GENERAL EDUCATION REQUIREMENTS

Philosophy
The University of Miami’s General Education Requirements ensure that graduates have acquired essential intellectual skills and have engaged in a range of academic disciplines. The General Education Requirements provide students with the opportunity to study methods and achievements in all areas of human inquiry and creative endeavor and to cultivate abilities essential for the acquisition of knowledge. The General Education Requirements allow students to create an integrative map for their academic careers, providing a context for more focused studies.

As an institution of higher learning in an increasingly diverse and global community, our goals are to produce graduates who have been exposed to a broad spectrum of educational opportunities and to prepare them for successful participation in the world. The University’s General Education Requirements consist of coursework taken before, within, and in addition to students’ specialized study in their areas of concentration. The aims of the General Education Requirements are designed to ensure that graduates of the University will have acquired essential intellectual skills and exposure to a range of intellectual perspectives and academic disciplines. Whereas the requirements of majors specified by schools and colleges within the University emphasize depth of learning, the General Education Requirements stress breadth of knowledge and the cultivation of intellectual abilities essential for the acquisition of knowledge.

Areas of Proficiency
The Areas of Proficiency requirements ensure that students either already possess, or develop at the University, the ability to express themselves effectively, to use quantitative skills with facility, and to reason cogently.

English Composition
Effective writing skills advance ideas efficiently and persuasively, so the expectation is that students become adept at using writing as an effective communication tool. Students fulfill this requirement by satisfactorily completing ENG 105 together with ENG 106 or ENG 107, or the equivalent. Appropriate Advanced Placement (AP) or International Baccalaureate (IB) scores in English composition may be used to satisfy this requirement. An appropriate score on the SAT or ACT examination may earn a student exemption from, but not credit for, ENG 105.

Students will be able to:

• Gather information, synthesize data, compare various points of view, and present results in writing.
• Develop the ability to read texts critically and to use textual evidence to support a sophisticated written argument.
• Consider audience, tone, organization, and standard conventions in relation to specific rhetorical tasks.

Effective Fall 2017, new students without prior college credit in English Composition will be placed as follows:

• ENG 103: ACT English score below 18 or SAT Evidence-Based Reading and Writing or Critical Reading score below 430, or TOEFL iBT Writing score below 18.
• ENG 105: ACT English score 18-31 or SAT Evidence-Based Reading and Writing or Critical Reading score 430-690, or TOEFL iBT Writing score 18 or above.
• ENG 106 or ENG 107: ACT English score 32 or above or SAT Evidence-Based Reading and Writing or Critical Reading score 700 or above.

All requirements for the English Composition General Education Requirements must be completed prior to attaining junior year classification.

Quantitative Skills
In a world increasingly influenced by science and technology, it is important for students to acquire the capacity to understand and use essential quantitative skills. The Quantitative Skills requirement helps students learn to use quantitative skills and tools to solve problems, including the interpretation, manipulation, and application of quantitative data. Students fulfill this requirement by completing either a Department of Mathematics course numbered MTH 108 or higher or a quantitative skills course approved by the student’s college/school and the University Curriculum Committee in consultation with appropriate academic units. Students may be able to fulfill this requirement through credit earned through the following tests: AP, IB, A-Level, and Cambridge Pre-U. The University has an equivalency chart (http://admissions.miami.edu/undergraduate/application-process/ap-ib-clep-credits) that illustrates how credit/exemption may be earned through these tests.

Students will be able to:

• Select and use appropriate quantitative methods and tools to solve problems.
• Interpret, manipulate, and apply quantitative data to solve problems.


2 Students in the Frost School of Music: An appropriate score on the SAT, ACT or proctored ALEKS examination may earn a student exemption from, but not credit for, the math requirement of the student’s degree program.

Areas of Knowledge
The Areas of Knowledge requirement is designed to help students understand and appreciate intellectual achievements in major areas of human inquiry and creative endeavor. Students satisfy this requirement through the Cognates Program, which aims to provide a broad array of intellectual and cultural exploration.
In the Cognate Program for the Areas of Knowledge requirement, students examine creative expression in the arts, literature, and philosophy; study human development and behavior; and explore the mathematical, scientific, and technological world. Students fulfill the requirement by completing three cognates, one from each of the three areas of the university curriculum: Arts & Humanities (A&H); People & Society (P&S); and Science, Technology, Engineering & Mathematics (STEM). A cognate is a group of at least three courses for at least nine credit hours with a shared theme or topic determined by the faculty. Each cognate has course options that allow students to complete the cognate in a manner that meets their interests, while staying within the focus of the cognate.

While students are required to take three cognates to fulfill the Areas of Knowledge requirement, there is no limit to the number of additional cognates students may complete. All cognates completed are listed on the students' transcripts.

The university offers a large number and range of cognates. Additionally, each major and minor fulfills the cognate requirement in one Area of Knowledge. All approved cognates are visible in a cognate search engine (https://cognates.miami.edu) that allows students to search for cognates based on cognate features, cognate courses, and keywords. Each cognate is administered by a department or program that is designated as the "Responsible Academic Unit" (RAU) for the cognate. Inquiries about a cognate should be directed to the cognate's RAU.

