serving in an official General Conference recognized call or as arranged with the Union College Student Mission Director. Credits do not count toward graduation. Graded CR/NC. May be repeated. *Fall semester*.

#### **UCSM 491 Student Mission Service II**

3

Prerequisites: UCSM 490 (minimum grade of CR) and Permission of Religion Program Director or Vice President for Spiritual Life

Continuation of the student mission service. Credits do not count toward graduation. Graded CR/NC. May be repeated. Spring semester.

# **UCSM 495 Student Mission Service III**

Prerequisite: UCSM 490 (minimum grade of CR)

Corequisite: UCSM 491

Continuation of the student mission service. Credits count toward graduation as elective credit only. Graded CR/NC. May be repeated. *Spring semester*.

# **Union College Task Force Service**

Students can request instructor permission to take a course, if they don't meet the stated prerequisites, unless instructor permission is specifically listed as a prerequisite.

#### **UCTF 490 Task Force Service I**

6

3

Prerequisite: Permission of Religion Program Director or Vice President for Spiritual Life

Credit for service as a task force worker serving in an official North American Division recognized call or as arranged with the Union College Student Mission Director. Credits do not count toward graduation. Graded CR/NC. May be repeated. *Fall semester*.

#### **UCTF 491 Task Force Service II**

3

Prerequisites: UCTF 490 (minimum grade of CR) and Permission of Religion Program Director or Vice President for Spiritual Life

Continuation of the task force service. Credits do not count toward graduation. Graded CR/NC. May be repeated. Spring semester.

## **UCTF 495 Task Force Service III**

3

Prerequisite: UCTF 490 (minimum grade of CR)

Corequisite: UCTF 491

Continuation of the task force service. Credits count toward graduation as elective credit only. Graded CR/NC. May be repeated. Spring semester.

# **College Organization**

# Board of Trustees (as of October 2020)

Gary Thurber, Chair	NE	Rob Koch	KS
Gil Webb, Vice Chair	NE	Jack Krogstad	IA
Vinita Sauder, Secretary	NE	Rebecca Krueger	NE
Harold Alomia	NE	Rick Krueger	NE
Ken Bacon	CO	Kevin Lang	CA
Ed Barnett	CO	Justin Lyons	MN
Steve Bascom	IA	James McArthur	NE
Roger Bernard	KS	Jason Moses	TX
Mardian Blair <sup>34</sup>	FL	Darlington Mundende	OK
Ron Carlson	KS	Troy Peoples	NE
Steven Chavez	ОН	Jeff Peterson	TN
Dean Coridan	IA	Barbara Prowant	WA
Morre Dean	CO	Rich Reiner	FL
Cary DeCamp	KS	Susan Reiswig-Haines	ОН
Garth Fletcher	NE	Sam Shum	CT
Doug Goetz	CO	Gelerie Stenbakken	CO
Mildred Greer	MO	Kent Thompson	NE
LouAnn Howard	NE	Mark Weir	ND
Sam Huenergardt	KS		

By Invitation: Director, North American Division Higher Education Cabinet

# Committees of the Union College Board of Trustees:

Academic Committee
Audit Committee
Audit Committee
Campus Life and Retention Committee
Compliance Committee
Compliance Committee
Finance and Development Committee

Investment Committee
Master Planning and Facilities Committee
Marketing and Recruitment Committee
Trusteeship Committee

Current membership of these committees can be found in the Union College President's Office.

# **Union College Presidents**

omon conege i residents			
W. W. Prescott	1891-1893	M. L. Andreasen	1931-1938
J. W. Loughhead	1893-1896	A. H. Rulkoetter	1938-1942
E. B. Miller	1896-1897	E. E. Cossentine	1942-1946
N. W. Kauble	1897-1898	R. W. Woods	1946-1950
W. T. Bland	1898-1901	H. C. Hartman	1950-1957
L. A. Hoopes	1901-1904	D. J. Bieber	1957-1964
C. C. Lewis	1904-1910	R. W. Fowler	1964-1970
Frederick Griggs	1910-1914	R. H. Brown	1970-1973
H. A. Morrison	1914-1922	M. O. Manley	1973-1980
O. M. John	1922-1924	Dean L. Hubbard	1980-1984
W. W. Prescott	1924-1925	Benjamin R. Wygal	1985-1985
Leo Thiel	1925-1928	John Wagner	1986-1991
P. L. Thompson	1928-1931	John Kerbs	1991-1998

David C. Smith 1998-2011 Vinita Sauder 2014-John Wagner 2011-2014

# College Administration 2021-2022

Dates in parentheses indicate the date of current appointment.

