The College of Arts and Sciences embodies the liberal arts: the natural sciences and mathematics, the social sciences, and the humanities. Students augment their knowledge in all three areas by exploring the interconnections among them.

Study of the liberal arts opens to students the vast scope and excitement of human intellectual and cultural achievement. It enlarges the student’s vision and enriches the student’s life. Study of arts and sciences prepares students for lifelong learning and vocational success. It also prepares them for a life of effective civic participation as informed and critical citizens of a diverse global society.

In essence, an Arts and Sciences education fosters the ability to think and learn independently. Arts and Sciences graduates are well prepared to meet future technological and cultural transformations.

Undergraduate Programs in Arts and Sciences

The University of Kentucky grants the following degrees in the College of Arts and Sciences:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Liberal Studies

Students pursuing the Bachelor of Arts or the Bachelor of Science select from these majors: anthropology; biology; chemistry; economics; English; foreign language and international economics; geography; geological sciences; history; linguistics; mathematical economics; mathematics; modern and classical languages, literatures and cultures (with tracks in Arabic and Islamic studies, Chinese studies; Classics; French and Francophone studies; German studies; Japanese studies; and Russian studies); physics; political science; psychology; sociology; writing, rhetoric, and digital studies; and topical studies. The College also offers a Bachelor of Arts with these majors: African American and Africana Studies; environmental and sustainability studies; gender and women’s studies; health, society, and populations; international studies; philosophy; Spanish; and U.S. Culture and Business Practices; a Bachelor of Science with a major in Neuroscience; and a Bachelor of Liberal Studies.

For more information on degree programs, visit: [www.as.uky.edu](http://www.as.uky.edu/).

Undergraduate Certificates in Arts and Sciences

The University of Kentucky grants the following undergraduate certificates in the College of Arts and Sciences:

- Appalachian Studies
- Global Studies
- International Film Studies
- Peace Studies
- Sexuality Studies
- Social Sciences Research

Information and requirements for these certificates are listed at the end of this section.

ADMISSION

Admission requirements are the same as those of the University, except for the topical studies major. Prospective students should see the college web site: [www.as.uky.edu](http://www.as.uky.edu/).

PROGRAMS AND SERVICES

Academic Advising

Academic advising in the College of Arts and Sciences is provided by professional advisors, faculty, and graduate students beginning with new student advising conferences all the way through to graduation. All Arts and Sciences students are assigned an academic advisor after enrollment. Students and advisors will work as partners to help the student meet their academic goals.

All currently enrolled primary A&S majors have an assigned professional academic advisor or faculty advisor. All Arts and Sciences freshmen have an advising hold placed on their record requiring the student to meet with their A&S academic advisor prior to registration each semester. All students are encouraged to meet with their A&S advisor at least once each semester.

Students experiencing academic difficulty (academic probation) should meet with their academic advisor at the beginning of each semester and before the last day to withdraw from classes. For more information concerning these meetings, contact the Arts and Sciences Advising Center at 859-257-8712.

All Arts and Sciences students are expected to familiarize themselves with the degree requirements and keep track of requirements. The University has an online degree audit system within myUK GPS (Graduation Planning System). Students are expected to view their personalized degree audit prior to any advising session where scheduling for classes will be discussed. Routine questions concerning UK Core, college, major and minor requirements, grade-point average, repeat or bankruptcy options, transient student forms, credit overload requests, transfer credit equivalencies, forms required for graduation, and changing majors should be addressed to the student’s academic advisor.

For more information or to schedule an appointment with an advisor, visit [www.as.uky.edu/advising](http://www.as.uky.edu/advising).

Dean’s List

A student who completes at least 12 credits of “letter” grades with a 3.60 or higher grade-point average with no I grades listed for the fall or spring semester will be named to the Dean’s List in the College of Arts and Sciences. CLEP, AP, special exam and Independent Study credits are excluded. The student’s cumulative grade-point average is not considered; only the grade-point average for that particular semester is relevant. Exceptional circumstances, including fewer than 12 credits, will be considered for inclusion on the Dean’s List; students should submit a petition to the A&S Advising Center, 202 Patterson Office Tower.

Commencement and Departmental Honors

Commencement honors are determined by University standards. A full explanation of these honors can be found in the Graduation Requirements section of this Bulletin. Please note that if a student has not completed at least 90 hours at the University of Kentucky, has completed at least 60 hours at the University of Kentucky, the student is eligible for commencement honors, but is held to a 0.2 point higher standard. If the student has not completed at least 60 hours, the student is not eligible for commencement honors. Commencement honors are indicated on the student’s final transcript.

Departments in the College of Arts & Sciences award departmental honors to their outstanding graduates. The standards for departmental honors are not collectively established by the College, but determined by each department. For details on departmental honors, see “Guide to A&S Departmental Honors Requirements” on pages 127-128. Address questions to the department awarding honors. Departmental honors are indicated on the student’s final transcript.
## Guide to A&S Departmental Honors Requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>Cumulative GPA</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>Anthropology</td>
<td>3.5</td>
<td>The honors program in the Department of Anthropology is a research-intensive experience in which the student works closely with a faculty mentor. Requirements are: (1) a cumulative GPA of 3.5 or higher; (2) a departmental Major GPA of 3.5 or higher; (3) a research component designed by the student and the faculty mentor.</td>
</tr>
<tr>
<td>Biology</td>
<td>3.5</td>
<td>Biology majors are eligible for honors in biology if they: (1) Complete 6 hours of BIO 395. (2) Have an overall 3.5 GPA on graduation. (3) Successfully complete two biology honors (BIO--H) courses or two honors-selected 500 or 600 level Biology (BIO) courses, or a combination of BIO--H and honors-selected 500/600 BIO courses. Each semester the honors-selected 500/600-level BIO courses will be identified by a course note in the course schedule: this note will state “fulfills an Honors in Biology course requirement”. (4) A public presentation of one’s research results. Such a presentation can be a journal article, a seminar given to a diverse group, a talk or a poster at a professional meeting, a thesis or some form of public presentation approved by the Director of Undergraduate Studies.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3.5</td>
<td>12 hours in CHE or BCH courses (other than CHE 440G, 441G, and 572) at or above the 300 level. At least 6 of those hours must be in CHE 395. 3.5 cumulative GPA and 3.5 major GPA or above.</td>
</tr>
<tr>
<td>Earth and Environmental Sciences</td>
<td>3.5</td>
<td>3.3 cumulative GPA and senior thesis or 3.5 cumulative GPA or above.</td>
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<tr>
<td>Economics</td>
<td>3.2</td>
<td>3.2 cumulative GPA and a major GPA of 3.2 or above.</td>
</tr>
<tr>
<td>English</td>
<td>3.75</td>
<td>(1) 3.75 major GPA or above in courses taken at UK which count toward the English major. (2) At least 8 such courses taken at UK (i.e., not transferred). (3) Successful completion of at least one designated ENG honors seminar with a grade of B or higher.</td>
</tr>
<tr>
<td>Environmental and Sustainability Studies</td>
<td>3.5</td>
<td>3.5 cumulative GPA.</td>
</tr>
<tr>
<td>Gender and Women’s Studies</td>
<td>3.5</td>
<td>3.5 cumulative GPA and major GPA of 3.5 or above.</td>
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<tr>
<td>Geography</td>
<td>3.5</td>
<td>3.5 cumulative GPA and major GPA of 3.5 or above.</td>
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<tr>
<td>Health, Society, and Populations</td>
<td>3.6</td>
<td>3.6 or above major GPA.</td>
</tr>
<tr>
<td>Hispanic Studies</td>
<td>3.6</td>
<td>Overall cumulative GPA 3.6 and departmental GPA in 300-500 level SPA courses 3.75.</td>
</tr>
<tr>
<td>History</td>
<td>3.5</td>
<td>Minimum 3.5 cumulative GPA, 3.5 departmental GPA or above and a grade of A or B in HIS 301 and HIS 499.</td>
</tr>
<tr>
<td>International Studies</td>
<td>3.5</td>
<td>3.5 cumulative GPA and major GPA of 3.5 or above.</td>
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<table>
<thead>
<tr>
<th>Major</th>
<th>Cumulative GPA</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>Linguistics</td>
<td>3.5</td>
<td>3.5 cumulative GPA and major GPA of 3.75 or above.</td>
</tr>
<tr>
<td>Mathematical Economics</td>
<td>3.2</td>
<td>3.2 cumulative GPA or above and 3.2 major GPA or above.</td>
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<tr>
<td>Mathematics</td>
<td>3.5</td>
<td>3.5 cumulative GPA or above.</td>
</tr>
<tr>
<td>Modern and Classical Language</td>
<td>3.5</td>
<td>3.5 cumulative GPA and major GPA of 3.75 or above.</td>
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<tr>
<td>Neuroscience</td>
<td>3.5</td>
<td>Neuroscience majors are eligible for honors in neuroscience if they:</td>
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<td></td>
<td>(1) Have an overall GPA of 3.5 or above at graduation.</td>
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<td>(2) Complete two scholars courses or two 400G, 500 or 600 level or a</td>
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<td>combination of a scholars course and a 400G/500/600 BIO course.</td>
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<td>(3) Complete 6 credit hours of an independent research experience.</td>
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<td></td>
<td>(4) Give a public presentation of one’s research results. Such</td>
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<td>presentation can be a journal article, a seminar given to a diverse</td>
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<td>group, a talk or a poster at a professional meeting, a thesis or some</td>
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<td></td>
<td></td>
<td>form of public presentation approved by the Director of Undergraduate</td>
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<td>Studies.</td>
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<tr>
<td>Philosophy</td>
<td>3.5</td>
<td>3.5 cumulative GPA or above in PHI courses, plus a senior thesis.</td>
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<td>Students are encouraged to enroll in PHI 395 for support in writing the</td>
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<td>senior thesis.</td>
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<tr>
<td>Physics</td>
<td>3.4</td>
<td>3.4 cumulative GPA or above and 3.4 major GPA or above in physics and</td>
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<td></td>
<td>astronomy. All students awarded department honors will have fully</td>
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<td></td>
<td>participated in independent study or research including the preparation</td>
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<td>of a final report; participation with a high grade in a 3-credit-hour</td>
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<td></td>
<td>PHY 395 or participation in a summer research experience are ways of</td>
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<td>achieving this. Other factors such as citizenship, leadership in the</td>
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<td>Society of Physics Students, and other meritorious activity will be</td>
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<td>considered in the selection of seniors for graduation with honors.</td>
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<tr>
<td>Political Science</td>
<td>3.5</td>
<td>In order to graduate with departmental honors in political science, a</td>
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<td>student must obtain at least a 3.5 GPA in the major and at least a 3.25</td>
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<td></td>
<td>overall GPA. Additionally, honor students must complete PS 490, Honors in</td>
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<td></td>
<td>Political Science. In this course, students will be expected to carry</td>
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<td>out a major research project. Should that option be unavailable,</td>
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<td></td>
<td>however, students will have an opportunity to arrange completion of a</td>
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<td>major research project under faculty guidance as part of PS 395, the</td>
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<td>department’s Independent Study course, subject to approval from the</td>
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<td>Director of Undergraduate Studies.</td>
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<tr>
<td>Psychology</td>
<td>3.5</td>
<td>3.6 major GPA or above and successful completion of PSY 495 and PSY 496.</td>
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<tr>
<td>Sociology</td>
<td>3.5</td>
<td>3.5 cumulative GPA or above.</td>
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<tr>
<td>Topical</td>
<td>3.6</td>
<td>3.6 cumulative GPA or above and recommendation of the Associate Dean</td>
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<td>based on the final thesis.</td>
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<tr>
<td>Writing, Rhetoric, and Digital Studies</td>
<td>3.5</td>
<td>3.5 or above cumulative GPA and major GPA of 3.5 or above and GPA of</td>
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<td></td>
<td></td>
<td>3.5 or above in 400-level WRD courses.</td>
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</tbody>
</table>
Scholarships
For information on general scholarships in the College, contact the A&S Advising Center, 202 Patterson Office Tower, 859-257-8712, or www.as.uky.edu/scholarships. Students interested in scholarships in a specific major should contact the individual department.

College Policy on Learning Disabilities
The College of Arts and Sciences anticipates that virtually all of its students will satisfy all of its requirements. However, any student who believes that he or she can show evidence – by diagnostic testing and/or psychological evaluation – that he or she has a learning disability which warrants course substitution of any specific college requirement may request such an exception from the College. Students should begin their inquiries and/or discussions in the UK Disability Resource Center, 407 Multidisciplinary Science Building, 725 Rose Street.

Readmission After a Two-Year Absence
In accordance with the University Senate rules which allow the dean of each college to determine which degree requirements a returning student shall follow, students should note the following: Students enrolling in the College of Arts and Sciences after an absence from the University of Kentucky of two or more years will be expected to satisfy the university, college, graduation, and department requirements in effect at the time of readmission.

Students with extenuating circumstances may petition the College for permission to continue under the degree requirements that were in effect during their previous enrollment in the UK system.

ACADEMIC SUSPENSION AND REINSTATEMENT
The College of Arts and Sciences follows the general University rules for academic suspension and reinstatement, which are outlined in the Academic Requirements section of this Bulletin. Students placed on academic suspension must be reinstated by the college in which they plan to enroll before applying for readmission to the university. Students planning to pursue a degree program in the College of Arts and Sciences shall arrange for reinstatement proceedings before May 15 for any fall semester reinstatement, or October 1 for any spring semester reinstatement by calling the A&S Advising Center, 859-257-8712. Students who fail to request reinstatement prior to these deadlines will normally not be considered for reinstatement until the subsequent semester.

A student who has been suspended for a second time from the University of Kentucky will usually not be considered for reinstatement by the College of Arts and Sciences until two years have passed since the date of the second suspension.

THE BACHELOR OF ARTS AND BACHELOR OF SCIENCE DEGREE
Students must complete four areas of requirements to obtain a UK Arts and Sciences degree. The four areas are: UK Core; major requirements; college requirements; and university graduation requirements. The following information outlines the specific degree requirements for the B.A. and the B.S. in Arts and Sciences. Please read them carefully and also note the specific differences in each degree program.

The B.S. degree requires three hours in college disciplinary requirements for the natural sciences, social sciences and humanities beyond those required for the UK Core and requires 60 hours of physical, biological and/or mathematical sciences.

The B.A. degree requires six hours in college disciplinary requirements for the natural sciences, social sciences and humanities beyond those required for the UK Core and requires 39 hours in course work numbered at or above the 300 level.

College Requirements for a Bachelor of Arts Degree
It is important to review the “NOTES” section that immediately follows the “College Requirements for a Bachelor of Science Degree” section.

To receive the Bachelor of Arts degree, students must:
1. Complete the UK Core requirements.
2. Complete the following college requirements:
   a. Foreign Language Requirement. Contact your advisor or the A&S Advising Center for an explanation of the Foreign Language Requirement.
   b. Students must take six college hours in disciplines in the natural sciences.
   c. Students must take six college hours in disciplines in the social sciences.
   d. Students must take six college hours in disciplines in the humanities.
3. Complete at least 120 credit hours in courses acceptable to the College of Arts and Sciences.
4. Complete at least 90 credit hours in Arts and Sciences courses.
5. Complete at least 39 credit hours in courses numbered at or above the 300 level.
6. Complete at least 39 credit hours within the major. At least 24 of these hours must be at or above the 300 level.
7. Complete at least one course that includes some laboratory or field experience. (See the description of the College Laboratory or Field Experience Requirement which follows.)
8. Attain an overall grade-point average of at least 2.0.
9. Attain a grade-point average of at least 2.0 in all major requirements courses (including all premajor courses).
10. Complete a minimum of six credit hours of free electives. These college electives cannot be counted towards UK Core, college or major requirements.
11. Complete University graduation requirements, the Graduation Composition and Communication Requirement, and the residence requirement.

†See College Core Requirements for B.A. and B.S. Degree following the next section.

NOTES

1. See the UK Core section of this Bulletin for a detailed explanation of the requirements.

2. a. 001-099 courses, or courses followed by an “R” designation cannot be counted as credit towards a bachelor’s degree.

   b. Physical education one-hour service courses (KHP) are accepted only for the College 90-hour and 120-hour requirement for the B.A. or B.S. degree. AMS/MA 320 is not included in this 16 hour limit.

   d. A maximum of 12 semester credit hours earned in experiential education and internship courses (EXP 396, departmental 399 courses) will be accepted. For ANT 399, SOC 399 and SPA 399, a maximum of 15 semester credit hours can be earned. See Experiential Education and Internship Course section within the Arts and Sciences section of the Bulletin.

   e. All courses offered by the College of Arts and Sciences are acceptable with the exception of MA 108R.

   f. Courses transferred from other institutions and judged by the College to be equivalent or comparable to Arts and Sciences courses are acceptable. Usually the College will apply only six hours of technical course work taken at any institution toward graduation.

   b. The student is permitted to elect and count toward graduation courses in other colleges within the University of Kentucky or their equivalent from other institutions, not to exceed 30 hours. Hours taken in the other colleges at UK gained during the junior and senior years may, if at the 200-level or above, be counted towards the major requirements with approval from the Director of Undergraduate Studies/Program Director of the College.

   i. Courses with an “S” grade designation or a “place holder” designation such as NSE (National Student Exchange) for 1 credit hour cannot be counted as credit towards a bachelor’s degree in Arts & Sciences. EAP 599, 1 credit hour, can count towards the A&S “hours” requirements for the degree.

3. Courses classified as Arts and Sciences courses for purposes of the 90-hour requirement include all courses offered by the College of Arts and Sciences; all art history courses; all courses in music and theatre appreciation and ART 100 plus the history of music and theatre; TAD 370; all economics courses; all undergraduate courses in the Department of Computer Sciences (CS); all undergraduate courses in the Department of Communication (COM); and all American Sign Language courses officially transferred to the student’s UK record.

4. CHE 230, 231, 232 and 233 will count towards the 39 credit hours in courses numbered at or above the 300 level needed for degree requirements. Please note that courses numbered 800-899 cannot be counted as 300-level and above for the purpose of completing the 39 hours needed for the degree.

5. Courses offered within the disciplines of physical, biological and/or mathematical sciences may count towards the 60 credit hours of physical, biological and/or mathematical sciences for the Bachelor of Science degree. That includes courses with the following departmental prefix: ANA, AST, BCH, BIO, CHE, CS, EES, MA (except MA 108R), PGY, PHY, and STA. In addition, the following courses may be used to satisfy the 60-credit-hour requirement: ECO 391, PHI 120, PHI 320, PSY 215, and PSY 216. Courses listed as satisfying the A&S natural science core requirement may also be used towards the 60 credit hours of physical, biological and/or mathematical sciences.

College Core Requirements for B.A. and B.S. Degree

To satisfy the Arts and Sciences college core requirements, students must complete three (for a B.S.) or six (for a B.A.) college hours in each of the three areas – natural sciences, social sciences, and humanities – not counting any courses taken to fulfill the requirements of UK Core.

Students may also use other Arts and Sciences courses to satisfy the college core requirement if these courses have been approved to fulfill parallel inquiry areas in the UK Core.

Natural Sciences

Students cannot double dip courses to satisfy the Arts and Sciences core requirement that students complete in each of the three areas – natural sciences, social sciences, and humanities. A course used to satisfy the natural sciences requirement may not be used to satisfy the social sciences or humanities requirement.

1. All courses offered by Arts and Sciences departments or programs within the disciplines of the natural sciences including courses with the following departmental prefixes: AST, BIO, CHE, EES, PHY.

2. The following courses may also be used to satisfy the Arts and Sciences College requirement for course work within the discipline of natural sciences. However, if used to count as a Natural Science they cannot also be used for any Science requirement.

   AUA 209
   ANT 105, 230, 332, 333, 353, 354, 355
   CGS 500
   DHN 101
   ENS 200, 202, 400
   ENT 110, 300
   GEO 130, 135, 230, 351, 451G, 530
   PGG 206
   PLS 104
   PSY 312, 360, 393, 456, 459, 565

Students who take courses fulfilling the Natural, Physical, and Mathematical Sciences UK Core requirement that exceed the credit hours needed for the requirement itself may apply the excess to this college core requirement, accumulating credit hours until the minimum has been fulfilled. This option applies to all Arts and Sciences students regardless of where the course work was completed (e.g., main campus or transfer credit).

Social Sciences

Students cannot double dip courses to satisfy the Arts and Sciences core requirement that students complete in each of the three areas – natural sciences, social sciences, and humanities. A course used to satisfy the social sciences requirement may not be used to satisfy the natural sciences or humanities requirement.

1. All courses offered by Arts and Sciences departments or programs within the disciplines of the social sciences including courses with the following departmental prefixes: ANT, APP, GEO, GWS, IAS, PSY, SOC if content is designated as a social science; also, see #3 below.

2. The following courses may also be used to satisfy the Arts and Sciences College requirement for course work within the discipline of social sciences:

   AAS 200, 235, 301, 326, 328, 336, 400, 401, 417G, 422, 471, 500, 560
   ANT/LIN 515
   ANT/LIN 516
   ANT/LIN 519
   ANT/JPN 321
   CGS 500
   ENS 200, 400
   GEO/JPN 334
   GEO/JPN 551

3. The following courses may NOT be used in the social sciences area: GWS 201, PSY 459.

Humanities

Students cannot double dip courses to satisfy the Arts and Sciences core requirement that students complete in each of the three areas – natural sciences, social sciences, and humanities. A course used to satisfy the humanities requirement may be used to satisfy the natural sciences or social science requirement.

1. Excluding the courses listed below, all courses offered by Arts and Sciences departments or programs within the disciplines of the humanities, including courses with the following prefixes: A-H, AAS, CLA, ENG, FR, GER, HIS, JPN, LAS, LIN, MCL, PHI, RS, RUS, SPA, and HON courses designated as humanities. Note exceptions in #2 and #3 below.

2. The following courses may NOT be used in the humanities area:

   AAS 205, 235, 326, 328, 336, 417G, 432, 471
   AIS 101, 102, 201, 202, 442, 443
   CHI 101, 102, 201, 202
   CLA 131
   ENG 102, 207, 405, 407, 507, 509
   FR 011, 101, 102, 106, 201, 202, 204, 307, 310, 507
   GER 011, 101, 102, 201, 202, 205, 206, 211, 212, 307, 508, 516, 573, 577
   GRK 101, 102, 201, 202
   HPS 101, 102, 201, 202
   ITA 101, 102, 201, 202
   JPN 101, 102, 201, 202, 203, 301, 302, 401, 402, JPN/
   GEO 334, JPN/GEO 551
   LAT 101, 102, 201, 202
   LIN 520, 521
   PHI 120, 320
   PS 417G, 471
   RUS 101, 102, 201, 202, 301, 302, 401, 404, 501, 502
   SPA 011, 101, 102, 103, 151, 201, 202, 203, 205, 210, 211, 215, 302, 313, 413, 501, 506, 553
   WRD 203, 204, 205, 306

3. The following courses may also be used to satisfy the Arts and Sciences College requirement for course work within the discipline of humanities:

   AMS 201
   ANT 515, 516, 519
   ART 100
   CGS 500
   GWS 201, 506
   MUS 203, 222, 301, 302, 303, 325

College Laboratory or Field Experience Requirement

The College requires its students to complete at least one course that includes some laboratory or field experience. In such courses the external world is observed in a controlled manner using systematic techniques and methods. A substantial portion of the course must include data collection, data analysis, and hypothesis testing under supervised conditions. The approved courses for the laboratory requirement are:

Natural Sciences

   Biology – BIO 101, 115, 209
   Chemistry – CHE 111, 113
   Earth and Environmental Sciences – EES 160, 220
   Physics – PHY 211, 213, 241, 242

Social and Behavioral Sciences

   Anthropology – ANT 230, 541, 585
   Geography – GEO 406
A Second Bachelor’s Degree

A student may obtain a second bachelor’s degree by completing all university requirements for one degree; by completing all the major requirements of both degrees; and by completing all college requirements of both degrees. Courses taken towards fulfilling one degree may also count towards fulfilling parallel requirements in the other, but the total credits in the two degree programs must be at least 144 hours. Major work in one department can, if there is a generic relationship, serve as the outside field in the second major and vice versa. However, the International Studies major allows a maximum of 15 hours of course work to overlap between two majors. The student must indicate his/her double degree in his/her primary college. The student may elect to receive the degree simultaneously, if college and departmental requirements can be met simultaneously. For information regarding double degree (not the same as double majors), consult the Graduation Requirements section of this Bulletin. Students are expected to be knowledgeable of requirements for any major in Arts and Sciences as outlined in the online degree audit system within myUK GPS (Graduation Planning System).

Minors

The College of Arts and Sciences does not require minors. However, students can earn a minor in the following disciplines in the college:

- anthropology
- biological sciences
- chemistry
- creative writing
- criminology
- economics
- English
- gender and women’s studies
- geography
- geology
- history
- international studies
- linguistics
- mapping and GIS
- mathematics
- microbiology
- military leadership
- modern and classical languages, literatures and cultures
- neuroscience
- philosophy
- physics
- political science
- professional and technical writing
- psychology
- sociology
- Spanish
- statistics
- writing, rhetoric and digital studies
Interdisciplinary minors are available in:
- African American and Africana studies
- American studies
- Appalachian studies
- cognitive science
- environmental and sustainability studies
- Indian culture
- Jewish studies
- Latin American, Caribbean, and Latino studies
- world religions

Minors can only be awarded in conjunction with a UK undergraduate degree. Additionally, students cannot pursue a minor in the same discipline as their major. This includes the area of concentration for a Topical Studies major and International Studies major.

For more information about choosing or declaring a minor, please review the requirements outlined in the online degree audit system within myUK GPS (Graduation Planning System); contact the department where the minor is offered; and/or consult the departmental section of this Bulletin. To officially declare a minor, students must complete a Declaration/Change of Major or Minor form in the A&S Advising Center, 202 Patterson Office Tower.

Awarded minors appear on the student’s final transcript but not on his or her diploma.

The Preparation of Teachers

Any Arts and Sciences student intending to seek teaching certification should so indicate to his or her academic advisor. The student should also contact the College of Education, 166 Taylor Education Building. As soon as the student has determined to seek certification he or she is assigned an advisor both in the College of Education and in the major department in the College of Arts and Sciences.

Students seeking certification should be sure to familiarize themselves with the requirements of both colleges. The sooner and the more thoroughly this is done, the greater the advantage to the student.

INFORMATION ON COURSES

Transfer of Kentucky Community and Technical College System (KCTCS) Courses

The college will usually apply up to 6 hours of technical course work taken at any accredited institution including KCTCS. Beyond these 6 credit hours, courses will be evaluated on an individual basis and as it applies to the student’s baccalaureate degree program.

Independent Work Courses

A junior or senior may, with prior approval of his or her faculty advisor and the instructor who would direct the work, register for an independent work course in his or her major department.

Normally, a cumulative GPA of 3.0 in the major is required. In exceptional circumstances a nonmajor or topical studies major may be permitted to enroll in a departmental independent work course. Such a course is characterized by special assignments for study, regular conferences, reports, and usually involves preparation of a paper. The instructor in each case must file with the department evidence of the nature of the work achieved. Credit for such courses may be granted to undergraduates to an amount of not more than 12 hours.

Experiential Education and Internship Courses

The College of Arts and Sciences accepts experiential education and internship courses (such as EXP 396, departmental 399 courses,) on a pass-fail basis only, regardless of which college is offering the courses. A total of 12 credit hours in these courses may be counted toward the 120 credit hours required for graduation. For ANT 399 and SPA 399, a maximum of 15 semester credit hours can be earned. For PS 399, a maximum of 12 credit hours can be earned per semester on a case by case basis. However, College of Arts and Sciences majors may only earn a maximum of six credit hours of experiential education credit (EXP) in one semester.

ROTC Program

A maximum of 16 semester credit hours earned in American Military Studies and Air Force Studies courses will be accepted towards fulfilling the 90 hours of A&S courses required and the 120 minimum number of hours needed for graduation with a baccalaureate degree in the College of Arts and Sciences, even though students typically enroll for more than 16 semester credit hours of AMS and AFS course work. However, credit received from taking AMS/HIS 320, American Military History, can apply in addition to the 16 credit hour limit earned in AMS or AFS course work. Additionally, AMS 350 (1 credit hour) can only be counted for a maximum of 4 credit hours.

Requirements

An academic major in aerospace studies is not offered. However, by successfully completing the Air Force ROTC program, a qualified student may concurrently earn a commission as an active duty Air Force Second Lieutenant while completing requirements for a degree. Students may enroll in some Aerospace Studies courses without joining the Air Force ROTC cadet corps. For more information, call 859-257-7115.

AFROTC Curriculum

The AFROTC curriculum consists of both academic classes and leadership laboratory or seminar classes.

- The General Military Course (GMC) is a two-year course normally taken during the freshman and sophomore years.
- The Professional Officer Course (POC) is a two-year course normally taken during the junior and senior years. Along with academic classes each semester, all cadets also take leadership laboratory classes.

In the GMC, there are four academic classes:

- Freshman Semesters
  - AFS 111 offered in fall semesters
  - AFS 113 offered in spring semesters

- Sophomore Semesters
  - AFS 211 offered in fall semesters
  - AFS 213 offered in spring semesters

These cover two main themes – the development of air power and the contemporary Air Force in the context of the U.S. military organization. The GMC academic classes are open to any UK student.

In the POC, there are four academic classes:

- Junior Semesters
  - AFS 311 offered in fall semesters
  - AFS 313 offered in spring semesters

- Senior Semesters
  - AFS 411 offered in fall semesters
  - AFS 413 offered in spring semesters

These cover Air Force management and leadership and national security studies.

Note: Entry into the POC years is competitive and is based on:
- Air Force Officer Qualifying Test scores
- Grade-point average
- Evaluation by the AFROTC Detachment Commander
- Only physically qualified students in good academic standing may compete for entry into the POC.
- Typically, these courses are for those cadets who have already completed the courses in the GMC, but the courses are open to any UK student.

AEROSPACE STUDIES (Air Force ROTC)

The Department of Aerospace Studies provides a campus education program through which qualified students can simultaneously earn an Air Force commission and a college degree. Faculty members are experienced, active duty Air Force officers.

Admission to the Program

- Non-scholarship freshmen and sophomores may register for Air Force Studies (AFS) courses without incurring a military commitment.
- Students with a minimum of five semesters of school remaining in undergraduate status may qualify for Air Force ROTC. For more information, call 859-257-7115.
Students enrolled as cadets are required to be involved once a week in a 1-credit-hour course in the cadet corps training program designed to simulate a typical Air Force organization and its associated functions. This course is known as Leadership Laboratory. All cadets (only cadets) are required to take all of the Leadership Laboratories each fall and spring semester, concurrent with their AFS courses listed above. Please call 859-257-7115 for further inquiries on the matter.

GMC Years

Freshman Semesters
  AFS 112 fall semesters
  AFS 114 spring semesters

Sophomore Semesters
  AFS 212 fall semesters
  AFS 214 spring semesters

Senior Semesters
  AFS 412 fall semesters
  AFS 414 spring semesters

The leadership laboratories are largely cadet-planned and conducted under the concept that they provide leadership training experiences that will improve the cadets’ capabilities as Air Force officers. This also involves three hours of physical training each week. Leadership laboratory is open to students who are members of the Air Force Reserve Officer Training Corps or are eligible to pursue a commission as determined by the Air Force ROTC Detachment Commander.

Field Training

Field Training (FT) is offered at Maxwell Air Force Base in Alabama. FT students receive officer training and leadership development with other students from across the nation. Simultaneously, the Air Force has an opportunity to evaluate each student as a potential member of its officer corps. FT courses include cadet orientation, survival training, officer training, physical training, organizational and functional aspects of an Air Force base, career orientation, small arms familiarization, first aid, and other supplemental training.

Scholarships

Students interested in AFROTC scholarships should refer to the Student Financial Aid, Awards, and Benefits section of this Bulletin or call 859-257-7115. Information is subject to change.

Minor in Military Leadership

The Military Leadership Minor provides students with a broad perspective on the military with analysis of the Army and Air Force service branches of the Armed Forces, as well educating students on historical and social scientific perspectives. This minor is open to students who are enrolled in Bachelor’s degree programs at the University of Kentucky, and is designed to produce rounded leaders in the academic environment as well as in a professional setting.

The Military Leadership Minor requires 20 credit hours from the following:

Required Courses
one of the following groups (3 credits):
  AMS 101 Introduction to the Army ...................... 2
  AFS 111 Aerospace Studies I .............................. 1
  or
  AMS 102 Introduction to Leadership ................... 2
  AFS 113 Aerospace Studies I .............................. 1
one of the following groups (5 credits):
  AMS 212 Advanced Leadership II ...................... 2
  AMS 301 Leadership and Management I ............... 3
  or
  AFS 211 Aerospace Studies II .......................... 1
  AFS 213 Aerospace Studies II .......................... 1
  AFS 311 Aerospace Studies III .......................... 3
one of the following groups (6 credits):
  AMS 302 Advanced Tactics ............................... 3
  AMS/HIS 320 Advanced Studies in American Military History .......................... 3
  or
  AFS 313 Aerospace Studies III .......................... 3
  AFS 411 Aerospace Studies IVA ........................ 3

Guided Electives

two of the following courses (6 credits):
  CLD 230 Intraperusal Leadership ........................ 3
  CLD 530 Fundamentals of Organizational Leadership .................................. 3
  HHS 119 War and Society, 1350-1914 .................. 3
  HHS 121 War and Society, 1914-1945 .................. 3
  HHS 122 War and Society Since 1945 .................. 3
  HHS 357 Japan at War, 1850 to the Present ........ 3
  GEO 109 Digital Mapping ...................................... 3
  GEO 130 Earth’s Physical Environment .................... 3
  GEO 133 Science and Policy of Natural Hazards .......................... 3
  GEO 160 Lands and Peoples of the Non-Western World .......................... 3
  GEO 162 Introduction to Global Environmental Issues .................................. 3
  GEO 163 Global Conflicts ...................................... 3
  GEO 172 Human Geography .................................... 3
  GEO 222 Cities of the World ................................... 3
  GEO 255 Geography of the Global Economy ................ 3
  GEO 261 Global Dynamics of Health and Disease ........ 3
  GWS 302 Gender Across the World (Subtitle required) .................................. 3
  ANT 160 Cultural Diversity in the Modern World .................................. 3
  PSY 320 Introduction to Forensics: Psychology and Legal Issues .......................... 3
  A-H 360 Visual Culture of Politics ............................... 3
  PS 101 American Government ................................... 3
  PS 230 Introduction to International Relations .......................... 3
  SOC/CLD 380 Globalization: A Cross-Cultural Perspective .......................... 3
  GER 342 War, Peace, and Terror in Germany and Europe .................................. 3
  JP 351 The Japanese Experience of the Twentieth Century .................................. 3
  WRD 204 Technical Writing ...................................... 3

AFRICAN AMERICAN AND AFRICANA STUDIES

The African American and Africana Studies degree allows students to complete an interdisciplinary program of study that draws together the multifaceted understanding of the Africana experience. The rich and challenging course work addresses historical, cultural, sociological, political, and psychological factors that affect the lives of people of African descent worldwide. Students will develop the breadth of knowledge indicative of a liberal arts education, and enhance their critical thinking and writing, analysis, and communication skills. The African American and Africana Studies degree will be beneficial for a wide range of students who plan to work in communication and media, education, law, health care, non-profit, and government.

Bachelor of Arts with a major in AFRICAN AMERICAN AND AFRICANA STUDIES

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list .................................. 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list .................................. 3

III. Intellectual Inquiry in the Social Sciences

SOC 101 Introduction to Sociology or one course from approved list .................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

Choose one course from approved list .................................. 3

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I .................................. 3

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II .................................. 3

VII. Quantitative Foundations

Choose one course from approved list .................................. 3

VIII. Statistical Inferential Reasoning

Choose one course from approved list .................................. 3

IX. Community, Culture and Citizenship in the USA

AAS 200 Introduction to African-American Studies or one course from approved list .................................. 3

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X. Global Dynamics
AAS 100 Introduction to African Studies or one course from approved list .................. 3

UK Core hours: ................................................... 30

Graduation Composition and Communication Requirement (GCCR)
AAS 401 Independent Reading and Research in African-American and African Studies .... 3

Graduation Composition and Communication Requirement hours (GCCR) ............... 3

College Requirements
I. Foreign Language (placement exam recommended) ........................................... 0-14
II. Disciplinary Requirements
   a. Natural Science .................................................................................. 6
   b. Social Science ................................................................................... 6
   c. Humanities ....................................................................................... 6
III. Laboratory or Field Work .............................................................................. 1
IV. Electives ..................................................................................................... 6

College Requirement hours: ............... 13-27

Major Core Requirements
AAS 100 Introduction to African Studies ............................................................... 3
AAS 200 Introduction to African-American Studies .................................................. 3
AAS 301 Introduction to the African Diaspora .......................................................... 3
AAS 401 Independent Reading and Research in African-American and African Studies . 3
*AAS 400 Special Topics in African-American and Africana Studies (Subtitle required) ... 6

Major Core hours: .................................................................................. 18

*Students must take AAS 400 twice under different subtitles to satisfy the major core requirement.

Guided Electives
Students must take at least 15 hours of electives from the approved list, of which 12 credit hours must be at the 300 level or above:
A-H 304 African Art and Its Global Impact .......................................................... 3
A-H 308 Studies in African Arts (Subtitle required) ..................................................... 3
AAS/ENG 168 All That Speak of Jazz: An Intellectual Inquiry Into Jazz and Democracy .. 3
AAS/SOC 235 Inequalities in Society .......................................................... 3
AAS/HIS 235 History of Pre-Colonial Africa ............................................................ 3
AAS/HIS 254 History of Colonial and Postcolonial Africa ....................................... 3
AAS/HIS 260 African American History to 1865 ......................................................... 3
AAS/HIS 261 African American History 1865-Present ............................................... 3
AAS/FR 263 African and Caribbean Literature and Culture of French Expression in Translation (Subtitle required) .......................................................... 3
AAS/ENG 260 Introduction to Black Writers ............................................................. 3
AAS/MUS 300 History of Jazz .................................................................................. 3
AAS/ANT 326 Contemporary African Lives ............................................................ 3
AAS/ANT 327/Anthropology of Sub-Saharan Africa .................................................. 3
AAS/HIS 360 Race and Sports in America ................................................................. 3
AAS/SOC 432 Race and Ethnic Relations ................................................................. 3
AAS 433/SOC 435 Topics in Social Inequalities (Subtitle required) .......................... 3
AAS/PS 471 Race, Ethnicity and Politics ................................................................. 3
AAS/WRD 523 Social Perspectives on Racism and Ethnic Prejudices in America ........... 3
AAS/EAP 545 Psychology of the Black Experience ................................................... 3
AAS/EDC 550 Education in a Culturally Diverse Society ......................................... 3
AAS/PS 417 Survey of Sub-Saharan Politics ............................................................. 3
AAS/HIS 587 The Civil Rights Movement in the U.S. Since 1930 ............................. 3
AIS 228 Islamic Civilization ..................................................................................... 3
AIS 345 Islamic Mysticism ..................................................................................... 3
AIS 430 Islam in America ....................................................................................... 3
ANT 160 Cultural Diversity in the Modern World .................................................. 3
APP 200 Introduction to Appalachian Studies ......................................................... 3
ENG 265 Survey of African-American Literature I ..................................................... 3
ENG 266 Survey of African-American Literature II ................................................ 3
ENG 361 Early African-American Literature ......................................................... 3
ENG 362 Flights to Freedom: Literature of the Great Black Migrations ..................... 3
ENG 368 Contemporary African-American Voices .................................................. 3
ENG 369 African American Women’s Writing ....................................................... 3
ENG 460G Studies in African-American Literature (Subtitle required) ..................... 3
GEO 160 Lands and Peoples of the Non-Western World ......................................... 3
GEO 220 U.S. Cities ............................................................................................. 3
GEO 221 Immigrant America: A Geographic Perspective ......................................... 3
GEO 222 Cities of the World .................................................................................. 3
GEO 260 Geographies of Development in the Global South .................................... 3
GWS 250 Social Movements .................................................................................. 3
HIS 208 History of the Atlantic World ..................................................................... 3
HIS 564 History of Brazil ....................................................................................... 3
SW 325 Social Justice Foundations ......................................................................... 3

Guided Elective hours: .................................................................................. 15

From Outside the Major Department
Students must complete 6 or more credit hours of courses outside the AAS prefix, but in allied departments and programs at the 200 level or above to bring the total number of credit hours within the major to at least 39. Free electives may not be counted toward the UK Core or A&S requirements. Applicable departments and programs include (by prefix): A&S, AIS, A-H, HIS, SOC, ENG, FR, MUS, ANT, GEO, PS, SW, EDP, GWS ........................................... 6

Total Minimum Hours Required for Degree ....................................................... 120

ANTHROPOLOGY

The Department of Anthropology offers opportunities to learn about the diverse people of today’s world, as well as their biological and cultural origins. This area of study deals with ecology, society, biology, culture, and language, among other aspects of human life. In addition, anthropologists study history and evolution in both a cultural and biological framework.

Anthropology provides an excellent foundation for careers in a variety of professions and occupations, including community development, international relations and development, private business, government, law, journalism, museum work, and university teaching and research.

Students can major or minor in anthropology. The major is structured to provide the student with a broad overview of the major subdisciplines: cultural anthropology, physical anthropology and archaeology. It also allows sufficient flexibility for a student to concentrate on a specific area of interest.

Visit our website at: http://anthropology.as.uky.edu/.

Bachelor of Arts with a major in ANTHROPOLOGY

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ......................................................... 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ......................................................... 3

III. Intellectual Inquiry in the Social Sciences
One of the following:
ANT 101 What Makes Us Human? Intro to Anthropology ..................................... 3
ANT 102 Archaeology: Mysteries and Controversies ............................................. 3
ANT 103 Sports, Culture, and Society .................................................................. 3
ANT 335 Religion in Everyday Life ....................................................................... 3
ANT 339 Human Rights in Global Perspective ...................................................... 3
One course from approved list ........................................................................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
ANT 230 Introduction to Biological Anthropology ............................................... 3
One course from approved list ........................................................................... 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............................................... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ............................................... 3

VII. Quantitative Foundations
Choose one course from approved list ............................................................. 3

VIII. Statistical Inferential Reasoning
ANT 360 Statistics in Anthropology ................................................................. 3
One course from approved list ........................................................................... 3

IX. Community, Culture and Citizenship in the USA
One of the following:
ANT 221 Native People of North America ........................................................... 3
ANT 330 North American Cultures ...................................................................... 3
One course from approved list ........................................................................... 3

X. Global Dynamics
One of the following:
ANT 160 Cultural Diversity in the Modern World ................................................ 3
ANT 222 Middle East Cultures ............................................................................. 3
ANT 225 Culture, Environment and Global Issues ................................................ 3
ANT 241 Origins of Old World Civilization ........................................................... 3
ANT 242 Origins of New World Civilization ......................................................... 3
ANT 311 Anthropology of Globalization ............................................................... 3
ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present ........ ................. 3
ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change ......................................................................................................................... 3
One course from approved list ........................................................................... 3

UK Core hours: .................................................................................. 30
Graduation Composition and Communication Requirement (GCCR)

ANT 582 Senior Integrative Seminar ......................... 3

Graduation Composition and Communication Requirement hours (GCCR) ......................... 3

College Requirements

I. Foreign Language (placement exam recommended) .......................................................... 0-14

II. Disciplinary Requirements

a. Natural Science (partially completed by Premajor Requirements) ........................................... 3

b. Social Science (completed by Premajor Requirements) ......................................................... 3

III. Laboratory or Field Work (can be completed by Major Requirement) ............................................. 6

IV. Electives ........................................................................... 6

College Requirement hours: .................................. 15-29

Major Requirements

ANT 220 Introduction to Cultural Anthropology ........................ 3

ANT 230 Introduction to Biological Anthropology ........................ 3

ANT 240 Introduction to Archaeology ................................. 3

ANT 582 Senior Integrative Seminar ................................. 3

Anthropology Electives

21 hours. No more than 3 hours at the 100 level; at least 15 hours at the 300+ level. The student chooses electives according to specific interests within anthropology and in consultation with advisors. ........................................................................................................ 21

From Outside the Major Department

Choose 6 hours outside Anthropology at the 200+ level. 200+ level courses used to satisfy College Requirements can also be counted here ........................................................................................................ 6

Subtotal: Major requirements: ................................. 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation. ....................................................... 4

Total Minimum Hours Required for Degree ....................... 120

*Course used towards completion of a UK Core Requirement.

