
Master of Arts in Intercultural Studies
Master of Science in Biology
Certificate in International Health Care

The College of Arts and Sciences provides an excellent liberal arts education that is informed by Christian faith and prepares students for life, careers, and service.

- **Excellence driven:** The College of Arts and Sciences is committed to excellence in every aspect of the academy, including teaching, scholarship, and service.
- **Christ-centered:** The College of Arts and Sciences seeks to foster spiritual growth and the development of a vital Christian worldview in both faculty and students.
- **People-focused:** The College of Arts and Sciences consists of faculty and staff committed to modeling the concept of servant leadership.
- **Future-directed:** The College of Arts and Sciences seeks to nurture lifelong learning skills, empowering students and faculty to impact their local and global communities.

To enhance student preparation for professional school, graduate school, or career opportunities.

The Master of Science in Biology is offered through two tracks: Pre-Professional and General Biology. The Pre-Professional track is designed for students who are seeking to be better prepared for their particular health-related professional program. The General Biology track is a broader, more customized program for students who are seeking to further their education or career opportunities through advanced training in Biology. The program includes mentoring and advising for students for both professional programs and career preparation. The Master of Science in Biology is very affordable compared to similar programs around the country, and students who complete advanced training in Biology at Union are extremely well prepared to be successful at the professional level (for more information, please visit the program website at www.uu.edu/msbio).

- Bachelor's degree from accredited college or university; Official transcript(s) showing all course work, completion of baccalaureate degree(s), and all graduate credit previously attempted. Even if withdrawal occurred prior to earning credits and even if those credits do not apply to the current degree being sought, official transcripts must be sent from each institution.
- Minimum undergraduate GPA of 2.5.
- Minimum of 12 undergraduate hours in biology applicable to a biology major.
- Statement of purpose (500-1000 words) which identifies your educational goals and expectations from the program, as well as your primary and secondary career objectives.
- Three letters of recommendation.
- Scores from professional exam required (i.e, GRE, MCAT, PCAT, etc.).

- Must maintain minimum 3.0 GPA
- If not achieved after Fall term, student will be on

- General Student Fee: \$20/hour
- All financial information is subject to change without notice.

Financial aid information for graduate students is available on our website at <http://www.uu.edu/financialaid/graduate/>. Generally, graduate students **may be eligible** for Federal Direct student loans or private alternative student loans (www.uu.edu/financialaid/loans/alternative-lender-list.cfm), depending on the program of study and the eligibility of the borrower. Union University is also approved by the Department for Veterans Affairs to offer educational benefits to veterans, reservists, and dependents of veterans who qualify for Veterans Benefits. Any person who qualifies for VA Benefits should check with the Office of Student Financial Planning as soon as possible after acceptance into a graduate program. Additional external scholarship information may be obtained through www.fastweb.com

501/501L. Invertebrate Zoology (3) and Invertebrate Zoology Lab (1) F–Even Years

Classification, morphology, physiology, and ecology of the invertebrate animals. Three hours lecture and optional 3 hours laboratory/week.

505. Applied Anatomy & Physiology I (3) F

Prerequisites: BIO 221 and 222 or permission of instructor. An intensive examination of the human body that addresses the normal complex physiological processes of the cell, fluids and electrolytes, acid-base balance, temperature regulation, vascular hemodynamics, mobilization of fluids through the body and lymphatic system, musculoskeletal systems and function of the myocardium. The acquired information will provide the student with a body of knowledge to critically evaluate co-existing conditions of the surgical patient.

507. Applied Anatomy & Physiology II (3) S

Prerequisites: BIO 221 and 222 or permission of instructor. A continuation of 505 focusing on the normal complex physiological processes of blood components and coagulation and the respiratory, renal, endocrine, digestive and nervous system.

510. Advanced Human Gross Anatomy (3) F

Prerequisites: BIO 221 & 222 or BIO 505 & 507 or permission of instructor.