The following rule applies to all cognates: A course may not be used to satisfy the requirements of more than one cognate. This rule applies whether the cognate requirement is being met by a major, a minor, or a designated cognate. The fact that a school requires students to take courses which the school construes as outside the major or minor, but must be taken to fulfill the requirements for that major or minor, does not allow the course to be counted for both purposes. On the other hand, the fact that a course is listed as one which must be taken to meet the requirements for a major or minor does not necessarily preclude a student from participating in a cognate which has that course as one of its options. In many cases, the student could take one of the other courses included in the cognate.

**Arts & Humanities**

Arts & Humanities cognates engage students in the study of the most enduring and influential works of art, imagination, and culture. Through study, creation, and performance, courses in this area enable students to understand the works of artists, musicians, novelists, philosophers, playwrights, poets, historians, and theologians. These courses cultivate the ability to interpret, critically evaluate, and experience the creative products of human culture and expression.

Students will be able to:

- Critically evaluate and interpret the creative products of humanistic and artistic expression, applying appropriate vocabulary and concepts for their description and analysis.
- Understand the creation and performance of art.

The following departments and programs offer courses that are used in Arts & Humanities cognates: Africana Studies; American Studies; Architecture; Art & Art History; Cinema & Interactive Media; Classics; Dance; English; History; Judaic Studies; Latin American Studies; Modern Languages & Literatures; Music Theory – Composition; Musicology; Philosophy; Religious Studies; Strategic Communication; and Theatre Arts. Others will be added as cognates are approved.

**People & Society**

People & Society cognates help students understand and analyze the organization of society and the patterns of social change in the past and in the contemporary world.

Students will be able to:

- Analyze the organization of society.
- Analyze patterns of social change.

The following departments and programs offer courses that are used in People & Society cognates: Accounting; Advertising; Aerospace Studies; Africana Studies; American Studies; Anthropology; Business Law; Classics; Communication Studies; Criminology; Economics; Ecosystem Science & Policy; Educational & Psychological Studies; Entrepreneurship; Geography; Health Sector Management; History; Human Resource Management; International Studies; Journalism & Media Management; Judaic Studies; Kinesiology & Sport Sciences; Latin American Studies; Legal Studies; Management; Marine Affairs; Marketing; Military Science; Modern Languages & Literatures; Music Media & Industry; Nursing; Philosophy; Political Science; Psychology; Public Administration; Public Health; Regional Studies; Religious Studies; Sociology; Strategic Communication; Teaching & Learning; Urban Studies; and Women's & Gender Studies. Others will be added as cognates are approved.

**Science, Technology, Engineering & Mathematics (STEM)**

Science, Technology, Engineering & Mathematics (STEM) cognates develop students' abilities to think critically about mathematical, scientific, and technological issues, through an understanding of processes and methods of scientific inquiry involving experimentation, observation, and quantitative analysis. The cognates nurture literacies that enable students to make informed decisions in an increasingly complex world.

Students will be able to:

- Understand the use of quantitative tools, experimentation, and observation to analyze and solve mathematical, scientific, environmental, and technological problems.
- Interpret quantitative data and draw useful conclusions.

The following departments and programs offer courses that are used in Science, Technology, Engineering & Mathematics cognates: Aerospace Engineering; Anthropology; Architecture; Art; Atmospheric Science; Audio Engineering; Biochemistry; Biology; Biomedical Engineering; Business Law; Business Technology; Chemistry; Cinema & Interactive Media; Civil, Architectural & Environmental Engineering; Computer Information Systems; Computer Science; Economics; Ecosystem Science & Policy; Educational and Psychological Studies; Electrical & Computer Engineering; Engineering Science; Finance; Geography; Geological Sciences; Healthcare Science; Industrial Engineering; International Finance & Marketing; Journalism & Media Management; Kinesiology & Sport Sciences; Management Science; Marine Science; Marketing; Mathematics; Mechanical Engineering; Microbiology & Immunology; Molecular Biology; Neuroscience; Nursing; Philosophy; Physics; and Psychology; Public Health; Real Estate; and Strategic Communication. Others will be added as cognates are approved.
NOTES
The three cognates taken to fulfill the Areas of Knowledge requirement (including cognates fulfilled by majors and minors) must have different RAUs. No more than two Areas of Knowledge may be fulfilled by cognates whose RAUs are in the same school or college, except for the College of Arts and Sciences. Majors and minors may cover more than one Area of Knowledge but may be used to fulfill the cognate requirement in only one of those areas. A course may count in only one cognate used to fulfill the Areas of Knowledge requirement (including cognates fulfilled by majors and minors). Students may petition for individual course substitutions in cognates by application to the cognate’s RAU. Transfer courses, Advanced Placement, International Baccalaureate, CLEP, dual enrollment, etc., that are transferred in with specific UM course equivalencies can be used in cognates. Courses that transfer in with non-specific UM course credit hours can be used in cognates only by application to the cognate’s Responsible Academic Unit (RAU).

Transfer students entering the university with 30 or more credits may take an individualized cognate as one of the three required cognates. Individualized cognates allow for flexible use of transfer credits to fulfill a cognate requirement, as approved by the dean/advising office in the student’s school/college.