Bachelor of Science with a major in ANTHROPOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with an ANT prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list ................................ 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list ................................. 3

III. Intellectual Inquiry in the Social Sciences

One of the following:

ANT 101 What Makes Us Human? Intro to Anthropology
ANT 102 Archaeology: Mysteries and Controversies
ANT 103 Sports, Culture, and Society
ANT 335 Religion in Everyday Life
ANT 339 Human Rights in Global Perspective

One course from approved list ........................................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

ANT 230 Introduction to Biological Anthropology

One course from approved list ........................................... 3

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I ........................ 3

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II ................... 3

VII. Quantitative Foundations

Choose one course from approved list ................................. 3

VIII. Statistical Inferential Reasoning

ANT 360 Statistics in Anthropology

One course from approved list ........................................... 3

IX. Community, Culture and Citizenship in the USA

One of the following:

ANT 221 Native People of North America
ANT 330 North American Cultures

One course from approved list ........................................... 3

X. Global Dynamics

One of the following:

ANT 160 Cultural Diversity in the Modern World
ANT 222 Middle East Cultures
ANT 225 Culture, Environment and Global Issues
ANT 241 Origins of Old World Civilization
ANT 242 Origins of New World Civilization
ANT 311 Anthropology of Globalization
ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present
ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change

One course from approved list ........................................... 3

UK Core hours: ................................................................. 30

Graduation Composition and Communication Requirement (GCCR)

ANT 582 Senior Integrative Seminar ......................... 3

Graduation Composition and Communication Requirement hours (GCCR) ......................... 3

College Requirements

I. Foreign Language (placement exam recommended) .......................................................... 0-14

II. Disciplinary Requirements

a. Natural Science (completed by Premajor Requirement) .................................................. 3

b. Social Science (completed by Premajor Requirement) .................................................. 3

c. Humanities ........................................................................... 3

III. Laboratory or Field Work (can be completed by Major Requirement) ............................................. 6

IV. Electives ........................................................................... 6

College Requirement hours: .............................. 9-23

Major Requirements

ANT 220 Introduction to Cultural Anthropology ........................ 3

ANT 230 Introduction to Biological Anthropology ...................... 3

ANT 240 Introduction to Archaeology ........................................... 3

ANT 582 Senior Integrative Seminar ................................. 3

Anthropology Electives

21 hours. Can include up to 3 hours at the 100 level and must include at least 15 hours at the 300+ level. The student chooses electives according to specific interests within anthropology and in consultation with advisors. ........................................................................................................ 21

From Outside the Major Department

Choose 6 hours outside Anthropology at the 300+ level. 200+ level courses used to satisfy College Requirements can also be counted here ........................................................................................................ 6

Subtotal: Major requirements: ................................. 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation. ....................................................... 4

Total Minimum Hours Required for Degree ....................... 120

*Course used towards completion of a UK Core Requirement.

Minor in Anthropology

The minor in Anthropology requires 21 hours of course work to include:

Preminor Courses (9 hours)

Students must take ANT 220, 230, 240.

Additional Courses (12 hours)*

Students must take four ANT courses from at least two subdisciplines. Two courses must be at the 200 level or above and two courses must be at the 300 level or above.

*ANT 350, 399, 580, 581 and other ANT courses not listed here may be used to fulfill the Additional Courses requirement with the consent of the Director of Undergraduate Studies.

Courses taken to meet a requirement in one area cannot be used to meet a requirement in another area of the minor.

BIOLOGY

To address the breadth and depth essential to educating biologists, the biology major is structured to include both a broad foundation through core courses and opportunity for specialization within a biological subfield through biology electives. The major is designed to prepare the student for a post-baccalaureate profession in biology, for advanced professional training in the health sciences, or for graduate study in basic and applied areas of the biological sciences.

Bachelor of Arts with a major in BIOLOGY

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.
UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................. 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................. 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
CHE 105 General College Chemistry I ......................... 4
CHE 111 General Chemistry I Laboratory ..................... 1

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............ 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .......... 3

VII. Quantitative Foundations
MA 123 Elementary Calculus .................................... 3
or
MA 137 Calculus I .................................................. 3
or
MA 138 Elementary Calculus and its Applications .......... 4

VIII. Statistical Inferenceal Reasoning
STA 296 Statistical Methods and Motivations ................ 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............................. 3

X. Global Dynamics
Choose one course from approved list ............................. 3

UK Core hours: .............................................................. 33

Graduation Composition and Communication Requirement (GCCR)
In order to meet the Graduation Composition and Communication Requirement (GCCR), students must successfully complete both BIO 425 to fulfill the oral communication requirement and one course from the list below to fulfill the written communication requirement. In order to receive GCCR credit a student must:

a. Earn an average grade of C or better on all GCCR assignments; and

b. Have completed at least 30 credit hours of college-level course work prior to registering for the course.

Oral Communication Requirement
BIO 425 Biology Seminar (Subtitle required) .................. 1

Written Communication Requirement
Choose one course from the following 8 options: BIO 398 Research and Writing in Biology .............. 1-3
BIO 404 Advanced Genetics ....................................... 3
BIO 405 Human Genetics .......................................... 3
BIO 418 Ecological Genetics ....................................... 3
BIO 430G Plant Physiology ....................................... 4
BIO 445 The Biology of Sex ........................................ 3
WRD 305 Writing Public Science .................................. 3
WRD 310 Writing in the Natural Sciences ..................... 3

Graduation Composition and Communication Requirement hours (GCCR) .......................................... 2-5

College Requirements
Humaities – two courses ........................................... 6
Social Science – two courses ...................................... 6
Third and fourth semesters of language ...................... 6
Free Electives .......................................................... 6
Lab or Field Experience – satisfied by major
Graduation Writing Requirement (choose any GWR Humanities 300-level course; this will also count as one of the two Humanities courses in the College Requirements)

UK Core and College hours: ................................. 57 (45)

Premajor Requirements
BIO 148 Introductory Biology I ................................... 3
BIO 152 Principles of Biology II .................................. 3
BIO 155 Laboratory for Introductory Biology I
or
BIO 198 Scholars Biology Research ............................ 1-2
†CHE 105 General College Chemistry I ........................... 4
†CHE 111 General Chemistry I Laboratory ..................... 1
†CHE 107 General College Chemistry II ........................ 3
†CHE 113 General College Chemistry II Laboratory ...... 2
MA 137 Calculus I With Life Science Applications
or
MA 113 Calculus I .................................................. 4
or
MA 123 Elementary Calculus and its Applications .......... 4
Free Elective .......................................................... 0-1

Premajor hours: ..................................................... 21
†The CHE 105 requirement can be satisfied with CHE 109 and CHE 110

Major Requirements
Minimum major requirement for graduation is 54 credit hours in courses as detailed below. Once all other major requirements are completed, students must complete Biology electives until the 54 credit hour requirement has been met. The minimum GPA of all major and premajor courses must be at least 2.0.

First Tier Core
BIO 303 Introduction to Evolution ............................ 4
BIO 304 Principles of Genetics ................................. 4

Second Tier Core
To be taken after completion of First Tier Core.
Choose two of the following to complete 8 hours:
BIO 350 Animal Physiology .................................... 4
BIO 430G Plant Physiology ....................................... 4
BIO 315 Introduction to Cell Biology .......................... 4
BIO 325 Ecology ................................................... 4
plus:
STA 296 Statistical Methods and Motivations ............. 3
BIO 425 Biology Seminar (Subtitle required) ............... 3
or
BIO 499 Biology Research Seminar .......................... 1

Core hours: ...................................................... 20

Other Course Work Required for the Major
From Outside the Major Department
CHE 236/231 Survey of Organic Chemistry/Organic Chemistry Laboratory I
or
CHE 230/231 Organic Chemistry I/Laboratory I ........... 4
PHY 211 General Physics
or
††PHY 151 Introduction to Physics ............................ 3-5

Option A – Minor Option
NOTE: Fourteen of these hours must be at the 300-level or above.
Complete the requirements for any minor other than the biology minor .................................................. 18-21

Biology Electives .................................................. 4-9
Biology Electives – A minimum of 6 of the 4-9 upper-level elective credit hours must be BIO courses (i.e., have a BIO prefix). If fewer than 6 hours are required to complete the requirements, all hours must be upper-level elective BIO courses. A maximum of 5 credits of independent research course work may be used in this section.

If students double-dip major and minor requirements, additional biology electives must be taken to meet the graduation requirement of 54 hours for the B.A. in Biology.

Total hours Option A ............................................. 25-27

Option B – Topical Focus Option
Complete a 12 credit hour sequence of courses with a topical focus. At least 6 of these hours must be at the 300-level or above ................................................................. 12

NOTE: Students who have multiple interests or interests that do not fall into the requirements for a minor offered at the University of Kentucky may select a 12 credit hour sequence of courses with a topical focus. Courses in several disciplines and in the various interdisciplinary programs may be combined to pursue the topical focus. Students interested in pursuing Option B must have the 12 credit hour sequence of courses APPROVED IN ADVANCE by the Director of Undergraduate Studies, Department of Biology. Students must submit an Approval of Topical Focus Form to the Director of Undergraduate Studies.

Biology Electives .................................................. 13-15
Biology Electives – A minimum of 9 of the 13-15 upper-level elective credit hours must be BIO courses (i.e., have a BIO prefix). A maximum of 6 credits of independent research course work may be used in this section.

Total Hours Option B ............................................. 25-27

Hours to be chosen from 300+ level BIO courses or the list below. Note: ANA 209, BIO 208, BIO 209 and PGY 206 CANNOT be used for this requirement. A maximum of 1 credit hour of seminar course work (for example BIO 425, BIO 426, BIO 427) may be counted within this elective requirement.
Complete one of the following tracks below to fulfill your 13-15 hours of Biology electives. If an alternative track is not declared, the default track will be General Biology.

**Cellular, Molecular, and Developmental Biology Track**

The Cellular, Molecular, and Developmental Track provides a broad background in biology, with a focus on the cellular, integrative, and regulatory mechanisms by which organisms regulate life processes. Students will learn about the cellular and cellular mechanisms that provide the basis for biological structure, growth, evolution, embryonic development, and genetic inheritance. Students will understand how eukaryotic cells process information from their environment and initiate programs of gene expression leading to growth, development, and functional specification.

A degree in biology with an emphasis in Cellular, Molecular, and Developmental will prepare students for a career in the life sciences, whether they are interested in understanding the molecular mechanisms underlying cell growth, or the complex patterns of organismal development. This can help prepare students for a career in academic or industrial research, biotechnology, genetic engineering, or any of the health professions.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

- **BIO 308 General Microbiology** ........................................ 3
- **BIO 309 Microbiology Laboratory** .................................. 1
- **BIO 429 Developmental Biology** ..................................... 3
- **BIO 494i Immunobiology** ............................................... 3
- **BIO 394/395/397 Research in Neuroscience/Biology/ Microbiology (maximum 3 credits toward track)** .............. 1-3
- **BIO 495G Bacterial Pathogenesis** ........................................ 3
- **BIO 502 Systematics, Cellular and Molecular Physiology** ...... 5
- **BIO 510 Recombinant DNA Techniques Laboratory** .......... 4
- **BIO 520 Bioinformatics** .................................................. 3
- **BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine** .................................................. 3
- **BIO 582 Virology** ............................................................ 3
- **BIO 542 Histology** ............................................................ 3
- **BIO 410 Vertebrate Endocrinology** .................................... 3
- **BIO 315 Introduction to Cell Biology** ................................. 4
- **BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required)** ................................................. 1-4

Courses from Outside the Biology department:

- **BCH 401G Fundamentals of Biochemistry** .......................... 3
- **CHE 233 Organic Chemistry Laboratory II** ........................... 1
- **CHE 533 Advanced Organic Chemistry Laboratory** ............ 2
- **CHE 550 Biological Chemistry I** ........................................ 3
- **CHE 552 Biological Chemistry II** ....................................... 3
- **CHE 532 Spectrometric Identification of Organic Molecules** ....... 2
- **MEUPAT 549 Clinical Microbiology** .................................. 3
- **ANA 442 Molecular and Cellular Neurobiology** .................... 3

Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.

*Only for students who do not use the course to fulfill the 2nd Tier Core.

**Subtitle must be approved by Director of Undergraduate Studies.

**Ecology and Evolutionary Biology Track**

The Ecology and Evolutionary Biology Track focuses on the diversity of life on Earth, including diversity in genes, physiology, and behaviors. Students will learn about how this diversity emerged, as plants, animals, and microbes became adapted to the environment and to each other. A wide variety of scientific disciplines are integrated within the track, including ecology, organismal biology, physiology, genetics, evolution, conservation biology, and behavior. A degree in biology with an emphasis in Ecology and Evolution will prepare students for a career in the life sciences, whether they are interested in having a deep understanding of evolutionary process, or are interested in the interactions between organisms and their environment. This can help prepare students for careers in areas such as: 1. conservation and restoration biology – addressing the impacts of climate change, developing plans for habitat conservation and wildlife protection, or other issues critical to maintaining a healthy planet; 2. working as a doctor or veterinarian; 3. science education – educating students and the public on the history and diversity of life on earth and the need to conserve it; 4. basic research in biology – helping to expand the frontiers of knowledge by studying the evolution of organisms and their ecosystems.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

- **BIO 300 General Entomology** ............................................. 3
- **BIO 337 Mathematical Modeling in the Life Sciences** .......... 3
- **BIO 351 Plant Kingdom** ................................................... 3
- **BIO 375 Behavioral Ecology and Sociobiology** .................... 3
- **BIO 395 Research in Biology** (maximum 3 credits toward track) ................................................................. 1-3
- **BIO 430G Plant Physiology** .............................................. 4
- **BIO 440 Comparative and Functional Anatomy** .................. 4
- **BIO 445 The Biology of Sex** ............................................. 3
- **BIO 461 Introduction to Population Genetics** ..................... 3
- **BIO 508 Evolution** ............................................................ 3
- **BIO 418 Ecological Genetics** ............................................ 3
- **BIO 520 Bioinformatics** .................................................... 3
- **BIO 525 Advanced Ecology** ............................................. 3
- **BIO 530 Biogeography and Conservation** ......................... 3
- **BIO 555 Vertebrate Zoology** ............................................ 5
- **BIO 559 Ornithology** .......................................................... 4
- **BIO 568 Insect Behavior** ................................................... 3
- **BIO 325 Ecology** ............................................................. 4
- **BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required)** ................................................. 1-4

Courses from Outside the Biology department:

- **CHE 565 Environmental Chemistry** .................................. 3
- **CHE 532 Spectrometric Identification of Organic Molecules** ...... 2
- **CHE 550 Biological Chemistry I** ........................................ 3
- **CHE 552 Biological Chemistry II** ....................................... 3
- **CHE 558 Hormone Receptors and Cell Signals** ..................... 3
- **CHE 565 Environmental Chemistry** ................................... 3
- **EES 401G Invertebrate Paleobiology and Evolution** .......... 3
- **PSY 459 Neuropharmacology: Drugs and Behavior** .......... 3
- **STA 570 Basic Statistical Analysis** ................................... 3
- **STA 580 Biostatistics I** .................................................... 2

Other STA courses may be accepted at the discretion of your advisor.

**Writing, Rhetoric, and Digital Studies**

- **WRD 310 Writing in the Natural Sciences** .......................... 3

**College of Agriculture, Food and Environment**

- **ABT/AGR/ASC/ENT 460 Introduction to Molecular Genetics** ........ 3
- **ASC 364 Reproductive Physiology of Farm Animals** ............ 4
- **ASC 378 Animal Nutrition and Feeding** .......................... 4
- **ENT 310 Insect Pest of Field Crops** .................................. 3
- **ENT 320 Horticultural Entomology** .................................. 3
- **ENT/ABT 460 Introduction to Molecular Genetics** ............ 3
- **ENT/FOR 502 Forest Entomology** ..................................... 3
- **ENT 561 Insects Affecting Human and Animal Health** .......... 3
- **ENT 564 Insect Taxonomy** ................................................ 4
- **ENT 568 Insect Behavior** .................................................. 3
- **FOR 340 Forest Ecology** ................................................... 4
- **FOR 435 Conservation Biology** ......................................... 3
- **FOR/ENT 502 Forest Entomology** ..................................... 3
- **FOR 530 Freshwater Ecology** ........................................... 3
- **FOR 510 Herpetology** ....................................................... 4
- **FSC 530 Food Microbiology** ............................................ 5
- **NRE 420G Taxonomy of Vascular Plants** .......................... 4
- **NRE 450G Biogeochemistry** ............................................ 3
- **PLS 320 Woody Horticultural Plants** .................................. 4
- **PLS 330 Herbaceous Horticultural Plants I** ......................... 2
- **PLS 332 Herbaceous Horticultural Plants II** ....................... 2
- **PLS 366 Fundamentals of Soil Science** .............................. 4
- **PLS 450G Biogeochemistry** ............................................. 3
- **PLS 502 Ecology of Economic Plants** ............................... 3
- **PLS 566 Soil Microbiology** .............................................. 3
- **PPA 400G Principles of Plant Pathology** ............................ 3

**General Biology Track**

This is the default option for students who do not declare another track.

Choose 13-15 credit hours from the upper-level electives listed below.

- **BIO 3XX, BIO 4XX, BIO 5XX, BIO 6XX**
- **ANT 332 Human Evolution** .............................................. 3
- **CHE 226 Analytical Chemistry** ....................................... 3
- **CHE 232 Organic Chemistry II** ........................................ 3
- **CHE 233 Organic Chemistry Laboratory II** ......................... 1
- **CHE 440G Introductory Physical Chemistry** ....................... 3
- **CHE 441G Physical Chemistry Laboratory** .......................... 2
- **CHE 446G Physical Chemistry for Engineers** ....................... 3
- **CHE 532 Spectrometric Identification of Organic Molecules** ...... 2
- **CHE 533 Inorganic Chemistry Laboratory** .......................... 2
- **CHE 550 Biological Chemistry I** ....................................... 3
- **CHE 552 Biological Chemistry II** ....................................... 3
- **CHE 558 Hormone Receptors and Cell Signals** ..................... 3
- **CHE 565 Environmental Chemistry** ................................... 3
- **Geology**

- **EES 401G Invertebrate Paleobiology and Evolution** .......... 3
- **Psychology**

- **PSY 459 Neuropharmacology: Drugs and Behavior** .......... 3
- **Statistics**

- **Biology usually accepts only one of the following for each student**
  - **STA 570 Basic Statistical Analysis** ................................... 3
  - **STA 580 Biostatistics I** .................................................. 2
  - Other STA courses may be accepted at the discretion of your advisor.
Bioinformatics Track

The Genetics, Genomics, and Bioinformatics Track will provide guidance and structure to students with a desire to specialize in the study of inheritance and will formally recognize their chosen area of specialization in the description of their degree. The selected course offerings span the spectrum of studies within the area of inheritance, allowing students to select broadly from courses that provide sophisticated insight into genetic information and genetic analysis. The selected courses also allow students to delve deeply into different realms of genetics, including: emphasis on microbes (BIO 308, 309 and 510); emphasis on animals (BIO 404, 405, 429, 527); emphasis on analytical technology (BIO 337, 404, 461, 510, 520, STA 579, STA 580, ABT 460); emphasis on development (BIO 404, 405, 429, 445, 527, PGY 417); and emphasis on evolution (BIO 461, 508, 518).

Students selecting this track will be able to demonstrate a clear understanding of the most important and fundamental theories and ideas in contemporary biology from a perspective that emphasizes inheritance, organization, and analysis of genetic information.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 308 General Microbiology ........................................... 3
BIO 309 Microbiology Laboratory ........................................... 2
BIO 337 Mathematical Modeling in the Life Sciences ................ 3
BIO 395/397 Research in Biology/Microbiology (maximum 3 credits toward track) ........................................... 1-3
BIO 404 Advanced Genetics .............................................. 3
BIO 405 Human Genetics ................................................. 3
BIO 429 Developmental Biology ........................................... 3
BIO 445 The Biology of Sex .................................................. 3
BIO 461 Introduction to Population Genetics ......................... 3
BIO 508 Evolution .................................................................. 3
BIO 510 Recombinant DNA Techniques Laboratory ............... 4
BIO 418 Ecological Genetics ................................................. 3
BIO 520 Bioinformatics ...................................................... 3
BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine .................................................. 3
*BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ............................................................. 1-4

Courses from Outside the Biology department:

STA 570 Basic Statistical Analysis ........................................ 3
STA 580 Biostatistics I ......................................................... 3
ABT/ENT 460 Introduction to Molecular Genetics .................. 3
PGY 417 Genomics and Epigenetics ....................................... 2

Courses Outside the Biology department:

BIO 308 General Microbiology ........................................... 3
BIO 309 Microbiology Laboratory ........................................... 2
BIO 337 Mathematical Modeling in the Life Sciences ................ 3
BIO 395/397 Research in Biology/Microbiology (maximum 3 credits toward track) ........................................... 1-3
BIO 404 Advanced Genetics .............................................. 3
BIO 405 Human Genetics ................................................. 3
BIO 429 Developmental Biology ........................................... 3
BIO 445 The Biology of Sex ................................................. 3
BIO 461 Introduction to Population Genetics ......................... 3
BIO 508 Evolution .................................................................. 3
BIO 510 Recombinant DNA Techniques Laboratory ............... 4
BIO 418 Ecological Genetics ................................................. 3
BIO 520 Bioinformatics ...................................................... 3
BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine .................................................. 3
*BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ............................................................. 1-4

*Only for students who do not use the course to fulfill the 2nd Tier Core.

**Subtitle must be approved by Director of Undergraduate Studies.

Courses from Outside the Biology department:

ASC 364 Reproductive Physiology of Farm Animals .................. 4
ENT 568 Insect Behavior ....................................................... 3
MI 595 Immunobiology Laboratory ....................................... 2
PGY 560 Pathophysiology: Integrative Study in Physiology and Medicine .................................................. 1
PSY 459 Neuropharmacology: Drugs and Behavior ................ 3
ANA 410G Neurobiology of Brain ........................................... 3
ANA 442 Molecular and Cellular Neuroscience ...................... 3
ANA 512 Microscopy and Ultrastructure .................................. 4
ANA 516 Selected Topics in Advanced Neuroscience ............... 3

Courses Outside the Biology department:

UN 101G General Botany ..................................................... 3
UN 102G General Zoology .................................................... 3
UN 125G Elements of Entomology ......................................... 3
UN 308 General Microbiology ........................................... 3
UN 404 Advanced Genetics .............................................. 3
UN 405 Human Genetics ................................................. 3
UN 429 Developmental Biology ........................................... 3
UN 445 The Biology of Sex ................................................. 3
UN 461 Introduction to Population Genetics ......................... 3
UN 508 Evolution .................................................................. 3
UN 510 Recombinant DNA Techniques Laboratory ............... 4
UN 418 Ecological Genetics ................................................. 3
UN 520 Bioinformatics ...................................................... 3
UN 527 Stem Cells, Tissue Engineering, and Regenerative Medicine .................................................. 3
*BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ............................................................. 1-4

Physiology and Behavior Track

Physiology is the study of function of living organisms, primarily plants and animals. The field studies cells, tissues, organs, and the whole organism. To understand function, a mechanistic approach is used to integrate the cell level to the whole organism. The study of animal behavior and physiology go hand and hand in addressing the functional mechanisms which regulate behavior. This track will prepare pre-professionals in health science areas (MD, DO, DDS, and PT), researchers in the function of animals and plants (MS/PhD), and ecologists.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 302 Introduction to Neuroscience ................................... 3
BIO 305 Introduction to Neuroscience Techniques .................. 4
BIO 375 Behavioral Ecology and Sociobiology ......................... 3
BIO 394/395/397 Research in Neuroscience/Biology/ Microbiology (maximum 3 credits toward track) ...................... 1-3
*BIO 403G Plant Physiology ............................................... 4
BIO 440 Comparative and Functional Anatomy .................... 4
BIO 445 The Biology of Sex ................................................. 4
BIO 446 Neurophysiology Laboratory .................................... 3
BIO 494G Immunobiology .................................................. 3
BIO 502 Systems, Cellular and Molecular Physiology .............. 5
BIO 507 Biology of Sleep and Circadian Rhythms .................... 3
BIO 535 Comparative Neurobiology and Behavior .................. 3
BIO 550 Advanced Physiology .............................................. 3
*BIO 350 Animal Physiology ................................................. 4
BIO 410 Vertebrate Endocrinology ........................................ 3
*BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ............................................................. 1-4

Courses Outside the Biology department:

ENT 310 Insect Pests of Field Crops ..................................... 3
ENT 320 Horticultural Entomology ....................................... 3
FOR 340 Forest Ecology ....................................................... 4
ENT/ FOR 502 Forest Entomology ....................................... 3
PLS 502 Ecology of Economic Insects ................................. 3
PLS 566 Soil Microbiology ................................................. 3
PLS 567 Methods in Soil Microbiology ............................... 1
PPA 400G Principles of Plant Pathology .............................. 3
PLS 320 Woody Horticultural Plants ................................... 4
PLS 366 Fundamentals of Soil Science ................................. 4

Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.

*Only for students who do not use the course to fulfill the 2nd Tier Core.

**Subtitle must be approved by Director of Undergraduate Studies.

Plant Biology Track

The Plant Biology Track focuses on fundamental aspects of how plants function as organisms and interact with their environment. A wide variety of scientific disciplines are integrated within the track, including physiology, taxonomy, reproduction, and ecology.

A degree in biology with an emphasis in plant biology serves as an excellent launching point for a wide range of career options, including domestic and international opportunities in business, research, and teaching. The program is excellent preparation for students wishing to enter graduate or other professional schools. Plant biologists can work in the laboratory or field, forestry, botanical gardens and nurseries, agricultural companies, biotechnology, pharmaceuticals, energy and chemical industries, or environmental protection.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 310 The Life Processes of Plants ................................... 3
BIO 351 Plant Kingdom ...................................................... 3
BIO 394/395/397 Research in Neuroscience/Biology/ Microbiology (maximum 3 credits toward track) ...................... 1-3
BIO 420G Taxonomy of Vascular Plants ............................... 4
*BIO 430G Plant Physiology ............................................... 4
BIO 525 Advanced Ecology .................................................. 3
**BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ............................................................. 1-4

Courses Outside the Biology department:

ENT 310 Insect Pests of Field Crops ..................................... 3
ENT 320 Horticultural Entomology ....................................... 3
FOR 340 Forest Ecology ....................................................... 4
ENT/ FOR 502 Forest Entomology ....................................... 3
PLS 502 Ecology of Economic Insects ................................. 3
PLS 566 Soil Microbiology ................................................. 3
PLS 567 Methods in Soil Microbiology ............................... 1
PPA 400G Principles of Plant Pathology .............................. 3
PLS 320 Woody Horticultural Plants ................................... 4
PLS 366 Fundamentals of Soil Science ................................. 4

Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.

*Only for students who do not use the course to fulfill the 2nd Tier Core.

**Subtitle must be approved by Director of Undergraduate Studies.
Pre-Professional Track

The Pre-Professional Track in the biology major broadly explores organizational structure and function in the context of preparing students for health-related professional programs. The courses in this track give the students a broad view of both normal and abnormal organism function, with courses specializing in neuroscience, physiology, microbiology, and molecular biology. Independent research in this track will be an opportunity for students to work with science professionals within their desired field. Through completion of this track, students can fulfill prerequisite and recommended courses for most pre-professional health programs. Students who excel in this track can go on to enroll in a variety of professional programs, including medical, dental, optometry, veterinary, and physician's assistant programs. A biology degree with a pre-professional health emphasis also prepares students for careers as research scientists, research lab technicians, microbiologists, genetic counselors, biology teachers, and many other general biology careers.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 302 Introduction to Neuroscience .............................. 3
BIO 305 Introduction to Neuroscience Techniques ............. 4
BIO 308 General Microbiology ........................................ 3
BIO 309 Microbiology Laboratory ................................. 2
BIO 394/395/397 Research in Neuroscience/Biology/ Microbiology (maximum 3 credits toward track) ........... 1-3
BIO 405 Human Genetics .................................................. 3
BIO 410 Vertebrate Endocrinology .................................... 3
BIO 440 Comparative and Functional Anatomy .............. 4
BIO 445 The Biology of Sex ................................................ 3
BIO 446 Neurophysiology Laboratory .............................. 3
BIO 494I Immunobiology .................................................. 3
BIO 495G Bacterial Pathogenesis ..................................... 3
BIO 502 Systems, Cellular and Molecular Physiology ...... 3
BIO 507 Biology of Sleep and Circadian Rhythms .......... 3
BIO 510 Recombinant DNA Techniques Laboratory .... 4
BIO 520 Bioinformatics .................................................... 3
BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine ............................................. 3
BIO 429 Developmental Biology .................................... 3
BIO 535 Comparative Neurobiology and Behavior .......... 3
BIO 550 Advanced Physiology ......................................... 3
BIO 582 Virology ............................................................ 3
BIO 542 Histology ............................................................. 5
*BIO 315 Introduction to Cell Biology .............................. 4
*BIO 350 Animal Physiology ............................................. 4
**BIO 380 Special Topics in Biology (Intermediate Level) (Subject required) .............................................. 1-4

Courses from Outside the Biology department:
ANA 410G Neurobiology of Brain and Spinal Cord Disorders ............................................................ 3
ANA 442 Molecular and Cellular Neurobiology ................ 3
BCH 401G Fundamentals of Biochemistry .......................... 3
CHE 550 Biological Chemistry I ...................................... 3
CHE 552 Biological Chemistry II .................................... 3
MUPAT 598 Clinical Microbiology ...................................... 3
PGY 560 Pathophysiology: Integrative Study in Physiology and Medicine .............................................. 1
PSY 459 Neuropsychology: Drugs and Behavior .......... 3
PGY 512 Evolutionary Medicine ...................................... 3
PGY 431 Introduction to Neuroendocrinology ............... 3

Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.

*Only for students who do not use the course to fulfill the 2nd Tier Core.
**Subtitle must be approved by Director of Undergraduate Studies.

Total Hours Option B .................................................. 25-27
Total Minimum Hours Required for Degree ................ 120

Bachelor of Science with a major in BIOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 150.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ................................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list .......................... 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list .......................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

A. CHE 105 General College Chemistry I .......................... 4
CHE 111 General Chemistry I Laboratory .......................... 1

B. Composition and Communication I
CIS/WRD 110 Composition and Communication I ........ 3

C. Composition and Communication II
CIS/WRD 111 Composition and Communication II .......... 3

VII. Quantitative Foundations
MA 113 Calculus I .......................................................... 3
or MA 137 Calculus I With Life Science Applications ...... 4

VIII. Statistical Inferential Reasoning
STA 296 Statistical Methods and Motivations .............. 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list .......................... 3

X. Global Dynamics
Choose one course from approved list .......................... 3

**UK Core hours: .................................................. 33

Graduation Composition and Communication Requirement (GCCR)

In order to meet the Graduation Composition and Communication Requirement (GCCR), students must successfully complete both BIO 425 to fulfill the oral communication requirement and one course from the list below to fulfill the written communication requirement. In order to receive GCCR credit a student must:

- a. Earn an average grade of C or better on all GCCR assignments; and
- b. Have completed at least 30 credit hours of college-level course work prior to registering for the course.

Oral Communication Requirement
BIO 425 Biology Seminar (Subtitle required) .............. 1

Written Communication Requirement
Choose one course from the following 8 options:
BIO 398 Research and Writing in Biology ...................... 1-3
BIO 404 Advanced Genetics ......................................... 3
BIO 405 Human Genetics .............................................. 3
BIO 418 Ecological Genetics ......................................... 3
BIO 430G Plant Physiology ............................................. 4
BIO 445 The Biology of Sex ............................................ 3
WRD 305 Writing Public Science ..................................... 3
WRD 310 Writing in the Natural Sciences ...................... 3

Graduation Composition and Communication Requirement hours (GCCR) ........................ 2-5

College Requirements

Humanities – one course ............................................. 3
Social Science – one course ........................................... 2
Third and fourth semesters of language ...................... 6
Free Electives ............................................................... 6
Lab or Field Experience – satisfied by major
Graduation Writing Requirement (choose any GWR Humanities 300-level course; this will also count as one of the two Humanities courses in the College Requirements)

General Education and College hours: ............................................. 49 (39)

Premajor Requirements

BIO 148 Introductory Biology I ....................................... 3
BIO 152 Principles of Biology II ....................................... 3
BIO 155 Laboratory for Introductory Biology I ........................ 3
BIO 198 Scholars Biology Research ................................... 1-2
†CHE 105 General College Chemistry I .......................... 4
CHE 111 General Chemistry I Laboratory .......................... 1
CHE 107 General College Chemistry II .......................... 3
CHE 113 General Chemistry II Laboratory ........................ 2
MA 137/138 Calculus I/II With Life Science Applications .......................... 3
or MA 133/134 Calculus I/II ............................................ 8

Premajor hours: .................................................................. 25-26
†The CHE 105 requirement can be satisfied with CHE 109 and CHE 110.

Major Requirements

Minimum major requirement for graduation is 56 credit hours in courses not open to freshmen. The minimum GPA of all major and premajor courses must be at least 2.0.

Major Core

First Tier Core
BIO 303 Introduction to Evolution ................................... 4
BIO 304 Principles of Genetics ........................................ 4

Second Tier Core
To be taken after completion of First Tier Core.
BIO 315 Introduction to Cell Biology .............................. 4
BIO 325 Ecology .............................................................. 4
BIO 350 Animal Physiology ............................ 4
BIO 430G Plant Physiology ............................................. 4
STA 296 Statistical Methods and Motivations .............. 3
BIO 425 Biology Seminar (Subtitle required) .............. 1
or BIO 499 Biology Research Seminar ...................................... 1

Core hours: ...................................................................... 24
Other Course Work Required for the Major
From Outside the Major Department
CHE 230 Organic Chemistry I ........................................... 3
CHE 231 Organic Chemistry Laboratory I ......................... 1
CHE 232 Organic Chemistry II ......................................... 3
or
PHY 211 General Physics ............................................. 3
or
PHY 231/241 General University Physics/Laboratory ....... 3
or
PHY 213 General Physics ............................................. 3

Biology Electives ....................................................... 15
Choose 15 hours of acceptable biology electives:
15 hours to be chosen from 300+ level BIO courses or the list below. At least 9 of the 15 hours must be BIO courses. A maximum of 6 hours of Independent Research course work from biological sciences departments may be counted within the 15 hour requirement. NOTE: ANA 209, BIO 208, BIO 209 and PGY 206 CANNOT be used for this requirement.
A maximum of 1 credit hour of seminar course work (ex. BIO 425, BIO 426, BIO 427) may be counted within the 15 hour requirement.

Other Major hours: .................................................. 32

Tracks
Complete one of the following tracks. If an alternative track is not declared, the default track will be General Biology.

Cellular, Molecular, and Developmental Biology Track
The Cellular, Molecular, and Developmental Track provides a broad background in biology, with a focus on the molecular, cellular, and integrative mechanisms by which organisms regulate life processes. Students will learn about the molecular and cellular mechanisms that provide the basis for biologic structure, growth, evolution, embryonic development, and genetic inheritance. Students will understand how eukaryotic cells process information from their environment and initiate programs of gene expression leading to growth, development, and functional specification.

A degree in biology with an emphasis in Cellular, Molecular, and Developmental will prepare students for a career in the life sciences, whether they are interested in understanding the molecular mechanisms underlying cell growth, or the complex patterns of organismal development. This can help prepare students for a career in academic or industrial research, biotechnology, genetic engineering, or any of the health professions.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 308 General Microbiology ........................................ 3
BIO 309 Microbiology Laboratory .................................... 2
BIO 429 Developmental Biology ........................................ 3
BIO 494G Immunobiology ............................................ 3
BIO 394/395/397 Research in Neuroscience/Biology/ Molecular biology (maximum 3 credits toward track) .......... 1-3
BIO 495G Bacterial Pathogenesis .................................... 3

Ecology and Evolutionary Biology Track
The Ecology and Evolutionary Biology Track focuses on the diversity of life on Earth, including diversity in genes, physiology, and behaviors. Students will learn about how this diversity emerged, as plants, animals, and microbes became adapted to the environment and to each other. A wide variety of scientific disciplines are integrated within the track, including ecology, organismal biology, physiology, genetics, evolution, conservation biology, and behavior. A degree in biology with an emphasis in Ecology and Evolution will prepare students for a career in the life sciences, whether they are interested in having a deep understanding of evolutionary process, or are interested in the interactions between organisms and their environment. This can help prepare students for careers in areas such as: 1. conservation and restoration in biology—addressing the impacts of climate change, developing plans for habitat conservation and wildlife protection, or other issues critical to maintaining a healthy planet; 2. working as a doctor or veterinarian; 3. science education—educating students and the public on the history and diversity of life on Earth and the need to conserve it; 4. basic research in biology—helping to expand the frontiers of knowledge by studying the evolution of organisms and their ecosystems.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 300 General Entomology ........................................... 3
BIO 337 Mathematical Modeling in the Life Sciences ....... 3
BIO 351 Plant Kingdom ............................................... 3
BIO 375 Behavioral Ecology and Sociobiology ................. 3
BIO 395 Research in Biology (maximum 3 credits toward track) ........................................... 1-3
BIO 430G Plant Physiology ........................................... 4
BIO 440 Comparative and Functional Anatomy .............. 4
BIO 445 The Biology of Sex ......................................... 3

BIO 502 Systems, Cellular and Molecular Physiology ........ 5
BIO 510 Recombinant DNA Techniques Laboratory ....... 4
BIO 520 Bioinformatics ............................................. 3
BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine ........................................... 3
BIO 582 Virology ...................................................... 3
BIO 542 Histology .................................................... 5
BIO 410 Vertebrate Endocrinology ................................ 3
*BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ........................................... 1-4

Courses from Outside the Biology department:
BCH 401G Fundamentals of Biochemistry ....................... 3
CHE 233 Organic Chemistry Laboratory II ...................... 1
CHE 550 Biological Chemistry I ................................... 3
CHE 552 Biological Chemistry II .................................. 3
CHE 532 Spectrometric Identification of Organic Molecules ........................................... 2
MI/PAT 598 Clinical Microbiology ................................ 3
ANA 442 Molecular and Cellular Neurobiology ............... 3

Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis. 
**Only for students who do not use the course to fulfill the 2nd Tier Core.
**Subtitle must be approved by Director of Undergraduate Studies.

General Biology Track
This is the default option for students who do not declare another track.

Choose 13-15 credit hours from the upper-level electives listed below.

Biology
BIO 3XX, BIO 4XX, BIO 5XX, BIO 6XX

Anthropology
ANT 332 Human Evolution ........................................ 3

Chemistry
CHE 226 Analytical Chemistry ...................................... 3
CHE 233 Organic Chemistry Laboratory II ..................... 1
CHE 440G Introductory Physical Chemistry .................. 3
CHE 441G Physical Chemistry Laboratory .................... 2
CHE 446G Physical Chemistry for Engineers ................. 3
CHE 532 Spectrometric Identification of Organic Molecules ........................................... 2
CHE 533 Advanced Organic Chemistry Laboratory ........ 2
CHE 550 Biological Chemistry I .................................. 3
CHE 552 Biological Chemistry II .................................. 3
CHE 558 Hormone Receptors and Cell Signals ............... 3
CHE 565 Environmental Chemistry .............................. 3

Geology
EES 401G Invertebrate Paleobiology and Evolution .......... 3

Psychology
PSY 459 Neuropsychology: Drugs and Behavior ............. 3

Statistics
(Biology usually accepts only one of the following for each student)
STA 570 Basic Statistical Analysis ............................... 3
STA 580 Biostatistics I ............................................... 2

Other STA courses may be accepted at the discretion of your advisor.

Writing, Rhetoric, and Digital Studies
WRD 305 Writing Public Science ................................ 3
WRD 310 Writing in the Natural Sciences ....................... 3

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ABT/AGR/ASC/ENT 460 Introduction to Molecular Genetics .......................... 3
ASC 364 Reproductive Physiology of Farm Animals ........................................... 4
ASC 378 Animal Nutrition and Feeding ............................................................... 4
ENT 310 Insect Pests of Field Crops ................................................................. 3
ENT 320 Horticultural Entomology ................................................................. 3
ENT/ABT 460 Introduction to Molecular Genetics ........................................... 3
ENT/FOR 502 Forest Entomology ................................................................. 3
ENT 561 Insects Affecting Human and Animal Health ..................................... 3
ENT 564 Insect Taxonomy ................................................................................. 4
ENT 568 Insect Behavior .................................................................................. 3
FOR 340 Forest Ecology ..................................................................................... 4
FOR 370 Wildlife Biology and Management .................................................... 4
FOR 435 Conservation Biology ........................................................................ 3
FOR/ENT 502 Forest Entomology ................................................................. 3
FOR 530 Freshwater Ecology .......................................................................... 3
FOR 510 Herpetology ......................................................................................... 5
FSC 530 Food Microbiology ............................................................................ 5
NRE 420G Taxonomy of Vascular Plants ......................................................... 3
NRE 450G Biogeochemistry ........................................................................... 3
PLS 320 Woody Horticultural Plants ............................................................ 4
PLS 330 Herbaceous Horticultural Plants I ..................................................... 2
PLS 332 Herbaceous Horticultural Plants II ................................................. 2
PLS 366 Fundamentals of Soil Science .......................................................... 4
PLS 450G Biogeochemistry ........................................................................... 3
PLS 502 Ecology of Economic Plants ........................................................... 3
PLS 566 Soil Microbiology ............................................................................. 4
PLS 567 Methods in Soil Microbiology ....................................................... 1
PPA 400G Principles of Plant Pathology ....................................................... 3

College of Arts and Sciences

Genetics, Genomics, and Bioinformatics Track

The Genetics, Genomics, and Bioinformatics Track will provide guidance and structure to students with a desire to specialize in the study of inheritance and will formally recognize their chosen area of specialization in the description of their degree. The selected course offerings span the spectrum of studies within the area of inheritance, allowing students to select broadly from courses that provide sophisticated insight into genetic information and genetic analysis. The selected courses also allow students to dive deeply into different realms of genetics, including: emphasis on microbes (BIO 308, 309 and 510); emphasis on animals (BIO 404, 405, 429, 527); emphasis on analytical technology (BIO 337, 404, 461, 510, 520, STA 579, STA 580, ABT 460); emphasis on development (BIO 404, 405, 429, 445, 527, PGY 417); and emphasis on evolution (BIO 461, 508, 518).

Students selecting this track will be able to demonstrate a clear understanding of the most important and fundamental theories and ideas in contemporary biology from a perspective that emphasizes inheritance, organization, and analysis of genetic information.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The maximum 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

*BIO 308 General Microbiology ................................................................. 3
*BIO 309 Microbiology Laboratory ............................................................ 2
*BIO 337 Mathematical Modeling in the Life Sciences ......................... 3
*BIO 394/395/397 Research in Biology/Microbiology (maximum 3 credits toward track) ......................................................... 1-3
*BIO 404 Advanced Genetics ..................................................................... 3
*BIO 405 Human Genetics ......................................................................... 3
*BIO 429 Developmental Biology ............................................................... 3
*BIO 445 The Biology of Sex ........................................................................ 3
*BIO 461 Introduction to Population Genetics ......................................... 3
*BIO 508 Evolution ......................................................................................... 3
*BIO 510 Recombinant DNA Techniques Laboratory ................................ 4
*BIO 418 Ecological Genetics ....................................................................... 3
*BIO 520 Bioinformatics ............................................................................. 3
*BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine ...... 3

**BIO 380 Special Topics in Biology (Intermediate Level) (Subitle required) ......................................................... 1-4

Courses from Outside the Biology department:

STA 570 Basic Statistical Analysis ............................................................... 3
STA 580 Biostatistics I .................................................................................. 2
ABT/ENT 460 Introduction to Molecular Genetics ........................................ 3
PGY 417 Genomics and Epigenetics ........................................................... 2

Other courses can be approved by the Director of Undergraduate Studies in Biology on a case by case basis.

*Only for students who do not use the course to fulfill the 2nd Tier Core.
**Subitle must be approved by Director of Undergraduate Studies.

Physiology and Behavior Track

Physiology is the study of function of living organisms, primarily plants and animals. The field studies cells, tissues, organs, and the whole organism. To understand function, a mechanistic approach is used to integrate the cell level to the whole organism. The study of animal behavior and physiology go hand in hand in addressing the functional mechanisms which regulate behavior. This track will prepare pre-
Pre-Professional Track

The Pre-Professional Track in the biology major broadly explores organizational structure and function in the context of preparing students for health-related professional programs. The courses in this track give the students a broad view of both normal and abnormal organismal function, with courses specializing in neuroscience, physiology, microbiology, and molecular biology. Independent research in this track will be an opportunity for students to work with science professionals within their desired field. Through completion of this track, students can fulfill prerequisite and recommended courses for most pre-professional health programs. Students who exceed in this track can go on to enroll in a variety of professional programs, including medical, dental, optometry, veterinary, and physician’s assistant programs. A biology degree with a pre-professional health emphasis also prepares students for careers as research scientists, research lab technicians, microbiologists, genetic counselors, biology teachers, and many other general biology careers.

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The remaining 1-3 credit hours may come from the list of approved electives for the general biology track, which may include an additional 3 hours of independent research (BIO 394/395/397). A maximum of 6 credit hours of independent research can be counted toward the Biology degree. Of the 13-15 hours of total upper-level electives required, 9 credit hours must have a BIO prefix.