# Officers of the College

Vinita Sauder (2014-) President

BA 1978, Southern Missionary College; MBA. 1989, University of Tennessee-Chattanooga; PhD 2008, Andrews University

**Frankie Rose** (2016-) Vice President for Academic Administration, Associate Professor BS 2002, Union College; PhD 2009, University of Missouri

**Steve Trana** (2016-) Vice President for Financial Administration BS 1985, Union College

#### Major Administrative Officers

Kim Canine (2016-) Vice President for Student Services BA 2000, MBA 2001, La Sierra University;

**LuAnn Davis** (1992-) Vice President for Advancement BS 1982, Union College; MBA 1996, University of Nebraska-Lincoln

**Michelle Velazquez-Mesnard** (2017-) Vice President for Enrollment Services BS 1989, Pacific Union College; MS 2001, Golden Gate University

#### Staff Emeriti 2021-2022

Janella Abbey, Staff Emerita, Administrative Assistant for Academic Administration

Linda Becker, Administrative Emerita, Vice President for Student Services

Tom Becker, Staff Emeritus, Director of Information Systems

Osa-Karin Berg, Staff Emerita, Director of Records Office

Roger Binder, Staff Emeritus, Plant Services, Boiler Operator

Gary Bollinger, Administrator Emeritus, Vice President for Financial Administration

Randy Bollinger, Staff Emeritus, Grounds Supervisor for Plant Services

Karla Britain, Staff Emerita, Technical Services Librarian for Ella Johnson Crandall Memorial Library

Martha Cash, Staff Emerita, Cashier for Accounting Office

Tommy Cash, Staff Emeritus, Chief Accountant for Accounting Office

Cheryl Crawford, Staff Emerita, Manager of Union Manor

Wilma Darcy, Staff Emerita, Director of Transportation & Housing, Admin. Assistant for Financial Administration

Dean Dittberner, Staff Emeritus, Operations Manager of Information Systems

Jennifer Enos, Staff Emerita, Enrollment and Student Financial Services

Buell Fogg, Staff Emeritus, Associate Chaplain for Campus Ministries

LouAnn Fredregill, Staff Emerita, Executive Administrative Assistant

Phyllis Gorton, Staff Emerita, Larson Lifestyle Center, Pool Manager

Sharon Gregory, Staff Emerita, Office Manager for Division of Human Development

Anita Kidwiler, Staff Emerita, Associate Director of Records

Stan Hardt, Staff Emeritus, Student Services Counselor

Mary Jean Horst, Staff Emerita, Office Manager for Larson Lifestyle Center

Harvey Meier, Staff Emeritus, Controller

Evelyn Lucas, Staff Emerita, Library Periodicals and Custodial Library

LeAnn Merth, Staff Emerita, Dean of Women for Rees Hall

Leona Murray, Administrator Emerita, Director of Enrollment Services

Bernie Rieke, Staff Emeritus, Baker at Union Market

Malcolm Russell, Administrative Emeritus, Vice President for Academic Administration

Sharon Russell, Staff Emerita, Coordinator for Ortner Conference & Guest Services

Jonathan Shields, Staff Emeritus of Teaching learning Center

Linda Skinner, Staff Emerita, Director of Donor Relations

Ric Spaulding Staff Emeritus, Director of Larson Lifestyle Center

Doug Tallman, Staff Emeritus, Dean of Men

Sandy Tallman, Staff Emerita, Office Manager for Division of Religion and Human Health and Performance

Patricia Venis, Staff Emerita, Cook for Union Market

John Wagner, Administrator Emeritus, President of Union College

#### Faculty Emeriti 2021-2022

Don Abbey, PhD, Professor Emeritus of Biology

Chris Blake, MA, Associate Professor Emeritus of English and Communication

Kathy Bollinger, MEd, Associate Professor Emerita of Education

Sylvester Case, MA, MDiv, Professor Emeritus of Religion

Arlie Fandrich, MAT, Professor Emeritus of Computer Science

Robert Fetrick, MDiv, Associate Professor Emeritus, of Religion

Bill Fitts, PhD, Professor Emeritus, English and Communication

Wayne Fleming, EdD, Professor Emeritus of Health and Human Performance

Barry Forbes, PhD, Professor Emeritus of Business and Computer Science

George Gibson, PhD, Professor Emeritus of History and Economics

Lowell Hagele, EdD, Professor Emeritus of Mathematics

Cliff Korf, MPAS, Professor Emeritus of Physician Assistant Studies

Jenienne Kriegelstein, MEd, Assistant Professor Emerita of Education and George Stone School