This course will incorporate the dissection of cadavers and viewing of anatomical models in understanding the nervous, endocrine, cardiovascular, respiratory, digestive, and urinary systems of the human body. Additional emphasis is placed on the needs of professional health care personnel.

511. Conservation Techniques (3) S–Even Years

A field intensive introduction to techniques for determining the age of many species, trapping for population assessments, terrestrial and aquatic sampling methods, methods for assessing population health through necropsies, and

habitat management techniques. One hour lecture and 6 hours laboratory/week.

512/512L. Comparative Vertebrate Anatomy (3) and Comparative Vertebrate Anatomy Lab (1) F–Odd Years

Study of the similarities of anatomy and early development of vertebrates, complemented by dissection of representative adults. Three hours lecture and optional 3 hours laboratory/week.

514. Immune Response to Infectious Disease (3) F

This course reviews the organisms associated with infections in humans with application directed towards those most commonly encountered in the United States. This will be integrated with a study of the immune system, how the body responds to various types of infections, and relevant clinical treatment methods.

515/515L. Genetics (3) and Genetics Lab (1) S

A study of the principles of heredity including both classical and molecular genetics. Three hours lecture and optional 3 hours laboratory/week.

516/516L. Physiology (3) and Physiology Lab (1) S

A study of the principles of physiology, emphasizing metabolic processes common to many organisms. Three hours lecture and optional 3 hours laboratory/week.

517/517L. Developmental Biology (3) and Developmental Biology Lab (1) F

A study of development in organisms, including both classical, descriptive embryology and contemporary investigations of processes involved in morphogenesis and differentiation. Three hours lecture and optional 3 hours laboratory/week.

518. Career Development in Biology (2) F

This course is designed to develop critical professional skills in students interested in a career in the biological sciences. An emphasis will be in guiding the students

**522/522L. Advanced Human Anatomy and Physiology
II (3) and Advanced Human Anatomy & Physiology
II Lab (1) S**
Prerequisite: BIO 521.

practices. The laboratory will include field trips that will focus on tree identification. Three hours lecture and optional 3 hours laboratory/week.

560/560L. Plant-Insect Interactions (3) and Plant-Insect Interactions Lab (1) F–Odd Years

This course is designed to introduce the student to insects and their relationships with plants. Lecture will cover insect ecology, taxonomy, and biology, as well as plant strategies to overcome insect damage and mutualism between plants and insects. The laboratory and field portions of the class will involve insect collection and identification, along with the evaluation of positive and negative impacts of insects on plants. Three hours lecture and optional 3 hours laboratory/week.

570. Graduate Project I (2) F

Students enrolling in this course will work with a faculty mentor on a year-long project, culminating in a research

Intercultural engagement—including community development, humanitarian outreach, and integrative research skills—is essential for a globalized world and increasingly important to our student population. Union's M.A. in Intercultural Studies (M.A.I.S.)—integrative, academically rigorous, missional—is a 39 credit-hour graduate program that provides its students with an interdisciplinary approach to current theory and research relevant to

- Official TOEFL score of 83 or higher.
- Official evaluation of transcript(s). Approved transcript evaluation companies: Josef Silny & Associates, Educational Credential Evaluators, World Education Services.
- Official evaluation of transcript(s). Union University accepts only National Association of Credential Evaluation Services (NACES) certified transcript evaluation companies including but not limited to World Education Services.

Admission to the Master of Arts in Intercultural Studies program is based on the overall record and aptitude of the applicant. The M.A.I.S. Director and the M.A.I.S. Admissions Committee will determine whether to accept or conditionally accept an applicant based on the overall record and aptitude of the candidate.

After successfully completing one semester in the M.A.I.S. program, including a minimum of 6 hours of UU courses with at least a 3.0 average, students who are conditionally admitted, will earn full admission to the program.