BIO 302 Introduction to Neuroscience ................. 3
BIO 305 Introduction to Neuroscience Techniques .... 4
BIO 306 General Microbiology ....................... 3
BIO 309 Microbiology Laboratory ..................... 2
BIO 394/395/397 Research in Neuroscience/Biology/Microbiology (maximum 3 credits toward track) .... 1-3

BIO 405 Human Genetics ................................. 3
BIO 410 Vertebrate Endocrinology ...................... 3
BIO 440 Comparative and Functional Anatomy ........ 4
BIO 445 The Biology of Sex ............................... 3
BIO 446 Neurophysiology Laboratory .................. 3
BIO 494Q Immunobiology ................................. 3
BIO 495Q Bacterial Pathogenesis ....................... 3
BIO 502 Systems, Cellular and Molecular Physiology .... 3
BIO 507 Biology of Sleep and Circadian Rhythms ...... 3
BIO 510 Recombinant DNA Techniques Laboratory ... 4
BIO 520 Bioinformatics ...................................... 3
BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine ............................ 3
BIO 429 Developmental Biology ......................... 3
BIO 535 Comparative Neurobiology and Behavior ...... 3
BIO 550 Advanced Physiology ............................ 3
BIO 582 Virology ............................................... 3
BIO 542 Histology ............................................. 3
BIO 350 Animal Physiology ............................... 4
**BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) .................. 1-4

Courses from Outside the Biology Department:

ANA 410Q Neurobiology of Brain and Spinal Cord Disorders ............... 3
ANA 442 Molecular and Cellular Neurobiology ............ 3
BCH 401G Fundamentals of Biochemistry ................ 3
CHE 550 Biological Chemistry I ........................... 3
CHE 551 Biological Chemistry II .......................... 3
MIPAT 598 Clinical Microbiology ......................... 3
PGY 560 Pathophysiology: Integrative Study in Physiology and Medicine ...... 1
PSY 459 Neuropharmacology: Drugs and Behavior ...... 3
PGY 512 Evolutionary Medicine ........................... 3
PGY 431 Introduction to Neuroendocrinology ............ 3

Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.

**Subtitle must be approved by Director of Undergraduate Studies.

Minor in Microbiology

The minor in Microbiology consists of a total of 19 hours as follows:

**Minor Requirements**

BIO 308 General Microbiology ............................ 3
BIO 309 Microbiology Laboratory .......................... 2
BCH 401G Fundamentals of Biochemistry

or

BIO 315 Introduction to Cell Biology

or

CHE 550 Biological Chemistry I

or

CHE 552 Biological Chemistry II ........................... 3

One course from the following:

BIO/MI 494Q Immunobiology .............................. 3
BIO/MI 495Q Bacterial Pathogenesis ..................... 3
BIO/MI 582 Virology .......................................... 3

If more than one course is taken from this list, the additional course(s) would count as an elective for the minor.

Minor Electives

Select 7 or 8 hours of electives (to make a total of 19 hours for the minor) from:

BIO 397 Research in Microbiology ........................ 1-3
BIO 427 Seminar in Microbiology (Subtitle required) .... 1
ART/BIO/ENT/461 Introduction to Population Genetics ........................................ 3

One of these courses must be approved by the Director of Undergraduate Studies for the Microbiology minor.

High achieving students may take advanced level course work from (permission of the Dean of the Graduate School is required to register for these courses):

- BIO 208 and BIO 209 cannot be used to satisfy the upper-level elective requirement for the Minor in Biology.
- Any course can be taken for up to 3 hours of independent research credit.
- Other microbiology-related courses at the 300-level or above, as approved by the Director of Undergraduate Studies for the Microbiology minor.
The Department of Chemistry offers the Bachelor of Science degree for students who intend to become professional chemists or do graduate work in chemistry or a closely related discipline. There are three options in the B.S. program: a traditional track covering all the major areas of chemistry, an option that emphasizes biochemistry and an option in materials chemistry. The Biochemistry and Traditional Options are certified by the American Chemical Society. A Bachelor of Arts degree program is offered as well for students who want greater flexibility in the selection of courses to perhaps pursue more diverse degree options, including dual and double majors. The Department also offers the Master of Science and the Doctor of Philosophy degree.

Bachelor of Arts with a major in CHEMISTRY

122 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. Please also note that the Organic Chemistry Sequence (CHE 230/231/232/233) will count towards completion of this requirement. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ................................. 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list .................................. 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list .................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
CHE 105 General College Chemistry I ................................ 4
CHE 111 General Chemistry I Laboratory ............................. 1

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .............. 3

VII. Quantitative Foundations
MA 113 Calculus I .......................................................... 4

VIII. Statistical Inferential Reasoning
Choose one course from approved list ................................. 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ................................. 3

X. Global Dynamics
Choose one course from approved list ................................. 3

UK Core hours: .................................................................. 33

Graduation Composition and Communication Requirement (GCCR)

In order to meet the Graduation Composition and Communication Requirement (GCCR), students must successfully complete both BIO 425 to fulfill the oral communication requirement and one course from the list below to fulfill the written communication requirement. In order to receive GCCR credit a student must:

a. Earn an average grade of C or better on all GCCR assignments;

b. Have completed at least 30 credit hours of college-level coursework prior to registering for the course.

Oral Communication Requirement
BIO 425 Biology Seminar (Subtitle required) ........................ 1

Written Communication Requirement
Choose one course from the following 8 options:

BIO 398 Research and Writing in Biology .............................. 1-3
BIO 404 Advanced Genetics .............................................. 3
BIO 405 Human Genetics .................................................. 3
BIO 418 Ecological Genetics .............................................. 3
BIO 430G Plant Physiology ............................................... 4
BIO 445 The Biology of Sex .............................................. 3
WRD 305 Writing Public Science ....................................... 3
WRD 310 Writing in the Natural Sciences .............................. 3

Graduation Composition and Communication Requirement hours (GCCR) ........................................ 2-5

College Requirements

I. Foreign Language (placement exam recommended) ............... 0-14
II. Disciplinary Requirements
a. Natural Science (completed by Major Requirements) ........
b. Social Science .......................................................... 5

III. Laboratory or Field Work (completed by Premajor Requirement)

IV. Electives

College Requirement hours: ............................................ 18-32

Premajor Requirements

*MA 113 Calculus I or
MA 132 Calculus for the Life Sciences ............................... 3-4
MA 114 Calculus II ........................................................ 4

*CHE 105 General College Chemistry I ............................. 4
*CHE 107 General College Chemistry II ............................ 3
*CHE 111 General Chemistry I Laboratory ......................... 1
CHE 113 General Chemistry II Laboratory .......................... 2

Premajor hours: ................................................................ 17-18

Major Requirements

Major Core Requirements
CHE 226 Analytical Chemistry ........................................... 3
CHE 230 Organic Chemistry I .......................................... 3
CHE 231 Organic Chemistry Laboratory I .......................... 1
CHE 232 Organic Chemistry II .......................................... 3
CHE 233 Organic Chemistry Laboratory II .......................... 1
CHE 440G Introductory Physical Chemistry ....................... 3
CHE 441 Physical Chemistry Laboratory ............................ 2

Major Core hours: ......................................................... 16

Other Course Work Required for the Major Chemistry Major Field Options

Choose 21 hours at the 300+ level with a prefix of ANA, BCH, BIC, CHE, CME, CS, EES, MA, MI, MIE, PAT, POY, PHA, PHR, PHY, PM, RM, or STA. Credit will not be given for both BCH 401G and CHE 550 or CHE 552. At least 5 of these hours must be in CHE courses; at least 4 hours must be taken outside CHE. Up to 9 hours of CHE 395 are possible for students having a minimum GPA of 3.0 in CHE courses. Other courses may be approved by the Undergraduate Program Committee. Students working towards teaching accreditation may count 6 hours taken at the 300+ level from the College of Education. A maximum of 9 hours in undergraduate research or reading courses may be counted; such courses require approval of the Undergraduate Program Committee if the courses do not carry the CHE prefix. 21

From the Physics Department
*PHY 211/213 General Physics or
*PHY 231/232 General University Physics
*PHY 241/242 General University Physics Laboratory

Other Major Hours: ....................................................... 10

Total Minimum Hours Required for Degree: ......................... 122

*Any language may be used to satisfy the College Foreign Language requirements – German is recommended.

*Course used towards completion of a UK Core Requirement.

Curriculum for B.A. in Chemistry

Freshman Year

First Semester

Hours
CHE 105 General College Chemistry I ............................. 4
CHE 111 General Chemistry I Laboratory .......................... 1
CIS/WRD 110 Composition and Communication I ............. 3
MA 113 Calculus I ........................................................ 4
UK 101 Academic Orientation ......................................... 1
UK Core – Arts and Creativity ....................................... 3

Second Semester

CHE 107 General College Chemistry II ............................ 3
CHE 113 General Chemistry II Laboratory ........................ 2
MA 114 Calculus II ...................................................... 4
CIS/WRD 111 Composition and Communication II ............ 3
UK Core – Humanities .................................................. 3

Sophomore Year

First Semester

Hours
CHE 230 Organic Chemistry I ........................................... 3
CHE 231 Organic Chemistry Laboratory I .......................... 1
PHY 211 General Physics ............................................... 5
STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning ............................................. 3

UK Core – Social Sciences ........................................... 3

Second Semester

CHE 226 Analytical Chemistry ........................................... 3
CHE 232 Organic Chemistry II ........................................... 3
CHE 233 Organic Chemistry Laboratory II ......................... 1
PHY 213 General Physics ............................................... 5
UK Core – Citizenship - USA .......................................... 3

Junior Year

First Semester

Hours
CHE 440G Introductory Physical Chemistry ....................... 3
WRD 310 Writing in the Natural Sciences ............................ 3

Foreign Language H ................................................................ 4

A&S Humanities ............................................................ 3

Major Field Option ......................................................... 3

Second Semester
CHE 441 Physical Chemistry Laboratory ........................................ 2
Forex and Language III .......................................................... 4
A&S Social Science ........................................................................ 3
Major Field Option ........................................................................ 3
Major Field Option ........................................................................ 3
Senior Year
First Semester
Foreign Language III ....................................................................... 3
Major Field Option ........................................................................ 3
A&S Humanities ............................................................................... 3
UK Core – Global Dynamics .......................................................... 3
Second Semester
Major Field Option ........................................................................ 3
Major Field Option ........................................................................ 3
A&S Social Science .......................................................................... 3
Elective .......................................................................................... 3
300+ Elective .................................................................................. 3
*Any foreign language sequence satisfying the College of Arts and Sciences requirement in foreign languages may be taken. German is recommended.

Bachelor of Science with a major in

CHEMISTRY

Traditional Option

123 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ........................................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ......................................... 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ......................................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
CHE 105 General College Chemistry I ........................................ 4
CHE 111 General Chemistry I Laboratory ........................................ 1

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .................. 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .................. 3

VII. Quantitative Foundations
MA 113 Calculus I ........................................................................ 4

VIII. Statistical Inferential Reasoning
Choose one course from approved list ......................................... 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ......................................... 3

X. Global Dynamics
Choose one course from approved list ........................................ 3

UK Core hours: ................................................................. 33

Graduation Composition and Communication Requirement (GCCR)
WRD 310 Writing in the Natural Sciences .................................... 3
Graduation Composition and Communication Requirement hours (GCCR) ........................................................................ 3

College Requirements

I. Foreign Language (placement exam recommended) 0-14
II. Disciplinary Requirements
   a. Natural Science (completed by Major Requirements) ......... 3
   b. Social Science ...................................................................... 3
c. Humanities ............................................................................... 3

III. Laboratory or Field Work (completed by Premajor Requirement)
IV. Electives .................................................................................. 6

College Requirement hours: ........................................ 12-26

Premajor Requirements

*MA 113 Calculus I ................................................................. 4
MA 114 Calculus II ................................................................. 4
*CHE 105 General College Chemistry I ...................................... 4
CHE 107 General College Chemistry II ...................................... 3
*CHE 111 General Chemistry I Laboratory .................................. 1
CHE 113 General Chemistry II Laboratory .................................. 2

Premajor hours: ................................................................. 18

Major Core Requirements

CHE 226 Analytical Chemistry ................................................... 3
CHE 230 Organic Chemistry I .................................................... 3
CHE 231 Organic Chemistry Laboratory I ............................... 1
CHE 232 Organic Chemistry II ................................................... 3
CHE 410G Inorganic Chemistry ................................................... 2
CHE 412 Inorganic Chemistry Laboratory .................................. 2
CHE 422 Instrumental Analysis .................................................. 4
CHE 441 Physical Chemistry Laboratory ................................... 2
CHE 442G Thermodynamics and Kinetics ............................... 3
CHE 532 Spectrometric Identification of Organic Molecules ...... 2
CHE 533 Advanced Organic Chemistry Laboratory ................ 2
CHE 547 Principles of Physical Chemistry I ............................. 3
CHE 550 Biological Chemistry I or CHE 552 Biological Chemistry II ......................................................... 3

Major Core hours: ................................................................. 33

Other Course Work Required for the Major
From the Major Department:
CHEM Major Field Options ...................................................... 6
Choose 6 hours from the following: up to 6 hours of CHE 395, any CHE 500-level course except for those required (CHE 422/525/533/550 or 552).

From the Mathematics Department
MA 213 Calculus III ................................................................ 4
MA 322 Matrix Algebra and its Applications ........................... 3

From the Physics Department
*PHY 231/232 General University Physics ................................ 8
*PHY 241/242 General University Physics Laboratory ............. 2

Other Major hours: ................................................................. 23

Total Minimum Hours
Required for Degree ......................................................... 123

*Any language may be used to satisfy the College Foreign Language requirements – German is recommended.

*Course used towards completion of a UK Core Requirement.

Certification Requirements

The B.S. degree is certified by the American Chemical Society.
Bachelor of Science with a major in CHEMISTRY

Biochemistry Option
128 hours

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............... 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............... 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
CHE 105 General College Chemistry I ................. 4
CHE 111 General Chemistry I Laboratory ............... 1

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ....... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ....... 3

VII. Quantitative Foundations
MA 113 Calculus I ................................................. 4

VIII. Statistical Inferential Reasoning
Choose one course from approved list ............... 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............... 3

X. Global Dynamics
Choose one course from approved list ............... 3

UK Core hours: ...................................................... 33

Graduation Composition and Communication Requirement (GCCR)
WRD 310 Writing in the Natural Sciences ............... 3

Graduation Composition and Communication Requirement hours (GCCR) .......................... 3

College Requirements
I. Foreign Language (placement exam recommended) .................................................. 0-14

II. Disciplinary Requirements
   a. Natural Science (completed by Major Requirements) ........................................... 3
   b. Social Science ......................................................... 3
   c. Humanities .................................................................. 3

III. Laboratory or Field Work (completed by Premajor Requirement)
   Premajor Requirements
   *MA 113 Calculus I ................................................. 4
   MA 114 Calculus II .................................................... 4
   *CHE 105 General College Chemistry I ................. 4
   CHE 107 General College Chemistry II ................. 3
   *CHE 111 General Chemistry I Laboratory ............... 1
   CHE 113 General Chemistry II Laboratory ............... 2
   BIO 148 Introductory Biology I ....................... 3
   BIO 152 Principles of Biology II ....................... 3
   BIO 155 Laboratory for Introductory Biology .......... 1
   
   Premajor hours: .................................................. 25

Major Requirements

Major Core Requirements
CHE 226 Analytical Chemistry ......................... 3
CHE 230 Organic Chemistry I ......................... 3
CHE 231 Organic Chemistry Laboratory I .............. 1
CHE 232 Organic Chemistry II ......................... 3
BIO 304 Principles of Genetics or
or BIO 308 General Microbiology or
or BIO 315 Introduction to Cell Biology ............... 3-4
CHE 410G Inorganic Chemistry ......................... 2
CHE 412 Inorganic Chemistry Laboratory .......... 2
CHE 440G Introductory Physical Chemistry ...... 3
CHE 441 Physical Chemistry Laboratory ........... 2
CHE 454 Biological Chemistry Laboratory ....... 2
CHE 422 Instrumental Analysis or
or CHE 532/533 Spectrometric Identification of Organic Molecules/Advanced Organic Chemistry Laboratory ......................... 4
CHE 550 Biological Chemistry I ...................... 3
CHE 552 Biological Chemistry II .................... 3

Major core hours: .................................................. 34-35

Other Course Work Required for the Major
From the Major Department:
Chemistry Major Field Options ......................... 4
Major Field Options must be chosen from the following:
CHE 395; or any CHE 500-level course except for those required.
CHE 395 is strongly recommended for students
having a minimum of 3.0 GPA in chemistry courses.
From the Mathematics Department
MA 213 Calculus III .............................................. 4
From the Physics Department
*PHY 231/232 General University Physics .......... 8
*PHY 241/242 General University Physics Laboratory ........................................... 2

Other Major Hours: .............................................. 18

Electives
Choose electives to lead to the minimum total of 128 hours
required for graduation.

Total Minimum Hours
Required for Degree ............................................ 128

*Course used towards completion of a UK Core Requirement.

Curriculum for B.S. in Chemistry
Biochemistry Option

Freshman Year

First Semester Hours
CHE 105 General College Chemistry I ................. 4
CHE 111 General Chemistry I Laboratory ............... 1
MA 113 Calculus I .................................................... 4
CIS/WRD 110 Composition and Communication I ....... 3
UK Core – Arts and Creativity .................................... 3

Second Semester
CHE 107 General College Chemistry II ............... 3
CHE 113 General Chemistry II Laboratory .......... 2
MA 114 Calculus II ..................................................... 4
BIO 148 Introductory Biology I ....................... 3
BIO 155 Laboratory for Introductory Biology .......... 1
CIS/WRD 111 Composition and Communication II .... 3

Sophomore Year

First Semester Hours
CHE 230 Organic Chemistry I ......................... 3
BIO 155 Principles of Biology II ....................... 3
MA 213 Calculus III ..................................................... 4
PHY 231 General University Physics .................... 4
PHY 241 General University Physics Laboratory .... 1
STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning ....... 3

Second Semester
CHE 226 Analytical Chemistry ......................... 3
CHE 231 Organic Chemistry Laboratory I ............. 1
CHE 232 Organic Chemistry II ......................... 3
PHY 232 General University Physics .................... 4
PHY 242 General University Physics Laboratory .... 1
UK Core – Humanities ............................................... 3

Junior Year

First Semester Hours
*CHE 440G Introductory Physical Chemistry .......... 3
CHE 422 Instrumental Analysis or
or CHE 532 Spectrometric Identification of Organic Molecules ........................................... 4
CHE 550 Biological Chemistry I ...................... 3
UK Core – Social Sciences ......................................... 3

Second Semester
CHE 410G Inorganic Chemistry ......................... 2
CHE 454 Biological Chemistry Laboratory .......... 2
CHE 533 Advanced Organic Chemistry Laboratory (if CHE 532 taken) ........................................... 2
CHE 552 Biological Chemistry II .................... 3
BIO 304 Principles of Genetics or
or BIO 308 General Microbiology or
or BIO 315 Introduction to Cell Biology ............... 3-4
Foreign Language* ................................................ 4

Senior Year

First Semester Hours
CHE 412 Inorganic Chemistry Laboratory .......... 2
Major Field Option ............................................... 2
A&S Social Science .................................................. 3
WRD 310 Writing in the Natural Sciences ............... 3
UK Core – Citizenship - USA .................................... 3
Foreign Language* ................................................ 4

Second Semester
CHE 441 Physical Chemistry Laboratory .......... 2
Major Field Option ............................................... 2
Foreign Language* ................................................ 3
UK Core – Global Dynamics ................................. 3
Electives ............................................................ 6
*CHE 442G may be substituted for CHE 440G.

**Any language may be used to satisfy the College Foreign Language requirements – German is recommended.

Certification Requirements
The B.S. degree with the Traditional and the Biochemistry Options are certified by the American Chemical Society.

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College of Arts and Sciences
Bachelor of Science with a major in CHEMISTRY

Materials Option

128 hours

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ........................................... 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ........................................... 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ........................................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ........................................... 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .................. 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .................. 3

VII. Quantitative Foundations
MA 113 Calculus I .......................................................... 4

VIII. Statistical Inference Reasoning
Choose one course from approved list ...................................... 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ...................................... 3

X. Global Dynamics
Choose one course from approved list ...................................... 3

UK Core hours: .................................................................. 33

Graduation Composition and Communication Requirement (GCCR)
WRD 310 Writing in the Natural Sciences .................................. 3

Graduation Composition and Communication Requirement hours (GCCR) ......................... 3

College Requirements

I. Foreign Language (placement exam recommended) ......... 0-14

II. Disciplinary Requirements
   a. Natural Science (completed by Major Requirements) .... 3
   b. Social Science ..................................................... 3
   c. Humanities ....................................................... 3

III. Laboratory or Field Work (completed by Premajor Requirement) ........................................ 6

IV. Electives ........................................................................ 6

College Requirement hours: .............................................. 12-26

Premajor Requirements

*MA 113 Calculus I .......................................................... 4
MA 114 Calculus II .......................................................... 4

*CHE 105 General College Chemistry I ......................... 4
CHE 107 General College Chemistry II ......................... 3
*CHE 111 General Chemistry I Laboratory ...................... 1
CHE 113 General Chemistry II Laboratory ................... 2

Premajor hours: ............................................................... 18

Major Requirements

Major Core Requirements
MSE 201 Materials Science .............................................. 3
CHE 226 Analytical Chemistry ......................................... 3
CHE 230 Organic Chemistry I ......................................... 3
CHE 231 Organic Chemistry Laboratory I ....................... 1
CHE 232 Organic Chemistry II ......................................... 3
CHE 4106 Inorganic Chemistry ....................................... 2
CIS/WRD 111 Composition and Communication II ....... 3
MA 213 Calculus III ...................................................... 4
MA 113 Calculus I .......................................................... 4

Premajor hours: ............................................................... 18

Major Core hours: ............................................................ 72

Other Course Work Required for the Major
From the Major Department:
Chemistry Major Field Options ........................................... 6

Choose 6 hours from the following: up to 6 hours of CHE 395, any CHE 500-level course except for those required (CHE 422/523/533/ [550 or 552]); BCH 401G.

From the Mathematics Department
MA 213 Calculus III ...................................................... 4

From the Physics Department
*PHY 231/232 General University Physics ....................... 8
*PHY 241/242 General University Physics Laboratory .... 2

Other Major hours: ............................................................. 20

Electives

Choose electives to lead to the minimum total of 128 hours required for graduation.

Total Minimum Hours Required for Degree ......................... 128

*Any language may be used to satisfy the College Foreign Language requirements – German is recommended.

*Course used towards completion of a UK Core Requirement.

Curriculum for B.S. in Chemistry Materials Chemistry Option

Freshman Year

First Semester Hours
CHE 105 General College Chemistry I ......................... 4
CHE 111 General Chemistry I Laboratory ..................... 1
CIS/WRD 110 Composition and Communication I ........ 3
MA 113 Calculus I .......................................................... 4
STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning ......................... 3

Second Semester
CHE 107 General College Chemistry II ..................... 3
CHE 113 General Chemistry II Laboratory ............... 2
MA 114 Calculus II .......................................................... 4
CIS/WRD 111 Composition and Communication II ....... 3
Foreign Language I* ..................................................... 4

Sophomore Year

First Semester Hours
CHE 230 Organic Chemistry I ......................................... 3
CHE 231 Organic Chemistry Laboratory I ..................... 1
MA 213 Calculus III ...................................................... 4
PHY 231 General University Physics ......................... 4
PHY 241 General University Physics Laboratory ........ 1
UK Core – Social Sciences ............................................. 3

Second Semester
CHE 226 Analytical Chemistry ....................................... 3
CHE 232 Organic Chemistry II ....................................... 3
PHY 232 General University Physics ......................... 4
PHY 242 General University Physics Laboratory ........ 1
UK Core – Arts and Creativity ........................................ 3
UK Core – Humanities ................................................... 3

Junior Year

First Semester Hours
MSE 201 Materials Science ............................................. 3
CHE 547 Principles of Physical Chemistry I ................... 3
CHE 532 Spectrometric Identification of Organic Molecules .................................................. 2
CHE 533 Advanced Organic Chemistry Laboratory .... 2
CHE 536 Organic Materials: Electronic and Photonic Properties ........................................ 3
CHE 547 Principles of Physical Chemistry I ................... 3
CHE 566 Organic Materials: Characterization and Devices ................................................. 3
CHE 567 Organic Materials: Fabrication Laboratory .... 2
CHE 576 Polymer Chemistry ........................................... 3

Second Semester
CHE 4106 Inorganic Chemistry ....................................... 2
CHE 533 Advanced Organic Chemistry Laboratory .... 2
CHE 441 Physical Chemistry Laboratory ..................... 2
CHE 516 Inorganic Chemistry Laboratory .................... 3
Foreign Language II* ..................................................... 4
A&S Free Elective ......................................................... 3

Senior Year

First Semester Hours
CHE 412 Inorganic Chemistry Laboratory .................... 2
CHE 536 Organic Materials: Electronic and Photonic Properties ........................................ 3
Major Field Option ....................................................... 3
A&S Social Sciences ..................................................... 3
A&S Free Elective ......................................................... 3
UK Core – Citizenship · USA ............................................. 3

Second Semester
CHE 566 Organic Materials: Characterization and Devices .................................................. 3
CHE 567 Organic Materials: Fabrication Laboratory .... 2
Major Field Option ....................................................... 3
Foreign Language II* ..................................................... 4
UK Core – Global Dynamics ............................................. 3

*Any foreign language sequence satisfying the College of Arts and Sciences requirement in foreign languages may be taken. German is recommended.

Certification Requirements

The B.S. degree is certified by the American Chemical Society.

Minor in Chemistry

The minor in Chemistry requires the following:

MA 113 Calculus I .......................................................... 4
MA 132 Calculus for the Life Sciences ......................... 3-4
MA 114 Calculus II .......................................................... 4
PHY 211/213 General Physics or .................................. 10
PHY 231/241 General University Physics and Laboratory and ........................................... 5
PHY 232/242 General University Physics and Laboratory ........................................... 5
CHE 105 General College Chemistry I ..................... 4
CHE 107 General College Chemistry II ..................... 3
EARTH AND ENVIRONMENTAL SCIENCES

The earth and environmental sciences encompass a wide variety of studies of our planet, including the study of its composition, structure, prehistoric life, internal and surficial processes, and history. These studies have important implications for understanding how our planet functions, as well as for understanding the interactions between humans and their environment. The discipline includes numerous applications in the discovery and use of mineral, energy, and water resources; in the protection and restoration of the environment; and in planning for the impacts of natural hazards (earthquakes, landslides, etc.) and climate change on global societal development. Students undertake the study of earth and environmental sciences in the classroom, laboratory, and field.

Students in earth and environmental sciences earn the Bachelor of Science or Bachelor of Arts degree with a major in Geological Sciences. The B.S. program is designed for students who plan a career as a professional geologist or who plan to attend graduate school. The B.A. program is designed for students planning a career in public policy relating to earth science and environmental issues, earth-science education, business (environmental consulting), environmental law, or environmental medicine.

Bachelor of Arts with a major in GEOLOGICAL SCIENCES

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

Other Course Work Required for the Major

From the Major Department:

Elective I ......................................................... 6
Choose 6 hours of EES courses at the 400+ level, not to include EES 495 or 496

Elective II ......................................................... 6
Choose 6 additional hours of 300+ EES or related courses

NOTE: 14 hours at the 200 level or higher must be completed outside Geological Sciences. Partial fulfillment of this requirement can be completed by the PHY and EES Elective II Requirements ................................. 3-14

Other Major hours: ........................................ 0-17

Total Minimum hours Required for Degree .......................... 120

*Course used towards completion of a UK Core Requirement.

Bachelor of Science with a major in GEOLOGICAL SCIENCES

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list .................................. 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list .................................. 3

III. Intellectual Inquiry in the Social Sciences

Choose one course from approved list .................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

Fulfilled by Premajor Requirement – CHE 105/CHE 111

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I .............. 3

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II .............. 3

VII. Quantitative Foundations

Fulfilled by Premajor Requirement – MA 123 or MA 113

VIII. Statistical Inferential Reasoning

Choose one course from approved list .................................. 3

IX. Community, Culture and Citizenship in the USA

Choose one course from approved list .................................. 3

X. Global Dynamics

Choose one course from approved list .................................. 3

UK Core hours: ................................................................ 24

Graduation Composition and Communication Requirement (GCCR)

EES 235 Fundamentals of Geology I .................................... 3

EES 461 Igneous and Metamorphic Petrology .................... 4

Graduation Composition and Communication Requirement hours (GCCR) .......................................................... 7

College Requirements

I. Foreign Language (placement exam recommended) .......................... 0-14

II. Disciplinary Requirements

a. Natural Science (completed by Major Requirements) .................................. 6

b. Social Science (can be partially fulfilled by Major Requirements) .................. 6

c. Humanities ........................................................................ 6

III. Laboratory or Field Work (completed by Premajor Requirement)

IV. Electives ........................................................................... 6

College Requirement hours: ........................................... 18-32

Premajor Requirements

*CHE 105 General College Chemistry I .................................. 4

*CHE 111 General Chemistry I Laboratory .............................. 1

EES 220 Principles of Physical Geology .................................. 4

EES 295 Geoscience Orientation .............................................. 1

*MA 123 Elementary Calculus and its Applications

or

*MA 113 Calculus I ............................................................... 4

*PHY 211 General Physics

or

*PHY 231/241 General University Physics/Lab ....................... 5

Premajor hours: .................................................................. 19

Major Requirements

Major Core Requirements

EES 230 Fundamentals of Geology I .................................... 3

EES 235 Fundamentals of Geology II .................................... 3

EES 350 Regional Historical Geology .................................... 3

EES 360 Mineralogy ............................................................. 4

EES 420G Structural Geology ................................................. 4

EES 450G Sedimentary Geology ............................................. 4

EES 461 Igneous and Metamorphic Petrology .................... 4

Major Core hours: ............................................................. 25

Other Course Work Required for the Major

From the Major Department:

Elective I ......................................................... 6
Choose 6 hours of EES courses at the 400+ level, not to include EES 495 or 496

Elective II ......................................................... 6
Choose 6 additional hours of 300+ EES or related courses

NOTE: 14 hours at the 200 level or higher must be completed outside Geological Sciences. Partial fulfillment of this requirement can be completed by the PHY and EES Elective II Requirements ................................. 3-14

Other Major hours: ........................................ 0-17

Total Minimum hours Required for Degree .......................... 120

*Course used towards completion of a UK Core Requirement.

Graduation Composition and Communication Requirement (GCCR)

EES 235 Fundamentals of Geology I .................................... 3

EES 461 Igneous and Metamorphic Petrology .................... 4

Graduation Composition and Communication Requirement hours (GCCR) .......................................................... 7
## College Requirements

### I. Foreign Language (placement exam recommended) 0-14

### II. Disciplinary Requirements
- a. Natural Science (completed by Major Requirements) 3
- b. Social Science 3
- c. Humanities 3

### III. Laboratory or Field Work (completed by Premajor Requirement)

### IV. Electives 6

College Requirement hours: 12-26

## Premajor Requirements

- *MA 113 Calculus I 4*
- *MA 114 Calculus II 4*
- *CHE 105 General College Chemistry I 4*
- *CHE 111 General Chemistry I Laboratory 1*
- *CHE 107 General College Chemistry II 3*
- *CHE 113 General Chemistry II Laboratory 2*
- EES 220 Principles of Physical Geology 4
- EES 230 Fundamentals of Geology I 3
- EES 235 Fundamentals of Geology II 3
- EES 295 Geoscience Orientation 1

Premajor hours: 29

## Major Requirements

### Major Core Requirements

- EES 323 Field Work in Regional Geology 6
- EES 360 Mineralogy 4
- EES 420G Structural Geology 4
- EES 4500 Sedimentary Geology 4
- EES 461 Igneous and Metamorphic Petrology 4
- EES 490 Earth Dynamics 3

Major Core hours: 25

### Other Course Work Required for the Major

From the Major Department:
- Elective I 6
- Elective II 6

Choose 6 hours of EES courses at the 400+ level, not to include EES 495 or 496

Choose 6 additional hours of 300+ EES or related courses

From the Physics Department

- *PHY 211/213 General Physics or *
- *PHY 231/232/241/242 General University Physics 10*

**NOTE:** 14 hours at the 200 level or higher must be completed outside Geological Sciences. Partial fulfillment of this requirement can be completed by the PHY Sequence and EES Elective II Requirements 0-4

### Other Major hours: 0-18

Total Minimum Hours Required for Degree: 120

*Course used towards completion of a UK Core Requirement.

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## Minor in Geological Sciences

The minor in Geological Sciences requires 19 hours of course work to include:

- EES 220 Principles of Physical Geology 4
- EES 230 Fundamentals of Geology I 3
- EES 235 Fundamentals of Geology II 3

Plus 9 hours in EES courses at the 300 level or higher.

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## ECONOMICS

The Department of Economics offers theoretical and applied courses in diverse areas including microeconomics, macroeconomics, labor, money and banking, international economics, public economics, and industrial organization. It provides an opportunity for the student to pursue his or her interests within the framework of a liberal arts education.

The department offers programs leading to different undergraduate degree – a Bachelor of Science in the Gatton College of Business and Economics, a Bachelor of Arts and a Bachelor of Science with a major in economics in the College of Arts and Sciences, and a Bachelor of Arts and a Bachelor of Science with a major in mathematical economics. The distinctions among these degree lie primarily in the required supporting courses in the various programs. (For students wishing to major in economics through the Gatton College of Business and Economics, please refer directly to that college’s section in the Bulletin. Mathematical economics majors should refer directly to that section of the Bulletin under the College of Arts and Sciences.)

### Bachelor of Arts with a major in ECONOMICS

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

### I. Intellectual Inquiry in Arts and Creativity

- Choose one course from approved list 3

### II. Intellectual Inquiry in the Humanities

- Choose one course from approved list 3

### III. Intellectual Inquiry in the Social Sciences

- Choose one course from approved list 3

### IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

- Choose one course from approved list 3

### V. Composition and Communication I

- CIS/WRD 110 Composition and Communication I 3

### VI. Composition and Communication II

- CIS/WRD 111 Composition and Communication II 3

### VII. Quantitative Foundations

MA 123 Elementary Calculus and its Applications or MA 113 Calculus I 4

### VIII. Statistical Inferential Reasoning

- STA 296 Statistical Methods and Motivations 3

### IX. Community, Culture and Citizenship in the USA

Choose one course from approved list 3

UK Core hours: 31

Graduation Composition and Communication Requirement (GCCCR) 3

### College Requirements

- *MA 113 Calculus I 4*
- *MA 123 Elementary Calculus and its Applications* or MA 162 Finite Mathematics and its Applications 4-7

**NOTE:** 14 hours at the 200 level or higher must be completed outside the major.

### Other Course Work Required for the Major

From the Major Department:
- Other Major: 12

### Other Course Work Required for the Major

From the Major Department:

- Other Major: 30

Choose electives to lead to the minimum total of 120 hours required for graduation.

Total Minimum Hours Required for Degree: 120

*Majors leading to a Bachelor of Arts degree are invited to discuss their plans with their advisor to make appropriate choices of courses.*
Bachelor of Science with a major in ECONOMICS

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with a prefix of ECO are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this 60-hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list .......................... 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list .......................... 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list .......................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list .......................... 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ......... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ......... 3

VII. Quantitative Foundations
MA 123 Elementary Calculus and its Applications or MA 113 Calculus I ..................................................... 3

VIII. Statistical Inferential Reasoning
STA 295 Statistical Methods and Motivations ............... 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list .......................... 3

X. Global Dynamics
Choose one course from approved list .......................... 3

UK Core hours: ......................................................... 31

Graduation Composition and Communication Requirement (GCCR)
ECO 499 Seminar in Economics (Subtitle required) ...... 3

Graduation Composition and Communication Requirement hours (GCCR) .............................................. 3

College Requirements

I. Foreign Language (placement exam recommended) .................. 0-14

II. Disciplinary Requirements
a. Natural Science ......................................................... 3
b. Social Science (completed by Premajor Requirement) ........ 3
c. Humanities .............................................................. 3
III. Laboratory or Field Work ............................................. 1
IV. Electives .................................................................... 6

College Requirement hours: ....................................... 13-27

Premajor Requirements

*MA 113 Calculus I or *MA 123 Elementary Calculus and its Applications and MA 162 Finite Mathematics and its Applications .... 4-7
ECO 201 Principles of Economics I ......................... 3
ECO 202 Principles of Economics II ......................... 3
STA 295 Statistical Methods and Motivations ............ 3

Premajor hours: ....................................................... 13-16

Major Requirements

Major Core Requirements
ECO 391 Economic and Business Statistics ............... 3
ECO 401 Intermediate Microeconomic Theory .......... 3
ECO 402 Intermediate Macroeconomic Theory ........ 3
ECO 499 Seminar in Economics (Subtitle required) .. 3

Major Core hours: ...................................................... 12

Other Course Work Required for the Major
From the Major Department:
Choose 9-15 hours of 300+ level economics courses of which at least 6 hours must be at the 400+ level ........... 9-15

From Outside the Major Department
Choose 15-21 hours outside economics at the 200+ level, with at least 6 hours in two different departments. These courses are generally chosen from the following departments: Anthropology, Computer Science, History, Mathematics, Philosophy, Political Science, Psychology, Sociology, Statistics, or courses offered by the College of Business and Economics. 200+ level courses used to satisfy College Requirements can also be counted here .......... 15-21

Other Major hours: ...................................................... 30

Electives
Choose electives to lead to the minimum total of 60 science hours and 120 earned hours required for graduation .... 7

Total Minimum Hours Required for Degree .................................. 120

*Course used towards completion of a UK Core Requirement.

Minor in Economics

The minor in Economics requires 18 hours of course work to include:
ECO 201 Principles of Economics I .............................. 3
ECO 202 Principles of Economics II .............................. 3
ECO 401 Intermediate Microeconomic Theory or ECO 402 Intermediate Macroeconomic Theory ........ 3
Three additional economics courses at the 300-level or above ................................................................. 9

ENGLISH

The Department of English offers a wide variety of courses in British, American and African-American literature as well as in creative writing, cultural studies, composition, and film.

Bachelor of Arts with a major in ENGLISH

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally com-
Major Requirements

Major Core Requirements

ENG Historical Survey Requirement .......................... 6
Majors must take two Historical Survey courses of their choice. Historical Surveys can be taken in any combination and any order. Courses fulfilling the Historical Survey Requirement include:
- ENG 241 Survey of British Literature I ………………… 3
- ENG 242 Survey of British Literature II ………………… 3
- ENG 251 Survey of American Literature I ……………… 3
- ENG 252 Survey of American Literature II ……………… 3
- ENG 265 Survey of African-American Literature I ……… 3
- ENG 266 Survey of African-American Literature II ……… 3
- ENG 343 Renaissance Drama and Society ……………… 3
- ENG 518 Advanced History of the English Language …… 3
- ENG 519 Introduction to Old English …………………… 3

Major Core hours: ............................................. 9-15

Other Course Work Required for the Major

From the Major Department:
Majors must take an additional seven courses in ENG (Major Electives) primarily at the 300-level and above. Of these required seven courses:
- two courses must be at the 400-level, of which one must be above ENG 407 (i.e., not ENG 401, 405, or 407);
- two courses maximum may be counted from additional Historical Surveys (surveys cannot be double-counted for the Historical Survey Requirement and for the total ENG course requirement);
- two courses maximum may be counted from ENG 207, ENG 221, ENG 260, ENG 280, and ENG 290.

All additional courses must be at the 300-500 level in ENG. Majors should fulfill the Early Period and Diversity Requirements from among these courses if they have not been already satisfied (e.g., by survey classes or ENG 330) ………… 21

Total minimum ENG course hours (excluding premajor) ………… 30

From Outside the Major Department
For the English B.A. degree, 9 additional hours at the 200+ level outside English are required in allied departments and programs in Arts, Humanities, Social Sciences, and Education. Applicable departments and programs include (by prefix): AKS, AAS, AIS, ANT, APP, CHL, CLA, EDC, EDU, EPE, GER, GWS, HIS, HIS, HMM, HON, IAS, ITA, JOU, JPN, LAS, LIN, MAS, MCL, PHI, PS, RS, SPA, ST, WRD ………… 9

Total Major hours: ………… 39-42

Other Electives
Choose electives and other courses to lead to the minimum total of 120 hours required for graduation.

Total Minimum Hours Required for Degree ………… 120

Creative Writing Option – B.A.
12 total hours within the ENG program
To fulfill the ENG Creative Writing Option, students must complete the following:
- ENG 207 Beginning Workshop in Creative Writing (Subtitled required) ………… 3
- ENG 407 Intermediate Workshop in Creative Writing (Subtitled required) ………… 3
- *ENG 507 Advanced Workshop in Creative Writing (Subtitled required) taken twice ………… 6
- submission of a portfolio for evaluation by the Creative Writing staff six weeks prior to graduation

Students complete 6 credit hours of ENG 507 under different subtitles but within the same genre.

Bachelor of Science with a major in ENGLISH

120 hours (minimum)
Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Courses with an ENG prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. For the ENG B.S. in particular, majors are allowed to apply an additional 9 hours of elective course work towards the science requirement. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ………… 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ………… 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ………… 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ………… 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ………… 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ………… 3

VII. Quantitative Foundations
Choose one course from approved list ………… 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ………… 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ………… 3

X. Global Dynamics
Choose one course from approved list ………… 3

UK Core hours ………… 30

Graduation Composition and Communication Requirement (GCCR)
ENG 330 Text and Context (Subt谍 required) ………… 3

Graduation Composition and Communication Requirement hours (GCCR) ………… 3

College Requirements
I. Foreign Language (placement exam recommended) ………… 0-14
II. Disciplinary Requirements
a. Natural Science ………… 3
b. Social Science ………… 3
c. Humanities (completed by Major Requirements) ………… 3
III. Laboratory or Field Work ………… 1
IV. Electives ………… 6

College Requirement hours: ………… 16-30

Premajor Requirements
*CIS/WRD 110 Composition and Communication I (requirement fulfilled in UK Core)
*CIS/WRD 111 Composition and Communication II (requirement fulfilled in UK Core)
plus one of the following:
*ENG 230 Introduction to Literature (Subtitled required) ………… 3
*ENG 260 Introduction to Black Writers ………… 3
*ENG 290 Introduction to Women’s Literature ………… 3

Premajor hours: ………… 3

*Course used towards completion of a UK Core Requirement.

Major Requirements

Major Core Requirements

ENG Historical Survey Requirement ………… 6
Majors must take two Historical Survey courses of their choice. Historical Surveys can be taken in any combination and any order. Courses fulfilling the Historical Survey Requirement include:
- ENG 241 Survey of British Literature I ………………… 3
- ENG 242 Survey of British Literature II ………………… 3
- ENG 251 Survey of American Literature I ……………… 3
- ENG 252 Survey of American Literature II ……………… 3
- ENG 265 Survey of African-American Literature I ……… 3
- ENG 266 Survey of African-American Literature II ……… 3
- ENG 343 Renaissance Drama and Society ……………… 3
- ENG 518 Advanced History of the English Language …… 3
- ENG 519 Introduction to Old English …………………… 3

Premajor hours: ………… 9-15
ENG 251 Survey of American Literature I ............. 3
ENG 252 Survey of American Literature II .......... 3
ENG 265 Survey of African-American Literature I .................. 3
ENG 266 Survey of African-American Literature II .................. 3
ENG 330 Text and Context (Subtitle required) ............. 3

Majors must complete this core course after completing the premajor requirements and before going on to 400-level courses in the major. ENG 330 fulfills the Graduation Composition and Communication Requirement. ENG 330 is repeatable for up to six hours of credit as an ENG elective.

ENG Early Period Requirement ......................... 0-3
Majors must take at least one Early Period ENG course of their choice. Courses fulfilling the Early Period Requirement include:
ENG 241 Survey of British Literature I ............... 3
ENG 251 Survey of American Literature I .......... 3
ENG 341 Chaucer and His Contemporaries ............ 3
ENG 342 Shakespeare ........................................... 3
ENG 343 Renaissance Drama and Society ............. 3
ENG 351 Chaucer and His Contemporaries ............ 3
ENG 352 Renaissance Drama and Society ............. 3
ENG 353 Renaissance Drama and Society ............. 3
ENG 354 Renaissance Drama and Society ............. 3
ENG 355 Renaissance Drama and Society ............. 3
ENG 356 Renaissance Drama and Society ............. 3
ENG 357 Renaissance Drama and Society ............. 3
ENG 358 Renaissance Drama and Society ............. 3
ENG 359 Renaissance Drama and Society ............. 3
ENG 360 Renaissance Drama and Society ............. 3
ENG 361 Early African-American Literature .......... 3
ENG 362 Early Period Requirement ..................... 3

Diversity Requirement ................................. 3
Students must take at least one Diversity ENG course of their choice. Courses fulfilling the Diversity Requirement include:
ENG 260 Introduction to Black Writers ............... 3
ENG 265 Survey of African-American Literature I ............. 3
ENG 266 Survey of African-American Literature II ............. 3
ENG 361 Early African-American Literature .......... 3
ENG 362 Early Period Requirement ..................... 3
ENG 363 Flights to Freedom: Literature of the Great Black Migrations ............. 3
ENG 364 Contemporary African-American Voices .......... 3
ENG 365 African American Women’s Writing .......... 3
ENG 370 Literature Across Borders .................... 3
ENG 460G Studies in African-American Literature (Subtitle required) .................. 3
ENG 470G Comparative and Transnational Studies in Literature (Subtitle required) .................. 3
ENG 480G Studies in Literature and Gender (Subtitle required) .................. 3
any other course designated as a Diversity course at the 300-400 level .................. 3

Minor Electives
Two non-Creative Writing ENG courses at the 300-level or above ............................................... 6

NOTE: Students pursuing both the Minor in English and the Minor in Creative Writing may only count 3 credit hours of ENG prefix course work towards both minors.