Valeree Krueger, MSN, Associate Professor Emerita of Nursing

Daniel Lynn, DMA, Professor Emeritus of Music

Marilyn McArthur, PhD, Professor Emerita of Nursing

Jim McClelland, MA, Professor Emeritus of Art

Robert Murray, PhD, Professor Emeritus of Music

Ralph Neall, PhD, Professor Emeritus of Religion

Keith Riese, MSEE, Professor Emeritus of Engineering

Charlotte Schober, MSN, Associate Professor Emerita of Nursing

Karl-Heinz Schroeder, MA, Professor Emeritus of History

Peggy Wahlen, MA, Associate Professor Emerita, English and Communication

# Faculty 2021-2022

Date(s) in parentheses indicate years of faculty service at Union College

Fara Adams (2018-) Lecturer of Occupational Therapy Assistant Studies

AS 2000, Clarkson College; BS 2020 Union College

Peter Adams (2018-) Assistant Professor of Education; Program Director of Education

BS 1989 Union College, MA 1999, La Sierra University

Edward M. Allen (2005-) Professor of Religion; Academic Dean; Program Director of Leadership, Library, Music,

Professional Excellence, and Religion

BA 1975, Loma Linda University; MDiv 1979, Andrews University; DMin 1991, PhD 2008, Fuller Theological Seminary

Ramon Araujo (2020-) Associate Professor of Music

MM 1998, Texas Tech University; MME 2003, Texas Tech University

Christopher Banks (2015-) Assistant Professor of International Relations

BA 2003, Brown University; MIA 2006, Columbia University

Kelly Boyd (2010-) Associate Professor of Nursing

BSN 2002, Union College; MSN 2013, Nebraska Wesleyan University

Christina Burden-Page (2016-) Associate Professor of Biology

BS 2006, MS 2009, Andrews University; PhD 2016, Arizona State University

Susan Byers (2016-) Associate Professor of Education

BS 1986, Union College; MA 1993, Andrews University; PhD 2020, Central Michigan University

Richard Clark (2012-) Professor of Chemistry

BA 1979, Union College; PhD 1992, Kansas State University

Tanya R. Cochran (2005-) Professor of English; Program Director of English

BA 1995, Southern Adventist University; MA 2000, University of Tennessee-Chattanooga; PhD 2009, Georgia State University

Pam Cotton (2017-) Assistant Professor of Education

BS 1989, Union College; MA 1997, California State University

Elizabeth Davis (2017-) Assistant Professor of Social Work; Program Director of Social Work

BSW 2001, MSW 2003, Andrews University

Jody Detwieler (2012-) Assistant Professor of Social Work

BSW 2004, Union College; MSW 2005, Walla Walla University

Jack Dougan (2019 -) Assistant Professor of Business

BS1982, BA 1982, Union College; MBA 1986, UCLA Anderson School of Management

Jaycob Edwards (2019-) Assistant Professor of Physician Studies

BS 2014, University of Nebraska Lincoln; MPAS 2018, Union College

Debbie Eno (2003-) Associate Professor of Nursing; Academic Dean

BS 1999, Union College; MSN 2004, University of Phoenix

Larinda Fandrich (2014-) Associate Professor of Nursing

BSN 1986, Union College; MSN, MHA 2014, University of Phoenix

Kristine Follett (2010-) Associate Professor of Nursing

BSN 1995, Southwestern Adventist University; MSN 2008, Southern Adventist University; DNP 2020, Creighton University

Bruce Forbes (2000-) Professor of Art and Graphic Design; Program Director of Art & Design

BS 1986, Union College; MFA 1996, Savannah College of Art and Design

Lisa L. Forbes (2002-) Professor of Accounting and Finance; Program Director of Business Administration BS 1992, Union College; MBA 1995, University of Nebraska-Lincoln; DBA 2016, Anderson University

Melanie Gabbert (2008-) Associate Professor of Psychology

BS 1992, Union College; MA 1995, Andrews University

Tracy Hagele (2014-) Assistant Professor of Nursing

BSN 1993, Union College; MSN 2015, American Sentinel University

Megan Heidtbrink (2013-) Associate Professor of Physician Assistant Studies; Academic Dean

BA 2006, Tulane University; MPAS 2010, Union College

Ben Holdsworth (2009-) Professor of Religion

BA 1980, Columbia Union College; MBA 1987, Florida Institute of Technology; MA 2003, Newbold College; PhD 2010, University of Durham

Trudy Holmes-Caines (1994-) Professor of Psychology; Program Director of Psychology

BA 1986, West Indies College; MA 1991, PhD 1995, Andrews University

**Lesa Kean** (2014-) Associate Professor of Mathematics BS 1994, Union College; MA 2006, PhD 2012, Illinois Institute of Technology

**Kyle Kuehmichel** (2017-) Assistant Professor of International Rescue and Relief BS 2010, Union College; MS 2019, Grand Canyon University

**Tim Kuntz** (2017-) Associate Professor of Physician Assistant Studies BS 2004, Union College; MPAS 2012, University of Nebraska Medical Center