The curriculum for the program consists of a 27-hour core of classes and a 12-hour emphasis approved by the program director. As a low-residency program, the delivery system for the core classes is intensive and full-time status for a regular semester is 6 graduate credit hours. At other times throughout the course, students complete readings, online course activities and other assignments as required by the professor. Dates for the intensive course meetings are announced as part of the preregistration process each term. Transfer credit: maximum 6 hours with grades of B or higher and approval of Director.

Calendars and Schedules of Course offerings for the M.A.I.S. program are available from the Program Coordinator.

Completion of the 39 credit hours of required coursework, including an approved 12 credit-hour emphasis with a total minimum grade point average of 3.0 or higher. For more information regarding the 12 credit-hour program emphasis, see the concluding section of this program's catalog entry.

The M.A.I.S.'s 12-hour program emphasis is designed to enhance a student's learning experience and/or provide specialization for a given student's vocational goals. The Director of the M.A.I.S. works with students to craft emphases that are cohesive, academically rigorous, and interculturally relevant. Primary consideration is given to emphases completed within the MAIS, while secondary consideration is given to emphases completed within Union's graduate coursework.

Students seeking intercultural theory, research, and internships/ externships work with the M.A.I.S. Program Director to craft an emphasis within the program.

Students seeking emphases of a disciplinary nature may propose coursework from other Union graduate programs. Partnering with Union's AACSB-accredited Masters in Business Administration (MBA), the Masters in Christian Studies (MCS), the CSWE-accredited Masters in Social Work (MSW), and the Department of Languages, the MA in Intercultural Studies offers an emphasis in Business, Christian Studies, Social Work, French, and Spanish. The MA in Intercultural Studies also offers graduate training in Teaching English as a Second Language (TESL). These programs provide an integrative framework for current theory, practice, and research for those seeking private and public sector opportunities both stateside and abroad. Students are encouraged to pursue structured field experiences relevant to their vocational interests when available.

Emphases include but are not limited to the following:

Business Emphasis Course Options: For the M.A.I.S. program's three-course research sequence, students pursuing this program of study may craft their research around business and commerce-related phenomena. Students will work with the M.A.I.S. Program Director to craft an emphasis best suited for their individual vocational goals. Course options for the Master of Business Administration (MBA) emphasis include the following (see MBA section of the catalogue for course descriptions):
MBA 620 Ethical Management
MBA 621 Business & the Legal Environment
MBA 622 Social Issues in Management
MBA 628 Strategic Marketing
MBA 630 Management Information Systems
MBA 643 Negotiations & Conflict Resolution
MBA 648 Organizational Behavior

Christian Studies Emphasis Course Options: For the M.A.I.S. program's three-course research sequence, students pursuing this program of study may craft their research around theological, faith-based, and/or worship-based phenomena. Students will work with the M.A.I.S. Program Director to craft an emphasis best suited for their individual vocational goals. MAIS students interested

in pursuing appointment with the International Mission Board of the Southern Baptist Convention should consult the Director of the MCS to devise an M.A.I.S. program emphasis that meets IMB's requirements. Course options for the Masters of Christian Studies (MCS) emphasis include the following (see MCS section of the catalogue for course descriptions):

MCS 500 Old Testament I: Promise, Covenant, and Praise

MCS 505 Old Testament II: W/MCID 2574 BDC BT-0.023 Tw 10 0 07B

525. Principles and Practice of Medical-Surgical Nursing (6)

Principles and practice of medical-surgical nursing as related to the wellness-illness continuum addressing the pathophysiological and psychological issues associated with acute and chronic disease processes. Clinical simulation, anatomical experiences, and didactic instruction will be provided in strengthening the practice of the established nurse.

540. NCLEX-RN Prep Course for International Nurses (6)

A broad overview of all areas of nursing care as it relates to the potential content on the NCLEX-RN exam, including necessary test taking skills and practice exams based on NCLEX-RN standards. Clinical simulation, anatomical experiences, and didactic instruction will be provided in strengthening the practice of the established nurse.