Minor in Creative Writing

The minor in Creative Writing consists of a total of 18 hours, of which at least 9 hours must be at or above the 300 level, distributed as follows:

Minor Requirements
One ENG Historical Survey course:
ENG 241 Survey of British Literature I ............... 3
ENG 242 Survey of British Literature II ............... 3
ENG 251 Survey of American Literature I .......... 3
ENG 252 Survey of African-American Literature I ............. 3
ENG 265 Survey of African-American Literature II ............. 3
ENG 266 Survey of African-American Literature II ............. 3

ENG 207 Beginning Workshop in Creative Writing (Subtitle required) .................. 3
ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) .................. 3

ENG 507 Advanced Workshop in Creative Writing (Subtitle required) taken twice .................. 6

Students complete 6 credit hours of ENG 507 under different subtitles but within the same genre.

Creative Writing Option – B.S.

12 total hours within the ENG program

To fulfill the ENG Creative Writing Option, students must complete the following:

ENG 207 Beginning Workshop in Creative Writing (Subtitle required) .................. 3
ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) .................. 3
ENG 507 Advanced Workshop in Creative Writing (Subtitle required) taken twice .................. 6
Submission of a portfolio for evaluation by the Creative Writing staff six weeks prior to graduation

Minor in English

The minor in English requires 18 hours of course work to include:

Any one ENG Historical Survey course:
ENG 241 Survey of British Literature I ............... 3
ENG 242 Survey of British Literature II ............... 3
ENG 251 Survey of American Literature I .......... 3
ENG 252 Survey of African-American Literature I ............. 3
ENG 265 Survey of African-American Literature II ............. 3
ENG 266 Survey of African-American Literature II ............. 3

One core course:
ENG 330 Text and Context (Subtitle required) .................. 3

Four more ENG courses, with a maximum of one 100-level course and a minimum of two 300-level courses .................. 12

NOTE: Students pursuing both the Minor in English and the Minor in Creative Writing may only count 3 credit hours of ENG prefix course work towards both minors.

Environmental and Sustainability Studies

The Environmental and Sustainability Studies B.A. degree educates students in a broad range of fundamental environmental studies subjects with concepts of sustainability integrated throughout the curriculum. The course work requirements consist of 18 credits of core courses and 24 credits of electives organized in the Areas of Economics, Environment, and Society. In order to ensure depth of knowledge and expertise 15 credits of courses will be taken within one Area. To provide breadth of knowledge, six credits of courses will be taken in a second Area and three credits of courses in the third Area. The Areas were selected in recognition that any type of sustainable activity, resource, or product must balance economic, environmental, and social considerations. In the Environmental and Sustainability Studies program, students will combine the fundamental knowledge they obtain in the three Areas to develop an understanding of sustainability and how sustainable practices can be implemented in their eventual careers. The ENS B.A. is an ideal double major for other disciplinary degrees.

Bachelor of Arts with a major in Environmental and Sustainability Studies

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the major requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major.
UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................... 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................... 3

III. Intellectual Inquiry in the Social Sciences
Recommended:
ECON 101 Contemporary Economic Issues .......................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................... 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .................. 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .................. 3

VII. Quantitative Foundations
Choose one course from approved list ............................... 3

VIII. Statistical Inferential Reasoning
STA 296 Statistical Methods and Motivations .......................... 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............................... 3

X. Global Dynamics
Choose one course from approved list ............................... 3

UK Core hours: ........................................................................ 30

Graduation Composition and Communication Requirement (GCCR)
ENS 400 Senior Seminar (Subtitle required) ............................. 3

Graduation Composition and Communication Requirement hours (GCCR) ................................................................. 3

College Requirements
I. Foreign Language (placement exam recommended) .................. 0-14

II. Disciplinary Requirements
a. Natural Science (completed by Major Requirements) ............ 3
b. Social Science (completed by Major Requirements) ............ 3
c. Humanities ........................................................................... 6

III. Laboratory or Field Work ..................................................... 1

IV. Electives .............................................................................. 6

College Requirement hours: ................................................. 13-27

Required Core Courses

Hours
ENS 201 Environmental and Sustainability Studies I: Humaneities and Social Sciences ................................................. 3
ENS 202 Environmental and Sustainability Studies II: Natural Science and Policy ............................................................. 3
ENG 425 Environmental Writing ................................................. 3
ENS 300 Special Topics (Subtitle required) .................................. 3
PHIL 336 Environmental Ethics ................................................. 3
ENS 400 Senior Seminar (Subtitle required) ............................... 3

Required Core Courses hours: .................................................. 18

Areas of Expertise

Students must take five courses (15 credits) in one Area of Expertise, two in another Area (6 credits), and one in a third Area (3 credits)

Area 1 – Economics

A sustainable balance must be made between economic gain and protection of natural resources. Governments must determine policy and institute laws to provide the necessary protection of natural resources, and provide the guidelines for any development. This Area will provide the students with training in the interconnectedness of economics, policy and development. The students will have the freedom to select clusters of courses suited to their career goals. For example, students anticipating careers in business may select courses related to economics and those planning to go to Law School may focus on policy courses.

AEC 303 Microeconomic Concepts in Agricultural Economics .......................................................... 3
AEC 324 Agricultural Law ......................................................... 3
AEC 326 Principles of Environmental Law .................................. 3
AEC 445G Introduction to Resource and Environmental Economics .................................................. 3
AEC/ECON 479 Public Economics ............................................ 3
AEC 483 Regional Economics .................................................. 3
AEC 532 Agriculture and Food Policy .................................... 3
AEC/NRE 545 Resource and Environmental Economics .................. 3
ANT 225 Culture, Environment and Global Issues ....................... 3
ANT 311 Anthropology of Globalization ................................ 3
ANT 322 Ancient Mexican Civilizations ................................ 3
ANT 338 Economic Anthropology ........................................... 3
ANT 340 Development and Change in the Third World .......................................................... 3
ANT 375 Ecology and Social Practice ........................................ 3
ANT 470G Regional American Ethnography ............................... 3
ANT 532 Anthropology of the State ........................................ 3
ANT 543 Cultural Resource Management ................................ 3
*ECON 201 Principles of Economics I ..................................... 3
ECON 202 Principles of Economics II ...................................... 3
ECON 401 Intermediate Microeconomic Theory .......................... 3
ECON 410 Current Issues in Economics (Subtitle required) ............. 3
ECON 473G Environmental Economics ................................. 3
ENS 395 Independent Work ..................................................... 3
FOR 280 Forest Resource Policy and Law .................................. 3
FOR 325 Economic Botany: Plants and Human Affairs ................. 3
GEO 235 Environmental Management and Policy ....................... 3
GEO 255 Geography of the Global Economy ............................ 3
GEO 260 Geographies of Development in the Global South ............ 3
GEO 321 Land, People, and Development in Appalachia .................. 3
GEO 442G Political Geography ................................................. 3
GEO 455 Globalization and the Changing World Economy .......... ....... 3
GEO 550 Sustainable Resource Development and Environmental Management .................................................. 3
NRE 201 Natural Resources and Environmental Science .................. 3
NRE 381 Natural Resource and Environmental Policy Analysis ......... 3
STA 210 Statistics: A Force in Human Judgment ......................... 3
STA 296 Statistical Methods and Motivations .............................. 3
STA 320 Introductory Probability ............................................. 3
*ECON 201 is required for Area 1.

Area 2 – Environment

This Area will build upon the fundamental natural science knowledge obtained in ENS 202 and the subjects taken to fulfill the A&S requirements. Students will be able to select from courses spanning a wide range of environmental subjects in order to focus on a subject of their specific interest. For example, this Area could be used to observe how societies have influenced the natural world from historic to modern times, the impact of development on ecology, and how climate change today compares to changes that occurred in the past.

ANT 240 Introduction to Archeology .......................................... 3
ANT 241 Origins of Old World Civilization ................................. 3
ANT 242 Origins of New World Civilization ............................... 3
ANT 351 Special Topics in Archaeology (Subtitle required) ............. 3
BIO 303 Introduction to Evolution ............................................ 4
BIO 325 Ecology ................................................................. 4
BIO 375 Behavioral Ecology and Sociobiology ............................. 3
BIO 452G Laboratory in Ecology .............................................. 2
CE 555 Microbial Aspects of Environmental Engineering ............... 3
CHE 565 Environmental Chemistry .......................................... 3
CPH 201 Introduction to Public Health ..................................... 3
CPH 320 Fundamentals of Environmental Health .......................... 3
CPH 365 Special Topics in Public Health (Subtitle required) ............. 3
CGR 240 Global Energy Issues ................................................. 3
ENG 401 Special Topics in Writing (Subtitle required) ..................... 3
ENS 395 Independent Work ..................................................... 3
FOR 219 Dendrology ............................................................. 4
FOR 240 Forestry and Natural Resource Ethics ............................ 2
FOR 435 Conservation Biology ................................................. 3
FOR 599 Independent Work in Forestry ..................................... 1-3
GEO 231 Environment and Development .................................. 3
GEO 235 Environmental Management and Policy ....................... 3
GEO 322 Geography of Kentucky ........................................... 3
GEO 331 Global Environmental Change ................................... 3
GEO 351 Physical Landscape .................................................. 3
GEO 431 Political Ecology ...................................................... 3
GEO/BIO 530 Biogeography and Conservation ......................... 3
GEO 531 Landscape Ecology ................................................... 3
GEO 550 Sustainable Resource Development and Environmental Management .................................................. 3
EES 220 Principles of Physical Geology .................................... 4
PHIL 300 Special Topics in Philosophy (Subtitle required) ............... 1-3
EES 341 Landforms ............................................................. 3
ANT 342 North American Archaeology .................................... 3
EES 360 Mineralogy ............................................................. 4
EES 385 Hydrology and Water Resources .................................. 3

Area 3 – Society

This Area explores the way that human society interacts with the environment. “Coupled human-natural systems” are a primary driver of environmental change, and also a key source of solutions to environmental problems. This Area will build students’ knowledge of the mutually influencing human-environment dynamic.

ANT 221 Native People of North America .................................. 3
ANT 225 Culture, Environment and Global Issues ....................... 3
ANT 245 Food Culture and Society ......................................... 3
ANT 303 Topics in the Anthropology of Food and Nutrition (Subtitle required) .................................................. 3
ANT 311 Anthropology of Globalization ................................... 3
ANT/AAS 326 Contemporary African Lives ............................... 3
ANT 340 Development and Change in the Third World ................. 3
ANT 342 North American Archaeology .................................... 3
ANT 375 Ecology and Social Practice ........................................ 3
ANT 470G Regional American Ethnography ................................ 3
ANT 525 Applied Anthropology .............................................. 3

University of Kentucky 2019-2020 Undergraduate Bulletin
Bachelor of Arts with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS

120 hours (minimum)
Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................................. 3

II. Intellectual Inquiry in the Social Sciences
AIS 312 Arabic for Business and Media I ............................................. 3
AIS 313 Arabic for Business and Media II ............................................. 3
AIS 316 Modern Standard Arabic I ..................................................... 3
AIS 317 Modern Standard Arabic II ..................................................... 3
AIS 318 Modern Standard Arabic III ..................................................... 3

III. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list .............................................. 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .......................... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .......................... 3

VII. Quantitative Foundations
Choose one course from approved list .............................................. 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list .............................................. 3

IX. Community, Culture and Citizenship in the USA
AIS 430 Islam in America .................................................................. 3
SPA 208 U.S. Latino Culture and Politics or any area course ............. 3

X. Global Dynamics
CHI 331 Introduction to Chinese Culture, 1840 to Present ............... 3
GER 342 War, Peace, and Terror in Germany and Europe ............... 3
GER 361 German Cinema ................................................................ 3
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 ........ 3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ...... 3

Graduation Composition and Communication Requirement (GCCR)
MCL/SPA 300 Contact Zones: Cultivating Intercultural Competence .... 3

College Requirements
I. Foreign Language (placement exam recommended) .................... 0-14

II. Disciplinary Requirements
a. Natural Science ........................................................................... 6
b. Social Science ............................................................................. 6
c. Humanities .................................................................................. 6

III. Laboratory or Field Work ......................................................... 1

IV. Electives .................................................................................... 6

College Requirement hours: ......................................................... 16-30

Language Core Requirement
MCL/SPA 300 Contact Zones: Cultivating Intercultural Competence .... 3

Language Core hours: ................................................................ 27

Economics Core Requirement
STA 296 Statistical Methods and Motivations ................................ 3
ECO 201 Principles of Economics I .................................................. 3
ECO 202 Principles of Economics II .................................................. 3
ECO 391 Economic and Business Statistics ..................................... 3
ECO 402 Intermediate Macroeconomic Theory ............................... 3
ECO 403 Intermediate Macroeconomic Theory ............................... 3
ECO 404 Any 300+ level ECO course plus two of the following:
ECO 417 International Trade ......................................................... 3
ECO 472 International Monetary Economics .................................... 3
ECO 473 Economic Development ................................................... 3

Economics Core hours: ................................................................. 27

FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS

The Foreign Language and International Economics (FLIE) major combines economics with proficiency in a non-English language and prepares students for a future in government, international relations, law, research, multinational corporations, and local industries who conduct business internationally. Economists are able to interpret and forecast general economic conditions, estimate trends, analyze data, and use economic theory to help their organization operate more efficiently. Combine those skills with the ability to communicate effectively in another language, and opportunities abound.

In the FLIE major, students take a minimum of nine economics courses and seven to ten intermediate and advanced courses in one of the following languages: Arabic, Chinese, French, German, Italian, Japanese, Russian, or Spanish.
**College of Arts and Sciences**

**Language Core Requirement: Chinese**

CHI 301 Advanced Intermediate Chinese I ........................................ 3
CHI 302 Advanced Intermediate Chinese II ..................................... 3
CHI 331 Introduction to Chinese Culture, Pre-Modernday to 1840 .......... 3
CHI 345 Introduction to Early Chinese Thought .............................. 3
CHI 401 Advanced Chinese I ........................................................... 3
CHI 402 Advanced Chinese II .......................................................... 3
CHI 450 Hermit, Immortals, and Madmen .................................... 3
CHI 511 Literary Chinese ............................................................... 3
* A-H 310 Asian Art and Culture (Subtitle required) ....................... 3
* HIS 555 Topics in Non-Western History Since 1789 .................. 3
HIS 597 Westerners in East Asia, 1839 to the Present ..................... 3
HIS 598 China in Revolution, 1895-1976 ....................................... 3
A-H 300 Special Course (Subtitle required) .................................... 3
Other courses as approved by the advisor .................................. 3

**Chinese Core hours:** .................................................. 21

*Subtitle required.

**Language Core Requirement: French**

FR 204 Introduction to French and Francophone Studies .................. 3
FR 214 France Today or FR 215 Visual Cultures ............................. 3
FR 307 French for Business and Economics ................................ 3
FR 310 French Phonetics ............................................................. 3
FR 311 Introduction to French Linguistics ..................................... 3
FR 324 Studies in French Literature (Subtitle required) .................... 3
FR 325 French Cinema (Subtitle required) ...................................... 3
FR 344 The Literary Text (Subtitle required) .................................. 3
FR 350 Francophone Cultures (Subtitle required) .......................... 3
FR 410 French in Performance .................................................... 3
FR 425 Media Studies ................................................................ 3

**French core hours:** ...................................................... 21

**Language Core Requirement: German**

GER 206 Spoken Communication .................................................. 3
GER 207 Intermediate German Composition and Conversation I ........ 3
GER 310 German for International Business and Professions .......... 3
GER 311 Intermediate German Composition and Conversation II ...... 3
GER 312 German Popular Forms (Subtitle required) ...................... 3
GER 317 History of German Culture ............................................. 3
GER 319 Contemporary German Literature and Culture ................ 3
GER 342 War, Peace, and Terror in Germany and Europe ................ 3
GER 352 German-Speaking Europe (Subtitle required) ................... 3
GER 361 German Cinema ............................................................ 3
GER 363 Germanic Mythology ..................................................... 3
GER 395 Independent Work in German ....................................... 1-3
GER 515 Studies in Major Authors ............................................. 3
GER 516 Studies in Genre .......................................................... 3
GER 550 Multidisciplinary German Studies Seminar (Subtitle required) 3

**Arabic Core hours:** ...................................................... 21

**German Core hours:** ..................................................... 21

**Language Core Requirement: Italian**

ITA 263 Studies in Italian Culture (Subtitle required) ...................... 3
ITA 300 Italian Conversation and Writing ...................................... 3
ITA 301 Italy from Fascism to the Present ..................................... 3
ITA 355 Topics in Italian Cinema (Subtitle required) ...................... 3

**plus 9 hours from the following:**

ITA 263 Studies in Italian Culture (Subtitle required) ................. 3
ITA 300 Italian Conversation and Writing ..................................... 3
A&S 300 Special Course (Subtitle required) .................................. 3
A-H/CLA 314 Ancient (Subtitle required) ...................................... 3
A-H 334 Reconstructing Renaissance Art .................................... 3
A-H 335 Early Modern Art and Visual Culture, 1400-1700 (Subtitle required) 3
CLA/HIS 391 Christians in the Roman Empire .......................... 3
ITA 355 Topics in Italian Cinema (Subtitle required) ...................... 3
ITA 395 Independent Studies in Italian ....................................... 3
ITA 410G Special Topics in Italian Language (Subtitle required) .......... 3
ITA 443G Survey of Italian Literature ....................................... 3
HIS 502 A History of the Roman Republic ............................... 3
HIS 503 A History of the Roman Empire .................................... 3
HIS 509 Roman Law ............................................................... 3
HIS 519 The Era of the Renaissance ......................................... 3

**Italian Core hours:** ...................................................... 21

**Language Core Requirement: Japanese**

JPN 301 Advanced Japanese I .................................................. 3
JPN 302 Advanced Japanese II .................................................. 3

**plus 12 hours from the following:**

JPN 301 Advanced Japanese I .................................................. 3
JPN 302 Advanced Japanese II .................................................. 3

**Japanese Core hours:** .................................................... 21

**Language Core Requirement: Russian**

RUS 301 Conversation and Composition I .................................... 3
RUS 302 Advanced Intermediate Russian II ............................... 3
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present .. 3

**plus 12 hours from the following:**

RUS 301 Conversation and Composition I .................................... 3
RUS 302 Advanced Intermediate Russian II ............................... 3

**Russian Core hours:** ..................................................... 21

**Department of History**

HIS 519 The Era of the Renaissance ......................................... 3
HIS 537 Intellectual and Cultural History of Russia to 1800 ............ 3
HIS 537 Intellectual and Cultural History of Russia to 1800 ............ 3
HIS 300 Visual Arts of Japan .................................................... 3
HIS 321 Introduction to Japanese Culture, Meiji (1868) to Present ..... 3

**Japanese Core hours:** .................................................... 21

**Department of Modern Languages and Cultures**

**Language Core Requirement: Chinese**

CHI 301 Advanced Intermediate Chinese I ........................................ 3
CHI 302 Advanced Intermediate Chinese II ..................................... 3
CHI 331 Introduction to Chinese Culture, Pre-Modernday to 1840 .......... 3
CHI 345 Introduction to Early Chinese Thought .............................. 3
CHI 401 Advanced Chinese I ........................................................... 3
CHI 402 Advanced Chinese II .......................................................... 3
CHI 450 Hermit, Immortals, and Madmen .................................... 3
CHI 511 Literary Chinese ............................................................ 3
* A-H 310 Asian Art and Culture (Subtitle required) ....................... 3
* HIS 555 Topics in Non-Western History Since 1789 .................. 3
HIS 597 Westerners in East Asia, 1839 to the Present ..................... 3
HIS 598 China in Revolution, 1895-1976 ....................................... 3
A-H 300 Special Course (Subtitle required) .................................... 3
Other courses as approved by the advisor .................................. 3

**Chinese Core hours:** .................................................. 21

**Department of Modern Languages and Cultures**

**Language Core Requirement: French**

FR 204 Introduction to French and Francophone Studies .................. 3
FR 214 France Today or FR 215 Visual Cultures ............................. 3
FR 307 French for Business and Economics ................................ 3
FR 310 French Phonetics ............................................................. 3
FR 311 Introduction to French Linguistics ..................................... 3
FR 324 Studies in French Literature (Subtitle required) .................... 3
FR 325 French Cinema (Subtitle required) ...................................... 3
FR 344 The Literary Text (Subtitle required) .................................. 3
FR 350 Francophone Cultures (Subtitle required) .......................... 3
FR 410 French in Performance .................................................... 3
FR 425 Media Studies ................................................................ 3

**French core hours:** ...................................................... 21

**Department of Modern Languages and Cultures**

**Language Core Requirement: German**

GER 206 Spoken Communication .................................................. 3
GER 207 Intermediate German Composition and Conversation I ........ 3
GER 310 German for International Business and Professions .......... 3
GER 311 Intermediate German Composition and Conversation II ...... 3
GER 312 German Popular Forms (Subtitle required) ...................... 3
GER 317 History of German Culture ............................................. 3
GER 319 Contemporary German Literature and Culture ................ 3
GER 342 War, Peace, and Terror in Germany and Europe ................ 3
GER 352 German-Speaking Europe (Subtitle required) ................... 3
GER 361 German Cinema ............................................................ 3
GER 363 Germanic Mythology ..................................................... 3
GER 395 Independent Work in German ....................................... 1-3
GER 515 Studies in Major Authors ............................................. 3
GER 516 Studies in Genre .......................................................... 3
GER 550 Multidisciplinary German Studies Seminar (Subtitle required) 3

**German Core hours:** ..................................................... 21

**Language Core Requirement: Italian**

ITA 263 Studies in Italian Culture (Subtitle required) ...................... 3
ITA 300 Italian Conversation and Writing ...................................... 3
ITA 301 Italy from Fascism to the Present ..................................... 3
ITA 355 Topics in Italian Cinema (Subtitle required) ...................... 3

**plus 9 hours from the following:**

ITA 263 Studies in Italian Culture (Subtitle required) ................. 3
ITA 300 Italian Conversation and Writing ..................................... 3
A&S 300 Special Course (Subtitle required) .................................. 3
A-H/CLA 314 Ancient (Subtitle required) ...................................... 3
A-H 334 Reconstructing Renaissance Art .................................... 3
A-H 335 Early Modern Art and Visual Culture, 1400-1700 (Subtitle required) 3
CLA/HIS 391 Christians in the Roman Empire .......................... 3
ITA 355 Topics in Italian Cinema (Subtitle required) ...................... 3
ITA 395 Independent Studies in Italian ....................................... 3
ITA 410G Special Topics in Italian Language (Subtitle required) .......... 3
ITA 443G Survey of Italian Literature ....................................... 3
HIS 502 A History of the Roman Republic ............................... 3
HIS 503 A History of the Roman Empire .................................... 3
HIS 509 Roman Law ............................................................... 3
HIS 519 The Era of the Renaissance ......................................... 3

**Italian Core hours:** ...................................................... 21

**Language Core Requirement: Japanese**

JPN 301 Advanced Japanese I .................................................. 3
JPN 302 Advanced Japanese II .................................................. 3

**plus 12 hours from the following:**

JPN 301 Advanced Japanese I .................................................. 3
JPN 302 Advanced Japanese II .................................................. 3

**Japanese Core hours:** .................................................... 21

**Department of Modern Languages and Cultures**

**Language Core Requirement: Russian**

RUS 301 Conversation and Composition I .................................... 3
RUS 302 Advanced Intermediate Russian II ............................... 3
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present .. 3

**plus 12 hours from the following:**

RUS 301 Conversation and Composition I .................................... 3
RUS 302 Advanced Intermediate Russian II ............................... 3

**Russian Core hours:** ..................................................... 21
**Bachelor of Science with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. **Please note:** courses with a FR, GER, JPN, RUS, SPA, or ECO prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. **Intellectual Inquiry in Arts and Creativity**

Choose one course from approved list ............................. 3

**II. Intellectual Inquiry in the Humanities**

AIS 320 Modern Arabic Literature and Film in Translation
AIS 345 Islamic Mysticism
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 331 Introduction to Chinese Culture, 1840 to Present
FR 103 French Cinema
FR 205 The French Graphic Novel
FR 225 French Film Noir
GER 103 Fairy Tales in European Context
GER 305 German Film Today
MCL 100 The World of Language
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 200 Global Literacy
MCL 270 Introduction to Folklore and Mythology
RUS 275 Russian Film
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present
SPA 208 U.S. Latino Culture and Politics
SPA 302 Spanish for Business Professionals
SPA 313 Advanced Spanish Language
SPA 314 Civilization of Spain
SPA 320 Introduction to Spanish Language
SPA 322 Spanish Literature
SPA 332 Spanish Cinema (Subtitle required)
SPA 350 Hispanic Cities (Subtitle required)
SPA 371 Latin American Cinema
SPA 372 Spanish Cinema (Subtitle required)
SPA 397 Independent Work in Spanish
SPA 399 Field Based/Community Based Education

*SPANISH Core hours: ................................. 21

**Electives**

Choose electives to lead to the minimum total of 120 hours required for graduation.

**Total Minimum Hours Required for Degree ........................................ 120**

*Course used towards completion of a UK Core Requirement

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**Language Core Requirement: Spanish**

SPA 310 Spanish Composition
Through Textual Analysis ........................................ 3
SPA 322 Spanish Language
SPA 323 Introduction to Spanish Language
SPA 325 Hispanic America
SPA 420 Spanish in the World

**plus 9 hours from the following:**

SPA 312 Civilization of Spain ........................................ 3
SPA 313 Advanced Spanish Language ................................ 3
SPA 314 Civilization of Spanish America ................................ 3
SPA 322 Introduction to Spanish Translation ................................ 3
SPA 350 Hispanic Cities (Subtitle required) ..................... 3
SPA 371 Latin American Cinema (Subtitle required) ............. 3
SPA 372 Spanish Cinema (Subtitle required) ..................... 3
SPA 397 Independent Work in Spanish ............................. 3
SPA 399 Field Based/Community Based Education ............. 3

**Total 400-level SPA course**

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**Language Core Requirement: Arabic**

AIS 202 Intermediate Modern Standard Arabic
AIS 311 Arabic for Business and Media
AIS 312 Arabic for Business and Media

**plus at least 12 hours from the following:**

AIS 228 Islamic Civilization
AIS 301 Advanced Modern Standard Arabic
AIS 302 Advanced Modern Standard Arabic
AIS 320 Modern Arabic Literature and Film in Translation
AIS 330 Islamic Civilization II
AIS 331 Classical Arabic Literature (in English)
AIS 338 Women and Islam
AIS 340 Fundamentalism and Reform in Islam
AIS 345 Islamic Mysticism
AIS 410 Theology and Law in Islam
AIS 430 Islam in America
AIS 435 Topics in Islamic Studies (Subtitle required)
AIS 440 Introduction to the Qur’an
AIS 442 Arabic Reading I
AIS 443 Arabic Reading II
ANT 222 Middle East Cultures
ANT 331 Anthropology of North Africa
GEO 328 Geography of the Middle East and North Africa
HIS 549 History of the Middle East: 1920 to the Present
HIS 550 Studies in Mid-East History and Politics (Subtitle required)
PS 410 Topics in Regional Politics (Subtitle required)

**Arabic Core hours: ............................................. 21**

**Economics Core Requirement**

STA 296 Statistical Methods and Motivations
ECO 201 Principles of Economics I
ECO 202 Principles of Economics II
ECO 391 Economic and Business Statistics
ECO 401 Intermediate Microeconomic Theory
ECO 402 Intermediate Macroeconomic Theory
ECO 390+ Any 300+ level ECO course

**plus two of the following:**

ECO 471 International Trade
ECO 472 International Monetary Economics
ECO 473G Economic Development

**Economics Core hours: ......................................... 27**

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**Language Core Requirement: Chinese**

CHI 301 Advanced Intermediate Chinese I
CHI 302 Advanced Intermediate Chinese II
CHI 331 Introduction to Chinese Culture, 1840 to Present

**plus 12 hours from the following:**

CHI 320 Gender Politics in Chinese Literature
CHI 321 Introduction to Contemporary Chinese Film
CHI 322 Self and Society in Chinese Culture
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 335 Introduction to Early Chinese Thought
CHI 395 Independent Work in Chinese
CHI 401 Advanced Chinese I
CHI 402 Advanced Chinese II
CHI 430 Popular Culture in Modern China
CHI 450 Hermits, Immortals and Madmen
CHI 511 Literary Chinese

**plus 3 credits from the following:**

CHI 320 Gender Politics in Chinese Literature
CHI 321 Introduction to Contemporary Chinese Film
CHI 322 Self and Society in Chinese Culture
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 335 Introduction to Early Chinese Thought
CHI 395 Independent Work in Chinese

**Arabic Core hours: ............................................. 21**
Language Core Requirement: French
FR 204 Introduction to French and Francophone Studies ........................................... 3
FR 214 France Today or FR 215 Visual Cultures ................................................................. 3
FR 307 French for Business and Economics ................................................................. 3
plus 12 hours from the following:
FR 310 French Phonetics ............................................. 3
FR 311 Introduction to French Linguistics ......................................................... 3
FR 324 Studies in French Literature (Subtitle required) ........................................... 3
FR 325 French Cinema (Subtitle required) ............................................................... 3
FR 344 The Literary Text (Subtitle required) ............................................................ 3
FR 350 Francophone Cultures (Subtitle required) .................................................. 3
FR 410 French in Performance ................................................................. 3
FR 425 Media Studies ......................................................... 3
French core hours: ........................................................................................................... 21

Language Core Requirement: German
GER 206 Spoken Communication ......................................................... 3
GER 307 Intermediate German Composition and Conversation ........................................... 3
GER 310 German for International Business and Professions ........................................... 3
plus 12 hours from the following:
GER 308 Intermediate German Composition and Conversation II ........................................... 3
GER 311 Introduction to German Literature: Themes (Subtitle required) ........................................... 3
GER 312 German Popular Forms (Subtitle required) ...................................................... 3
GER 317 History of German Culture ................................................................. 3
GER 319 Contemporary German Literature and Culture ...................................................... 3
GER 342 War, Peace, and Terror in Germany and Europe ...................................................... 3
GER 352 German-Speaking Europe (Subtitle required) ...................................................... 3
GER 361 German Cinema ................................................................. 3
GER 363 Germanic Mythology ................................................................. 3
GER 395 Independent Work in German ................................................................. 1-3
GER 507 Advanced German Composition and Conversation ...................................................... 3
GER 515 Studies in Major Authors ................................................................. 3
GER 516 Studies in Genre ...................................................................................... 3
GER 550 Multidisciplinary German Studies Seminar (Subtitle required) ...................................................... 3
German core hours: ........................................................................................................... 21

Language Core Requirement: Italian
ITA 263 Studies in Italian Culture (Subtitle required) ...................................................... 3
ITA 300 Italian Conversation and Writing ................................................................. 3
ITA 301 Italy from Fascism to the Present ................................................................. 3
ITA 355 Topics in Italian Cinema (Subtitle required) ...................................................... 3
plus 9 hours from the following:
ITA 263 Studies in Italian Culture (Subtitle required) ...................................................... 3
ITA 300 Italian Conversation and Writing ................................................................. 3
A&S 300 Special Course (Subtitle required): Italian Language through Film ...................................................... 3
A-H/CLA 314 Ancient (Subtitle required) ................................................................. 3
A-H 334 Reframing Renaissance Art ................................................................. 3
A-H 335 Early Modern Art and Visual Culture, 1400-1700 (Subtitle required) ...................... 3
CLA/HIS 391 Christians in the Roman Empire ................................................................. 3
ITA 335 Topics in Italian Cinema (Subtitle required) ...................................................... 3
ITA 395 Independent Studies in Italian Language ...................................................... 3
ITA 410G Special Topics in Italian Language (Subtitle required) ...................................................... 3
ITA 443G Survey of Italian Literature I ................................................................. 3
HIS 502 A History of the Roman Republic ................................................................. 3
HIS 503 A History of the Roman Empire ................................................................. 3
HIS 509 Roman Law ................................................................. 3
HIS 519 The Era of the Renaissance ................................................................. 3
Italian core hours: ........................................................................................................... 21

Language Core Requirement: Japanese
JPN 301 Advanced Japanese I ................................................................. 3
JPN 302 Advanced Japanese II ................................................................. 3
plus one of the following modern Japanese cultural-social studies courses:
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ...................................................... 3
JPN/GEO 334 Environment, Society and Economy of Japan ...................................................... 3
JPN 351 The Japanese Experience of the Twentieth Century ...................................................... 3
HIS 357 Japan at War, 1850 to the Present ...................................................... 3
plus 12 hours from the following:
A-H 310 Asian Art and Culture (Subtitle required) ...................................................... 3
A-H 311 The Arts As Soft Power: The Japanese Tea Ceremony ...................................................... 3
JPN 283 Japanese Film ................................................................. 3
JPN 320 Introduction to Japanese Culture, Premodern to 1868 ...................................................... 3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ...................................................... 3
JPN/GEO 334 Environment, Society and Economy of Japan ...................................................... 3
JPN 351 The Japanese Experience of the Twentieth Century ...................................................... 3
JPN 420G Pre-Modern Literary and Visual Arts of Japan ...................................................... 3
JPN 421G Contemporary Literary and Visual Arts of Japan ...................................................... 3
JPN 520 Japanese Linguistics and Society ...................................................... 3
and other related courses with the approval of the major advisor
Japanese core hours: ........................................................................................................... 21

Language Core Requirement: Russian
RUS 301 Conversation and Composition I ...................................................... 3
RUS 302 Advanced Intermediate Russian II ...................................................... 3
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present ...................................................... 3
plus 12 hours from the following:
ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change ...................................................... 3
ANT 432 Anthropology of Eastern Europe and Russia ...................................................... 3
GEO 329 Geography of the Former Soviet Union ...................................................... 3
HIS 385 History of Russia to 1825 ................................................................. 3
HIS 386 History of Russia Since 1825 ................................................................. 3
HIS 534 Russia in the 19th Century ................................................................. 3
HIS 535 Russia in the 20th Century ................................................................. 3
HIS 536 Intellectual and Cultural History of Russia to 1800 ...................................................... 3
HIS 537 Intellectual and Cultural History of Russia from 1800 to the Present .............. 3
PS 429G Government and Politics in Russia and the Post-Soviet States ................. 3
RUS 275 Russian Film ................................................... 3
RUS 370 Russian Folklore (in English) ..................................... 3
RUS 371 The Russian Cultural Imagination: 900-1900 ......................... 3
RUS 410G Russian for Special Purposes (Subtitle required) .................................. 3
RUS 525 Russian Literary Studies (Subtitle required) ....................... 3
RUS 535 Russian Visual Studies (Subtitle required) ...................... 3
RUS 545 Russian Cultural Studies (Subtitle required) .................. 3
RUS 555 Topical Seminar on Russian Studies (Subtitle required) ... 3

**Russian Core hours:** ............................................. 21

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**Language Core Requirement: Spanish**

SPA 310 Spanish Composition Through Textual Analysis ............................................. 3
SPA 302 Spanish for Business Professionals ................................................. 3
SPA 332 Spanish and Latin American Business Environments .................... 3
SPA 420 Spanish in the World .................................................. 3

**Spanish Core hours:** ............................................. 21

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**Elections**

Choose electives to lead to the minimum total of 120 hours required for graduation.

**Total Minimum Hours Required for Degree**: 120

*Course used towards completion of a UK Core Requirement

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**GENDER AND WOMEN’S STUDIES**

The Department in Gender and Women’s Studies offers an interdisciplinary curriculum which focuses on the study of gender as an aspect of everyday life, as well as on the political and cultural experiences and contributions of women across the world and through time. Majors in GWS have gone on to become artists, activists, to study law, medicine, social work, and to pursue academic careers.

**Bachelor of Arts with a major in GENDER AND WOMEN’S STUDIES**

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ........................................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ........................................ 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ........................................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ........................................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............................ 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ............................ 3

VII. Quantitative Foundations
Choose one course from approved list ........................................ 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ........................................ 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ........................................ 3

X. Global Dynamics
Choose one course from approved list ........................................ 3

**UK Core hours:** .................................................. 30

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**Graduation Composition and Communication Requirement (GCCR)**

GWS 599 Senior Seminar: Subtitle required ..................................... 3

**Graduation Composition and Communication Requirement hours (GCCR)** 3

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**College Requirements**

I. Foreign Language (placement exam recommended) ............................ 0-14

II. Disciplinary Requirements
   a. Natural Science ............................................... 6
   b. Social Science .............................................. 6
   c. Humanities ................................................. 3

III. Laboratory or Field Work .................................................. 1

IV. Electives ................................................................. 6

**College Requirement hours:** ............................................. 22-36

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**Premajor Requirements**

*GWS 200 Sex and Power ................................................. 3
*GWS 201 Gender and Popular Culture .................................... 3

**Premajor hours:** .................................................. 6

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**Major Requirements**

Core Courses
GWS 250 Social Movements or
GWS 340 History of Feminist Thought to 1975 .................................. 3

GWS 350 Feminist Theory .................................................. 3

GWS 400 Doing Feminist Research ............................................ 3

GWS 599 Senior Seminar ................................................... 3

**Core hours:** .................................................. 12

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**Elective Courses**

Choose five 3-credit-hour courses (not to exceed more than 12 hours of GWS courses from the following) from a list of approved electives, including the courses below. Additional non-GWS courses will be approved on a semester-by-semester basis.

*GWS 300 Topics in Gender and Women’s Studies (Subtitle required) .................. 3
GWS 301 Crossroads (Subtitle required) ................................................. 3
GWS 302 Gender Across the World (Subtitle required) ...................... 3
GWS 360 LGBTQ History in the United States ................................... 3
GWS 395 Undergraduate Research in Gender and Women’s Studies .......... 1-3
GWS 399 Internship in Gender and Women’s Studies ......................... 1-6
GWS 410 Introduction to Queer Theory .............................................. 3
GWS 430 Gender, Power and Violence ............................................. 3
GWS 506 History of Sexuality in the U.S. ........................................ 3
GWS 595 Issues in Gender and Women’s Studies (Subtitle required) ........ 3

**Elective hours:** .................................................. 15

**Total Major hours:** .................................................. 27

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**Other Course Work Required for the Major**

Students must complete at least 27 credit hours of the major through upper-division course work (12 credit hours of core courses, 15 credit hours of electives).

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**From Outside the Major Department**

Choose 12 hours outside GWS at the 300+ level. 200+ level courses used to satisfy College requirements can also be counted here.

**Other Major hours:** .................................................. 12

**Total Minimum Hours Required for Degree**: 120

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**Minor in Gender and Women’s Studies**

The minor in Gender and Women’s Studies requires 18 hours of course work to include:

GWS 200 Sex and Power or
GWS 201 Gender and Popular Culture .................................... 3

GWS 250 Social Movements or
GWS 340 History of Feminist Thought to 1975 .................................. 3

GWS 350 Feminist Theory .................................................. 3

Plus an additional 9 hours of electives to be selected with the approval of the Director of Undergraduate Studies in the Department of Gender and Women’s Studies.

Courses used for the Gender and Women’s Studies topical major, minor or graduate certificate must be taught by a Gender and Women’s Studies Affiliated Faculty.

Gender and Women’s Studies also offers an Undergraduate Certificate in Sexuality Studies, listed on page 197.

For further information, contact the department manager, Gender and Women’s Studies, 112 Breckinridge Hall, 859-257-1388.
**GEOGRAPHY**

Geography analyzes and explains the location and interrelationships between human and physical features of the earth’s environment. Geographers also examine how and why features and their locations change over time, with particular interest in the many impacts of these changes on both people and natural settings. Geography is, therefore, both a social and a physical science. Because its fundamental subject matter is people and their environments, the discipline serves as an effective bridge between the physical and cultural worlds.

Majors in geography build solid academic foundations that draw from and interrelate areas of study from the environmental sciences, natural sciences, social and behavioral sciences, humanities, digital studies, and graphic communication. With developed analytical, critical thinking, and communication skills, geography is particularly useful for students wishing to enter a wide range of careers, such as economic development, environmental management, international trade, transportation analysis, diplomacy, government administration, market analysis, urban and regional planning, research, teaching, cartography, Geographic Information Systems (GIS), and private business.

The Department of Geography has developed detailed major concentration tracks in seven areas: environmental geography, physical geography, urban geography and planning, GIS focus, human geography, international studies, and design your own geography major. For more information, contact the Department of Geography at 859-257-2931, or on the web at: https://geography.as.uky.edu/.

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**Bachelor of Arts with a major in GEOGRAPHY**

**120 hours (minimum)**

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
   Choose one course from approved list ...................... 3

II. Intellectual Inquiry in the Humanities
   Choose one course from approved list ...................... 3

III. Intellectual Inquiry in the Social Sciences
   Choose one course from approved list ...................... 3

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**IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**

Choose one course from approved list ...................... 3

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**V. Composition and Communication I**

CIS/WRD 110 Composition and Communication I ..................... 3

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**VI. Composition and Communication II**

CIS/WRD 111 Composition and Communication II ..................... 3

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**VII. Quantitative Foundations**

Choose one course from approved list ...................... 3

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**VIII. Statistical Inferential Reasoning**

Choose one course from approved list ...................... 3

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**IX. Community, Culture and Citizenship in the USA**

Choose one course from approved list ...................... 3

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**X. Global Dynamics**

Choose one course from approved list ...................... 3

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**UK core hours: ............................................. 30**

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**Graduation Composition and Communication Requirement (GCCR)**

GEO 499 Senior Research Seminar .................................. 3

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**Graduation Composition and Communication Requirement hours (GCCR) ................... 3**

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**College Requirements**

I. Foreign Language (placement exam recommended) .................. 0-14

II. Disciplinary Requirements

   a. Natural Science ................................................. 6
   b. Social Science (completed by Major Requirements) .......... 6
   c. Humanities ..................................................... 6

III. Laboratory or Field Work ........................................ 1

IV. Electives .................................................................... 6

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**College Requirement hours: ................... 19-33**

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**Major Requirements**

**Major Core Requirements**

GEO 130 Earth’s Physical Environment .................... 3

GEO 172 Human Geography ......................................... 3

GEO 200 Orientation to Geography ................................ 3

GEO 406 Field Studies in Geography (Subtitle required) ........ 3

GEO 309 Introduction to GIS ........................................ 3

GEO 499 Senior Research Seminar .............................. 3

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**Major core hours: ............................................. 18**

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**Methods Requirements**

Choose one methods course from the following options:

GEO 305 Elements of Cartography .................................... 3

GEO 310 Data Exploitations and Applications in Everyday Life ........................................ 3

GEO 311 Qualitative Methods in Geography ..................... 3

GEO 409 Advanced GIS .................................................. 3

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**Methods hours: ............................................. 3**

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**Other Course Work Required for the Major**

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**Geography Tracks ............................................. 18**

Choose at least 18 hours of additional geography courses to include: no more than 3 hours of 100-level courses; no more than 6 hours of GEO 560 and GEO 599; a minimum of 3 hours of 400+ level courses (not including GEO 409, 406, or 499).

The following focus areas represent specializations within Geography and are provided as guidelines. Most students will find it useful to concentrate their 18 hours within these focus areas, but this is not a requirement. On completion of 15 hours within any focus area, the Geography Department will award a certificate of completion of studies in the area of specialization. Consult with your advisor in making selections of courses.