**Dwain Leonhardt** (1996-) Professor of Physician Assistant Studies BA 1972, Union College; MD 1975, Loma Linda University

Ricky Little (2015-) Professor of Music BA 1980, Oakwood College; MA 1981, DMA 1985, The Ohio State University

**Sharlene Martinez** (2021-) Instructor of Nursing BSN 2011, Union College

**Corraine McNeill** (2013-) Associate Professor of Biology; Program Director of Biomedical Science BS 2005, Randolph-Macon Woman's College; MS 2008, PhD 2012, University of Florida

Seth McNeill (2014-) Assistant Professor of Engineering; Program Director of Computer Science & Math BS 2001, Walla Walla University; MS 2004, PhD 2009, University of Florida

**Ruth Mendenhall** (1986-) Associate Professor of Nursing BS 1980, Union College; MSN 1986, University of Texas at Arlington

**Salvador Moguel** (2006-) Associate Professor of Biology BS 1983, Autonomous University of Guadalajara; MS 1995, State University of New York; PhD 2004, New Mexico State University

Elysia Ockenga (2011-2014, 2015-) Assistant Professor of Nursing BSN 2002, Union College; MSN 2009, Nebraska Wesleyan University

Nicole Orian (2007-) Professor of Nursing; Program Director of Nursing BSN 2004, Union College; MSN 2009, Nebraska Wesleyan University; DNP 2016, University of Pittsburgh

**Alan Orrison** (2017-) Associate Professor of Graphic Design BA 2006, Southern Adventist University; MFA 2012, Savannah College of Art and Design

**Kenneth Osborn** (2011-) Professor of Chemistry BS 1996, Missouri Western State College; PhD 2003, University of Kansas

Lori Peckham (2017-) Assistant Professor of English and Communication BA 1984, Pacific Union College; MA 1986, La Sierra University

Michelle Petersen (2009-) Professor of Physician Assistant Studies BS 2000, University of Nebraska-Lincoln; MMS 2004, Midwestern University

**Doug Phelps** (2018-) Assistant Professor of Physician Assistant Studies BS 1993, Creighton University; BS 2001, Union College; MPAS 2002, University of Nebraska Medical Center

**Seth Pierce** (2019 -) Assistant Professor of Communications; Program Director of Communication BA 2003, Union College; MDiv 2007, Andrews University; PhD 2019, Regent University

Rebecca Randa (2014-) Associate Professor of Nursing

BSN 2007, Union College; DNP 2018, Capella University

Shawntae Razo (2013-) Professor of Health and Human Performance; Program Director of Health and Human Performance

BS 2011, DPT 2011, Loma Linda University

David Rickard (2019 -) Assistant Professor of Business

BSBA 2002, University of Phoenix; MBA 2004, Colorado Technical University

Ellen Rose (2012-) Assistant Professor of Nursing

BSN 2002, Union College; MSN 2016, Bryan College of Health Sciences

**Emily Rumery** (2019-) Assistant Professor of Occupational Therapy Assistant; Program Director of Occupational Therapy Assistant

BS 2013, Nebraska Wesleyan University; ODT 2016, Creighton University

Andrew Saunders (2017-) Assistant Professor of International Rescue and Relief

BS 2012, Union College; MIDA 2017, Andrews University

**Kelila Saunders** (2017-) Assistant Professor of International Rescue and Relief; Program Director of International Rescue and Relief

BS 2013, Union College; MIDA 2018, Andrews University

Thomas Toews (2011-) Professor of Religion

BA 1993, Pacific Union College; MDiv 1995, PhD 2011, Andrews University

Jodie Trana (2018-) Assistant Professor of Business

BS 1985, Union College; MBA 1990, Avila University

**Benjamin Tyner** (2010-) Professor of History; Program Director of Politics, History and International Relations BA 2002, La Sierra University; MA 2008, PhD 2015; City University of New York

**Debbie Unterseher** (1990-) Associate Professor of Computer Information Systems

BS 1987, Union College; MA 1993, University of Nebraska-Lincoln

Carrie Wolfe (1999-) Professor of Chemistry; Program Director of General Education BA 1990, Union College; PhD 1995, University of Nebraska-Lincoln

Austin Young (2017-) Assistant Professor of Physician Assistant Studies

BS 2006, University of Nebraska-Kearney; MPAS 2009, University of Nebraska Medical Center

**Rick Young** (2011-) Assistant Professor of International Rescue and Relief; Academic Dean BA 2009, MEd 2011, Regis University

#### Librarians Holding Faculty Rank

Bliss Kuntz (2018-) Research and Instruction Librarian, Lecturer

BS 2012, Western Kentucky University

Jill Donald (2020-) Public Services Librarian, Lecturer

BS 2018, Union College

# **Teachers at George Stone Laboratory School**

Jacquelyn Simpson (1989-95, 2000-) Assistant Professor of Education

BS 1988, Union College; MA 1993, La Sierra University

# Stacy Simpson (2020-)

BS 2019, Union College

#### **Adjunct Lecturers**

These individuals carry continuing teaching responsibilities

Harold Alomia, MDiv, Religion

Brian Baskerville, BS, Philosophy History, &

International Relations Steve Bassett, BS, Education

Linda Becker, PhD, Leadership

Kelly Bolz, MS, Occupational Therapy Assistant

Rich Carlson, PhD, Religion

Sara Cooper, EdD, General Education

Cid Coto, BS, Art & Design

Cathleen Cronk, MSW, Social Work Larry Crouch, PhD, Physician Assistant LuAnn Davis, MBA, Communication

Maria dos Santos, BS, Health & Human Performance

Don Farrell, BA, Art & Design

Santiago Fernandez, MDiv, Religion

Jason Gildow, PhD, English Amy Golter, MSN, Nursing

Becky Gustafson MA, Education

Michael Halfhill, MA, Religion Mic Henton, MDiv, Religion

Joann Herrington, MA, Education

Jacob Kimberly-Martinez, AS, Computer Science &

Math

James McClelland, MA, Art & Design

Mike Mennard, MA, English

Pinky Mohapatra, MS, Occupational Therapy Assistant

Jill Morstad, PhD, English Julia Noyes, MA, Art & Design

Matt Olson, BS, Art & Design

Kathleen Packard, PharmD, Physician Assistant Brent Page, BS, Computer Science & Math

Michael Paradise, MDiv, Religion

Keith Riese, MSEE, General Education Bronson Riley, BS, Physician Assistant

Aaron Rogge, BA, Computer Science & Math

Jennifer Schall, BS, Communication Mary Schleider, EdD, Education

David Shaw, PhD, Physician Assistant

Amy Smith, MFA, Art & Design Jacque Smith, MS, Communication

Kirsten Smith, EdD, General Education

Stacy Stocks, MA, Leadership

Gregg Stubbendieck, PhD, Computer Science & Math

David Subiabre, MA, General Education

Lena Toews, PhD, Religion Peggy Whalen, MLS, English

Derek Williams, MS, Computer Science & Math

Leslie Working, PhD, Philosophy, History, &

International Relations

#### Adjunct Clinical Instructors in Nursing

These individuals carry continuing clinical instructor responsibilities

Nicole Badura, MSN Lindsay Beil, MSN Kristen Bern, BSN Whitney Bernecker, BSN Chad Brown, BSN Jennifer Carlson, BSN Leonard Finn, BSN Robyn Gasseling, BSN S. Ameera Guenzel, BSN Kayla Hallock, BSN Mirisa Hernandez, BSN Bronna Hooper, BSN Leah Logan, MSN Simon Nyamongo, BSN Tami Orton, BSN Sandy Prindle, BSN Renata Richardson, BSN Molly Sass, MSN Amber Schuler, MSN Rebekah Trevino, MSN Jacqueline Weise, BSN Jill Weyers, MSN

# **Individual Music Instructors**

Evelyn Araujo, MM Stephen Cantarero BMU Marina Fabrikant, DMA Natalie Francel-Stone, MM Sarah Gilbert, MM Elizabeth Grunin, DMA Kevin Madden, MM Catherine Martinez, MM Daniel Martinez, BS Lisa Nielsen, MM Lisette Deemer Parks, MM Darcy Jo Pearcy, MM Jennifer Reeves, DMA Brent Shaw, MM

# Physician Assistant Preceptors

Amulya Abburi, MD Sigfredo Acosta Perez, MD Anthony Akainda, MD Beth Anderson, PA-C Grant Anderson, PA-C Andrew Arends, PA-C Marta Atalla, MD Bhavish Aubeelauck, MD Nagi Ayoub, MD Danielle Bachman, PA-C Lee Bailey, MD Ann Baird, PA-C Brianna Bankson, PA-C Amy Barker, MD Fran Barnes, PA-C Craig Bartuff, MD Rodney Basler, MD Brittney Bauer, PA-C Ron Bear, MD Thomas Beutler, MD Giana Boyle, PA-C Deb Braun, APRN Jeff Breitkreutz, PA-C Stanton Brown, PA-C Stephen Brown, MD Kim Brown, PA-C Benjamin Byers, DO Tiffany Byrkit, PA-C Tara Callison, PA-C Raymond Carlson, DO Francisca Carlson, MD Brooke Cast, PA-C Rebecca Chittenden, PA-C Dianna Clyne, MD Jeffery Coffman, MD Amber Crawford, DO Isam Dafdony, MD Chris Darst, PA-C Mark Davis, MD Lisa Degen, PA-C Sean Denney, MD Andy Dibelka, PA-C Emily Dierks, PA-C Maja Djordjevic, MD Chelsie Doane, PA-C David Duensing, DO Walter Duffy, MD Robert Dugas, MD Emma Edwards, PA-C Kelly Fields, APRN Brett Fischer, MD Jen Flider, PA-C Jason Forsythe, PA-C Erich Fruehling, MD