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**GEOGRAPHY TRACKS**

**Environmental Geography Option**

Suggested Courses:

GEO 135 Global Climate Change ..................................... 3

GEO 162 Introduction to Global Environmental Issues .......... 3

GEO 231 Environment and Development .................................. 3

GEO 235 Environmental Management and Policy .................. 3

GEO 261 Global Dynamics of Health and Disease ................. 3

GEO 321 Land, People, and Development in Appalachia .......... 3

GEO 331 Global Environmental Change ................................ 3

GEO 334 Environment, Society and Economy of Japan .......... 3

GEO 431 Political Ecology .............................................. 3

GEO 530 Biogeography and Conservation .......................... 3

GEO 531 Landscape Ecology ............................................ 3

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**Physical Geography Option**

Suggested Courses:

GEO 135 Global Climate Change ..................................... 3

GEO 130 Earth’s Physical Environment ............................ 3

GEO 230 Weather and Climate ........................................ 3

GEO 235 Environmental Management and Policy ................. 3

GEO 351 Physical Landscapes ........................................... 3

GEO 451G Fluvial Forms and Processes ............................ 3

GEO 530 Biogeography and Conservation .......................... 3

GEO 531 Landscape Ecology ............................................ 3

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**Urban Geography and Planning Option**

Suggested Courses:

GEO 220 U.S. Cities ................................................... 3

GEO 285 Introduction to Planning ..................................... 3

GEO 485G Urban Planning and Sustainability .................... 3

GEO 235 Environmental Management and Policy ................. 3

GEO 309 Introduction to GIS ........................................... 3

GEO 310 Data Exploitations and Applications in Everyday Life ........................................ 3

GEO 415 Map Interpretation ............................................ 3

GEO 422 Urban Geography .............................................. 3

GEO 455 Globalization and the Changing World Economy ...... 3

GEO 490G American Landscapes .................................... 3

GEO 544 Human Population Dynamics ............................ 3

GEO 545 Transportation Geography .................................. 3

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**GIS Focus**

Suggested Courses:

GEO 109 Digital Mapping ............................................. 3

GEO 164 iWorlds: Global Information Geographies ............ 3

GEO 409 Advanced GIS ................................................. 3

GEO 309 Workshop in Geospatial Technologies .................. 3

GEO 419 Introduction to Remote Sensing .......................... 3

GEO 305 Elements of Cartography .................................... 3

GEO 506 Introduction to Computer Cartography .................. 3

GEO 305 Practicum in Cartography ................................... 3

GEO 310 Data Exploitations and Applications in Everyday Life ........................................ 3

GEO 415 Map Interpretation ............................................ 3

GEO 365 Special Topics in Geography (Subtitle required) ........ 3

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**Human Geography Option**

Suggested Courses:

GEO 161 Global Inequalities .......................................... 3

GEO 240 Geography and Gender ...................................... 3

GEO 260 Geographies of Development in the Global South ...... 3

GEO 422 Urban Geography .............................................. 3

GEO 442G Political Geography ........................................ 3

GEO 455 Globalization and the Changing World Economy ...... 3
GEO 475 Health and Medical Care in Space and Time.............................. 3
GEO 490G American Landscapes ................................................. 3
GEO 544 Human Population Dynamics ....................................... 3
GEO 545 Transportation Geography ........................................... 3
GEO 546 Tourism and Recreation Geography .............................. 3

International Studies Option

Suggested Courses:
GEO 163 Global Conflicts .......................................................... 3
GEO 221 Immigrant America: A Geographic Perspective .................. 3
GEO 222 Cities of the World .......................................................... 3
GEO 255 Geography of the Global Economy ................................. 3
GEO 326 Geography of Europe ..................................................... 3
GEO 328 Geography of the Middle East and North Africa ................ 3
GEO 329 Geography of the Former Soviet Union ............................ 3
GEO 331 Global Environmental Change ..................................... 3
GEO 334 Environment, Society and Economy of Japan .................... 3
GEO 546 Tourism and Recreation Geography .............................. 3

Design Your Own Geography Major Option

Any Geography courses fulfilling the requirements for the major.

Major hours: .......................................................... 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation ........................................ 4

Total Minimum Hours Required for Degree .................................. 120

Bachelor of Science with a major in GEOGRAPHY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with a GEO prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list ....................................... 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list ....................................... 3

III. Intellectual Inquiry in the Social Sciences

Choose one course from approved list ....................................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

Choose one course from approved list ....................................... 3

V. Composition and Communication I

CIS-WRDR 110 Composition and Communication I ........................... 3

V. Composition and Communication II

CIS-WRDR 111 Composition and Communication II ............................. 3

VII. Quantitative Foundations

Choose one course from approved list ....................................... 3

VIII. Statistical Inferential Reasoning

Choose one course from approved list ....................................... 3

IX. Community, Culture and Citizenship in the USA

Choose one course from approved list ....................................... 3

X. Global Dynamics

Choose one course from approved list ....................................... 3

UK Core hours: ....................................................... 30

Graduation Composition and Communication Requirement (GCCR)

GEO 499 Senior Research Seminar .............................................. 3

Graduation Composition and Communication Requirement hours (GCCR) .................................................. 3

College Requirements

I. Foreign Language (placement exam recommended) .............. 0-14

II. Disciplinary Requirements

a. Natural Science ......................................................... 3

b. Social Science (completed by Major Requirement) ............ 3

c. Humanities .............................................................. 3

III. Laboratory or Field Work ................................................. 1

IV. Electives

Choose electives to lead to the minimum total of 120 hours required for graduation ........................................ 6

College Requirement hours: ............................................. 13-27

Major Requirements

Major Core Requirements

GEO 130 Earth’s Physical Environment ............................................. 3
GEO 172 Human Geography .......................................................... 3
GEO 200 Orientation to Geography .............................................. 3
GEO 406 Field Studies in Geography (Subtitle required) ............. 3
GEO 309 Introduction to GIS ..................................................... 3
GEO 499 Senior Research Seminar .............................................. 3

Major Core hours: ....................................................... 18

Methods Requirements

Choose one methods course from the following options:

GEO 305 Elements of Cartography .............................................. 3
GEO 310 Data Explorations and Applications in Everyday Life .......... 3
GEO 311 Qualitative Methods in Geography .................................... 3
GEO 409 Advanced GIS .......................................................... 3

Methods hours: .......................................................... 3

Other Course Work Required for the Major Geography Tracks .................................................. 18

Choose at least 18 hours of additional geography courses to include: no more than 3 hours of 100-level courses; no more than 6 hours of GEO 560 and GEO 399; a minimum of 3 hours of 400-level courses (not including GEO 409, 406, or 499).

The following focus areas represent specializations within Geography and are provided as guidelines. Most students will find it useful to concentrate their 18 hours within these focus areas, but this is not a requirement. On completion of 15 hours within any focus area, the Geography Department will award a certificate of completion of studies in the area of specialization. Consult with your advisor in making selections of courses.

GEOGRAPHY TRACKS

Environmental Geography Option

Suggested Courses:
GEO 135 Global Climate Change .................................................. 3
GEO 162 Introduction to Global Environmental Issues ............... 3
GEO 231 Environment and Development ..................................... 3
GEO 235 Environmental Management and Policy ...................... 3
GEO 261 Global Dynamics of Health and Disease ....................... 3
GEO 321 Land, People, and Development in Appalachia ............. 3
GEO 331 Global Environmental Change ..................................... 3
GEO 334 Environment, Society and Economy of Japan ............. 3
GEO 431 Political Ecology ....................................................... 3
GEO 530 Biogeography and Conservation .................................. 3
GEO 531 Landscape Ecology ..................................................... 3

Physical Geography Option

Suggested Courses:
GEO 135 Global Climate Change .................................................. 3
GEO 130 Earth’s Physical Environment ............................................. 3
GEO 230 Weather and Climate ..................................................... 3
GEO 235 Environmental Management and Policy ...................... 3
GEO 351 Physical Landscapes ..................................................... 3
GEO 432 Fluvial Forms and Processes ......................................... 3
GEO 530 Biogeography and Conservation .................................. 3
GEO 531 Landscape Ecology ..................................................... 3

Urban Geography and Planning Option

Suggested Courses:
GEO 220 U.S. Cities .............................................................. 3
GEO 285 Introduction to Planning .............................................. 3
GEO 406 Urban Planning and Sustainability ............................... 3
GEO 235 Environmental Management and Policy ...................... 3
GEO 309 Introduction to GIS ..................................................... 3
GEO 310 Data Explorations and Applications in Everyday Life .......... 3
GEO 415 Map Interpretation ..................................................... 3
GEO 422 Urban Geography ....................................................... 3
GEO 455 Globalization and the Changing World Economy ............ 3
GEO 490G American Landscapes .............................................. 3
GEO 544 Human Population Dynamics ....................................... 3
GEO 545 Transportation Geography ........................................... 3

GEO 490G American Landscapes .............................................. 3
GEO 545 Transportation Geography ........................................... 3

GIS Focus

Suggested Courses:
GEO 109 Digital Mapping .......................................................... 3
GEO 164 iWorlds: Global Information Geographies ................. 3
GEO 409 Advanced GIS .......................................................... 3
GEO 500 Workshop in Geospatial Technologies ......................... 3
GEO 419 Introduction to Remote Sensing .................................... 3
GEO 305 Elements of Cartography .............................................. 3
GEO 506 Introduction to Computer Cartography ......................... 3
GEO 505 Practicum in Cartography ............................................. 3
GEO 310 Data Explorations and Applications in Everyday Life .......... 3
GEO 415 Map Interpretation ..................................................... 3
GEO 365 Special Topics in Geography (Subtitle required) ............. 3

Human Geography Option

Suggested Courses:
GEO 161 Global Inequalities ..................................................... 3
GEO 240 Geography and Gender ............................................... 3
GEO 260 Geographies of Development in the Global South ........... 3
GEO 422 Urban Geography ....................................................... 3
GEO 442C Political Geography ..................................................... 3
GEO 455 Globalization and the Changing World Economy ............ 3

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### GEO 475 Health and Medical Care
- in Space and Time .............................................. 3
- GEO 490G American Landscapes .............................. 3
- GEO 544 Human Population Dynamics ........................ 3
- GEO 545 Transportation Geography ........................... 3
- GEO 546 Tourism and Recreation Geography .................. 3

### International Studies Option
Suggested Courses:
- GEO 163 Global Conflicts ........................................ 3
- GEO 221 Immigrant America: A Geographic Perspective .......................... 3
- GEO 222 Cities of the World ..................................... 3
- GEO 255 Geography of the Global Economy ................... 3
- GEO 326 Geography of Europe ................................... 3
- GEO 328 Geography of the Middle East and North Africa ................. 3
- GEO 329 Geography of the Former Soviet Union .......... 3
- GEO 331 Global Environmental Change .......................... 3
- GEO 334 Environment, Society and Economy of Japan ................. 3
- GEO 546 Tourism and Recreation Geography .................. 3

### Design Your Own Geography Major Option
Any Geography courses fulfilling the requirements for the major.

- **Major hours:** ..................................................... 39
- **Electives**
  - Choose electives to lead to the minimum total of 120 hours
  - **Total Minimum Hours Required for Degree** ..................... 120

### Minor in Geography
The minor in Geography requires a minimum of 18 hours, 15 of which must be in courses at the 200+ level, taken within the department as follows:

The courses below are suggested courses; all GEO courses count toward the minor.

### K-12 Teaching and Administration
Take 6 for 18 credit hours:
- GEO 172 Human Geography ........................................ 3
- GEO 130 Earth’s Physical Environment .......................... 3
- GEO 200 Orientation to Geography .................................. 3
- GEO 220 U.S. Cities .................................................... 3
- GEO 222 Cities of the World ........................................ 3
- GEO 320-365 Regional Geography Courses ..................... 3
- GEO 452G World Geography for Teachers ....................... 3
- GEO 430G Physical Geography for Teachers .................... 3

### Geosciences
Take 6 for 18 credit hours:
- GEO 130 Earth’s Physical Environment .......................... 3
- GEO 230 Weather and Climate ...................................... 3
- GEO 331 Global Environmental Change .......................... 3
- GEO 351 Physical Landscapes ...................................... 3
- GEO 451G Fluvial Forms and Processes .......................... 3
- GEO 530 Biogeography and Conservation ......................... 3
- GEO 531 Landscape Ecology ........................................ 3

### Social Sciences and Humanities
Take 6 for 18 credit hours:
- one of the following:
  - GEO 160 Lands and Peoples of the Non-Western World .............. 3
  - GEO 161 Global Inequalities ..................................... 3
  - GEO 162 Introduction to Global Environmental Issues ................. 3
  - GEO 163 Global Conflicts ........................................ 3
  - GEO 172 Human Geography ........................................ 3
  - GEO 211 Immigrant America: A Geographic Perspective ............... 3
  - GEO 240 Geography and Gender ................................... 3
  - GEO 320-365 Regional Geography Courses .......................... 3
  - GEO 422 Urban Geography ........................................ 3
  - GEO 442G Political Geography ..................................... 3
  - GEO 470G America’s Cultural Geographies .......................... 3

### Environmental Studies
Take 6 for 18 credit hours:
- GEO 162 Introduction to Global Environmental Issues ................. 3
- GEO 130 Earth’s Physical Environment ................................ 3
- GEO 230 Weather and Climate or GEO 331 Global Environmental Change .................................................. 3
- GEO 235 Environmental Management and Policy .......................... 3
- GEO 351 Physical Landscapes ...................................... 3
- GEO 431 Political Ecology .......................................... 3
- GEO 530 Biogeography and Conservation ........................... 3
- GEO 531 Landscape Ecology ........................................ 3
- GEO 546 Tourism and Recreation Geography .......................... 3
- GEO 550 Sustainable Resource Development and Environmental Management ............................................. 3
- GEO 585 Aging and Environment ..................................... 3

### Minor in Mapping and GIS
The minor in Mapping and GIS requires 18 hours as follows:
- **Introduction to Digital Mapping** (3 hours)
- GEO 109 Digital Mapping or GEO 164 iWorlds: Global Information Geographies ................. 3

### GIS Theories and Methods (6 hours)
- GEO 309 Introduction to GIS ........................................ 3
- GEO 409 Advanced GIS ............................................. 3

### GIS Design and Application (9 hours)
Complete three of the following:
- GEO 305 Elements of Cartography ................................... 3
- GEO 399 Internship in Geography .................................... 3
- GEO 415 Map Interpretation .......................................... 3
- GEO 419 Introduction to Remote Sensing ............................ 3
- GEO 505 Praxicum in Cartography .................................... 3
- GEO 506 Introduction to Computer Cartography ...................... 3
- GEO 509 Workshop in Geospatial Technologies ....................... 3
- GEO 560 Independent Work in Geography ............................ 3
- GEO 565 Topics in Geography ........................................ 3

*With approval of DUS for GIS/Mapping related internships or independent study.

### Economic Geography
Take 6 for 18 credit hours:
- GEO 161 Global Inequalities or GEO 164 iWorlds: Global Information Geographies ................. 3
- GEO 172 Human Geography ........................................ 3
- GEO 255 Geography of the Global Economy .......................... 3
- GEO 260 Geographies of Development in the Global South ................. 3
- GEO 320-365 Regional Geography Courses .......................... 3
- GEO 455 Globalization and the Changing World Economy ................. 3
- GEO 545 Transportation Geography ................................... 3
- GEO 546 Tourism and Recreational Geography .......................... 3
- GEO 551 Japanese Multinational Corporations .......................... 3

### Medical and Health Geography
Take 6 for 18 credit hours:
- GEO 172 Human Geography ........................................ 3
- GEO 261 Global Dynamics of Health and Disease .......................... 3
- GEO 309 Introduction to GIS ........................................ 3
- GEO 320-365 Regional Geography Courses .......................... 3
- GEO 422 Urban Geography ........................................ 3
- GEO 475 Health and Medical Care in Space and Time .................. 3
- GEO 585 Aging and Environment ..................................... 3

### Geosciences
Take 6 for 18 credit hours:
- GEO 130 Earth’s Physical Environment ................................ 3
- GEO 230 Weather and Climate ...................................... 3
- GEO 331 Global Environmental Change .......................... 3
- GEO 351 Physical Landscapes ...................................... 3
- GEO 451G Fluvial Forms and Processes ................................ 3
- GEO 530 Biogeography and Conservation ........................... 3
- GEO 531 Landscape Ecology ........................................ 3

### Urban Planning and Urban Studies
Take 6 for 18 credit hours:
- GEO 161 Global Inequalities or GEO 164 iWorlds: Global Information Geographies ................. 3
- GEO 172 Human Geography ........................................ 3
- GEO 220 U.S. Cities .................................................... 3
- GEO 222 Cities of the World ........................................ 3

### Geographic Perspectives
The B.A. in GIS/Mapping requires a broad liberal arts education in addition to a concentration on science based approaches to population health. Students may further specialize in three areas: Global Health, Health Economies, and Social Inequalities in Health and Illness. GIS/Mapping majors will obtain fundamental knowledge of the complex relationship that exists among the global economy, societal problems and needs, and the distribution of health and illness, in addition to providing students the opportunity to develop critical thinking, communication, and independent study skills necessary for many entry-level career opportunities in city, state and federal government, nonprofit organizations and in the public and private health sectors.
Bachelor of Arts with a major in
HEALTH, SOCIETY, AND POPULATIONS

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list

II. Intellectual Inquiry in the Humanities

Choose one course from approved list

III. Intellectual Inquiry in the Social Sciences Recommended:

PSY 100 Introduction to Psychology

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

Choose one course from approved list

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II

VII. Quantitative Foundations Recommended – one of the following:

MA 111 Introduction to Contemporary Mathematics

MA 113 Calculus I

MA 123 Elementary Calculus and Its Applications

MA 137 Calculus I with Life Science Applications

VIII. Statistical Inferential Reasoning

Choose one course from approved list

IX. Community, Culture and Citizenship in the USA

Choose one course from approved list

X. Global Dynamics

Choose one course from approved list

UK Core hours: 30-32

Graduation Composition and Communication Requirement (GCCR)

HSP 499 Health, Society and Populations Capstone

Graduation Composition and Communication Requirement hours (GCCR): 3

College Requirements

I. Foreign Language

(placement test recommended) 6-14

II. Disciplinary Requirements

a. Natural Science

(may be satisfied by major requirements) 0-6

b. Social Science

(may be satisfied by major requirements) 0-6

c. Humanities

(may be satisfied by major requirements) 0-6

III. Laboratory or Field Work

(PSY 100 recommended) 1-3

IV. Electives

College Requirement hours: 19-29

Major Requirements

Hours

Major courses that also fulfill the A&S College requirements are marked with "•"; major courses that also fulfill UK Core areas are marked with "†". 24 credit hours within the major must be at the 300+ level.

Statistics

Choose one of the following (3 hours):

STA 296 Statistical Methods and Motivations

SOC 303 Quantitative Social Analysis

GEO 309 Introduction to GIS

Math

Choose one of the following (3 hours):

MA 109 College Algebra

MA 111 Introduction to Contemporary Mathematics

MA 113 Calculus I

MA 123 Elementary Calculus and Its Applications

MA 137 Calculus I with Life Science Applications

Writing

Choose one of the following (3 hours):

WRD 205 Writing and Rhetoric

see HSP advisor for appropriate subtitles

Science

Choose one BIO course and one from any of the remaining science electives (6 hours):

ANA 109 Anatomy and Physiology for Nursing I

ANA 110 Anatomy and Physiology for Nursing II

*ANA 209 Principles of Human Anatomy

*BIO 102 Human Ecology

*BIO 103 Basic Ideas of Biology

*BIO 148 Introductory Biology I

*BIO 206 Principles of Microbiology

*CHE 104 Introductory General Chemistry

*CHE 108 Introduction to Inorganic, Organic, and Biochemistry without Laboratory

*PGY 206 Elementary Physiology

Social Science Approaches to Health

(9 hours):

Required

HSP/SOC 255 Medicine, Health, and Society

HSP 308 Health and Disease in the U.S.

PHI 305 Health Care Ethics

*SOC 235 Inequalities in Society

*SOC 340 Community Interaction

*ISOC 360 Environmental Sociology

*SOC 439 Topics in Crime, Law and Deviance (Subtitle required)

Course is approved only when the subtitle is "Gender, Race and Science."

Health Professions

Choose two from the following (6 hours):

CPI 201 Introduction to Public Health

CPI 202 Public Health Through Popular Film

CPI 203 Sexual Health

CPI 310 Disease Detectives: Epidemiology in Action

CPI 320 Fundamentals of Environmental Health

CPI 351 Preparing for An Apocalyptic Event: Population Health and Crisis Management

CPI 440 Foundations of Health Behavior

CPI 450 Managing Health Organizations to Improve Population Health

CPI 472 Public Health Professions and Practice

CPI 476A A Sick World: Global Public Health in the Early 21st Century

HSM 241 Health and Medical Care Delivery Systems

KHP 230 Human Health and Wellness

KHP 270 Introduction to Health Education and Health Promotion

KHP 590 Advanced Health Concepts

Capstone

(3 hours):

HSP 499 Health, Society and Populations Capstone

Major hours: 45-46

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation.

Total Minimum Hours Required for Degree: 120

HISPANIC STUDIES

The Department of Hispanic Studies aims to develop students’ Spanish language skills, to deepen their understanding of Spanish-speaking cultures and literatures domestically and abroad, to sharpen their critical thinking, and to heighten their awareness of their role as local and global citizens in a pluralistic society. The department offers a major with three specialty options and a minor in Spanish.

Hispanic Studies Department Policy for Spanish Language Placement Exams

The Spanish language placement exam – currently the AAPL (ACTFL Assessment for Performance toward Proficiency in Language)– is administered to incoming and current students who have not completed any Spanish language course work at the University of Kentucky. This exam is administered for the sole purpose of determining the most appropriate initial course for students embarking on their study of Spanish at the University. However, it is also used to exempt students from the A&S language requirement if
their score demonstrates language ability roughly equivalent to that which is expected of students who have completed 4 semesters of Spanish language study at the Elementary and Intermediate levels (SPA 101, 102, 201 and 202) here at UK. This differs from other exams that give incoming students credit on their transcripts, such as the Advanced Placement Exam (AP), the International Baccalaureate Exam (IB) and the College Level Examination Program Exam (CLEP). No credit is earned through this placement exam.

Most often, this exam is administered when students arrive as freshmen or transfers, whether for the fall or the spring semester, during their initial orientation and registration for incoming students. However, if a person chooses not to take the placement exam upon entering as a freshman or transfer student, the Hispanic Studies Department offers alternative opportunities to take the exam in our departmental office by appointment.

Sometimes, students choose not to take the placement exam or choose to enroll in a course that is below the level recommended by the AAPPL exam score. If a student has a question or concern about the level recommended for a certain score, we recommend that the student consult with the department directly, in order to assure that the decision is in the best interest of both that student and the other students in the class.

Sometimes, students take the placement exam at the start of their time at the university but choose not to take language classes immediately. If a student does not choose to enroll in Spanish classes the semester following the administration of the placement exam, the placement score is valid for another two years and is reported on the student’s advising profile on myGPS. As with many skills, language ability begins to degrade over time if those skills are not employed regularly. Pedagogically, it is important that the student be placed into the appropriate class for her/his current skill level. Thus, after two years, the student will need to repeat the placement exam in the Hispanic Studies departmental office before enrolling in course work in Spanish.

Once a student has chosen to take a class in the Spanish language sequence – or has chosen to transfer credit from another institution as Spanish language credit – the placement exam is no longer an option for that student. The exam serves as a placement exam and will not be used to determine language competency beyond recommended placement for continued study. Therefore, no student may take the AAPPL placement exam to satisfy language requirements if they have already taken Spanish language course work at UK or if they have transferred in Spanish language course work from another college or university, since that course work determines the placement of the student in the language series.

If you have any questions regarding the use and scope of the placement exam, please contact the Hispanic Studies department directly at 859-257-2565.

**Bachelor of Arts with a major in SPANISH**

**120 hours (minimum)**

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

1. **Intellectual Inquiry in Arts and Creativity**
   - Choose one course from approved list .......................... 3

2. **Intellectual Inquiry in the Humanities**
   - Choose one course from approved list .......................... 3

3. **Intellectual Inquiry in the Social Sciences**
   - Choose one course from approved list .......................... 3

4. **Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**
   - Choose one course from approved list .......................... 3

5. **Composition and Communication I**
   - CIS/WRD 110 Composition and Communication I ........... 3

6. **Composition and Communication II**
   - CIS/WRD 111 Composition and Communication II .......... 3

7. **Quantitative Foundations**
   - Choose one course from approved list .......................... 3

8. **Statistical Inferential Reasoning**
   - Choose one course from approved list .......................... 3

9. **Community, Culture and Citizenship in the USA**
   - Choose one course from approved list .......................... 3

10. **Global Dynamics**
    - Choose one course from approved list .......................... 3

11. **UK Core hours: ......................................................... 30**

**Graduation Composition and Communication Requirement (GCCR)**

SPA 323 Introduction to Spanish Translation ........................ 3

**Graduation Composition and Communication Requirement hours (GCCR) ......................................................... 3**

**College Requirements**

1. **Foreign Language (completed by Premajor Requirement)**
   - **Disciplinary Requirements**
     - a. Natural Science .................................................. 6
     - b. Social Science .................................................... 6
     - c. Humanities (completed by Major Requirements) ...... 6

2. **Laboratory or Field Work ........................................... 1

3. **Electives ................................................................. 6

4. **College Requirement hours: ...................................... 19**

- **Premajor Requirements**
  - SPA 210 Spanish Grammar and Syntax and
  - SPA 211 Intermediate Spanish Conversation ....................... 6
  - or
  - SPA 215 Written Spanish for Bilingual Students ................ 3

- **Premajor hours: ....................................................... 3-6**
  - The premajor requirements may be fulfilled by AP exam – credit bearing – or departmental placement exam – noncredit bearing.

**Major Requirements**

**Major Core Requirement**

SPA 310 Spanish Composition

**Through Textual Analysis ............................................. 3**

**Major Core hours: .................................................... 3**

**Other Course Work Required for the Major**

**From the Major Department:**

Choose 3 courses outside Spanish (SPA) with any of the following prefixes at the 200+ level that fulfill the requirements for one of the three options listed below .......................... 30

- **A-E:** Art Education
- **A-H:** Art History
- **A-S:** Art Studio
- **AAD:** Arts Administration
- **AAS:** African American Studies
- **AIS:** Arabic and Islamic Studies
- **ANT:** Anthropology
- **APP:** Appalachian Studies
- **ART:** Art
- **BSC:** Behavioral Science
- **CGS:** Cognitive Science
- **CHI:** Chinese Culture and Language
- **CIS:** Communications and Information Studies
- **CLA:** Classics
- **CLD:** Community and Leadership Development
- **CLM:** Clinical Leadership and Management
- **COM:** Communication
- **CSD:** Communication Sciences and Disorders
- **EAP:** Education Abroad Program
- **EBC:** Curriculum and Instruction
- **EDL:** School Administration
- **EDP:** Educational and Counseling Psychology
- **EDS:** Special Education
- **EDU:** Education
- **ELS:** Teacher Leadership
- **ENG:** English
- **EPE:** Educational Policy Studies and Evaluation
- **FA:** Fine Arts
- **FR:** French Language and Literature
- **GEO:** Geography
- **GER:** German Studies
- **GWS:** Gender and Women’s Studies
- **HIS:** History
- **HJS:** Hebrew and Jewish Studies
- **HMN:** Humanities
- **HP:** Historic Preservation
- **IAS:** Interdisciplinary American Studies
- **IEC:** Interdisciplinary Early Childhood Education
- **INT:** International Studies
- **IS:** Information Studies
- **ISC:** Integrated Strategic Communication
- **ISP:** International Studies Program
- **ITA:** Italian
- **JAT:** Journalism, Advertising, Telecommunications
**Option A – Spanish Language and Linguistics**

**Required Course**
SPA 310 Spanish Composition .......................... 3

**Specialty Option Courses**
Choose 18 credit hours from Language and Linguistics courses:

- **SPA 300 Contact Zones:**
  - Cultivating Intercultural Competence .......................... 3
- SPA 302 Spanish for Business Professionals ................. 3
- SPA 313 Advanced Spanish Language ...................... 3
- SPA 323 Introduction to Spanish Translation ............... 3
- SPA 332 Spanish and Latin American Business Environments .......................... 3
- **SPA 397 Independent Work in Spanish** .................... 3
- **SPA 399 Field Based/ Community Based Education** .... 1-15
- **SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required)** ................. 3
- SPA 410 Advanced Spanish Grammar .......................... 3
- SPA 413 Spanish Phonetics ..................................... 3
- SPA 420 Spanish in the World ................................ 3
- SPA 423 Advanced Spanish Translation ...................... 3
- SPA 430 Introduction to Spanish Linguistics ............... 3
- **SPA 480 Hispanic Kentucky** .................................. 3
- **SPA 497 Hispanic Studies Honors Thesis** ............... 3
- SPA 519 Themes in Medieval and Early Modern Spanish Literature and Culture (Subtitle required) .................. 3
- SPA 529 Themes in Modern and Contemporary Spanish Literature, Culture and Film (Subtitle required) .................. 3
- **SPA 539 Themes in Latin American Literature, Culture and Film (Subtitle required)** ............... 3

**Additional Courses**
Choose 6 credit hours from either list ...................... 6

- **These courses must have a focus on literature or culture.**

**Total SPA hours:** ............................................. 42

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**Option B – Spanish Literature and Culture**

**Required Course**
SPA 310 Spanish Composition .......................... 3

**Specialty Option Courses**
Choose 18 credit hours from Literature and Culture courses:

- **SPA 300 Contact Zones:**
  - Cultivating Intercultural Competence .......................... 3
- SPA 314 Civilization of Spain .................................. 3
- SPA 315 Introduction to Hispanic Literature .................. 3
- SPA 320 Literature, Life and Thought of Spain ............... 3
- SPA 322 Literature, Life and Thought of Spanish America ............... 3
- SPA 324 The Theatre in Spain and Spanish America ............. 3
- SPA 350 Hispanic Cities (Subtitle required) ................... 3
- SPA 361 Latin American Literature in Translation (Subtitle required) .................. 3
- SPA 371 Latin American Cinema (Subtitle required) ............... 3
- SPA 372 Spanish Cinema (Subtitle required) ................... 3
- **SPA 397 Independent Work in Spanish** .................... 3
- **SPA 399 Field Based/ Community Based Education** .... 1-15
- **SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required)** ................. 3
- SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) .................. 3
- SPA 432 18th and 19th Century Spanish Studies (Subtitle required) .................. 3
- SPA 434 Spanish Literature of the 20th Century .................. 3
- SPA 438G Latin American Literature of Social Protest in Spanish America ............... 3
- SPA 444 20th and 21st Century Spanish Studies (Subtitle required) .................. 3
- **SPA 450 Colonialism and 19th Century Spanish-American Studies (Subtitle required)** ............... 3

**SPA 474 Topics in Hispanic Studies (Subtitle required)** ............... 3
- **SPA 480 Hispanic Kentucky** .................................. 3
- **SPA 497 Hispanic Studies Honors Thesis** ............... 3
- SPA 519 Themes in Medieval and Early Modern Spanish Literature and Culture (Subtitle required) .................. 3
- SPA 529 Themes in Modern and Contemporary Spanish Literature, Culture and Film (Subtitle required) .................. 3
- **SPA 539 Themes in Latin American Literature, Culture and Film (Subtitle required)** ............... 3

**Total SPA hours:** ............................................. 30

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**Option C – Spanish (General)**

**Required Course**
SPA 310 Spanish Composition .......................... 3

**Specialty Option Courses**
Choose 9 credit hours from Language and Linguistics courses:

- **SPA 300 Contact Zones:**
  - Cultivating Intercultural Competence .......................... 3
- SPA 302 Spanish for Business Professionals ................. 3
- SPA 313 Advanced Spanish Language ...................... 3
- SPA 323 Introduction to Spanish Translation ............... 3
- SPA 332 Spanish and Latin American Business Environments .......................... 3
- **SPA 397 Independent Work in Spanish** .................... 3
- **SPA 399 Field Based/ Community Based Education** .... 1-15
- **SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required)** ................. 3
- SPA 410 Advanced Spanish Grammar .......................... 3
- SPA 413 Spanish Phonetics ..................................... 3
- SPA 420 Spanish in the World ................................ 3
- SPA 423 Advanced Spanish Translation ...................... 3
- SPA 430 Introduction to Spanish Linguistics ............... 3
- **SPA 480 Hispanic Kentucky** .................................. 3
- **SPA 497 Hispanic Studies Honors Thesis** ............... 3
- SPA 501 Spanish Phonetics, Pronunciation and Phonemics .......................... 3
- SPA 506 Introduction to Comparative Spanish, Portuguese, and Italian Linguistics ............... 3

**Total SPA hours:** ............................................. 30

*These courses must have a focus on language or linguistics.*
Non-specialty Option Courses
Choose 9 credit hours from Literature and Culture courses:

**SPA 300 Contact Zones:
Cultivating Intercultural Competence ........................................ 3
SPA 312 Civilization of Spain ............................................. 3
SPA 314 Civilization of Spanish America .................................. 3
SPA 315 Introduction to Hispanic Literature ............................ 3
SPA 320 Literature, Life and Thought of Spain ....................... 3
SPA 322 Literature, Life and Thought of Spanish America .......... 3
SPA 324 The Theatre in Spain and Spanish America ............... 3
SPA 330 Hispanic Cities (Subtitle required) ......................... 3
SPA 361 Latin American Literature in Translation (Subtitle required) 3
SPA 371 Latin American Cinema (Subtitle required) ................ 3
SPA 372 Spanish Cinema (Subtitle required) .......................... 3
**SPA 397 Independent Work in Spanish ............................ 3
**SPA 399 Field Based/Community Based Education ............... 3

Minor in Spanish

The minor in Spanish requires a total of 21 hours based on the following distribution:

Prerequisites
SPA 210 Spanish Grammar and Syntax .................................. 3
SPA 211 Intermediate Spanish Conversation .......................... 3

Required Core Course
SPA 310 Spanish Composition
Through Textual Analysis .................................................. 3

plus 12 credit hours at the 300-level or above. At least 3 credit hours must be from the Language and Linguistics courses listed below; at least 3 credit hours must be from the Literature and Culture courses listed below:

Language and Linguistics Courses
SPA 300 Contact Zones:
Cultivating Intercultural Competence .................................. 3
SPA 302 Spanish for Business Professionals ............................ 3
SPA 313 Advanced Spanish Language .................................. 3
SPA 323 Introduction to Spanish Translation ......................... 3
SPA 397 Independent Work in Spanish ................................ 3
SPA 399 Field Based/Community Based Education ................ 3
SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .................. 3
SPA 410 Advanced Spanish Grammar .................................. 3
SPA 413 Spanish Phonetics ............................................... 3
SPA 420 Spanish in the World .......................................... 3
SPA 423 Advanced Spanish Translation ............................... 3
SPA 430 Introduction to Spanish Linguistics ........................ 3
SPA 480 Hispanic Kentucky ............................................. 3
SPA 497 Hispanic Studies Honors Thesis ............................ 3
SPA 501 Spanish Phonetics, Pronunciation and Phonemics .... 3
SPA 506 Introduction to Comparative Spanish, Portuguese, and Italian Linguistics ............... 3

Literature and Culture Courses
SPA 300 Contact Zones:
Cultivating Intercultural Competence .................................. 3
SPA 312 Civilization of Spain ............................................. 3
SPA 314 Civilization of Spanish America ................................ 3
SPA 315 Introduction to Hispanic Literature ........................ 3
SPA 320 Literature, Life and Thought of Spain ....................... 3
SPA 322 Literature, Life and Thought of Spanish America .......... 3
SPA 324 The Theatre in Spain and Spanish America ............... 3
SPA 361 Latin American Literature in Translation (Subtitle required) .................. 3
SPA 371 Latin American Cinema (Subtitle required) ................ 3
SPA 372 Spanish Cinema (Subtitle required) .......................... 3
SPA 397 Independent Work in Spanish ................................ 3
SPA 399 Field Based/Community Based Education ............... 3

Additional Courses
Choose 12 credit hours from either list .................................. 12
**These courses must have a focus on literature or culture.

Total SPA hours: ........................................................... 30

HISTORY

HISTORY is the study of the most important and exciting events that have ever occurred, providing students with a wide ranging introduction to modern societies, cultures, and global events. The Department of History's program provides rigorous instruction in critical thinking, writing, and composition. And as one of the broadest and most diverse disciplines in academia, history provides students with connections to numerous other programs and opportunities across campus. History majors develop research and presentation skills that are highly transferable to any career, including those in public policy, law, government, education, public relations, healthcare, journalism, publishing, sales, and marketing, among others.

Bachelor of Arts with a major in HISTORY

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list .................................. 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list .................................. 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list .................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list .................................. 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ............. 3

VII. Quantitative Foundations
Choose one course from approved list .................................. 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list .................................. 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list .................................. 3

X. Global Dynamics
Choose one course from approved list .................................. 3

UK Core hours: .................................................................. 30

Graduation Composition and Communication Requirement (GCCR)
HIS 499 Senior Seminar for History Majors (Subtitle required) .................. 3

Graduation Composition and Communication Requirement hours (GCCR) .................. 3

College Requirements
I. Foreign Language (placement exam recommended) 0-14
II. Disciplinary Requirements
a. Natural Science ....................................................... 6
b. Social Science ....................................................... 6
c. Humanities (completed by Major Requirements) 1
III. Laboratory or Field Work ............................................... 1
IV. Electives .................................................................. 6

College Requirement hours: .............................................. 19-33
Premajor Requirements
HIS 104 A History of Europe through the Mid-Seventeenth Century
and
*HIS 105 A History of Europe from the Mid-Seventeenth Century to the Present
OR
HIS 106 Western Culture: Science and Technology I
and
HIS 107 Western Culture: Science and Technology II
OR
*HIS 108 History of the United States Through 1876
and
*HIS 109 History of the United States Since 1877

Premajor hours: ................................. 6

Major Requirements

Major Core Requirements
HIS 301 History Workshop: Introduction to the Study of History ................................................. 3
HIS 499 Senior Seminar for History Majors ........................................................................... 3

Major Core hours: ................................. 6

Other Course Work Required for the Major

From the Major Department:
Choose 24 hours to include at least 6 hours in pre-1789 work; at least 6 hours in post-1789 work; at least 3 hours in American history; at least 3 hours of European history; at least 3 hours in the history of Africa, Asia, Latin America, or the Middle East. At least 15 of these hours must be at the 300+ level. This minimum must be fulfilled before the senior seminar requires the completion of 60 hours in the history major. Choose one course from approved list ............................................. 3

From Outside the Major Department
Choose 15 hours outside History at the 300+ or 200+ level, or the required field beyond the Major Core. Choose one course from approved list ............................................. 3

Other Major hours: ........................................ 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation. Choose one course from approved list ............................................. 3

Total Minimum Hours Required for Degree .............................................. 120

*Course used towards completion of a UK Core Requirement.

Bachelor of Science with a major in HISTORY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with an H&I prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................................. 3

II. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................................. 3

III. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................................. 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............................................. 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ............................................. 3

VII. Quantitative Foundations
Choose one course from approved list ............................................. 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ............................................. 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............................................. 3

X. Global Dynamics
Choose one course from approved list ............................................. 3

All UK Core hours: ........................................................................... 30

Graduation Composition and Communication Requirement (GCCR)
HIS 499 Senior Seminar for History Majors
(Subtitle required) ........................................................................... 3

Graduation Composition and Communication Requirement hours (GCCR) ............................................. 3

College Requirements

I. Foreign Language (placement exam recommended) ............................................. 0-14

II. Disciplinary Requirements
a. Natural Science ........................................................................... 3
b. Social Science ........................................................................... 3
c. Humanities (completed by Major Requirements) ............................................. 3

III. Laboratory or Field Work ........................................................................... 1

IV. Electives .................................................................................. 6

College Requirement hours: ................................................. 13-27

Premajor Requirements

HIS 104 A History of Europe through the Mid-Seventeenth Century
and
*HIS 105 A History of Europe from the Mid-Seventeenth Century to the Present
OR
HIS 106 Western Culture: Science and Technology I
and
HIS 107 Western Culture: Science and Technology II
OR
*HIS 108 History of the United States Through 1876
and
*HIS 109 History of the United States Since 1877

Premajor hours: ................................................. 6

Major Requirements

Major Core Requirements
HIS 301 History Workshop: Introduction to the Study of History ............................................. 3

HIS 499 Senior Seminar for History Majors ........................................................................... 3

Major Core hours: ................................. 6

Other Course Work Required for the Major

From the Major Department:
Choose 24 hours to include at least 6 hours in pre-1789 work; at least 6 hours in post-1789 work; at least 3 hours in American history; at least 3 hours of European history; at least 3 hours in the history of Africa, Asia, Latin America, or the Middle East. At least 15 of these hours must be at the 300+ level. This minimum must be fulfilled before the senior seminar requires the completion of 60 hours in the history major. Choose one course from approved list ............................................. 3

From Outside the Major Department
Choose 15 hours outside History at the 300+ or 200+ level courses used to satisfy College requirements can also be counted here. Foreign language instruction courses may not be used to fulfill the related field requirement. Literature, civilization, and culture classes do count toward fulfilling this requirement. Choose one course from approved list ............................................. 3

Other Major hours: ........................................ 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation. Choose one course from approved list ............................................. 3

Total Minimum Hours Required for Degree .............................................. 120

*Course used towards completion of a UK Core Requirement.

Minor in History

A minor in History provides training in critical thinking and expression and a valuable perspective on the varieties of civilizations and modes of human behavior, complementing coursework in numerous other disciplines, including the humanities, the social sciences, and the natural and applied sciences.