Trinity Fuss, PA-C

Steve Gabriel, PA-C Amy Garwood, MD Matthew Gatlin, PA-C Hugo Gonzalez, MD Stacy Goodrich, MD Sarah Grady, PA-C Reba Grovijohn, PA-C Daniel Growney, MD Brian Grubbs, MD Kelley Hanau, APRN Jenny Hanshaw, APRN Heidee Hanson, PA-C Zijun Hao, MD Don Harmon, PA-C Brenda Haussermann, APRN Mark Heibel, MD Sandra Henry, PA-C Mitchell Henry, MD Emily Hensley, APRN Tamara Herold Mathieu Hinz, MD Jed Hollenbeck, PA-C Susan Howard, MD Mark Howerter, MD Jeff Hudson, PA-C Benjamin Hung, MD Steven Husen, MD Brooke Huxoll, PA-C Bryan Hynes, MD Imtiaz Islam, MD Mohammed Jasser, MD Gabriel Jefferson, PA-C Andrea Johnson, PA-C Lisa Johnson, PA-C Renee Johnson, FNP-BC Christopher Kampfe, PA-C Paul Kampfe, MD Sean Kenney, MD Tami Kester Ray Kidwell, MD Kyleen Klinkebiel, PA-C Robert Koch, MD Narayana Koduri, MD Kendee Koster, PA-C Jim Krahling, PA-C Ashley Krohn, PA-C Karinne Kulwicki, PA-C Kit Kwan, PA-C John Lammli, MD Rex Largen, MD Shawn Lawrence, MD Yajuan Leonard, APRN

Heather Liss, PA-C

Brett Loseke, PA-C

Jason Loden, DO

James Macer, MD John Majerus, MD Todd Martin, MD Roy Maurer, PA-C Kylie Maurer, PA-C Katelyn Mazuch, CNM Robert McKeeman, MD Anna Menter, PA-C Matt Metschke, PA-C Gary Milius, MD Todd Miner, MD Bryan Mizner, PA-C Jon Morton, MD Stephen Nagengast, MD Sundee Naing, MD Ahsan Nassem, MD Nila Notovny, MD Janet Oberhauser, PA-C David Oberst, PA-C Stanley Okosun, MD Abbie Oran, PA-C Todd Orchard, MD Rodett Osorio, PA-C Michael Pace, MD Dhaval Patel, MD Deann Paulson, MD Susan Peterlin, PA-C Kaitlyn Peterson, PA-C Iodi Pfeifer, PA-C Hanna Pick, PA-C Robert Pitsch, MD Lydia Plioplis, PA-C Brad Plouzek, PA-C Jason Potts, MD Tina Recker, PA-C Brian Reger, PA-C Robert Reilly, PA-C Curtis Reimer, MD Matthew Rivard, MD Angie Robb, PA-C Ron Ross, PA-C April Rostvet, PA-C Dave Runnings, MD David Samani, MD Dallas Schlegel, PA-C Kurt Schmeckpeper, PA-C Charles Scholtes, PA-C Karen Schrader, PA-C Alesha Scott, DO Mary Severson, CNP Denni Sewell, PA-C Mohammed Shoiab, MD Zakaria Siddiqui, MD Todd Sorenson, PA-C Jonathan Spencer, D

Greg Stevens, PA-C
Jacqueline Stewart, APRN
Kelsey Stoysich, PA-C
Stephen Swanson, MD
Raymond Taddeuci, MD
Douglas Tewes, MD
Kelli Thomazin, PA-C
Mike Thompson, PA-C
Dane Todd, MD
Yohanes Tot, PA-C
Linda Tucker, PA-C

Michelle Tyser,PA-C Rajani Vanam, MD Sai Vang, CNP Wendy VanSkiver, PA-C Leah Vogel, PA-C David Voight, MD Dave Vuchetich, PA-C Shannon Wakeley, MD Barrett Waldrep, PA-C Amber Warholoski, PA-C Ben Westerfield, PA-C Clint Whitwer, PA-C Timothy Widhalm, MD Chelsea Williams, MD Brent Willman, MD Rick Windle, MD Robert Woods, MD Michael Woods, MD Nick Wulf, MD Juliana Yates, PA-C Jaylene Zanker, PA-C

# Administrative Staff (2021-2022)

Date(s) in parentheses indicate years of employment in the most recent position at Union College.

#### **Academic Services**

**Rachael Boyd** (2020-) Registrar, Director of Records BBA 2008, Southern Adventist University

**Debbie Forshee-Sweeney** (2002-) Director of Disability Information BSW 1994, Union College; MEd 2008, University of Nebraska-Lincoln

**Taryn Rouse** (2017-) Executive Director for Student Success BA 2003, William Penn University

Tim Simon (2020-) Director for Institutional Effectiveness BAT 1979, Union College; MA 1990, Loma Linda University

#### **Campus Services**

Lori Brasuell (1997-) Director of Custodial Service

Chris Canine (2016-) Business Office Operations Specialist AS 1996, BS 1996, Union College; MA 2003, University of Northern Colorado

Maria dos Santos (2019 -) Director of Lifestyle Center BS 2017, Union College

Richard Henriques (2013-) Director of Information Systems

Paul Jenks (2012-) Director of Plant Services

**Terri Lair** (2004-) Manager of Campus Store BA 1985, Union College

#### **Student Life**

**Tammy Adams** (2015-) Director of Student Health BSN 1989, Union College

**Ron Dodds** (1990-) Associate Dean of Men BS 1990, Union College

Lorie Escobar (2009-) Counselor BA 2003, Union College; MA 2010, Doane College

Daniel Force (2019-) Associate Dean of Men

BSE 2008, Union College

Emily Patterson (2014-) Assistant Dean of Women BS 2011, Union College

**Dustin Sauder** (2020-) Director of Campus Safety BS 2017, Union College

Stacy Stocks (2018-) Dean of Students BA 2001, Southern Adventist University; MA 2020, Indiana Wesleyan University

#### **Enrollment and Student Financial Services**

**Brienne Engelhart** (2020-) Director of Visit Experience BS 2018, Union College

**Kevin Erickson** (2007-) Director of Admissions BS 2006, Union College

**Laurie Wheeler** (2018-) Director of Student Financial Services BS 1986, Pacific Union College; MBA 2000, Regis University

#### College Advancement

**Ken Farrow** (2017-) Director of Leadership Giving BS, 2016, University of Nebraska-Lincoln

**Stephanie Meyer** (1989-) Director of Scholarships & Special Events BS 1989, Union College

**Jennifer Schall** (2017-) Director of Major Gifts BS 2005, Union College

# **Integrated Marketing Communications**

**Scott Cushman** (2006-) Director of Digital Communications BA 2003, Union College

**Kim Peckham** (2018-) Director of Communication Strategy BA 1981, Union College

**Steve Nazario** (1997-) Director of Visual Communication BA 1980, Loma Linda University

**Ryan Teller** (2016-) Executive Director of Integrated Marketing Communication BA 1997, Union College

# Financial Administration

**Alan Ashcraft** (2019-) Senior Accountant BS 1977, Southern Adventist University

**Michelle Current** (2018-) Director of Student Accounts BS 2011, Union College

**Lisa R. Forbes** (2015-) Director for Human Resources BA 2007, Doane College

Jonathan Rickard (2017-) Controller

BS 2000, Pacific Union College; MBA 2002, University of California-Riverside

# Administrative Councils (2021-2022)

#### President's Council

Vinita Sauder, President, Chair Kim Canine, Vice President for Student Services LuAnn Davis, Vice President for Advancement Ken Osborn, Faculty Senate Chair Frankie Rose, Vice President for Academic Administration Steve Trana, Vice President for Financial Administration Michelle Velazquez-Mesnard, Vice President for Enrollment Services

#### **Academic Council**

Frankie Rose, Vice President for Academic Administration, Chair Edward Allen, Academic Dean Rachael Boyd, Registrar, Director of Records Tanya Cochran, Director, English Program Debbie Eno, Academic Dean Elizabeth Davis, Director, Social Work Program Stacy Flores, Associate Registrar Bruce Forbes, Director, Art & Design Program Lisa L. Forbes, Director, Business Administration Program Debbie Forshee-Sweeney, Director of Disability Information Megan Heidtbrink, Program Director, Physician Assistant Studies Trudy Holmes-Caines, Director, Psychology Program Lesa Kean, Associate Professor of Mathematics Bliss Kuntz, Library Director Corraine A. McNeill, Director, Biomedical Science Program Seth McNeill, Director, Computer Science & Math Program

Nicole Orian, Director, Nursing Program Seth Pierce, Director, Communications Program Shawntae Razo, Director, Health and Human Performance Program Taryn Rouse, Executive Director of Student Success Emily Rumery, Director, Occupational Therapy Assistant Program Kalie Saunders, Director, International Rescue and Relief Program Ben Tyner, Director, Politics, History & International Relations Program Carrie Wolfe, Director, General Education Program