The minor in History requires a minimum of 18 hours of course work to include:

1. 6 hours sequential introduction to the history of a civilization or a nation. This may be selected from:
   HIS 104/105 A History of Europe through the Mid-Seventeenth Century/A History of Europe from the Mid-Seventeenth Century to the Present
   HIS 106/107 Western Culture: Science and Technology I/Western Culture: Science and Technology II
   HIS 108/109 History of the United States Through 1876/History of the United States Since 1877
   HIS 202/203 History of the British People to the Restoration/History of the British People Since the Restoration
   HIS 229/230 The Ancient Near East and Greece to the Death of Alexander the Great/The Hellenistic World and Rome to the Death of Constantine
   HIS 295/296 East Asia to 1800/East Asia Since 1800
   HIS 297/298 Latin America to 1800/Latin America Since 1800
   HIS 370/371 Early Middle Ages/Later Middle Ages
   HIS 385/386 History of Russia to 1825/History of Russia Since 1825

2. 12 hours of course work at or above the 300 level, at least 6 hours of which must be at or above the 400 level. No more than 12 of the 18 hours required may be in any one of the subfields of American history, European history, or history of the non-Western world.
INT 200 Introduction to International Studies ........... 3
UK Core hours: ................................................. 30
Graduation Composition and Communication Requirement (GCCR)
INT 495 Capstone Seminar for International Studies Majors (Subtitle required) ........... 3
Graduation Composition and Communication Requirement hours (GCCR) ................... 3
College Requirements
I. Foreign Language (placement exam recommended, completed by Major Requirements) .... 0-14
II. Disciplinary Requirements
   a. Natural Science ............................................. 6
   b. Social Science (can be completed with Major Requirements) ........... 6
   c. Humanities (can be completed with Major Requirements) ........... 6
III. Laboratory or Field Work ................................ 1
IV. Electives ...................................................... 6
Subtotal: College Hours: ........................................ 25-39
Distribution Requirements
1. Students may not apply to their IS major more than 15 credit hours that have already been applied to another major, minor, or undergraduate certificate program.
2. Students must apply to their IS major at least one course from four different departments and/or academic programs.
3. Students must complete at least 24 of the major’s total credit hours at the 300 level or above.
Major Requirements
Pathway Courses
INT 200 Introduction to International Studies ........... 3
plus an additional 3 hours from the following list. Courses must be from two departments:
   - ANT 160 Cultural Diversity in the Modern World ........... 3
   - ANT 225 Culture, Environment and Global Issues ........... 3
   - GEO 152 Regional Geography of the World ........... 3
   - GEO 160 Lands and Peoples of the Non-Western World ........... 3
   - GEO 161 Global Inequalities .................................. 3
   - GEO 162 Introduction to Global Environmental Issues ........... 3
   - HIS 104 A History of Europe through the Mid-Seventeenth Century ........... 3
   - HIS 105 A History of Europe from the Mid-Seventeenth Century to the Present ........... 3
   - PS 210 Introduction to Comparative Politics ........... 3
   - PS 230 Introduction to International Diplomacy ........... 3
Language Competency
Complete the fourth semester in one language
   AND Two semesters in a second language .................. 6-8
   OR Two additional semesters in the same language ........... 6
Capstone Senior Project
Complete the following course:
INT 495 Capstone Seminar for International Studies Majors (Subtitle required) ........... 3
Thematic and Area Concentrations
Complete one of the following:
1. 15 credit hours in a thematic concentration and 12 credit hours with an area concentration .......... 27
Thematic Concentrations
(12-15 credit hours in one theme and from at least two departments)
Culture and the Arts
The Culture and the Arts concentration focuses on forms of cultural expression and representation (performing arts, film, philosophy, literature, folklore and myth, visual arts) from global perspectives.
A-H 310 Asian Art and Culture (Subtitle required) ........... 3
A-H 323 Medieval (Subtitle required) ...................... 3
A-H 334 Reframing Renaissance Art ........... 3
AIS 228 Islamic Civilization .................................. 3
AIS 330 Islamic Civilization II ................................. 3
AIS 331 Classical Arabic Literature (in English) ........... 3
"AIS 435 Topics in Islamic Studies (Subtitle required) ........... 3
CHI 320 Gender Politics in Chinese Literature ........... 3
CHI 321 Introduction to Contemporary Chinese Film ........... 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 ........... 3
CHI 331 Introduction to Chinese Culture, 1840 to Present ........... 3
CHI 430 Popular Culture in Modern China ........... 3
CHI 511 Literary Chinese ...................................... 3
CLA 210 The Art of Greece and Rome ........... 3
CLA 229 The Ancient Near East and Greece to the Death of Alexander the Great ........... 3
CLA 230 The Hellenistic World and Rome to the Death of Constantine ........... 3
CLA 261 Literary Masterpieces of Greece and Rome ........... 3
CLA 301 Latin Literature I (Subtitle required) ........... 3
CLA 302 Latin Literature II (Subtitle required) ........... 3
CLA 331 Gender and Sexuality in Antiquity ........... 3
CLA 382 Greek and Roman Religion ........... 3
CLA 390 Backgrounds to and Early History of Christianity to 150 CE ........... 3
CLA 391 Christians in the Roman Empire ........... 3
CLA 4808Q Studies in Greek and Latin Literature (Subtitle required) ........... 3
CLA 524 The Latin Literature of the Republic (Subtitle required) ........... 3
CLA 525 The Latin Literature of the Empire (Subtitle required) ........... 3
CLA 528 Late Antique and Post-Imperial Latin Literature (Subtitle required) ........... 3
CLA 551 Greek Poetry and Drama (Subtitle required) ........... 3
CLA 555 Greek Prose (Subtitle required) ........... 3
ENG 241 Survey of British Literature ........... 3
ENG 242 Survey of British Literature II ........... 3
ENG 274 Classics of Western Literature ........... 3
ENG 342 Shakespeare ........... 3
ENG 440G Studies in British Literature (Subtitle required) ........... 3
FR 214 France Today ........... 3
FR 215 Visual Cultures ........... 3
FR 225 French Film Noir ........... 3
FR 263 African and Caribbean Literature and Culture of French Expression in Translation (Subtitle required) ........... 3
"FR 324 Studies in French Literature (Subtitle required) ........... 3
FR 325 French Cinema (Subtitle required) ........... 3
FR 504 Topics in French Literature and Culture (Subtitle required) ........... 3
GER 263 The German Cultural Tradition I ........... 3
GER 264 The German Cultural Tradition II ........... 3
GER 311 Introduction to German Literature:
### College of Arts and Sciences: 2019-2020 Undergraduate Bulletin

**Themes (Subtitle required) .................................................. 3**

**GER 312 German Popular Forms (Subtitle required) ................. 3**

**GER 317 History of German Culture ....................................... 3**

**GER 319 Contemporary German Literature and Culture .............. 3**

**GER 342 War, Peace, and Terror in Germany and Europe .......... 3**

**GER 361 German Cinema ................................................... 3**

**GER 363 German Mythology ................................................ 3**

**GER 515 Studies in Major Authors ......................................... 3**

**GER 516 Studies in Genre .................................................. 3**

**GER 540 Multidisciplinary German Studies Seminar (Subtitle required) .................................................. 3**

**HJS 324 Jewish Thought and Culture I: From Ancient Israel to the Middle Ages ......................... 3**

**HJS 325 Jewish Thought and Culture II: From the Expulsion from Spain to the Present ................ 3**

**^INT 350 Special Topics in International Studies (Subtitle required) .................................................. 3**

**INT 399 Internship in International Studies ......................... 3**

**ITA 263 Studies in Italian Culture (Subtitle required) .............. 3**

**ITA 443G Survey of Italian Literature ..................................... 3**

**JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 .... 3**

**JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present .................................................. 3**

**JPN 421G Contemporary Literary and Visual Arts of Japan ........ 3**

**MCL 270 Introduction to Folklore and Mythology .................... 3**

**^MUS 330 Music in the World (Subtitle required) ...................... 3**

**PHI 504 Islamic and Jewish Philosophy and the Classical Tradition .................................................. 3**

**RUS 275 Russian Film ....................................................... 3**

**RUS 370 Russian Folklore (in English) ................................... 3**

**RUS 371 The Russian Cultural Imagination: 900-1917 ............... 3**

**RUS 372 Experiments in Life and Art: Russian Culture 1900-Present .................................................. 3**

**RUS 380 Love and Death in 19th Century Russian Literature ....... 3**

**RUS 381 Writing, Revolution & Reaction in Modern Russian Literature .................................................. 3**

**SPA 312 Civilization of Spain ............................................. 3**

**^SPA 314 Civilization of Spanish America ................................ 3**

**SPA 315 Introduction to Hispanic Literature ......................... 3**

**SPA 323 Introduction to Spanish Translation ......................... 3**

**SPA 371 Latin American Cinema (Subtitle required) ................ 3**

**SPA 372 Spanish Cinema (Subtitle required) ......................... 3**

**^SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) ......................... 3**

**SPA 423 Advanced Spanish Translation .................................. 3**

**SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) .................................................. 3**

**SPA 434 Spanish Literature of the 20th Century ..................... 3**

**SPA 438G Literature of Social Protest in Spanish America ...... 3**

**^SPA 444 20th and 21st Century Spanish Studies (Subtitle required) .................................................. 3**

**SPA 454 Colonialism and 19th Century Spanish-American Studies (Subtitle required) ......................... 3**

**TA 386 World Theatre II .................................................... 3**

**TA 485 French Theatre: Culture, Text and Performance .......... 3**

**^The subtitle for this course must directly relate to the Culture and the Arts Concentration. You must check with the IS director or advisor for verification prior to taking the course.**

### Global Development

The Global Development concentration focuses on social justice, sustainable economic development, public health, global interconnection, public service and managing global businesses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC 309</td>
<td>International Agricultural, World Food Needs</td>
</tr>
<tr>
<td>AEC 471</td>
<td>International Trade</td>
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<tr>
<td>AEC 510</td>
<td>International Trade and Agriculture</td>
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<tr>
<td>AIS 338</td>
<td>Women and Islam</td>
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<tr>
<td>AIS 340</td>
<td>Fundamentalism and Reform in Islam</td>
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<tr>
<td>AIS 435</td>
<td>Topics in Islamic Studies (Subtitle required)</td>
</tr>
<tr>
<td>AIS 440</td>
<td>Introduction to the Quran</td>
</tr>
<tr>
<td>ANT 241</td>
<td>Origins of Old World Civilization</td>
</tr>
<tr>
<td>ANT 242</td>
<td>Origins of New World Civilization</td>
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<tr>
<td>ANT 245</td>
<td>Food Culture and Society</td>
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<tr>
<td>ANT 324</td>
<td>Contemporary Latin American Cultures</td>
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<td>ANT 432</td>
<td>Social Organization</td>
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<tr>
<td>ANT 450</td>
<td>Symbols and Culture</td>
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<tr>
<td>CLA 509</td>
<td>Roman Law</td>
</tr>
<tr>
<td>*FR 350</td>
<td>Francophone Cultures (Subtitle required)</td>
</tr>
<tr>
<td>GEO 255</td>
<td>Geography of the Global Economy</td>
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<td>GEO 260</td>
<td>Geographies of Development in the Global South</td>
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<td>GEO 442G</td>
<td>Political Geography</td>
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<td>GER 342</td>
<td>War, Peace, and Terror in Germany and Europe</td>
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<td>GWS 250</td>
<td>Social Movements</td>
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<tr>
<td>HIS 561</td>
<td>Culture, Ideas, and Society in Latin America</td>
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<tr>
<td>HIS 562</td>
<td>Modern Mexico</td>
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<tr>
<td>HIS 563</td>
<td>The History of Women in Latin America</td>
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<tr>
<td>HIS 564</td>
<td>History of Brazil</td>
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<tr>
<td>*INT 350</td>
<td>Special Topics in International Studies (Subtitle required)</td>
</tr>
<tr>
<td>INT 399</td>
<td>Internship in International Studies</td>
</tr>
<tr>
<td>JOU 319</td>
<td>World Media Systems</td>
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<td>JPN 403</td>
<td>Self and Other: The Politics of Culture in Japan-U.S. Relationship</td>
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<tr>
<td>JPN 451</td>
<td>Social Movements in Modern Japan</td>
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<tr>
<td>JPN 461G</td>
<td>Japanese Colonialism and its Legacies</td>
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<td>LAS 201</td>
<td>Introduction to Latin America</td>
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<tr>
<td>^PS 391</td>
<td>Special Topics in Political Science (Subtitle required)</td>
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<td>^PS 410</td>
<td>Topics in Regional Politics (Subtitle required)</td>
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<td>The Governments and Politics of Eastern Asia</td>
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<td>^PS 420G</td>
<td>Governments and Politics of South Asia</td>
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<td>^PS 427G</td>
<td>East European Politics</td>
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<td>^PS 428G</td>
<td>Latin American Government and Politics</td>
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<td>^PS 429G</td>
<td>Government and Politics in Russia and the Post-Soviet States</td>
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<tr>
<td>^PS 433G</td>
<td>Politics of International Economic Relations</td>
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<td>^PS 436G</td>
<td>International Organization</td>
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<td>^PS 437G</td>
<td>Dynamics of International Law</td>
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<tr>
<td>^PS 439G</td>
<td>Special Topics in International Relations (Subtitle required)</td>
</tr>
<tr>
<td>^PS 538</td>
<td>Conflict and Cooperation in Latin American Relations</td>
</tr>
<tr>
<td>^SOC 444</td>
<td>Topics in Political Sociology (Subtitle required)</td>
</tr>
<tr>
<td>SW 320</td>
<td>Global Poverty: Responses Across Cultures</td>
</tr>
</tbody>
</table>

**^The subtitle for this course must directly relate to the Comparative Politics and Societies concentration. You must check with the IS director or advisor for verification prior to taking the course.**

### Area Concentrations

(12-15 credit hours in one theme and from at least two departments)

**Africa and the Middle East**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 228</td>
<td>Islamic Civilization</td>
</tr>
<tr>
<td>AIS 330</td>
<td>Islamic Civilization II</td>
</tr>
<tr>
<td>AIS 331</td>
<td>Classical Arabic Literature (in English)</td>
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<td>AIS 338</td>
<td>Women and Islam</td>
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<tr>
<td>AIS 340</td>
<td>Fundamentalism and Reform in Islam</td>
</tr>
<tr>
<td>AIS 435</td>
<td>Topics in Islamic Studies (Subtitle required)</td>
</tr>
<tr>
<td>AIS 440</td>
<td>Introduction to the Quran</td>
</tr>
<tr>
<td>ANT 222</td>
<td>Middle East Cultures</td>
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<tr>
<td>ANT 241</td>
<td>Origins of Old World Civilization</td>
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<tr>
<td>ANT 326</td>
<td>Contemporary African Lives</td>
</tr>
<tr>
<td>ENG 440G</td>
<td>Studies in British Literature (Subtitle required)</td>
</tr>
</tbody>
</table>

*The subtitle for this course must directly relate to the Comparative Politics and Societies concentration. You must check with the IS director or advisor for verification prior to taking the course.*
College of Arts and Sciences

FR 263 African and Caribbean Literature and Culture of French Expression in Translation (Subtitle required) 3
GEO 328 Geography of the Middle East and North Africa (Subtitle required) 3
GEO 336 Geography of Sub-Saharan Africa 3
HIS 208 History of the Atlantic World 3
HIS 254 History of Colonial and Post-Colonial Africa 3
HIS 549 History of the Middle East: 1952 to the Present 3
HIS 550 Studies in the Mid-East History and Politics (Subtitle required) 3
HIS 324 Jewish Thought and Culture I: From Ancient Israel to the Middle Ages 3
HIS 325 Jewish Thought and Culture II: From the Expulsion from Spain to the Present 3
^INT 350 Special Topics in International Studies (Subtitle required) 3
INT 399 Internship in International Studies 3
PHI 504 Islamic and Jewish Philosophy and the Classical Tradition 3
^PS 410 Topics in Regional Politics (Subtitle required) 3
^PS 417G Survey of Sub-Saharan Politics 3
^SOC 444 Topics in Political Sociology (Subtitle required) 3
*The subtitle for this course must directly relate to the Africa and the Middle East concentration. You must check with the IS director or advisor for verification prior to taking the course.

East, South, and Southeast Asia

A-H 310 Asian Art and Culture (Subtitle required) 3
ANT 241 Origins of Old World Civilization 3
ANT 327 Culture and Societies of India and South Asia 3
CHI 320 Gender Politics in Chinese Literature 3
CHI 321 Introduction to Contemporary Chinese Film 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 3
CHI 331 Introduction to Chinese Culture, 1840 to Present 3
CHI 430 Popular Culture in Modern China 3
CHI 511 Literary Chinese 3
ENG 440G Studies in British Literature (Subtitle required) 3
GEO 330 Geography of the Indian Subcontinent 3
GEO 332 Geography of Southeast Asia 3
GEO 333 Geography of East Asia 3
GEO 334 Environment, Society and Economy of Japan 3
GEO 551 Japanese Multinational Corporations 3
HIS 296 East Asia Since 1600 3
HIS 297 The Hellenistic World and Rome to the Death of Alexander the Great 3
HIS 230 The Hellenistic World and Rome to the Death of Constantine 3
HIS 554 British History 1815-1901 3
HIS 323 The Byzantine Empire 3
HIS 370 Early Middle Ages 3
HIS 371 Later Middle Ages 3
HIS 375 Europe and the World in the Age of the French Revolution 3
HIS 500 Preclassical and Classical Greece 3
HIS 501 Fourth-Century Greece and the Hellenistic World 3
HIS 502 A History of the Roman Republic 3
HIS 503 A History of the Roman Empire 3
HIS 504 Greek and Roman Medicine 3
HIS 509 Roman Law 3
HIS 514 Spain: From Reconquest to Empire, 1200-1700 3
HIS 519 The Era of the Renaissance 3
HIS 521 European Social History, 1400-1800 3
HIS 525 Modern Europe: 1890-1939 3
HIS 526 Europe Since 1939 3
HIS 529 Women in Modern Europe 3
HIS 540 History of Modern France to 1815 3
HIS 541 History of Modern France Since 1815 3
HIS 542 German History, 1789-1918 3
HIS 543 German History Since 1918 3
HIS 546 The Byzantine Empire 3
HIS 553 Eighteenth Century Britain 3
HIS 554 British History 1815-1901 3
HIS 555 British History Since 1901 3
HIS 556 The British Empire, 1322-1879 3
HIS 557 British Empire and Commonwealth, 1880-2000 3
^INT 350 Special Topics in International Studies (Subtitle required) 3
INT 399 Internship in International Studies 3
ITA 263 Studies in Italian Culture (Subtitle required) 3
^PS 410 Topics in Regional Politics (Subtitle required) 3
PS 419G The Governments and Politics of Eastern Asia 3
PS 420G Governments and Politics of South Asia 3
^SOC 444 Topics in Political Sociology (Subtitle required) 3
SPA 262 Hispanic Literatures in Translation (Subtitle required) 3
SPA 312 Civilization of Spain 3
SPA 320 Literature, Life and Thought of Spain 3
SPA 372 Spanish Cinema (Subtitle required) 3
SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) 3
SPA 434 Spanish Literature of the 20th Century 3
SPA 438G Literature of Social Protest in Spanish America 3
*SPA 444 20th and 21st Century Spanish Studies (Subtitle required) 3
SPA 454 Colonialism and 19th Century Spanish-American Studies (Subtitle required) 3
TA 485 French Theatre: Culture, Text and Performance 3
*The subtitle for this course must directly relate to the Europe concentration. You must check with the IS director or advisor for verification prior to taking the course.

Europe

A-H 323 Medieval (Subtitle required) 3
A-H 334 Reforming Renaissance Art 3
ANT 241 Origins of Old World Civilization 3
ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change 3
CLA 210 The Art of Greece and Rome 3
CLA 229 The Ancient Near East and Greece to the Death of Alexander the Great 3
CLA 230 The Hellenistic World and Rome to the Death of Constantine 3
CLA 261 Literary Masterpieces of Greece and Rome 3
CLA 301 Latin Literature I (Subtitle required) 3
CLA 302 Latin Literature II (Subtitle required) 3
CLA 331 Gender and Sexuality in Antiquity 3
CLA 382 Greek and Roman Religion 3
CLA 390 Backgrounds to and Early History of Christianity to 150 CE 3
CLA 391 Christians in the Roman Empire 3
CLA 480G Studies in Greek and Latin Literature (Subtitle required) 3
CLA 509 Roman Law 3
CLA 524 The Latin Literature of the Republic (Subtitle required) 3
CLA 525 The Latin Literature of the Empire (Subtitle required) 3
CLA 528 Late Antique and Post-Imperial Latin Literature (Subtitle required) 3
CLA 551 Greek Poetry and Drama (Subtitle required) 3
CLA 555 Greek Prose (Subtitle required) 3
ENG 241 Survey of British Literature I 3
ENG 242 Survey of British Literature II 3
ENG 274 Classics of Western Literature 3
ENG 342 Shakespeare 3
ENG 440G Studies in British Literature (Subtitle required) 3
FR 214 France Today 3
FR 215 Visual Cultures 3
FR 225 French Film Noir 3
^FR 324 Studies in French Literature (Subtitle required) 3
^FR 350 Francophone Cultures (Subtitle required) 3
FR 504 Topics in French Literature and Culture (Subtitle required) 3
GEO 326 Geography of Europe 3
GER 263 The German Cultural Tradition I 3
GER 264 The German Cultural Tradition II 3
GER 311 Introduction to German Literature: Themes (Subtitle required) 3
GER 312 German Popular Forms (Subtitle required) 3
GER 317 History of German Culture 3
GER 319 Contemporary German Literature and Culture 3
GER 342 War, Peace, and Terror in Germany and Europe 3
GER 361 German Cinema 3
GER 515 Studies in Major Authors 3
GER 516 Studies in Genre 3
GER 540 Multidisciplinary German Studies Seminar (Subtitle required) 3
HIS 202 History of British People to the Restoration 3
HIS 203 History of British People Since the Restoration 3
HIS 229 The Ancient Near East and Greece to the Death of Alexander the Great 3
HIS 230 The Hellenistic World and Rome to the Death of Constantine 3
HIS 323 The Byzantine Empire 3
HIS 370 Early Middle Ages 3
HIS 371 Later Middle Ages 3
HIS 375 Europe and the World in the Age of the French Revolution 3
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HIS 501 Fourth-Century Greece and the Hellenistic World 3
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HIS 503 A History of the Roman Empire 3
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HIS 554 British History 1815-1901 3
HIS 555 British History Since 1901 3
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HIS 557 British Empire and Commonwealth, 1880-2000 3
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INT 399 Internship in International Studies 3
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*SPA 444 20th and 21st Century Spanish Studies (Subtitle required) 3
SPA 454 Colonialism and 19th Century Spanish-American Studies (Subtitle required) 3
TA 485 French Theatre: Culture, Text and Performance 3

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Minor in International Studies

The minor in International Studies requires 18 credit hours of course work, 12 of which must be at the 300 level or above. Nine of the 18 credit hours should be in either a single thematic or single area concentration. No more than 9 credit hours from any other major can apply to the minor. All 18 credit hours must be in approved International Studies courses.

BACHELOR OF LIBERAL STUDIES

A Bachelor of Liberal Studies degree allows students to design individualized programs of study in the humanities, social sciences, and natural and mathematical sciences; to develop a breadth of knowledge reflective of a true liberal arts education; to develop critical thinking and writing skills; and to synthesize problem-solving strategies.

This degree is beneficial to a wide range of students: students who plan to work in business, technological, cultural, community, and human-service settings; students for whom a highly specialized, structured major is not ideal; and students who have accumulated a substantial number of credit hours across a range of departments.

To graduate with a BLS degree, students will complete rigorous upper-division courses within the College of Arts and Sciences and complete a capstone writing intensive course in which they synthesize and evaluate their previous course work. Students will also be required to take at least one course that includes laboratory or field experience. Along with the completion of UK Core courses, and the College of Arts and Sciences requirements, students complete 24 credit hours in a specific track: Humanities, Social Sciences, and Natural/Physical/Mathematical Sciences.

Students must complete at least 45 credit hours before declaring the major. Students may not double or triple major/degree with the BLS.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.
<table>
<thead>
<tr>
<th>Course Area</th>
<th>Course Title and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Intellectual Inquiry in Arts and Creativity</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>II. Intellectual Inquiry in the Humanities</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>III. Intellectual Inquiry in the Social Sciences</td>
<td>Choose one ANT or SOC course from approved list ............................ 3</td>
</tr>
<tr>
<td>IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>V. Composition and Communication I</td>
<td>CIS/WRD 110 Composition and Communication I .................... 3</td>
</tr>
<tr>
<td>VI. Composition and Communication II</td>
<td>CIS/WRD 111 Composition and Communication II .................... 3</td>
</tr>
<tr>
<td>VII. Quantitative Foundations</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>VIII. Statistical Inferential Reasoning</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>IX. Global Dynamics</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>UK Core hours:</td>
<td>................................................. 30</td>
</tr>
<tr>
<td>Graduation Composition and Communication Requirement (GCCR)</td>
<td>LIN 222 Introduction to Linguistics II: Language in Context ................................................. 3</td>
</tr>
<tr>
<td>Graduation Composition and Communication Requirement hours (GCCR)</td>
<td>................................................. 3</td>
</tr>
<tr>
<td>College Requirements</td>
<td>I. Foreign Language (completed by Premajor Requirements)</td>
</tr>
<tr>
<td></td>
<td>a. Natural Science ................................................. 6</td>
</tr>
<tr>
<td></td>
<td>b. Social Science ................................................. 6</td>
</tr>
<tr>
<td></td>
<td>c. Humanities (completed by Major Requirements)</td>
</tr>
<tr>
<td>III. Laboratory or Field Work</td>
<td>................................................. 1</td>
</tr>
<tr>
<td>IV. Electives</td>
<td>................................................. 6</td>
</tr>
<tr>
<td>College Requirement hours:</td>
<td>................................................. 19</td>
</tr>
<tr>
<td>Premajor Requirements</td>
<td>Complete the third and fourth semesters of a foreign language (or the equivalent) ................................................. 6-8</td>
</tr>
<tr>
<td>Premajor hours:</td>
<td>................................................. 6-8</td>
</tr>
<tr>
<td>Major Core Requirements</td>
<td>LIN 221 Introduction to Linguistics I: Theoretical Foundations and Analysis ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>LIN 222 Introduction to Linguistics II: Language in Context ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>plus four major area courses:</td>
</tr>
<tr>
<td></td>
<td>LIN 500 Phonetics ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>LIN 505 Linguistic Morphology ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>LIN 512 Analysis of English Syntax ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>LIN 515 Phonological Analysis ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>plus 15 additional hours of LIN courses of which six (6) or more must be at the 500 level and distinct from the major area courses ................................................. 15</td>
</tr>
<tr>
<td>Major Core hours:</td>
<td>................................................. 33</td>
</tr>
<tr>
<td>Other Course Work Required for the Major</td>
<td>Choose 15 hours of additional courses relevant to the major chosen from the following prefixes, or courses approved by the Director of Undergraduate Studies:</td>
</tr>
<tr>
<td></td>
<td>AIS, ANT, APP, BIO, CHI, CLA, COM, CS, CSD, ENG, FR, GEO, GER, GWS, HIS, HIS, ICT, INT, ISC, ITA, JOU, JPN, LAS, MA, MCL, PHI, PS, PSY, RUS, SOC, SPA, STA, TSL, WRD (200-level or above)</td>
</tr>
<tr>
<td>Other Major hours:</td>
<td>................................................. 15</td>
</tr>
<tr>
<td>Electives</td>
<td>Choose electives to lead to the minimum total of 120 hours required for graduation ................................................. 9</td>
</tr>
<tr>
<td>Total Minimum Hours Required for Degree</td>
<td>................................................. 120</td>
</tr>
</tbody>
</table>

**Bachelor of Arts with a major in Linguistics**

**120 hours (minimum)**

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the **UK Core** section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

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<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>I. Intellectual Inquiry in Arts and Creativity</td>
<td>Choose one course from approved list ............................ 3</td>
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</tr>
<tr>
<td>III. Intellectual Inquiry in the Social Sciences</td>
<td>Choose one ANT or SOC course from approved list ............................ 3</td>
</tr>
<tr>
<td>IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>V. Composition and Communication I</td>
<td>CIS/WRD 110 Composition and Communication I .................... 3</td>
</tr>
<tr>
<td>VI. Composition and Communication II</td>
<td>CIS/WRD 111 Composition and Communication II .................... 3</td>
</tr>
<tr>
<td>VI. Composition and Communication II</td>
<td>CIS/WRD 111 Composition and Communication II .................... 3</td>
</tr>
<tr>
<td>VII. Quantitative Foundations</td>
<td>Choose one course from approved list ............................ 3</td>
</tr>
<tr>
<td>VIII. Statistical Inferential Reasoning</td>
<td>Choose one course from approved list ............................ 3</td>
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<td>IX. Global Dynamics</td>
<td>Choose one course from approved list ............................ 3</td>
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<tr>
<td>Graduation Composition and Communication Requirement (GCCR)</td>
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<tr>
<td>Graduation Composition and Communication Requirement hours (GCCR)</td>
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</tr>
</tbody>
</table>

**College Requirements**

I. Foreign Language (completed by Premajor Requirements)

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
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<tr>
<td>a. Natural Science</td>
<td>................................................. 3</td>
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<td>b. Social Science</td>
<td>................................................. 3</td>
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<tr>
<td>c. Humanities (completed by Major Requirements)</td>
<td></td>
</tr>
<tr>
<td>III. Laboratory or Field Work</td>
<td>................................................. 1</td>
</tr>
<tr>
<td>IV. Electives</td>
<td>................................................. 6</td>
</tr>
<tr>
<td>College Requirement hours:</td>
<td>................................................. 13</td>
</tr>
</tbody>
</table>
Premajor Requirements

Complete the third and fourth semesters of a foreign language (or the equivalent) ........................................... 6-8

Premajor hours: .................................................... 6-8

Major Requirements

Major Core Requirements

LIN 221 Introduction to Linguistics I: Theoretical Foundations and Analysis ........................................... 3
LIN 222 Introduction to Linguistics II: Language in Context ................................................................. 3
plus four major area courses:
LIN 500 Phonetics ....................................................... 3
LIN 505 Linguistic Morphology ..................................... 3
LIN 512 Analysis of English Syntax ............................... 3
LIN 515 Phonological Analysis .................................... 3
plus 15 additional hours of LIN courses of which six (6) or more must be at the 500 level and distinct from the major areas courses ................................................................................................. 15

Major Core hours: ....................................................... 33

Other Course Work Required for the Major

For the related component:
Choose 15 hours of additional courses relevant to the major chosen from the following prefixes, or courses approved by the Director of Undergraduate Studies:
AIS, ANT, APP, BIO, CHI, CLA, COM, CS, CSD, ENG, FR, GEO, GER, GWS, HIS, HJS, ICT, INT, ISC, ITA, JOU, JPN, LAS, MA, MCL, PHI, PS, PSY, RUS, SOC,SPA, STA, TSL, WRD (200-level or above)

Other Major hours: ...................................................... 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation ........................................... 12

Total Minimum Hours Required for Degree ................................................................. 120

Minor in Linguistics

The minor in Linguistics requires 18 hours of course work to include:

LIN 221 Introduction to Linguistics I: Theoretical Foundations and Analysis ........................................... 3
LIN 222 Introduction to Linguistics II: Language in Context ................................................................. 3
Choose one phonetics/phonology course:
LIN 500 Phonetics
or
LIN 515 Phonological Analysis ........................................... 3
Choose one morphosyntax/semantic course:
LIN 512 Analysis of English Syntax ........................................... 3
LIN 505 Linguistic Morphology ........................................... 3
LIN 509 Formal Semantics
or
LIN 516 Grammatical Typology ........................................... 3
Choose two other LIN courses at 300 level or above .... 6

MAJOR IN MATHEMATICAL ECONOMICS

The Mathematical Economics major offers students a degree program that combines mathematics, statistics, and economics. In today's increasingly complicated international business world, a strong preparation in the fundamentals of both economics and mathematics is crucial to success. This degree program is designed to prepare a student to go directly into the business world with skills that are in high demand, or to go on to graduate study in economics or finance. A degree in mathematical economics would, for example, prepare a student for the beginning of a career in operations research or actuarial science.

In many ways, the mathematical economics program parallels the engineering philosophy. It combines the quantitative methods of mathematics with an applied science in order to solve real problems. As an example, operations research is used to optimize costs for extremely complicated systems such as airline scheduling. A major problem in business and economics is decision making under uncertainty. Efficient inventory control for large national retail chains can mean the difference between success and failure. A business will improve its bottom line if it can effectively control cost of inventory under the uncertainty of consumer demand. The solution of control problems of this type requires knowledge of relatively sophisticated mathematics and statistics as well as knowledge of basic economic principles.

There is currently a serious shortage of individuals who have sufficient training in mathematics and statistics as well as an understanding of business and economics. Companies that employ operations research analysts or actuaries cannot fill their positions. Mathematical economics and related areas have often been referred to as engineering for the service sector or “financial engineering.” With the ever increasing importance of the service sector in our economy, the math-econ degree will prove to be a valuable asset. The program will give the student an opportunity to study a fascinating collection of ideas and it will also provide the student with very marketable skills.

BACHELOR OF ARTS WITH A MAJOR IN MATHEMATICAL ECONOMICS

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ........................................... 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ........................................... 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ........................................... 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ........................................... 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ........................................... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ........................................... 3

VII. Quantitative Foundations
Choose one course from approved list ........................................... 3

VIII. Statistical Inferential Reasoning
STA 296 Statistical Methods and Motivations ........................................... 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ........................................... 3

X. Global Dynamics
Choose one course from approved list ........................................... 3

UK Core hours: ....................................................... 30

Graduation Composition and Communication Requirement (GCCR)
ECO 491G Applied Econometrics ........................................... 3

Graduation Composition and Communication Requirement hours (GCCR) ........................................... 3

College Requirements

I. Foreign Language (placement exam recommended) ........................................... 0-14
II. Disciplinary Requirements
a. Natural Science ........................................... 6
b. Social Science (completed by Major Requirements) ........................................... 6
c. Humanities ........................................... 6
III. Laboratory or Field Work ........................................... 1
IV. Electives ........................................... 6

College Requirement hours: ........................................... 19-33

Premajor Requirements

Choose one of the following two sequences:
MA 113 Calculus I
MA 114 Calculus II ........................................... 8
or
MA 137 Calculus I with Life Science Applications
MA 138 Calculus II with Life Science Applications ........................................... 8

Premajor hours: ........................................... 8

Major Requirements

Mathematics Core Requirements

MA 213 Calculus III ........................................... 4
MA 214 Calculus IV ........................................... 3
MA 320 Introductory Probability
or
STA 524 Probability ........................................... 3
MA 322 Matrix Algebra and its Applications ........................................... 3

Mathematics Core hours: ........................................... 13

College of Arts and Sciences

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Economics Core Requirements
ECO 201 Principles of Economics I .................................... 3
ECO 202 Principles of Economics II .................................. 3
ECO 391 Economic and Business Statistics ........................ 3
ECO 401 Intermediate Microeconomic Theory .................. 3
ECO 402 Intermediate Macroeconomic Theory ................. 3

Economics Core hours: ............................................ 15

Other Course Work Required for the Major For the Mathematics Component:
Choose one of the following two sequences:
MA 416G Introduction to Optimization
MA 417G Decision Making Under Uncertainty
STA 525 Introductory Statistical Inference ...................... 9

OR
MA 417G Advanced Calculus I
MA 472G Advanced Calculus II
MA 417G Decision Making Under Uncertainty ................. 9

For the Economics Component
ECO 491G Applied Econometrics .................................. 3

For the Statistics Component
Choose one course from approved list ............................ 3

Choose three courses from the following:

- STA 296 Statistical Methods and Motivations .............. 3

Choose one course from approved list ............................ 3

UK Core hours: .......................................................... 30

Graduation Composition and Communication Requirement (GCCR)
ECO 491G Applied Econometrics .................................. 3

Graduation Composition and Communication Requirement hours (GCCR) ........................................ 3

College Requirements
I. Foreign Language (placement exam recommended) ....... 0-14
II. Disciplinary Requirements
   a. Natural Science ................................................. 3
   b. Social Science (completed by Major Requirements) .... 3
   c. Humanities ..................................................... 3
III. Laboratory or Field Work ...................................... 1
IV. Electives ............................................................ 6

College Requirement hours: ....................................... 13-27

Premajor Requirements
Choose one of the following two sequences:
MA 113 Calculus I ..................................................... 3
MA 114 Calculus II ................................................... 8

Premajor hours: ....................................................... 8

Major Requirements
Mathematics Core Requirements
MA 213 Calculus III .................................................. 4
MA 214 Calculus IV ................................................... 3
MA 320 Introductory Probability or STA 524 Probability ........................................ 3
MA 322 Matrix Algebra and its Applications .................. 3

Mathematics Core hours: ........................................... 13

Economics Core Requirements
ECO 201 Principles of Economics I ................................ 3
ECO 202 Principles of Economics II ............................... 3
ECO 391 Economic and Business Statistics ..................... 3
ECO 401 Intermediate Microeconomic Theory ................. 3
ECO 402 Intermediate Macroeconomic Theory ............... 3

Economics Core hours: ............................................ 15

Other Course Work Required for the Major For the Mathematics Component:
Choose one of the following two sequences:
MA 416G Introduction to Optimization
MA 417G Decision Making Under Uncertainty
STA 525 Introductory Statistical Inference ...................... 9

OR
MA 417G Advanced Calculus I
MA 472G Advanced Calculus II
MA 417G Decision Making Under Uncertainty ................ 9

For the Economics Component
ECO 491G Applied Econometrics .................................. 3
One 300+ level economics course ............................... 3
One 400+ level economics course ............................... 3

For the Statistics Component
Choose STA 296 or a higher level statistics course ........... 3

Other Major hours: ...................................................... 21

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation. .................. 6

Total Minimum Hours Required for Degree ..................... 120

*Course used towards completion of a UK Core Requirement.

Bachelor of Science with a major in MATHEMATICAL ECONOMICS

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with an ECO prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................ 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .......... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .......... 3

VII. Quantitative Foundations
Choose one course from approved list ............................ 3

Other Major hours: ...................................................... 6

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation. .................. 6

Total Minimum Hours Required for Degree ..................... 120

*Course used towards completion of a UK Core Requirement.

MATHEMATICS

The department offers two programs leading to the B.A. or B.S. degree. Students may major in mathematics by completing the requirements for either: Option A, Mathematics or Option B, Mathematical Sciences.

The mathematics option consists of courses offered solely by the department of mathematics and is intended for those who wish to follow a traditional mathematics career path. The mathematical sciences option consists of courses offered by the departments of computer science, mathematics and statistics, and is intended for those who opt for a career that requires the application of mathematics. The requirements for these programs are outlined below.

Bachelor of Arts with a major in MATHEMATICS

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................ 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .......... 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II .......... 3

VII. Quantitative Foundations
Choose one course from approved list ............................ 3

Other Major hours: ...................................................... 21

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation. .................. 6

Total Minimum Hours Required for Degree ..................... 120

*Course used towards completion of a UK Core Requirement.
**Major Requirements**

*MA 113 Calculus I .......................... 4
*MA 114 Calculus II ........................... 4
MA 138 Calculus II with Life Science Applications ... 4
CS 115 Introduction to Computer Programming ........ 3

**Premajor Requirements**

*MA 113 Calculus I .......................... 4
or
*MA 137 Calculus I with Life Science Applications ... 4
MA 114 Calculus II ........................... 4
or
MA 138 Calculus II with Life Science Applications ... 4
CS 115 Introduction to Computer Programming ........ 3

**College Requirements**

**I. Foreign Language (placement exam recommended) .......................................................... 0-14**

**II. Disciplinary Requirements**

a. Natural Science ............................................. 6
b. Social Science ................................................ 6
c. Humanities ..................................................... 6

**III. Laboratory or Field Work ................................................. 1**

**IV. Electives ..................................................................... 25-39**

**Options**

**Option A – Mathematics**

**Premajor Requirements**

*MA 113 Calculus I .......................... 4
MA 114 Calculus II ........................... 4
CS 115 Introduction to Computer Programming ........ 3

**Premajor hours: .................................................. 11**

**Major Requirements**

**Major Core Requirements**

MA 213 Calculus III ............................... 4
MA 214 Calculus IV ................................. 3
MA/STA 320 Introductory Probability ................ 3
MA/CS 321 Introduction to Numerical Methods ... 3
MA 322 Matrix Algebra and its Applications ...... 3
STA 321 Basic Statistical Theory I ................. 3

**Other Course Work Required for the Major**

Choose 18 hours of 300+ level mathematics courses. One of the following sequences, or a substitute approved by the Department of Undergraduate Studies, must be included: MA 351/352, MA 361/362, MA 471G/472G, MA 481G/483G, CS/MA 416G and MA/STA 417G; at least two of the following must be included (they also count as the sequence if applicable): MA 351, 352, 361, 362, 471G, 472G. May not include MA 322 ................. 18

**Other Major hours: ........................................... 10**

**From the Major Department:**

Choose 18 hours outside mathematics at the 300+ level. Courses are generally chosen from physics, chemistry, biology, logic, statistics, computer science, economics, and engineering. 200+ level courses used to satisfy College requirements can also be counted here ............. 14

**Other Major hours: ........................................... 32**

**Option B – Mathematical Sciences**

**Bachelor of Science with a major in **

**MATHEMATICS**

**120 hours (minimum)**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.
Other Course Work Required for the Major

**From the Major Department:**
Choose 18 hours of 300+ level mathematics courses. One of the following sequences, or a substitute approved by the Director of Undergraduate Studies, must be included: MA 351/352, MA 361/362, MA 472G/472G, MA 481G/483G, CS/MA 416G and MA/STA 417G; at least two of the following must be included (they can also count as the sequence if appropriate): MA 351, 352, 361, 362, 472G, 472G.

May not include MA 322. 

**From Outside the Major Department**

Choose 14 hours outside Mathematics at the 300+ level. Courses are generally chosen from physics, chemistry, biology, logic, statistics, computer science, economics, and engineering. 200+ level courses used to satisfy College requirements can also be counted here.

**Other Major hours:** 32

**Option B – Mathematical Sciences**

**Premajor Requirements**
- *MA 113 Calculus I* or
- *MA 137 Calculus I with Life Science Applications* .... 4
- *MA 114 Calculus II* or
- *MA 138 Calculus II with Life Science Applications* .... 4
- *CS 115 Introduction to Computer Programming* .... 3

**Premajors hours:** 11

**Major Requirements**

CS 215 Introduction to Program Design, Abstraction and Problem Solving 
MA 213 Calculus III
MA 214 Calculus IV
MA/STA 320 Introductory Probability
MA/CS 321 Introduction to Numerical Methods
MA 322 Matrix Algebra and its Applications
STA 321 Basic Statistical Theory I

Plus a two-semester sequence chosen from the following:
- MA/CS 340 Applicable Algebra
- MA/CS 415G Combinatorics and Graph Theory
- MA 42G Methods of Applied Mathematics I
- MA 433G Introduction to Complex Variables
- MA 481G Differential Equations
- MA 483G Introduction to Partial Differential Equations

**Major Core hours:** 29

**Other Course Work Required for the Major**

**From the Major Department:**

Choose 6 hours of acceptable MA courses at the 300 level and above (MA 308 may not be used) .... ....

**From Outside the Major Department**

Nine hour supporting program chosen from one area outside mathematics. The Director of Undergraduate Studies must approve the supporting program. Courses in the supporting program must be at the 300 level and above. Cross-listed courses may be used for the supporting program provided they are not used to satisfy another major requirement.

**Other Major hours:** 15

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**Electives**

Choose electives to lead to the minimum total of 120 hours required for graduation.

**Total Minimum Hours Required for Degree:** 120

*Course used towards completion of a UK Core Requirement.*

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**Minor in Mathematics**

The minor in Mathematics requires 21 hours of course work to include:

1. MA 113/114 Calculus I and II and MA 213 Calculus III .... 8
   or equivalent

2. MA 322 Matrix Algebra and Its Applications .... 3
   or equivalent

3. 6 additional hours of mathematics courses numbered greater than 213. Possible courses include: MA 214, MA 261, MA 320, MA 321, MA 327, MA 330, MA 341, MA 351, MA 361, or any 400 level math course.

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**MILITARY SCIENCE AND LEADERSHIP (Army Officer Commissioning)**

The Army Reserve Officers’ Training program at the University of Kentucky is open to both men and women and follows a general military science curriculum that is normally completed in four years but which may be completed in two years. An academic major in military science is not offered. The program’s primary objective is to commission the future leadership of the Active Army, Army National Guard, and U.S. Army Reserve in the rank of Second Lieutenant.

**Scholarships**

Students interested in Army ROTC scholarships should contact the Army ROTC Admissions Officer at 859-257-6865; or visit 101 Barker Hall on campus. Additionally, students should refer to the Student Financial Aid, Awards, and Benefits section of this Bulletin.

**Academic Program**

Required program courses are: AMS 101, AMS 102, AMS 211, AMS 212, AMS 301, AMS 302, AMS 341, AMS 342, an approved military history course (AMS 320), and continuous enrollment (or participation) in physical fitness training (KHP 107, KHP 108, KHP 137, KHP 138) and practical laboratories (AMS 250 or AMS 350) once contracted in the ROTC program. Cadets must successfully attend an immersive four-week leadership experience in order to commission, usually in the summer between the junior and senior years in Fort Knox, KY.

An alternative two-year program is available for students with at least two academic years remaining until graduation and who have not completed the AMS 100- and AMS 200-level courses. Students will attend and complete a four-week immersive summer leadership camp held at Fort Knox, Kentucky in order to be eligible. Successful completion of the camp enables students to take AMS 300-level courses and complete the program in two years.

In certain cases, veterans or students who have completed Army basic training are also eligible to complete the program in two years. Members of the Army National Guard or U.S. Army Reserve may directly enroll in the ROTC program and participate in the Simultaneous Membership Program (SMP).

The Basic Course: (100 and 200 level) are orientational and deal with the Army’s role in the U.S. government. American military history, small unit organizations/operations, military geography/map reading and some adventure training are also addressed. No military obligation is incurred by completion of the courses.

The Advanced Course: (300 level) focus on leadership, management, and command/staff responsibilities within military organizations. All contracted Army ROTC students receive subsistence pay during the academic year. During the summer, students are compensated while attending Camp.

Leadership Lab periods, held weekly during the academic year, and on one weekend per semester, focus on adventure-type training (e.g., orienteering, rappelling, survival training, and basic marksmanship). These activities are offered, subject to availability of equipment and facilities, to provide an opportunity to develop leadership, organizational abilities, and confidence.

Army ROTC incorporates the dimension of leadership into the academic curriculum and provides training and experience that can be valuable in any profession.

For more information, contact the Professor of Military Science, ATTN: Admissions Officer, U.S. Army ROTC, 101 Barker Hall, University of Kentucky, Lexington, KY 40506-0028; or call 859-257-6865. Visit the website at: http://armyrotc.as.uky.edu/

**Minor in Military Leadership**

The minor in Military Leadership is on page 133 of this Bulletin.