# Dean's Council

Stacy Stocks, Chair, Dean of Students Ron Dodds, Associate Dean of Men

Rick Young, Academic Dean

Daniel Force, Associate Dean of Men Emily Patterson, Assistant Dean of Women

# Index

Academic Advising	29	Computing	89
Academic Amnesty	35	Contact Information	3
Academic Course Load	29	Contents	2
Academic Information	29	Course Cancellation	30
Academic Minors	42	Course Descriptions	161
Academic Recognition at Graduation	41	Course Numbers	29
Academic Resources	23	Credit Balances	12
Academic Sanctions	36	Credit Balances	12
Academic Year Calendar	4	Credit by Examination	32
Academic Year Study Abroad	27	Dean's List	30
Accounting	75	Disability Information	25
Accreditation	6	Education	92
Add/Drop Deadline	30	Education, Biology	59
Adjunct Clinical Instructors in Nursing	239	Education, Certification	94
Adjuncts	239	Education, Chemistry	82
Administration Staff	239	Education, English Language Arts	90
Administrative Councils	241	Education, Field Endorsements	94
Admission to the College	7	Education, History	109
Admission, Advanced Pre-Physician Assistant	61	Education, Mathematics	128
Admission, Nursing	138	Education, Music (K-12)	131
Admission, OTA	145	Education, Religion	152
Admission, Physician Assistant	51	Education, Science	154
Adventist Colleges Abroad	27	Education, Secondary	93
Alternative Programs	32	Education, Social Science	109
Art	57	Education, Subject Endorsements	94
Assessment	38	Education, Vocal Music	131
Associate Degree Requirements	40	Emergency Medical Services	115
Associate General Education	45	Employment Opportunities	15
Athletics Philosophy	21	English	90
Attendance	36	Exercise Science	105
Auditing Courses	30	Faculty	233
Baccalaureate Bonus Program	10	Family Educational Rights and Privacy Act (FERI	
Bachelor General Education	43	•	20, 38
Bachelor's Degree Requirements	40	Federal Financial Aid	14
Best of Both Worlds	10	Final Examination Schedule and Exceptions	37
Biomedical Science	59	Financial Aid Eligibility	10
Board of Trustees	231	Financial Information	11
Bulletin for Graduation	40	Foreign Language Studies	100
Business Administration	75	Free Application for Federal Student Aid (FAFSA	
Campus Dining Services	20	General Education	43
Campus Health	20	General Studies	32
Changes in Registration	30	Grades	34
Changes to Current Bulletin	39	Graduation Requirements	40
Charges, Misc.	12	Graduation Requirements, Physician Assistant	54
Chemistry	82	Graphic Design	102
Class Standing	29	Grievance Process	22
Collection Policy	12	Guaranteed Education	ç
College Administration	232	Guest Students	Ç
College Organization	231	Health and Human Performance	105
College-Owned Housing	20	Health Insurance	21
Commencement	40	History	109
Communication	86	Ignite	8
Computer Labs	24	Information Systems	23
Computer Science	89	Informational Technology	89

Integrity of Scholarship	37	Professional Excellence	47
Intercollegiate Sports	21	Provisional Acceptance	8
International Relations	113	Psychology	148
International Rescue and Relief	115	Refund Policy	11
International Students	7	Registration	30
Intramural Sports	21	Religion	150
Leadership Minor	126	Rescue & Relief/Allied Health	115
Library, Ella Johnson Crandall Memorial	23	Residence Life Policy	20
Master of Physician Assistant Studies	50	Residency Requirements	41
Mathematics	128	Scholarships	14
Motor Vehicles	21	Second Degrees	41
Multiple Majors	41	Social Work	156
Music Instructors	237	Spark	8
Music Performance	131	Student Life Agreement	19
Music	131	Student Life and Services	19
New Student Orientation	30	Student Mission and Task Force Credits	37
Nursing	138	Student Right to Know Act Graduation Rate	39
Occupational Therapy Assistant	145	Student Success	24
Online Courses	29	Studio for Writing and Speaking	25
Payment Arrangements	11	Theology	158
Personal Effects	20	This is Union College	5
Personalized Degree	33	Transcripts and Diplomas	12
Photo Video Imaging	57	Transcripts	39
Physician Assistant	55	Transfer Credits	31
Physician Assistant Instructors	238	Transfer Student Admissions	9
Policy Regarding Student Complaints	21	Tuition and Fees	11
Post Baccalaureate Professional Program	33	Veterans	14, 37
Prerequisites for All Upper Division Courses	29	Withdrawal	31



Contact www.ucollege.edu records@ucollege.edu P 402.486.2529

Union College 3800 South 48th Street Lincoln, NE 68506