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**MODERN AND CLASSICAL LANGUAGES, LITERATURES AND CULTURES**

The Department of Modern and Classical Languages, Literatures and Cultures is comprised of tracks in Arabic and Islamic Studies, Chinese Studies, Classics, Folklore and Mythology, French and Francophone Studies, German Studies, Hebrew and Jewish Studies, Italian Studies, Japan Studies and Russian Studies.
Bachelor of Arts with a major in MODERN AND CLASSICAL LANGUAGES, LITERATURES AND CULTURES

120 hours (minimum)
Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in the Arts and Creativity
MCL 311 The World of Autobiography
MCL 312 The Art of Adaptation
or any area course ............................................................. 3

II. Intellectual Inquiry in the Humanities
Choose one of the following courses
AIS 228 Islamic Civilization
AIS 320 Modern Arabic Literature and Film in Translation
AIS 345 Islamic Mysticism
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 331 Introduction to Chinese Culture, 1840 to Present
CLA 135 Greek and Roman Mythology
CLA 191 Christianity, Culture, and Society: A Historical Introduction
CLA 229 The Ancient Near East and Greece to the Death of Alexander the Great
FR 103 French Cinema
FR 205 The French Graphic Novel
FR 225 French Film Noir
GER 103 Fairy Tales in European Context
GER 305 German Film Today
ITA 263 Studies in Italian Culture (Subtitle required)
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 270 Introduction to Folklore and Mythology
MCL 343 Global Horror
MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards
RUS 275 Russian Film
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present
or any area course ............................................................. 3

III. Intellectual Inquiry in the Social Sciences
AIS 430 Islam in America
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 270 Introduction to Folklore and Mythology
RUS 370 Russian Folklore (in English)
or any area course ............................................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ........................................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I .................. 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ................. 3

VII. Quantitative Foundations
Choose one course from approved list .................................. 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list .................................. 3

IX. Community, Culture, and Citizenship in the USA
AIS 430 Islam in America
MCL 335 Democracy – Ancient and American or any area course ............................................................. 3

X. Global Dynamics
CHI 331 Introduction to Chinese Culture, 1840 to Present
GER 342 War, Peace, and Terror in Germany and Europe
GER 361 German Cinema
ITA 335 Topics in Italian Cinema (Subtitle required)
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present
JPN 351 The Japanese Experience of the Twentieth Century
MCL 324 The City in the Twentieth Century: Tokyo, Shanghai, Paris
MCL 343 Global Horror
RUS 275 Russian Film
RUS 370 Russian Folklore (in English)
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present
or any area course ............................................................. 3

UK Core hours: .............................. 30

Graduation Composition and Communication Requirement (GCCR)
MCL 495 Modern and Classical Languages, Literatures and Cultures Capstone .................................................. 3

Graduation Composition and Communication Requirement hours (GCCR) ................. 3

College Requirements
I. Foreign Language (completed by Major Requirements)
II. Disciplinary Requirements
a. Natural Science ....................................................... 3-6
b. Social Science ....................................................... 3-6
c. Humanities (completed by Major Requirements)

III. Laboratory or Field Work .............................................. 1

IV. Electives ........................................................................ 6

College Requirement hours: .............................................. 19

MCL Common Core
MCL 100 The World of Language ........................................ 3
MCL 200 Global Literacy .................................................. 3

Cross-Disciplinary Requirement: a course at or above the 200-level offered by MCLMC in an area other than the student’s field of concentration (AIS, CHI, CLA, FR, GER, HIS, ITA, JPN, RUS). This requirement can also be fulfilled by MCL 135, 190, 270, 310, 311, 324, 343, 360, and 390 ............................................................. 3

MCL 495 Modern and Classical Languages, Literatures and Cultures Capstone .................................................. 3

Common Core hours: ....................................................... 12

Other Course Work Required for the Major
MCL Tracks
The following applies to all MCL tracks. Students complete 30 hours of track requirements and track electives within one of 7 MCL language and culture tracks. Repeatable courses may be applied up to the maximum number of hours allowed for the course. Additional iterations of courses listed under the track requirements may be applied under track electives. The following MCL courses may be applied as elective hours to all tracks of the MCL major (up to the maximum allowed for the course):

MCL 375 Language Study Abroad ........................................ 1-12
MCL 376 Cultural Studies Abroad ........................................ 1-12
MCL 591 Language Practicum (Subtitle required) ............... 1-6
MCL 592 Research Practicum (Subtitle required) ................ 1-9
MCL 593 Internship ......................................................... 1-12
MCL 595 Topics in Folklore and Myth (Subtitle required) ....... 3-6
MCL 596 Topics in Culture (Subtitle required) .................... 3-6
MCL 597 Topics in Comparative Literary Studies (Subtitle required) ........................................ 3-6

Tracks

MCL / Arabic and Islamic Studies

Track Requirements
AIS 228 Islamic Civilization .............................................. 3
AIS 301 Advanced Modern Standard Arabic I ..................... 3
AIS 302 Advanced Modern Standard Arabic II .................. 3
AIS 330 Islamic Civilization .............................................. 3

Track Requirement hours: .............................................. 12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

AIS 300+ courses
ANT 222 Middle East Cultures ........................................ 3
ANT 326 Contemporary African Lives ................................ 3
ANT 327 Culture and Societies of India and South Asia .............. 3
GEO 328 Geography of the Middle East and North Africa .......... 3
GEO 330 Geography of the Indian Subcontinent .................. 3
GEO 336 Geography of Sub-Saharan Africa ...................... 3
PHI 504 Islamic and Jewish Philosophy and the Classical Tradition ........ 3
*PS 410 Topics in Regional Politics (Subtitle required) ................. 3

*If topic is appropriate.

Total Elective hours .......................................................... 18

Major Requirement hours: .............................................. 42

MCL / Chinese Studies

Track Requirements
CHI 301 Advanced Intermediate Chinese I ......................... 3
CHI 302 Advanced Intermediate Chinese II ....................... 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 .... 3
CHI 331 Introduction to Chinese Culture, 1840 to Present ....... 3

Track Requirement hours: .............................................. 12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

CHI 300+ courses
HIS 355 Topics in Non-Western History Since 1789 .............. 3
HIS 597 Westerners in East Asia, 1839 to the Present ............. 3
HIS 598 China in Revolution, 1895-1976 ............................ 3

In addition to the courses above, students may also choose up to 6 hours maximum toward their total of 42 hours from the following courses in China and its East Asian context:

HIS 295 East Asia to 1800 .............................................. 3
HIS 296 East Asia Since 1600 .......................................... 3
**Track Electives**

Students must choose an additional 15 hours from the list of elective courses approved for all tracks or those courses listed below.

FR 300+ courses, not including FR 335, 465G and FR 553

**Total Elective hours** ................................. 15

**Major Requirement hours:** ............................ 42

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### MCL / Russian Studies

**Track Requirements**

- RUS 301 Conversation and Composition I ................. 3
- RUS 302 Advanced Intermediate Russian II .............. 3
- RUS 371 The Russian Cultural Imagination: 900-1900 ....... 3
- RUS 372 Experiments in Life and Art: Russian Culture 1900-Present .................................................. 3

**Track Requirement hours:** ............................ 12

**Track Electives**

Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below.

RUS 300+ courses

**Total Elective hours** ................................. 18

**Major Requirement hours:** ............................ 42

**Total Minimum Hours Required for Degree** ............................ 120

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### MCL / Germany Studies

**Track Requirements**

- GER 307 Intermediate German Composition and Conversation I .................................................. 3
- GER 308 Intermediate German Composition and Conversation II .................................................. 3
- GER 311 Introduction to German Literature: Themes (Subtitle required) .......................................... 3
- GER 312 German Popular Forms (Subtitle required) ................................................................. 3

**Track Requirement hours:** ............................ 12

**Track Electives**

Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

GER 300+ courses

**Total Elective hours** ................................. 18

**Major Requirement hours:** ............................ 42

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### MCL / Japan Studies

**Track Requirements**

- JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 .................................................. 3
- JPN/ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present or JPN 351 The Japanese Experience of the Twentieth Century or HIS 357 Japan at War, 1850 to the Present ............. 3
- JPN 301 Advanced Japanese I ........................................ 3
- JPN 302 Advanced Japanese II ................................... 3

**Track Requirement hours:** ............................ 12

**Track Electives**

Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

JPN 300+ courses

**Total Elective hours** ................................. 18

**Major Requirement hours:** ............................ 42

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### MCL / Classics

**Track Requirements**

To graduate, the student must complete either Greek to the GRK 202 level or Latin to the 202 level either by successfully completing the specified course, by successfully completing a course above the 200 level in either language, or by demonstrating the equivalent competency.

The student must also complete 18 hours in courses at the 200 level or above with a CLA prefix or cross-listed CLA.

**Total Requirement hours:** ............................ 18

**Track Electives**

In addition, the student must complete 12 hours in courses appropriate to the study of Classics at the 200 level or above not prefixed CLA (courses cross-listed CLA also fulfill this requirement). The following courses are automatically accepted to fulfill this requirement, but other courses may be approved by the major advisor on a case-by-case basis.

A-H 314 Ancient (Subtitle required) ................................................................. 3

**Total Elective hours** ................................. 18

**Major Requirement hours:** ............................ 42

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### MCL / French and Francophone Studies

**Track Requirements**

- FR 204 Introduction to French and Francophone Studies .................................................. 3
- FR 214 France Today or FR 215 Visual Cultures .................................................. 3
- FR 410 French in Performance or FR 425 Media Studies .................................................. 3
- FR 470G Topical Seminar I (Subtitle required) .................................................. 3
- FR 471G Topical Seminar II (Subtitle required) .................................................. 3

**Track Requirement hours:** ............................ 15

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### MCL / Modern and Classical Languages, Literatures and Cultures

**Bachelor of Science with a major in**

**Modern and Classical Languages, Literatures and Cultures**

**120 hours (minimum)**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

**UK Core Requirements**

See the **UK Core section** of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

**I. Intellectual Inquiry in Arts and Creativity**

- MCL 311 The World of Autobiography
- MCL 312 The Art of Adaptation or any area course

**II. Intellectual Inquiry in the Humanities**

Choose one of the following courses

- AIS 228 Islamic Civilization
- AIS 320 Modern Arabic Literature and Film in Translation
- AIS 345 Islamic Mysticism
- CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
- CHI 331 Introduction to Chinese Culture, 1840 to Present
- CLA 135 Greek and Roman Mythology
- CLA 191 Christianity, Culture, and Society: A Historical Introduction
- CLA 229 The Ancient Near East and Greece
to the Death of Alexander the Great
FR 103 French Cinema
FR 205 The French Graphic Novel
FR 225 French Film Noir
GER 103 Fairy Tales in European Context
GER 305 German Film Today
ITA 263 Studies in Italian Culture (Subtitle required)
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 270 Introduction to Folklore and Mythology
MCL 343 Global Horror
MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards
RUS 275 Russian Film
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present

III. Intellectual Inquiry in the Social Sciences
AIS 430 Islam in America
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 270 Introduction to Folklore and Mythology
RUS 370 Russian Folklore (in English)
or any area course ............................................................. 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ........................................... 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ................ 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ................ 3

VII. Quantitative Foundations
Choose one course from approved list ........................................... 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ........................................... 3

IX. Community, Culture and Citizenship in the USA
AIS 430 Islam in America
MCL 335 Democracy – Ancient and American
or any area course ............................................................. 3

X. Global Dynamics
CHI 331 Introduction to Chinese Culture, 1840 to Present
GER 342 War, Peace, and Terror in Germany and Europe
GER 361 German Cinema
ITA 335 Topics in Italian Cinema (Subtitle required)
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present
JPN 351 The Japanese Experience of the Twentieth Century
MCL 324 The City in the Twentieth Century:
Tokyo, Shanghai, Paris
MCL 343 Global Horror
RUS 275 Russian Film
RUS 370 Russian Folklore (in English)
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present
or any area course ............................................................. 3

Graduation Composition and Communication Requirement (GCCR)
MCL 495 Modern and Classical Languages, Literatures and Cultures Capstone

Graduation Composition and Communication Requirement hours (GCCR) ................... 3

College Requirements

I. Foreign Language (completed by Major Requirements)

II. Disciplinary Requirements
   a. Natural Science .......................................................... 3-6
   b. SocialScience ........................................................... 3-6
   c. Humanities (completed by Major Requirements)........ 3-6

III. Laboratory or Field Work .................................................. 1

IV. Electives
Choose one course from approved list ........................................... 3

College Requirement hours: .................................................. 19

MCL Common Core
MCL 100 The World of Language ............................................ 3
MCL 200 Global Literacy .......................................................... 3

Cross-Disciplinary Requirement: a course at or above the 200-level offered by MCLLC in an area other than the student’s field of concentration (AIS, CHI, CLA, FR, GER, HIS, ITA, JPN, RUS). This requirement can also be fulfilled by MCL 135, 190, 270, 310, 311, 324, 343, 360, and 390 .................................................. 3

MCL 495 Modern and Classical Languages, Literatures and Cultures Capstone .............. 3

Common Core hours: ....................................................... 12

Other Course Work Required for the Major
MCL Tracks ................................................................. 30
The following applies to all MCL tracks. Students complete 30 hours of track requirements and track electives within one of 7 MCL language and culture tracks. Repeatable courses may be applied up to the maximum number of hours allowed for the course. Additional iterations of courses listed under the track requirements may be applied under track electives. The following MCL courses may be applied as elective hours to all tracks of the MCL major (up to the maximum allowed for the course):
MCL 375 Language Study Abroad ............................................ 1-12
MCL 376 Cultural Studies Abroad ............................................ 1-12
MCL 591 Language Practicum (Subtitle required) ......... 1-6
MCL 592 Research Practicum (Subtitle required) ......... 1-9
MCL 593 Internship ........................................................... 1-12
MCL 595 Topics in Folklore and Myth (Subtitle required) ........................................... 3-6
MCL 596 Topics in Culture (Subtitle required) .................. 3-6
MCL 597 Topics in Comparative Literary Studies (Subtitle required) .......................... 3-6

Tracks

MCL / Arabic and Islamic Studies

Track Requirements
AIS 228 Islamic Civilization .................................................. 3
AIS 301 Advanced Modern Standard Arabic I ................ 3
AIS 302 Advanced Modern Standard Arabic II .............. 3
AIS 330 Islamic Civilization II ............................................. 3

Track Requirement hours: .................................................. 12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.
AIS 300+ courses

MCL / Classics

Track Requirements
To graduate, the student must complete either Greek to the GRK 202 level or Latin to the 202 level either by successfully completing the specified course, by successfully completing a course above the 200 level in either language, or by demonstrating the equivalent competency.
The student must also complete 18 hours in courses at the 200 level or above with a CLA prefix or cross-listed CLA.

Total Requirement hours: .................................................. 18

Track Electives
In addition, the student must complete 12 hours in courses appropriate to the study of Classics at the 200 level or above not prefixed CLA (courses cross-listed CLA also fulfill this requirement). The following courses are automatically accepted to fulfill this requirement, but other courses may be approved by the major advisor on a case-by-case basis.
A-H 314 Ancient (Subtitle required) .................................. 3
AIS 228 Islamic Civilization .................................................. 3
AIS 240 Introduction to Archaeology ................................. 3
ENG 271 The Bible as Literature ......................................... 3
HIS 330 A History of Western Religious Thought (I) .............. 3

MCL / Chinese Studies

Track Requirements
CHI 301 Advanced Intermediate Chinese I .................... 3
CHI 302 Advanced Intermediate Chinese II ..................... 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 .... 3
CHI 331 Introduction to Chinese Culture, 1840 to Present .... 3

Track Requirement hours: .................................................. 12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

CHI 300+ courses

HIS 355 Topics in Non-Western History
Since 1789 ................................................................. 3
HIS 597 Westerners in East Asia, 1839 to the Present ....... 3
HIS 598 China in Revolution, 1895-1976 ......................... 3

In addition to the courses above, students may also choose up to 6 hours maximum toward their total of 42 hours from the following courses in China and its East Asian context:
HIS 295 East Asia to 1800 .................................................. 3
HIS 296 East Asia Since 1600 ............................................. 3
HIS 593 East Asian History Since World War II ............... 3
*A-H 315 Asian Art and Culture (Subtitle required) ............ 3
GEO 333 Geography of East Asia .................................. 3
MUS 330 Music in the World (Subtitle required) ............ 3
PHI 343 Asian Philosophy .................................................. 3
PS 419G The Governments and Politics of Eastern Asia .... 3

*If topic is appropriate.

Total Elective hours ....................................................... 18

Major Requirement hours: .................................................. 42

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MCL / Japan Studies

Track Requirements
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 ................. 3
JPN/ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present ....... 3
JPN 351 The Japanese Experience of the Twentieth Century ................. 3
or HIS 357 Japan at War, 1850 to the Present ...................................... 3
JPN 301 Advanced Japanese I ................................................................. 3
JPN 302 Advanced Japanese II ............................................................... 3

Track Requirements: ..................12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

JPN 300+ courses ................................................................. 3
JPN 283 Japanese Film ................................................................. 3
MCL 324 The City in the Twentieth Century: Tokyo, Shanghai, Paris ....... 3
A-H 310 Asian Art and Culture (Subtitle required) .......................... 3
HIS 295 East Asia to 1800 ............................................................... 3
HIS 296 East Asia Since 1600 ......................................................... 3
HIS 357 Japan at War, 1850 to the Present ...................................... 3
GEO/JPN 334 Environment, Society and Economy of Japan ............... 3
GEO/JPN 491G Japanese Landscapes ............................................ 3
GEO/JPN 551 Japanese Multinational Corporations ........................... 3

Total Elective hours: ..................18

Major Requirement hours: ..........42

MCL / Russian Studies

Track Requirements
RUS 301 Conversation and Composition I ........................................ 3
RUS 302 Advanced Intermediate Russian II ...................................... 3
RUS 371 The Russian Cultural Imagination: 900-1900 ......................... 3
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present .. 3
RUS 275 Russian Film ................................................................. 3
plus 6 credit hours related to Russia/Former USSR from outside the major department:
ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change 3
ANT 432 Anthropology of Eastern Europe and Russia ........................ 3
HIS 385 History of Russia to 1825 .................................................. 3
HIS 386 History of Russia Since 1825 ............................................. 3
HIS 534 Russia in the 19th Century .................................................. 3
HIS 535 Russia in the 20th Century .................................................. 3

Track Requirements: ..................12

Track Electives
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below.

RUS 300+ courses ................................................................. 3
RUS 275 Russian Film ................................................................. 3
plus 6 credit hours related to Russia/Former USSR from outside the major department:
ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change 3
ANT 432 Anthropology of Eastern Europe and Russia ........................ 3
HIS 385 History of Russia to 1825 .................................................. 3
HIS 386 History of Russia Since 1825 ............................................. 3
HIS 534 Russia in the 19th Century .................................................. 3
HIS 535 Russia in the 20th Century .................................................. 3

Total Elective hours: ..................18

Major Requirement hours: ..........42

Total Minimum Hours Required for Degree: 120

MCL / Chinese Studies

Track Requirements
CHI 301 Advanced Intermediate Chinese I ....................................... 3
CHI 302 Advanced Intermediate Chinese II ...................................... 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 .......... 3
CHI 331 Introduction to Chinese Culture, 1840 to Present ................. 3

Total Core hours: .................... 6

MCL / French and Francophone Studies

Track Requirements
FR 204 Introduction to French and Francophone Studies .................. 3
FR 214 France Today ................................................................. 3
FR 215 Visual Cultures ................................................................. 3
FR 410 French in Performance ..................................................... 3
FR 425 Media Studies ................................................................. 3
FR 470G Topical Seminar I (Subtitle required) .................................. 3
FR 471G Topical Seminar II (Subtitle required) ................................ 3

Track Requirements: ..................15

Track Electives
Students must choose an additional 15 hours from the list of elective courses approved for all tracks and/or those courses listed below.

FR 300+ courses, not including FR 335, 465G and FR 553 ................. 3

Total Elective hours: ..................15

Major Requirement hours: ..........42

MCL / German Studies

Track Requirements
GER 307 Intermediate German Composition and Conversation I ........ 3
GER 308 Intermediate German Composition and Conversation II ....... 3
GER 311 Introduction to German Literature: Themes (Subtitle required) 3
GER 312 German Popular Forms (Subtitle required) .......................... 3

Track Requirements: ..................12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

GER 300+ courses ................................................................. 3
GER 206 Spoken Communication .................................................. 3
MCL 343 Global Horror ............................................................... 3
Up to 6 hours of electives in ENG, GEO, GWS, HIS, LIN, MCL and PHI may be applied here.

Total Elective hours: ..................18

Major Requirement hours: ..........42

MCL and PHI may be applied here.

Up to 6 hours of electives in ENG, GEO, GWS, HIS, LIN, MCL and PHI may be applied here.

Total Elective hours: ..................12

Major Requirement hours: ..........42

MCL / Arabic and Islamic Studies

Core Requirements
Arabic language course at the 300 level ............................. 3
AIS 228 Islamic Civilization ......................................................... 3

Total Core hours: .................... 9

Elective Requirements
Students must choose an additional 9 hours from the list of elective courses approved for all tracks and/or those courses listed below.

AIS 300+ ................................................................. 3
ANT 222 Middle East Cultures ...................................................... 3
ANT 331 Anthropology of North Africa ........................................ 3
GEO 328 Geography of the Middle East and North Africa .............. 3
HIS 549 History of the Middle East: 1952 to the Present .............. 3
HIS 550 Studies in Mid-East History and Politics (Subtitle required) 3
PS 410 Topics in Regional Politics (Subtitle required) .................. 3

Total Elective hours: .................. 9

MCL / Japanese Studies

Track Requirements
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 ................. 3
JPN/ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present ....... 3
JPN 351 The Japanese Experience of the Twentieth Century ................. 3
or HIS 357 Japan at War, 1850 to the Present ...................................... 3
JPN 301 Advanced Japanese I ................................................................. 3
JPN 302 Advanced Japanese II ............................................................... 3

Track Requirements: ..................12

Track Electives
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

JPN 300+ courses ................................................................. 3
JPN 283 Japanese Film ................................................................. 3
MCL 324 The City in the Twentieth Century: Tokyo, Shanghai, Paris ....... 3
A-H 310 Asian Art and Culture (Subtitle required) .......................... 3
HIS 295 East Asia to 1800 ............................................................... 3
HIS 296 East Asia Since 1600 ......................................................... 3
HIS 357 Japan at War, 1850 to the Present ...................................... 3
GEO/JPN 334 Environment, Society and Economy of Japan ............... 3
GEO/JPN 491G Japanese Landscapes ............................................ 3
GEO/JPN 551 Japanese Multinational Corporations ........................... 3

Total Elective hours: ..................18

Major Requirement hours: ..........42

Total Minimum Hours Required for Degree: 120

Minor in Modern and Classical Languages, Literatures and Cultures

The minor in Modern and Classical Languages, Literatures and Cultures requires a minimum of 18 hours of course work. Students choose one of nine options (fields of concentration) from: Arabic and Islamic Studies, Chinese Studies, Classics, Folklore and Mythology, French and Francophone Studies, German Studies, Italian Studies, Japan Studies, and Russian Studies.

Within all options of the MCL minor repeatable courses may be applied up to the maximum number of credit hours allowed for the course. Additional iterations of courses listed under the core requirements may be applied under track electives. The following MCL courses may be applied as elective hours to all MCL minor options.

MCL 100 The World of Language .................................................. 3
MCL 200 Global Literacy ................................................................. 3
MCL 375 Language Study Abroad .................................................. 1-3
MCL 376 Cultural Studies Abroad .................................................. 1-3
MCL 591 Language Practicum (Subtitle required) .......................... 1-6
MCL 592 Research Practicum (Subtitle required) ........................... 1-9
MCL 593 Internship ................................................................. 1-12
MCL 595 Topics in Folklore and Myth (Subtitle required) ........ ..... 3-6
MCL 596 Topics in Culture (Subtitle required) ............................. 3-6
MCL 597 Topics in Comparative Literary Studies (Subtitle required) ......... 3-6

Total Elective hours: .................. 18

Minor in Modern and Classical Languages, Literatures and Cultures

Track Requirements
Japanese language course at the 300 level ............................. 3

Total Core hours: .................... 9

Elective Requirements
Students must choose an additional 18 hours from the list of elective courses approved for all tracks and/or those courses listed below.

CHI 301 Advanced Intermediate Chinese I ....................................... 3
CHI 302 Advanced Intermediate Chinese II ...................................... 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 .......... 3
CHI 331 Introduction to Chinese Culture, 1840 to Present ................. 3

Total Core hours: .................... 6
Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below.

CHI 300 __________________________________________________________ 3
HIS 365 Topics in Non-Western History Since 1789 ___________________ 3
HIS 597 Westerns in East Asia ______________________________________ 3
HIS 598 China in Revolution, 1895-1976 ________________________________ 3

Total Elective hours ........................................................................ 12

*Approved for the minor when the topic of the course is as determined by the minor advisor.

MCL / Classics
Core Requirements
The requirements for a Classics minor are 18 credit hours, at least 6 of which must be at the 300 level or above, earned from among the following courses:
1. Greek and Latin courses at any level
2. Non-language CLA courses at the 200 level or higher

All courses may be chosen from category 1, all from category 2, or the two categories may be combined in any manner, as long as students earn the requisite 18 credit hours. Elective courses approved for all tracks also count towards the Classics minor.

MCL / Folklore and Mythology
Core Requirements
MCL 270 Introduction to Folklore and Mythology .............................. 3
CLA 135 Greek and Roman Mythology or
CLA 100 Ancient Stories in Modern Films ........................................ 3
GER 103 Fairy Tales in European Context ......................................... 3

Total Core hours ........................................................................... 9

Students in this minor must also satisfy the current A&S Language Requirement, regardless of their college. The minor is not restricted to A&S majors.

Elective Requirements
Students choose an additional 6 hours from the following courses:
CLA 331 Gender and Sexuality in Antiquity .................................... 3
CLA 382 Greek and Roman Religion ............................................... 3
FR 263 African and Caribbean Literature and Culture of French Expression in Translation (Subtitle required) .............................. 3
GER 363 Germanic Mythology ..................................................... 3
MCL 135 Vampires: Evolution of a Sexy Monster ............................ 3
RUS 370 Russian Folklore (in English) .......................................... 3

Students choose 3 additional elective hours that may include those listed above not applied above and/or the following:
CLA 462G Topics in Classical Literature (Subtitle required) ............. 3
GER 263 The German Cultural Tradition I ..................................... 3
*GER 312 German Popular Forms (Subtitle required) ...................... 3
AAS 200 Introduction to African-American Studies ........................ 3
AAS 254 History of Colonial and Post-Colonial Africa ..................... 3
ANT 220 Introduction to Cultural Anthropology ............................. 3
ANT 241 Origins of Old World Civilization .................................... 3
ANT 242 Origins of New World Civilization .................................. 3
ANT 245 Food Culture and Society ............................................. 3
ANT 301 History of Anthropological Theory ................................ 3
ANT 401 Gender Roles in Cross-Cultural Perspective ....................... 3
ANT 450 Symbols and Culture ................................................... 3
ANT 470G Regional American Ethnography ................................ 3

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below.

APP 200 Introduction to Appalachian Studies ................................. 3
*APP 300 Topics in Appalachian Studies (Subtitle required) .......... 3
ENG 271 The Bible as Literature ................................................... 3
*ENG 492G Cultural Studies (Subtitle required) ............................. 3
ENG 519 Introduction to Old English ........................................... 3
HIS 521 European Social History, 1400-1800 ................................. 3
LAS 201 Introduction to Latin America ......................................... 3
*LIN 317 Language and Society (Subtitle required) ....................... 3
MAT 247 Dress and Culture ...................................................... 3
MUS 300 History of Jazz ............................................................ 3
MUS 301 Appalachian Music ...................................................... 3
*SOC 350 Topics in Sociology (Subtitle required) ......................... 3
GWS 200 Sex and Power ........................................................... 3
GWS 201 Gender and Popular Culture ........................................ 3
*GWS 300 Topics in Gender and Women's Studies (Subtitle required) 3
*GWS 301 Crossroads (Subtitle required) .................................... 3
*GWS 302 Gender Across the World (Subtitle required) ............... 3

Other courses approved by the minor advisor

Total Elective hours ..................................................................... 9

*Approved for the minor when the topic of the course is as determined by the minor advisor.

MCL / French and Francophone Studies
Core Requirements
FR 204 Introduction to French and Francophone Studies .................. 3
FR 214 France Today or
FR 215 Visual Cultures .............................................................. 3

Total Core hours ......................................................................... 6

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:
FR 300+ (excluding FR 335, FR 465G, and FR 553) .......................... 3

Total Elective hours ................................................................. 12

MCL / German Studies
Core Requirements
GER 307 Intermediate German Composition and Conversation I ....... 3
GER 308 Intermediate German Composition and Conversation II ........ 3

Total Core hours ...................................................................... 6

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:
GER 300+ ................................. 3
MCL 343 Global Horror .............................................................. 3
GER 206 Spoken Communication .............................................. 3

Total Elective hours ................................................................. 12

MCL / Italian Studies
Core Requirements
ITA 300 Italian Conversation and Writing ...................................... 3
ITA 301 Italy from Fascism to the Present .................................... 3

Total Core hours ...................................................................... 6

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:
ITA 200+ .................................... 3
A-H 105 World Art Before 1400 ............................................. 3
A-H 106 Renaissance to Modern Art ........................................... 3

Elective Requirements
Students must choose an additional 9 hours from the list of elective courses approved for all tracks and/or those courses listed below:

JPN 301 Advanced Japanese I ................................................... 3
JPN 302 Introduction to Japanese Culture, Pre-Modern to 1868 ...... 3
JPN/ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present or
JPN 351 The Japanese Experience of the Twentieth Century .......... 3

Total Core hours .................................................................... 9

Elective Requirements
Students must choose an additional 9 hours from the list of elective courses approved for all tracks and/or those courses listed below:

JPN 300+ .................................... 3

Total Core hours .................................................................... 9

MCL / Japanese Studies
Core Requirements
JPN 302 Advanced Intermediate Japanese II ................................. 3

Total Core hours .................................................................... 6

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:

RUS 301 Conversation and Composition I .................................... 3
RUS 302 Advanced Intermediate Russian II ............................... 3

Total Core hours .................................................................... 6

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:

RUS 300+ .................................... 3

Total Core hours .................................................................... 9

MCL / Russian Studies
Core Requirements
RUS 200 Introduction to Classical Literature (Subtitle required) ...... 3

Total Core hours .................................................................... 6

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:

RUS 275 Russian Film ............................................................. 3

Total Core hours .................................................................... 4

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:

RUS 300+ .................................... 3

Total Core hours .................................................................... 9

Elective Requirements
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:

RUS 300+ .................................... 3

Total Core hours .................................................................... 18
NEUROSCIENCE

The Bachelor of Science degree program in Neuroscience provides undergraduate students with an opportunity to engage in the in-depth study of neuroscience from a uniquely interdisciplinary perspective. Students receive extensive exposure to fundamental and applied aspects of neuroscience through classroom and laboratory-based interactions with faculty members and research staff from several departments housed in the College of Arts and Sciences and Medicine. The scope of training spans the entirety of key topics in neuroscience and includes examination of biological systems ranging from cellular/molecular neuroscience; neurophysiology; neuroanatomy; and integrated neuroscience including behavior.

Bachelor of Science with a major in NEUROSCIENCE

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list ............................. 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list ............................. 3

III. Intellectual Inquiry in the Social Sciences

PSY 100 Introduction to Psychology or equivalent transfer .................................................. 3-4

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

CHE 105 General College Chemistry I ........................... 4
CHE 111 General Chemistry I Laboratory ......................... 1
CHE 107 General College Chemistry II .......................... 3
CHE 113 General Chemistry II Laboratory ....................... 2
MA 137 Calculus I With Life Science Applications or
MA 113 Calculus I .................................................... 4

College Requirement hours: ........................................ 13-27

Premajor/Preprofessional Requirements

BIO 148 Introductory Biology I .................................... 3
BIO 152 Principles of Biology II ................................... 3
BIO 155 Laboratory for Introductory Biology I ................. 1
CHE 105 General College Chemistry I ........................... 4
CHE 111 General Chemistry I Laboratory ......................... 1
CHE 107 General College Chemistry II .......................... 3
CHE 113 General Chemistry II Laboratory ....................... 2
MA 137 Calculus I With Life Science Applications or
MA 113 Calculus I .................................................... 4
PSY 100 Introduction to Psychology .............................. 4

Premajor/Preprofessional Requirement hours: .......................... 25

Program Core

BIO 302 Introduction to Neuroscience ........................ 3
BIO 305 Introduction to Neuroscience Techniques .......... 4
BIO 315 Introduction to Cell Biology or
BCH 401G Fundamentals of Biochemistry or
CHE 550/552 Biological Chemistry I/II ......................... 3-6
BIO 426 Neuroscience Seminar (Subtitle required) .......... 1
CHE 230 Organic Chemistry I ..................................... 3
CHE 231 Organic Chemistry Laboratory I ....................... 1
PHY 211 General Physics .......................................... 5 or
PHY 231 General University Physics and
PHY 241 General University Physics Laboratory .......... 5
WRD 204 Technical Writing ........................................ 3

Program Core hours: .............................................. 23-26

Guided Electives

Students must complete 27 credit hours of guided electives. At least 12 of the 27 credit hours must come from group one. Students may choose from the remaining courses in group one or group two to equal the 27 credit hours of guided electives. Students cannot enroll in more than 3 credit hours of research courses in one semester even if under a different prefix (i.e., BIO 394, BIO 395, PSY 393, PGY 394) and no more than 6 total credit hours of research may be used toward the major.

Group One (12 credit hours)

ANA 410G Neurobiology of Brain and Spinal Cord Disorders ........................................ 3
ANA 442 Molecular and Cellular Neurobiology ................ 3
ANA 417G Functional Human Neuroanatomy ................ 3
BIO 410 Vertebrate Endocrinology .......................... 3

Group Two

ANA 394 Independent Research in Neurobiology and Neuroscience ................................ 1-3
BIO 394 Research in Neuroscience ................................ 1-3
PSY 393 Research in Neuroscience .......................... 1-3
PGY 394 Independent Research in Neurobiology and Neuroscience ................................ 1-3
*ANA 516 Selected Topics in Advanced Neuroscience .......... 3
BIO 375 Behavioral Ecology and Sociobiology ................ 3
BIO 440 Comparative and Functional Anatomy ............. 4
BIO 447 Animal Senses ............................................. 3
BIO 507 Biology of Sleep and Circadian Rhythms .......... 3
*BIO 510 Recombinant DNA Techniques Laboratory ....... 4
**BIO 315 Introduction to Cell Biology ......................... 4
**BCH 401G Fundamentals of Biochemistry .................. 3
**CHE 550/552 Biological Chemistry I/II .................... 6
BIO 550 Advanced Physiology ................................... 3
CHE 232 Organic Chemistry II ................................... 3
CHE 233 Organic Chemistry Laboratory II ..................... 1
*CSD 571 Neural Bases of Speech, Language, and Hearing . 4
PHY 213 General Physics ............................................. 5 or
PHY 232 General University Physics and
PHY 242 General University Physics Laboratory .......... 5
PGY 412G Principles of Human Physiology Lectures .......... 4
PGY 502/BIO 502 Systems, Cellular and Molecular Physiology ........................................ 5
PSY 312 Brain and Behavior ......................................... 3
Total Guided Elective hours: ......................................... 27

*Requires consent of instructor.
**May only be used as electives if the course is not used to satisfy program core requirements.

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation .................................................. 6

Total Minimum Hours Required for Degree ...................... 120

Minor in Neuroscience

The minor in Neuroscience requires 18 hours of course work to include:

Minor Prerequisites

BIO 152 Principles of Biology II or equivalent .................. 3

Minor Requirement

One of the following: BIO 302 Introduction to Neuroscience or
PSY 312 Brain and Behavior ..................................... 3

Minor Electives

Complete 12 credits from the following courses:

Anatomy

*ANA 394 Independent Research in Neurobiology and Neuroscience ................................ 1-3

University of Kentucky

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### PHILOSOPHY

Philosophy encourages critical and systematic inquiry into fundamental questions of right and wrong, truth and falsehood, the meaning of life, and the nature of reality, knowledge, and society. More than any other discipline, Philosophy explores the core issues of the Western intellectual tradition. With its emphasis on analytic precision and dialogical engagement, Philosophy is well positioned to help students develop their problem-solving, creative and critical thinking, communication, and other skills highly valued in the real world.

### Bachelor of Arts with a major in PHILOSOPHY

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 315</td>
<td>Philosophy and Science Fiction</td>
<td>3</td>
</tr>
<tr>
<td>PHI 100</td>
<td>Introduction to Philosophy: Knowledge and Reality</td>
<td>1</td>
</tr>
<tr>
<td>PHI 260</td>
<td>History of Philosophy I: From Greek Beginnings to the Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>PHI 270</td>
<td>History of Philosophy II: From the Renaissance to the Present Era</td>
<td>3</td>
</tr>
<tr>
<td>PHI 310</td>
<td>Philosophy of Human Nature</td>
<td>3</td>
</tr>
<tr>
<td>PHI 317</td>
<td>Existentialist Thought and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHI 380</td>
<td>Death, Dying and the Quality of Life</td>
<td>3</td>
</tr>
<tr>
<td>PHI 343</td>
<td>Asian Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHI 350</td>
<td>Metaphysics and Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>PHI 361</td>
<td>Biology and Society</td>
<td>3</td>
</tr>
<tr>
<td>PHI 335</td>
<td>The Individual and Society</td>
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<td>PHI 130</td>
<td>Introduction to Philosophy: Morality and Society</td>
<td>3</td>
</tr>
<tr>
<td>PHI 205</td>
<td>Food Ethics</td>
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<tr>
<td>PHI 120</td>
<td>The Art of Thinking: An Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHI 120</td>
<td>History of Philosophy I: From Greek Beginnings to the Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>PHI 260</td>
<td>History of Philosophy II: From the Renaissance to the Present Era</td>
<td>3</td>
</tr>
<tr>
<td>PHI 390</td>
<td>Death, Dying and the Quality of Life</td>
<td>3</td>
</tr>
<tr>
<td>PHI 350</td>
<td>History of Philosophy I: From Greek Beginnings to the Middle Ages</td>
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<tr>
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<td>History of Philosophy II: From the Renaissance to the Present Era</td>
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<tr>
<td>PHI 390</td>
<td>Death, Dying and the Quality of Life</td>
<td>3</td>
</tr>
</tbody>
</table>

### Graduation Composition and Communication Requirement (GCCR)

Choose one course from each group below: PHI 300, 305, 310, 317, 330, 332, 334, 335, 336, 337, 340, 341, 361, 380, 395, 500

### Electives

Choose electives to lead to the minimum total of 120 hours required for graduation.

**Total Minimum Hours Required for Degree**

120

*French or German is highly recommended to complete the College foreign language requirements. Ancient Greek is recommended if the student plans to concentrate on ancient philosophy. Latin is recommended if the student plans to concentrate on medieval philosophy.

### Minor in Philosophy

The minor in Philosophy requires a minimum of 18 hours of course work to include:

- (a) No more than two 100-level courses
- (b) At least one course in logic (PHI 120, PHI 320, or PHI 520)
- (c) At least one course in the history of philosophy (PHI 260, PHI 270, or any course from Group A of the undergraduate curriculum)
- (d) At least three courses (9 hours) at the 300 level or above, excluding PHI 320 and PHI 399.
### PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy helps many students acquire a general understanding and appreciation of physics and astronomy. In the liberal arts tradition, the undergraduate curriculum is complete and flexible enough to allow a graduate with a major in physics to pursue a variety of careers. Many of our graduates continue their studies with graduate work in physics or other areas.

For the student interested in combining the study of physics with studies in other areas, the department can assist in the planning of an individual curriculum which meets both the minimum requirements of the Physics program and the student’s needs and interests. Such planning is of particular value to students intending to pursue careers in engineering, computer science, applied physics, medicine, radiation medicine, biophysics, law, meteorology, oceanography, geophysics, environmental sciences, management, or the teaching of physics and/or physical science at the junior and senior high school levels. By working closely with an advisor, the student with special interests can take advantage of opportunities to take several other courses from one or more departments outside physics, or double major in physics and another area. For a description of suggested curricula, visit our website at: https://pa.as.uky.edu/.

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### Bachelor of Arts with a major in PHYSICS

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for the Bachelor of Arts degree on page 129.

#### UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

| I. Intellectual Inquiry in Arts and Creativity |   |
| Choose one course from approved list | 3 |

| II. Intellectual Inquiry in the Humanities |   |
| Choose one course from approved list | 3 |

| III. Intellectual Inquiry in the Social Sciences |   |
| Choose one course from approved list | 3 |

| IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences |   |
| Choose one course from approved list | 3 |

| V. Composition and Communication I | CIS-WRD 110 Composition and Communication I | 3 |
| VI. Composition and Communication II | CIS-WRD 111 Composition and Communication II | 3 |
| VII. Quantitative Foundations | Choose one course from approved list | 3 |
| VIII. Statistical Inferential Reasoning | Choose one course from approved list | 3 |
| IX. Community, Culture and Citizenship in the USA | Choose one course from approved list | 3 |
| X. Global Dynamics | Choose one course from approved list | 3 |
| UK Core hours: | 30 |
| Graduation Composition and Communication Requirement (GCCR) | PHY 435 Intermediate Physics Laboratory | 3 |
| College Requirements | Graduation Composition and Communication Requirement hours (GCCR) | 3 |
| I. Foreign Language (placement exam recommended) | 0-14 |
| II. Disciplinary Requirements | a. Natural Science (completed by Premajor Requirements) | 10 |
| b. Social Science | 6 |
| c. Humanities | 6 |
| III. Laboratory or Field Work (completed by Premajor Requirement) | 6 |
| IV. Electives | 6 |
| College Requirement hours: | 18-32 |
| Premajor Requirements | *PHY 211/213 General Physics *(10) |
| or with permission of the Director of Undergraduate Studies: | PHY 228 Optics, Relativity and Thermal Physics | 3 |
| CHE 105 General College Chemistry I | 4 |
| CHE 107 General College Chemistry II | 3 |
| MA 113 Calculus I | 4 |
| MA 114 Calculus II | 4 |
| Premajor hours: | 28 |
| Major Requirements | Major Core Requirements |
| PHY 306 Theoretical Methods of Physics | 3 |
| PHY 335 Data Analysis for Physicists | 2 |
| PHY 361 Principles of Modern Physics | 3 |
| Any 3-hour 300-level PHY course | 3 |
| Any 3-hour 400-level PHY course | 3 |
| PHY 435 Intermediate Physics Laboratory | 3 |
| MA 213 Calculus III | 4 |
| Major Core hours: | 21 |
| Other Course Work Required for the Major | From Outside the Major Department |
| Choose 13-16 hours outside Physics at the 300+ level. Courses are generally chosen from biology, chemistry, computer science, education, engineering, mathematics, philosophy, or statistics. 200+ level courses used to satisfy College requirements can also be counted here | 13-16 |
| Other Major hours: | 121 |
| Total Minimum Hours Required for Degree | *Course used towards completion of a UK Core Requirement.* | 121 |

---

### Suggested Curriculum for B.A. in Physics

As you plan your physics studies, please note that upper division physics courses, PHY 3XX and all higher numbered courses, are offered once per year in the semester indicated on the suggested curricula. For example, PHY 306 and PHY 361 are offered in the spring semester only. This suggested curriculum minimally meets the requirements for the B.A. in Physics.

#### Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MA 113 Calculus I</td>
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<tr>
<td>CIS-WRD 110 Composition and Communication I</td>
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</tr>
<tr>
<td>UK Core</td>
<td>3</td>
</tr>
<tr>
<td>UK Core</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>Hours</td>
</tr>
<tr>
<td>MA 114 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHY 231 General University Physics</td>
<td>4</td>
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<td>PHY 241 General University Physics Laboratory</td>
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<tr>
<td>UK Core</td>
<td>3</td>
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<td>UK Core</td>
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<thead>
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<th>Sophomore Year</th>
<th>Hours</th>
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<tbody>
<tr>
<td><em>MA 213 Calculus IV</em></td>
<td>4</td>
</tr>
<tr>
<td>or Major Related Electives</td>
<td>3</td>
</tr>
<tr>
<td>PHY 232 General University Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHY 242 General University Physics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ForeignLanguage</td>
<td>4</td>
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<tr>
<td>ForeignLanguage</td>
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<td>Major Related Electives</td>
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<tr>
<td>CHE 105 General College Chemistry I</td>
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<td>PHY 335 Data Analysis for Physicists</td>
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<td>ForeignLanguage</td>
<td>3</td>
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<tr>
<td><em>MA 322 Matrix Algebra and Its Applications</em></td>
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<td>Major Related Electives</td>
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<tr>
<td>PH 300+</td>
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<td>Electives</td>
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<table>
<thead>
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<th>Senior Year</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CHE 107 General College Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 361 Principles of Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PhD 428 Optics, Relativity and Thermal Physics</td>
<td>3</td>
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<tr>
<td>ForeignLanguage</td>
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<td><strong>Social Sciences 300+</strong></td>
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<td>Major Related Electives</td>
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<td>Electives</td>
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### Second Semester

<table>
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</thead>
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<tr>
<td>MA 214 Calculus IV</td>
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<td>or Major Related Electives</td>
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<tr>
<td>PHY 306 Theoretical Methods of Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 228 Optics, Relativity and Thermal Physics</td>
<td>3</td>
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<tr>
<td>Electives</td>
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</tr>
<tr>
<td>PHY 445 Intermediate Physics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MA 133 Calculus III</td>
<td>4</td>
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<tr>
<td>Major Related Electives</td>
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<td>Electives</td>
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<td>PHY 361 Principles of Modern Physics</td>
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<td>Major Related Electives</td>
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<td>Electives</td>
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<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 435 Intermediate Physics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>PHY 444 (suggested)</td>
<td>3</td>
</tr>
<tr>
<td>PHY 4XX (suggested)</td>
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</tr>
<tr>
<td>Electives</td>
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</tbody>
</table>
**Bachelor of Science with a major in PHYSICS**

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved listed ........................ 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved listed ........................ 3

III. Intellectual Inquiry in the Social Sciences

Choose one course from approved listed ........................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

Choose one course from approved listed ........................ 3

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I ........... 3

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II ........... 3

VII. Quantitative Foundations

Choose one course from approved listed ........................ 3

VIII. Statistical Inferential Reasoning

Choose one course from approved listed ........................ 3

IX. Community, Culture and Citizenship in the USA

Choose one course from approved listed ........................ 3

X. Global Dynamics

Choose one course from approved listed ........................ 3

UK Core hours: ................................................................ 30

**Graduation Composition and Communication Requirement (GCCR)**

PHY 535 Advanced Physics Laboratory .......................... 3

Graduation Composition and Communication Requirement hours (GCCR) ................................................. 3

**College Requirements**

I. Foreign Language (placement exam recommended) ...................................................................... 0-14

II. Disciplinary Requirements

a. Natural Science (completing Majors Requirement) .......................................................... 3
b. Social Science ............................................................................................................. 3
c. Humanities ............................................................................................................. 3

III. Major Core Requirements

Major Core hours: ................................................................. 12-26

Premajor Requirements

Major Core 365 Physical Phenomena and Instrumentation . 3

**College Requirement hours: ...................... 12-26**

**Premajor Requirements**

*PHY 231/232/241/242 General University Physics and Laboratory ...................................................... 10

or with permission of the Director of Undergraduate Studies:

*PHY 211/213 General Physics .......................... (10)

PHY 228 Optics, Relativity and Thermal Physics ........ 3

CHE 105 General College Chemistry I .................. 4

CHE 107 General College Chemistry II .................. 3

*MA 113 Calculus I .................................................... 4

MA 114 Calculus II .................................................... 4

Premajor hours: ......................................................... 28

**Major Requirements**

Major Core Requirements

PHY 306 Theoretical Methods of Physics .................. 3

PHY 335 Data Analysis for Physicists ........................ 2

PHY 361 Principles of Modern Physics .................... 3

PHY 404G Mechanics ................................................ 3

PHY 416G/417G Electricity and Magnetism .............. 6

PHY 520 Introduction to Quantum Mechanics II ........ 3

PHY 521 Introduction to Quantum Mechanics I ........... 3

PHY 522 Thermodynamics and Statistical Physics ....... 3

PHY 535 Advanced Physics Laboratory .................... 3

MA 213 Calculus III .................................................. 4

MA 214 Calculus IV .................................................. 3

plus two different courses from the following:

ASTPHY 395 Independent Work

in Astronomy/Physics

PHY 402G Electronic Instrumentation and Measurements ................................................................. 3

PHY 435 Intermediate Physics Laboratory ................. 3

PHY 508 Computational Physics ............................... 3

Major Core hours: ......................................................... 42

**Other Course Work Required for the Major**

From Outside the Major Department

Choose 6 hours outside Physics at the 200+ level. Courses are generally chosen from biology, chemistry, computer science, education, engineering, mathematics, philosophy, or statistics. 200+ level courses used to satisfy College requirements can also be counted here ...................................................... 6

Other Major hours: ....................................................... 6

**Total Minimum Hours Required for Degree** ....... 120

*Suggested Curriculum for B.S. in Physics*

(Students who have completed calculus or chemistry should visit our website at: https://pa.as.uky.edu/major-and-minor-requirements for suggested curriculum.)

As you plan your physics studies, please note that upper division physics courses, PHY 3XX and all higher numbered courses, are offered once per year in the semester indicated on the suggested curricula. For example, PHY 306 and PHY 361 are offered in the spring semester only. This suggested curriculum minimally meets the requirements for the B.S. in Physics.

**Freshman Year**

First Semester .................................. 4

MA 113 Calculus I .................................................. 4

PHY 231 General University Physics ....................... 4

PHY 241 General University Physics Laboratory ........ 1

CHE 105 General College Chemistry I ..................... 4

CIS/WRD 110 Composition and Communication I ....... 3

Second Semester .................................. 4

MA 114 Calculus II .................................................. 4

PHY 228 Optics, Relativity and Thermal Physics ........ 3

CHE 107 General College Chemistry II ................. 3

*CS 115 Introduction to Computer Programming or Major Related Electives ........................................ 3

CIS/WRD 111 Composition and Communication II .... 3

**Sophomore Year**

First Semester .................................. 4

MA 213 Calculus III ............................................... 4

PHY 232 General University Physics ....................... 4

PHY 242 General University Physics Laboratory ....... 1

PHY 335 Data Analysis for Physicists ........................ 2

Foreign Language ................................................. 3

Second Semester .................................. 3

MA 214 Calculus IV .................................................. 3

PHY 306 Theoretical Methods of Physics .................. 3

PHY 361 Principles of Modern Physics .................... 4

Foreign Language ................................................. 3

UK Core ......................................................... 4

**Junior Year**

First Semester .................................. 3

PHY 404G Mechanics ................................................. 3

PHY 416G Electricity and Magnetism ...................... 3

Foreign Language ................................................. 3

UK Core ......................................................... 3

Major Related Electives ........................................... 3

Elective ......................................................... 3

Second Semester .................................. 3

PHY 417G Electricity and Magnetism ...................... 3

Foreign Language ................................................. 3

UK Core ......................................................... 3

Major Related Electives ........................................... 3

Elective ......................................................... 3

**Senior Year**

First Semester .................................. 3

PHY 402G Electronic Instrumentation and Measurements ......................................................... 3

PHY 520 Introduction to Quantum Mechanics I ........ 3

PHY 522 Thermodynamics and Statistical Physics .... 3

PHY 361 course ................................................... 3

Elective ......................................................... 3

Second Semester .................................. 3

PHY 521 Introduction to Quantum Mechanics II ........ 3

PHY 535 Advanced Physics Laboratory ................. 3

Social Sciences 300+ .............................................. 3

Elective ......................................................... 4

*Minor in Physics*

The minor in Physics requires 28 hours of course work to include:

PHY 231 General University Physics

and

PHY 241 General University Physics Laboratory

OR

PHY 211 General Physics ....................................... 5

PHY 232 General University Physics

and

PHY 242 General University Physics Laboratory

OR

PHY 213 General Physics ....................................... 5
The undergraduate program in Political Science allows students to pursue course work in four disciplinary fields:

- American Politics – define the American political system, including the high-demand sub-field of judicial politics and legal studies; study of the institutions, behavioral patterns, and public policies that define the American political system;
- Comparative Politics – study of the institutions, policies, and mass behaviors observed in political systems outside the United States, usually explored through comparison within or across regions of the world;
- International Relations – study of the international system as a whole, as well as of the actors (such as nation-states, corporations, and international organizations) who participate in shaping diplomatic, military, and economic outcomes within that system; and
- Theory/Methodology – study of the values, concepts, and analytical methods that shape how people evaluate political life.

Degree recipients take introductory course work in each of these four areas, then pursue advanced studies in one or more of the fields as determined by their interests and/or career goals.

In addition to conveying information about politics and government—necessary background for pursuing graduate work in political science and related fields – Political Science courses at UK are designed to provide students with a broad liberal arts education. Graduates leave the program having cultivated their analytical abilities and having exercised their written and spoken communication skills. Such disciplinary training leads to a wide variety of careers, many of which have no direct political or governmental connection, but is particularly helpful in preparing students for careers such as law, policy analysis, governmental administration, diplomatic service, journalism, lobbying, and other sorts of political activity.

Currently the department offers two degree: a Bachelor of Arts and a Bachelor of Science. Most majors choose to pursue the B.A. The primary difference is that B.A. students must complete a minimum of 39 hours at the 300+ level, a requirement that students can fulfill using courses already needed for the major. Earning the B.S. degree, on the other hand, requires completing a minimum of 60 hours in natural, physical, mathematical, and computer sciences. Little of that course work fulfills other degree requirements.

**Bachelor of Arts with a major in POLITICAL SCIENCE**

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

**I. Intellectual Inquiry in Arts and Creativity**

Choose one course from approved list ................. 3

**II. Intellectual Inquiry in the Humanities**

Choose one course from approved list ................. 3

**III. Intellectual Inquiry in the Social Sciences**

*PS 230 Introduction to International Relations .................. 3

**IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**

Choose one course from approved list .................. 3

**V. Composition and Communication I**

CIS/WRD 110 Composition and Communication I .......... 3

**VI. Composition and Communication II**

CIS/WRD 111 Composition and Communication II .......... 3

**VII. Quantitative Foundations**

Choose one course from approved list .................. 3

**VIII. Statistical Inferential Reasoning**

Choose one course from approved list .................. 3

**IX. Community, Culture and Citizenship in the USA**

PS 101 American Government ......................... 3

**X. Global Dynamics**

PS 210 Introduction to Comparative Politics ............... 3

**UK Core hours:** ................................................... 30

**Graduation Composition and Communication Requirement (GCCR)**

WRD 304 Writing in the Social Sciences ................. 3

**Graduation Composition and Communication Requirement hours (GCCR)** ................. 3

**College Requirements**

I. Foreign Language (placement exam recommended) .................. 0-14

II. Disciplinary Requirements

a. Natural Science .................................................. 6

b. Social Science (completed by Premajor Requirements) ................. 6

c. Humanities (choose 300+ level courses) .................. 6

III. Laboratory or Field Work (completed by PS 372) ................. 3

IV. Electives .................................................. 6

**College Requirement hours:** ......................... 18-32

**Premajor/Introductory Requirements**

**Field One – American Politics**

PS 101 American Government .................................. 3

**Field Two – Comparative Politics**

PS 210 Introduction to Comparative Politics ............... 3

**Field Three – International Relations**

*PS 230 Introduction to International Relations ............... 3

**Field Four – Theory/Methodology**

PS 240 Introduction to Political Theory or PS 372 Introduction to Political Analysis ............... 3

**Premajor/Intro hours:** ........................................ 12

**Major/Core Requirements**

After being introduced to each undergraduate field, Political Science majors must take an additional 39 hours of course work that combines both (1) courses within the discipline and (2) courses covering topics related to the discipline but offered by other programs. These 39 hours, of which 24 must be at the 300+ level, are divided as follows.

**Disciplinary Courses**

Students must take 18 additional credit hours of political science course work, of which at least 15 hours must be at the 300+ level. Note that PS 399 may not be counted toward this requirement. Eligible courses span all four undergraduate fields:

**Field One – American Politics**

*General American Politics Courses*  
*Courses on American Law and Courts*  

**Field Two – Comparative Politics**


**Field Three – International Relations**


**Field Four – Theory/Methodology**

PS 240 or 372, 441G, 442G, 545, 572  
Note: PS 391, 395, 490, and 492 also meet this disciplinary requirement, although the fields will vary depending on the topic.

**Other Courses**

Choose 6 hours of PS courses (including 1-6 hours of PS 399) or approved courses from outside political science (see list below) .................. 6
Graduation Composition and Communication Requirement (GCCR)
WRD 304 Writing in the Social Sciences 3

Graduation Composition and Communication Requirement hours (GCCR) 3

College Requirements
I. Foreign Language (placement exam recommended) 0-14
II. Disciplinary Requirements
a. Natural Science 3
b. Social Science (completed by Premajor Requirements) 3
c. Humanities 3
III. Laboratory or Field Work (completed by PS 372) 3
IV. Electives 6

College Requirement hours: 12-26

Major/Introductory Requirements

Field One – American Politics
PS 101 American Government 3

Field Two – Comparative Politics
PS 210 Introduction to Comparative Politics 3

Field Three – International Relations
*PS 230 Introduction to International Relations 3
Field Four – Theory/Methodology
PS 240 Introduction to Political Theory or PS 372 Introduction to Political Analysis 3

Premajor/Intro hours: 12

Major/Core Requirements

After being introduced to each undergraduate field, Political Science majors must take an additional 39 hours of course work that combines both (1) courses within the discipline and (2) courses covering topics related to the discipline but offered by other programs. These 39 hours, of which 24 must be at the 300+ level, are divided as follows.

Disciplinary Courses
Students must take 18 additional credit hours of political science course work, of which at least 15 hours must be at the 300+ level. Note that PS 399 may not be counted toward this requirement. Eligible courses span all four undergraduate fields:

Field One – American Politics
General American Politics Courses
Courses on American Law and Courts

Field Two – Comparative Politics

Field Three – International Relations

Field Four – Theory/Methodology
PS 240 or 372, 441G, 442G, 545, 572

Note: PS 391, 395, 490, and 492 also meet this disciplinary requirement, although the fields will vary depending on the topic.

Other Courses
Choose 6 hours of PS courses (including 1-6 hours of PS 399) or approved courses from outside political science (see list below) 6

From Outside the Major Department
Choose 15 hours outside political science from the list below. Other course offerings may be substituted, subject to the approval of the Director of Undergraduate Studies 15

Any course numbered 200 or above from the following prefixes: AAS, ANT, APP, CLD, ECO, ENS, GWS, GEO, HIS, IS, LAS, MAS, PCE, PHI, PSY, SOC, STA, and WRD.

Any course numbered 300 or above from the following prefixes: AEC, AIS, CHI, CLA, EPE, FR, GER, SPA, INT, IT, HIS, JPN, MCL, and RUS.

*Course used towards completion of a UK Core Requirement.

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation.

Total Minimum Hours Required for Degree: 120

Minor in Political Science

The minor in Political Science requires a prerequisite course (PS 101) and 18 hours of course work at the 200 level or above to be distributed as follows:

1. 6 hours of 200 level courses, 3 hours of which must be either PS 210 or PS 230.
2. Four other courses, at least three of which must be at the 400 or 500 level.

PSYCHOLOGY

The undergraduate curriculum in psychology includes courses in the major content areas of psychology. The program provides course work emphasizing the fundamental concepts and techniques of this basic behavioral science. In addition to course work, the program provides for experience in conducting and analyzing laboratory and field research.

Bachelor of Arts with a major in PSYCHOLOGY

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list 3

III. Intellectual Inquiry in the Social Sciences
*PS 230 Introduction to International Relations 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II 3

VII. Quantitative Foundations
Choose one course from approved list 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list 3

IX. Community, Culture and Citizenship in the USA
PS 101 American Government 3

X. Global Dynamics
PS 210 Introduction to Comparative Politics 3

UK Core hours: 30

Bachelor of Science with a major in POLITICAL SCIENCE

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with a PS prefix are not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list 3

III. Intellectual Inquiry in the Social Sciences
*PS 230 Introduction to International Relations 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II 3

VII. Quantitative Foundations
Choose one course from approved list 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list 3

IX. Community, Culture and Citizenship in the USA
PS 101 American Government 3

X. Global Dynamics
PS 210 Introduction to Comparative Politics 3

UK Core hours: 30
**College of Arts and Sciences**

IV. **Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**
Choose one course from approved list .......................... 3

V. **Composition and Communication I**
CIS/WRD 110 Composition and Communication I ............ 3

VI. **Composition and Communication II**
CIS/WRD 111 Composition and Communication II .......... 3

VII. **Quantitative Foundations**
Choose one course from approved list .......................... 3

VIII. **Statistical Inferential Reasoning**
PSY 215 Experimental Psychology ............................... 4
PSY 216 Applications of Statistics in Psychology .............. 4

IX. **Community, Culture and Citizenship in the USA**
Choose one course from approved list .......................... 3

X. **Global Dynamics**
Choose one course from approved list .......................... 3

UK Core hours: ................................................. 35-36

**Graduation Composition and Communication Requirement (GCCR)**
Select one of the following (completed by Advanced Lecture/Lab):
PSY 427 Cognitive Processes ..................................... 4
PSY 430 Research in Personality ..................................... 4
PSY 440 Research in Social Psychology ......................... 4
PSY 450 Learning ..................................................... 4
PSY 456 Behavioral Neuroscience .................................... 4
PSY 460 Processes of Psychological Development .............. 4
PSY 552 Evolutionary Psychology .................................... 4

**Graduation Composition and Communication Requirement hours (GCCR)** ................................................. 4

**College Requirements**
I. **Foreign Language**
   (placement exam recommended) ................................. 0-14
   (completed by PSY 312) ........................................... 8-9
II. **Disciplinary Requirements**
   a. Natural Science (completed by PSY 312; and to complete this requirement, consider PSY 456 as the Advanced Lecture/Lab or PSY 356 as the Capstone or PSY 393 or PSY 459 as electives) ............. 3
   b. Social Science (completed by Premajor and Major Requirements) .......................................................... 6
   c. Humanities ................................................................ 6
   III. Laboratory or Field Work (completed by Premajor Requirement) .......................................................... 6
   IV. Electives .................................................................. 6

**College Requirement hours:** .................................... 15-29

**Premajor Requirements**
*PSY 100 Introduction to Psychology ............................ 4
or
*PSY 11 ................................................................. 3
PSY 195 Orientation to Psychology ................................. 1
*PSY 215 Experimental Psychology ............................... 4

**Premajor hours:** ..................................................... 8-9

**Major Requirements**
Major Core Requirements
*PSY 216 Applications of Statistics in Psychology ............ 4
plus four of the following five courses:
PSY 223 Developmental Psychology ................................ 3
PSY 311 Learning and Cognition ...................................... 3
PSY 312 Brain and Behavior ............................................. 3
PSY 313 Personality and Individual Differences ............... 3
PSY 314 Social Psychology and Cultural Processes ............ 3

**Major Core hours:** .................................................. 16

**Other Course Work Required for the Major**
From the Major Department:
Advanced Lecture/Lab .................................................. 4
Choose from: PSY 427, 430, 440, 450, 456, 460, 552

Capstone Option ......................................................... 3-8
Choose from: PSY 495 and 496, 499, 500, 534, 535, 561, 562, 563, 564, 565, 566

Electives ......................................................................... 0-5
Choose from: PSY 302, 320, 331, 333, 350, 393, 394, 395, 399, 4549, 558

**Total Minimum Hours Required for Degree** ................. 120

*Course used towards completion of a UK Core Requirement.
This requirement is fulfilled for students who have completed a 3-credit introductory psychology course at an accredited college or university, or who have scored a 3 on the Advance Placement Psychology Test.

**Bachelor of Science with a major in PSYCHOLOGY**

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: with the exception of PSY 215, PSY 216, PSY 312, PSY 393, PSY 456, PSY 459, and PSY 565, courses with a PSY prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

**UK Core Requirements**
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. **Intellectual Inquiry in Arts and Creativity**
Choose one course from approved list .......................... 3

II. **Intellectual Inquiry in the Humanities**
Choose one course from approved list .......................... 3

III. **Intellectual Inquiry in the Social Sciences**
PSY 100 Introduction to Psychology or approved equivalent transfer course .......................... 3-4

IV. **Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**
Choose one course from approved list .......................... 3

V. **Composition and Communication I**
CIS/WRD 110 Composition and Communication I .......... 3

VI. **Composition and Communication II**
CIS/WRD 111 Composition and Communication II .......... 3

VII. **Quantitative Foundations**
Choose one course from approved list .......................... 3

VIII. **Statistical Inferential Reasoning**
PSY 215 Experimental Psychology ............................... 4
PSY 216 Applications of Statistics in Psychology .............. 4

IX. **Community, Culture and Citizenship in the USA**
Choose one course from approved list .......................... 3

X. **Global Dynamics**
Choose one course from approved list .......................... 3

**UK Core hours:** ................................................. 35-36

**Graduation Composition and Communication Requirement (GCCR)**
Select one of the following (completed by Advanced Lecture/Lab):
PSY 427 Cognitive Processes ..................................... 4
PSY 430 Research in Personality ..................................... 4
PSY 440 Research in Social Psychology ......................... 4
PSY 450 Learning ..................................................... 4
PSY 456 Behavioral Neuroscience .................................... 4
PSY 460 Processes of Psychological Development .............. 4
PSY 552 Evolutionary Psychology .................................... 4

**Graduation Composition and Communication Requirement hours (GCCR)** ................................................. 4

**College Requirements**
I. Foreign Language (placement exam recommended) ................. 0-14
II. Disciplinary Requirements
   a. Natural Science (completed by PSY 312) ......................... 9-23
   b. Social Science (completed by Premajor Requirement) .......... 3
   c. Humanities ................................................................ 3
III. Laboratory or Field Work (completed by Premajor Requirement) .......................................................... 6
   IV. Electives .................................................................. 6

**College Requirement hours:** .................................... 9-23

**Premajor Requirements**
*PSY 100 Introduction to Psychology ............................ 4
or
*PSY 11 ................................................................. 3
PSY 195 Orientation to Psychology ................................. 1
*PSY 215 Experimental Psychology ............................... 4

**Premajor hours:** ..................................................... 8-9

**Major Requirements**
Major Core Requirements
*PSY 216 Applications of Statistics in Psychology ............ 4
plus four of the following five courses:
PSY 223 Developmental Psychology ................................ 3
PSY 311 Learning and Cognition ...................................... 3
PSY 312 Brain and Behavior ............................................. 3
PSY 313 Personality and Individual Differences ............... 3
PSY 314 Social Psychology and Cultural Processes ............ 3

**Major Core hours:** .................................................. 16

**Other Course Work Required for the Major**
From the Major Department:
Advanced Lecture/Lab .................................................. 4
Choose from: PSY 427, 430, 440, 450, 456, 460, 552

Capstone Option ......................................................... 3-8
Choose from: PSY 495 and 496, 499, 500, 534, 535, 561, 562, 563, 564, 565, 566

Electives ......................................................................... 0-5
Choose from: PSY 302, 320, 331, 333, 350, 393, 394, 395, 399, 4549, 558
crime, law and deviance comprise a large part of global-ization, family, community, environment, social inequalities, work, organizations, economy, a wide range of topics and issues. Areas such as education at the secondary level through the students seeking certification in social studies and Sciences. Students may also complete a Bachelor of Science through the College of Arts and Mathematical Sciences.

**Minor in Psychology**

The minor in Psychology requires a minimum of 19-20 hours of course work to include:

- **Prerequisite Courses**
  - PSY 100 Introduction to Psychology or equivalent ……………. 3-4
  - PSY 215 Experimental Psychology ……………. 4
  - Four of the following five courses:
    - PSY 223 Developmental Psychology ……………. 3
    - PSY 311 Learning and Cognition ……………. 3
    - PSY 312 Brain and Behavior ……………. 3
    - PSY 313 Personality and Individual Differences ……………. 3
    - PSY 314 Social Psychology and Cultural Processes ……………. 3

**SOCIOLoGY**

Sociology emphasizes the study of human behavior and basic social processes. The discipline provides excellent preparation for careers in a variety of occupations and professions including planning and community development, law, public relations and advertising, personnel administration, private business and government administration, health and human services, family relations, criminal justice fields, and others.

Students may major or minor in sociology. The department offers a Bachelor of Arts and a Bachelor of Science through the College of Arts and Sciences. Students may also complete a second major or minor in sociology even though they are enrolled in other colleges. In addition, students seeking certification in social studies education at the secondary level through the College of Education may also emphasize sociology in their programs.

Courses offered by the department cover a wide range of topics and issues. Areas such as social inequalities, work, organizations, economy, globalization, family, community, environment, crime, law and deviance comprise a large part of the curriculum. Students may also pursue special readings courses and experiential education placements or internships through the department.

**Bachelor of Arts with a major in SOCIOLOGY**

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

- **I. Intellectual Inquiry in Arts and Creativity**
  - Choose one course from approved list ……………. 3

- **II. Intellectual Inquiry in the Humanities**
  - Choose one course from approved list ……………. 3

- **III. Intellectual Inquiry in the Social Sciences**
  - Choose one course from approved list ……………. 3

- **IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**
  - Choose one course from approved list ……………. 3

- **V. Composition and Communication I**
  - CIS/WRD 110 Composition and Communication I ……………. 3

- **VI. Composition and Communication II**
  - CIS/WRD 111 Composition and Communication II ……………. 3

- **VII. Quantitative Foundations**
  - Choose one course from approved list ……………. 3

- **VIII. Statistical Inferential Reasoning**
  - Choose one course from approved list ……………. 3

- **IX. Community, Culture and Citizenship in the USA**
  - Choose one course from approved list ……………. 3

- **X. Global Dynamics**
  - Choose one course from approved list ……………. 3

**UK Core hours: ……………. 30**

**Graduation Composition and Communication Requirement (GCCR)**

SOC 302 Sociological Research Methods ……………. 3

**Graduation Composition and Communication Requirement hours (GCCR) ……………. 3**

**College Requirements**

- **I. Foreign Language (placement exam recommended) ……………. 0-14**
- **II. Disciplinary Requirements**
  - a. Natural Science ……………. 6
  - b. Social Science (completed by Premajor and Major Requirements) ……………. 6
  - c. Humanities ……………. 6
- **III. Laboratory or Field Work (completed by Major Requirement)**
- **IV. Electives**
- **College Requirement hours: ……………. 18-32**

**Premajor Requirements**

Any two sociology courses at the 100 or 200 level (including CLD 102) ……………. 6

Premajor hours: ……………. 6

**Bachelor of Science with a major in SOCIOLOGY**

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with a SOC prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

**UK Core Requirements**

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

- **I. Intellectual Inquiry in Arts and Creativity**
  - Choose one course from approved list ……………. 3

- **II. Intellectual Inquiry in the Humanities**
  - Choose one course from approved list ……………. 3

- **III. Intellectual Inquiry in the Social Sciences**
  - Choose one course from approved list ……………. 3

- **IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences**
  - Choose one course from approved list ……………. 3

- **V. Composition and Communication I**
  - CIS/WRD 110 Composition and Communication I ……………. 3

- **VI. Composition and Communication II**
  - CIS/WRD 111 Composition and Communication II ……………. 3

- **VII. Quantitative Foundations**
  - Choose one course from approved list ……………. 3

- **VIII. Statistical Inferential Reasoning**
  - Choose one course from approved list ……………. 3

**College Requirements**

- **I. Foreign Language (placement exam recommended) ……………. 0-14**
- **II. Disciplinary Requirements**
  - a. Natural Science ……………. 6
  - b. Social Science (completed by Premajor and Major Requirements) ……………. 6
  - c. Humanities ……………. 6
- **III. Laboratory or Field Work (completed by Major Requirement)**
- **IV. Electives**
- **College Requirement hours: ……………. 18-32**

**Premajor Requirements**

Any two sociology courses at the 100 or 200 level (including CLD 102) ……………. 6

Premajor hours: ……………. 6
College of Arts and Sciences

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ......................... 3

X. Global Dynamics
Choose one course from approved list ......................... 3

UK Core hours: ......................................................... 30

Graduation Composition and Communication Requirement (GCCR)
SOC 302 Sociological Research Methods ........................ 3

Graduation Composition and Communication Requirement hours (GCCR) ................. 3

College Requirements
I. Foreign Language (placement exam recommended) ............. 0-14
II. Disciplinary Requirements
   a. Natural Science .............................................. 3
   b. Social Science (completed by Premajor and Major Requirements) .......................... 3
   c. Humanities .................................................... 3
III. Laboratory or Field Work (completed by Major Requirement) .............. 6
IV. Electives .............................................................. 6

College Requirement hours: ......................... 12-26

Premajor Requirements
Any two sociology courses at the 100 or 200 level (including CLD 102) ................. 3

Premajor hours: ......................................................... 6

Major Core Requirements
SOC 302 Sociological Research Methods ........................ 3
SOC 303 Quantitative Sociological Analysis ...................... 3
or PSY 216 Applications of Statistics in Psychology .......... 3-4
SOC 304 Classical Sociological Theory .......................... 3

Major Core hours: ......................... 9-10

Other Course Work Required for the Major
From the Major Department:
Choose 18 hours of 300+ level Sociology courses, at least 6 of which must be at the 400+ level .................. 18

From Outside the Major Department
Choose 15 hours outside Sociology at the 300+ level. Maximum of 3 hours of 200+ level courses used to satisfy College requirements can also be counted here. ......................... 15

Other Major hours: ......................................................... 30

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation ........................................ 9

Total Minimum Hours Required for Degree ......................... 120

*Course used towards completion of a UK Core Requirement.

Minor Electives
9 hours from the following courses, 3 which must be at the 400-level:
*SOC 350 Topics in Sociology (Subtitle required) .................. 3
SOC 438 Cross-National Crime ..................................... 3
*SOC 439 Topics in Crime, Law and Deviance (Subtitle required) ......................... 3
To complete the 9 hours, students may take one course from the following:
PS 360 Politics of Law and Courts .................................. 3
PS 415G Comparative Judicial Politics ............................. 3
PS 437G Dynamics of International Law .......................... 3
PS 463G Judicial Politics ............................................ 3
PS 465G Constitutional Law ......................................... 3
GWS 430 Gender, Power and Violence ................................. 3
PSY 331 The Psychology of Adjustment ............................ 3
PSY 333 Abnormal Psychology ........................................ 3
PSY 534 Child Pathopsychology ...................................... 3
SW 512 Social Work in the Criminal Justice System .......... 3
SW 580 Topical Seminar in Social Work .......................... 1-4
SW 505 Child Welfare Services ....................................... 2-3
SW 571 Social Work and the Law ..................................... 3
COM 314 The Dark Side of Interpersonal Communication and Relationships ..................... 3

*The subtitle for this course must directly relate to criminology.

Minor in Sociology
The minor in Sociology requires 21 hours of course work to include:

Prerequisites
SOC 101 Introduction to Sociology
or CLD 102 The Dynamics of Rural Social Life ..................... 3
and
Any other 100- or 200-level sociology course ......................... 3

Preminor hours: ......................................................... 6

Minor Requirements
Students complete an additional 15 hours in sociology, at least 3 of which must be at the 400 level or above and must include one of the following six-hour blocks:
SOC 302 and SOC 303 (or PSY 216)
SOC 304 and SOC 305
SOC 302 and SOC 304

STATISTICS
The Department of Statistics at the University of Kentucky is concerned with three essential functions: teaching, research, and consulting in statistics.

The department does not offer an undergraduate degree, but students may elect to include statistics as part of a topical major or to minor in statistics. The program in mathematical sciences also includes several statistics courses. The Master of Science and the Doctor of Philosophy degree are offered.

Minor in Criminology
The minor in Criminology requires 18 hours as follows:

Minor Prerequisite
SOC 235 Inequalities in Society ..................................... 3

Minor Requirements
SOC 302 Sociological Research Methods
or one of the following courses:
PSY 215 Experimental Psychology
PS 372 Introduction to Political Analysis
ANT 302 Ethnographic Methods: Doing Anthropology
SW 450 Social Work Research

Research is being actively pursued in statistical theory and methods, both parametric and non-parametric, linear models, inference, stochastic processes, applied probability, and biostatistics.

Consultation on statistical analysis and interpretation of data is provided to research workers on and off the campus. Particular attention is paid to the consulting needs of graduate students.

Minor in Statistics
The minor in Statistics is aimed specifically at social and life science students, as well as students in the traditional mathematical sciences. A minimum of 15 hours of course work is required to complete the minor, as follows:

Complete one of the following:
STA 296 Statistical Methods and Motivations
STA 321 Basic Statistical Theory I
STA 525 Introductory Statistical Inference ......................... 3

Complete one of the following:
STA 281 Probability and Statistics
Using Interactive Computer Techniques
STA 320 Introductory Probability
STA 524 Probability .................................................... 3

Other STA 570 Basic Statistical Analysis ............................. 3

Complete one additional STA course approved by the Director of Undergraduate Studies ......................... 3-4

Complete one course from the student’s area approved by the Director of Undergraduate Studies ......................... 3-4

Total Hours ......................................................... 15-17

US CULTURE AND BUSINESS PRACTICES
A US Culture and Business Practices degree allows students to complete an interdisciplinary program of study that draws together rich training in the history, politics, arts, and culture of the United States with significant training in Business. Students will develop breadth of knowledge indicative of liberal arts education. Students will enhance critical thinking and writing skills, develop communication and other “soft skills,” and hone problem-solving strategies.

This training will mesh with key aspects of a Business degree, including Management, Marketing, Finance, and Economics. Students will thus attain the fundamentals of a Business degree within the broader scope of skills and methods of inquiry associated with the liberal arts. This degree will be beneficial for a wide range of students: students who plan to work in business, technological, cultural, community, and human-service settings; students who wish to combine the liberal arts with a more applied field; and students for whom a traditional intracollege major is too limiting. Students will be equipped with the flexible skills associated with a liberal arts degree, and who are also well-positioned to succeed in a twenty-first century entrepreneurial economy.
Bachelor of Arts with a major in
US CULTURE AND BUSINESS PRACTICES

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the major requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................ 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ............ 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ............ 3

VII. Quantitative Foundations
Choose one course from approved list ............................ 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ............................ 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............................ 3

X. Global Dynamics
Choose one course from approved list ............................ 3

UK Core Hours ....................................................... 30

Graduation Composition and Communication Requirement (GCCR)
USB 495 Senior Capstone Seminar ................................. 3

Graduation Composition and Communication Requirement hours (GCCR) ..................... 3

College Requirements

I. Foreign Language (placement exam recommended) ........... 0-14

II. Disciplinary Requirements
a. Natural Science ................................................. 6
b. Social Science .................................................. 6
c. Humanities ..................................................... 6
III. Laboratory or Field Work ...................................... 1
IV. Electives ................................................................ 6

College Requirement hours: ................................. 25-39

Major Requirements

USB 201 US Culture and Business Studies ........................... 3
USB 495 Senior Capstone Seminar .................................... 3
ECO 201 Principles of Economics I .................................... 3
ECO 202 Principles of Economics II .................................... 3
MGT 292 Introduction to Entrepreneurship .......................... 3

FIN 250 Personal Investing and Financial Planning ............... 3
MKT 300 Marketing Management ..................................... 3
MGT 301 Business Management ..................................... 3

Major Requirement hours ........................................... 24

Guided Electives

Students must choose 18 hours from the courses below. At least 3 credit hours must come from each of the three areas: National Formations (includes US in the World), American Communities & Identities, and Literary Arts.

National Formations (includes US in the World)
ANT 311 Anthropology of Globalization ............................ 3
ANT 312 Business, Culture and Society ............................ 3
ANT 330 North American Cultures .................................. 3
ENG 191 Literature and the Arts of Citizenship ................. 3
ENG 251 Survey of American Literature I ......................... 3
ENG 252 Survey of American Literature II ....................... 3
GEO 220 U.S. Cities .................................................... 3
GEO 320 Geography of the United States and Canada .......... 3
GEO 422 Urban Geography .......................................... 3
GEO 470 America’s Cultural Geographies ......................... 3
GEO 490 American Landscapes ..................................... 3
GWS 301 Crossroads (Subtitle required) ............................ 3
GWS 506 History of Sexuality in the U.S. .......................... 3
HIS 108 History of the United States Through 1787 .......... 3
HIS 109 History of the United States Since 1877 ............... 3
HIS 208 History of the Atlantic World ............................ 3
AAS 260/HIS 260 African American History to 1865 ......... 3
AAS 261/HIS 261 African American History 1865-Present .... 3
HIS 265 History of Women in America ............................ 3
HIS 461 The American Revolution, 1763-1789 ................. 3
HIS 467 Modern America: 1941-74 ............................... 3
HIS 468 Contemporary America: 1974 to the Present .......... 3
PS 101 American Government ....................................... 3
PS 430G The Conduct of American Foreign Relations .......... 3
PS 435G Politics of International Economic Relations ....... 3
PS 463G Judicial Politics ............................................... 3
PS 465G Constitutional Law .......................................... 3
PS 472G Political Campaigns and Elections ..................... 3
PS 475G Politics and the Mass Media ............................. 3
PS 484G The American Presidency .................................. 3
AAS 400 Special Topics in African-American and Africana Studies (Subtitle required) .... 3
HIS 350 Topics in U.S. History Before 1789 ................. 3
HIS 351 Topics in U.S. History Since 1789 ............... 3
HIS 460 Colonial America to 1763 ................................ 3
HIS 462 The New Republic, 1789-1820 ......................... 3
HIS 463 Expansion and Conflict, 1820-1860 ................. 3
HIS 464 Civil War and Reconstruction, 1860 to 1877 ....... 3
HIS 465 Emergence of Modern America, 1877-1917 .......... 3
HIS 466 Modern American History
from WWI to Pearl Harbor, 1917-1941 ........................... 3
HIS 572 American Legal History ................................. 3
HIS 573 American Constitutional History ....................... 3
HIS 574 The Diplomacy and Foreign Policy of the United States to 1919 ........ 3
HIS 575 The Diplomacy and Foreign Policy of the United States Since 1919 .......... 3
HIS 576 Frontier America, 1400-1869 ............................ 3
HIS 577 Frontier America, 1869-Present .......................... 3
HIS 584 Health and Disease in the U.S. .......................... 3
HIS 587 The Civil Rights Movement ............................. 3
in the U.S. Since 1930 ............................................. 3
APP 300 Topics in Appalachian Studies (Subtitle required) .... 3
APP 399 Practicum ................................................... 1-6

Guided Elective Hours ............................................ 18

Electives

Students must complete at least 6 hours of free electives to bring the total number of credit hours to 120. Free electives may not be counted toward UK Core or A&S requirements.

Elective Hours .................................................... minimum of 6

Total Minimum Hours Required for Degree ........................................... 120
Writing, Rhetoric, and Digital Studies

The major in Writing, Rhetoric, and Digital Studies focuses on the humanistic study of writing and rhetoric in its various genres, contexts (social, historical, political), and media (print and digital, textual and visual). Students in the program study rhetoric and composition theory, practice writing in various forms (including professional and technical writing), and consider the emerging dynamics of digital composition.

The major prepares students to enter publishing, business, industry, or non-profit organizations. Students focusing on writing in digital environments may find employment with multimedia firms or web design organizations. For those interested in graduate work, the major prepares students to enter English education, rhetoric and composition, professional writing, and law.

The major in Writing, Rhetoric, and Digital Studies is grounded in the foundational idea that writing and rhetoric are important not only for professional success, but also for the development of an informed, engaged citizenry.

Bachelor of Arts with a major in Writing, Rhetoric, and Digital Studies

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 129.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................ 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ........ 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ...... 3

VII. Quantitative Foundations
Choose one course from approved list ............................ 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ............................ 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............................ 3

X. Global Dynamics
Choose one course from approved list ............................ 3

UK Core hours: ........................................................................ 30

Graduation Composition and Communication Requirement (GCCR)
WRD 430 Advanced Workshop (Subtitle required) ....... 3
Graduation Composition and Communication Requirement hours (GCCR) ................................................. 3

College Requirements

Core Courses
WRD 300 Introduction to Writing, Rhetoric, and Digital Studies ................................................................. 3
WRD 430 Advanced Workshop (Subtitle required) ....... 3
Core Courses hours: .............................................................. 6

Other Course Work Required for the Major

From the Major Department

Choose 6 outside WRD at the 200+ level.

Total Major hours: .............................................................. 39

Electives

Free Electives ........................................................................ 6
Elective hours: ....................................................................... 6

Total Minimum Hours Required for Degree .......................... 120

Bachelor of Science with a major in Writing, Rhetoric, and Digital Studies

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 130.

UK Core Requirements

See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity
Choose one course from approved list ............................ 3

II. Intellectual Inquiry in the Humanities
Choose one course from approved list ............................ 3

III. Intellectual Inquiry in the Social Sciences
Choose one course from approved list ............................ 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
Choose one course from approved list ............................ 3

V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ........ 3

VI. Composition and Communication II
CIS/WRD 111 Composition and Communication II ...... 3

VII. Quantitative Foundations
Choose one course from approved list ............................ 3

VIII. Statistical Inferential Reasoning
Choose one course from approved list ............................ 3

IX. Community, Culture and Citizenship in the USA
Choose one course from approved list ............................ 3

X. Global Dynamics
Choose one course from approved list ............................ 3

UK Core hours: ........................................................................ 30

Graduation Composition and Communication Requirement (GCCR)
WRD 430 Advanced Workshop (Subtitle required) ....... 3
Graduation Composition and Communication Requirement hours (GCCR) ................................................. 3

College Requirements

I. Foreign Language ......................................................... 0-14

II. Disciplinary Requirements
a. Natural Science ....................................................... 6
b. Social Science ......................................................... 6
c. Humanities ............................................................. 3

III. Laboratory or Field Work ............................................ 3

IV. Electives ......................................................................... 3

College Requirement hours: ................................................. 21-35

Major Requirements

Core Courses
WRD 300 Introduction to Writing, Rhetoric, and Digital Studies ................................................................. 3
WRD 430 Advanced Workshop (Subtitle required) ....... 3
Core Courses hours: .............................................................. 6

Other Course Work Required for the Major

From the Major Department

Choose 6 outside WRD at the 200+ level.

Total Major hours: .............................................................. 39

Electives

Free Electives ........................................................................ 6
Elective hours: ....................................................................... 6

Total Minimum Hours Required for Degree .......................... 120
Students electing the minor are also encouraged to take a range of elective courses to complement their major. The minor in American Studies prepares students for further graduate or professional training, or for work in education, government, or business.

The minor requires 18 hours of study as follows:

1. IAS 301 Topics in American Culture
2. IAS 401 Perspectives in American Culture
3. Four additional courses (12 hours) from the following list of approved courses. No more than two courses (or 6 hours) may be taken in any one discipline:

Art History: A-H 342
Anthropology: ANT 221, ANT 342, ANT 470G, ANT 527, ANT 534
English: ENG 310, ENG 480G
Geography: GEO 320, GEO 321, GEO 322, GEO 490G
History: HIS 260, HIS 261, HIS 265, HIS 350, HIS 351, HIS 450, HIS 461, HIS 463, HIS 464, HIS 465, HIS 466, HIS 472, HIS 572, HIS 573, HIS 574, HIS 575, HIS 576, HIS 577, HIS 578, HIS 379, HIS 580, HIS 584, HIS 585, HIS 586
Linguistics: LIN 317
Music: MUS 206, MUS 222, MUS 300, MUS 301, MUS 506
Philosophy: PHI 514
Sociology: SOC 340, SOC 534

For further information, contact: Director Pearl James, avdool2@uky.edu; 1227 Patterson Office Tower 0027, 859-257-6978.
http://american-studies.as.uky.edu/

Appalachian Studies

This minor offers the student with serious interests in Appalachian regional studies an opportunity to pursue a minor concentration to complement a major in one of the university’s professional or liberal arts programs. This interdisciplinary program enables students to comprehend more fully the history, health, social structure, environment, and culture of the region – its people, its challenges, and its future.

The minor in Appalachian Studies requires 18 hours of course work to include the following:

1. APP 200 Introduction to Appalachian Studies
2. Choose 15 hours of Appalachian Studies courses. These courses must be chosen from the list below, or current courses listed on the website approved by the Director of Appalachian Studies:

   APP 300 Topics in Appalachian Studies (Subtitle required)
   APP 395 Independent Study
   APP 399 Practicum
   GEO 365 Special Topics in Regional Geography (Subtitle required) (if appropriate)
The undergraduate minor in Cognitive Science is aimed to provide undergraduates with an introduction to cognitive science as a theory of the mind as an intelligent (information-processing) system. Our objectives are to ensure that each student (a) be able to articulate, at least in broad terms, some of the assumptions that have been thought to unify the various subfields within the domain of cognitive science; (b) explore more than one discipline’s approach to matters pertaining to cognitive science; and (c) explore in some detail at least one of the five main disciplines contributing to cognitive science (biology, computer science, linguistics, philosophy, and psychology). CGS 500 (Cognitive Science in Theory and Practice) will be run with the aim in mind of getting students to satisfy (a); and distribution requirements aim to put students in a position to satisfy (b) and (c).

To receive an undergraduate minor in Cognitive Science, the student must successfully complete 18 credit hours to be distributed as follows:

1. CGS 500 Cognitive Science in Theory and Practice ............................................. 3
2. 15 credits from among the following:
   *ANT 332 Human Evolution
   BIO 375 Behavioral Ecology and Sociobiology
   BIO 535 Comparative Neurobiology and Behavior
   BIO 550 Advanced Physiology
   BIO 556 Communication Biology
   COM 350 Language and Communication
   CS 375 Logic and Theory of Computing (may not be combined with PHI 520)
   CS 463G Introduction to Artificial Intelligence
   *CS 521 Computational Sciences
   CS 536 Situated Computing
   CS 575 Models of Computation (may not be combined with PHI 520)

   LIN 210 History of the English Language
   LIN 211 Introduction to the Study of Language
   LIN 212 Introduction to Linguistics II
   LIN 509 Formal Semantics
   LIN 512 Analysis of English Syntax
   *LIN 513 Teaching English as a Second Language
   LIN 515 Phonological Analysis
   LIN 516 Grammatical Typology
   LIN 517 Special Topics in Linguistics (Subtitle required)
   LIN 519 Historical Linguistics
   PHI 320 Symbolic Logic
   PHI 361 Biology and Society (Subtitle required)
   PHI 520 Symbolic Logic II (may not be combined with CS 375, 575, or 675)
   PHI 560 Philosophy of Scientific Method
   PHI 565 Philosophy of Language
   PHI 575 Philosophy of Mind
   *PSY 223 Developmental Psychology
   PSY 311 Learning and Cognition
   PSY 312 Brain and Behavior
   PSY 427 Cognitive Processes
   PSY 456 Behavioral Neuroscience
   PSY 552 Evolutionary Psychology
   PSY 562 Advanced Topics
   in Cognitive Psychology (Subtitle required)
   PSY 564 Advanced Topics in Learning (Subtitle required)
   PSY 565 Advanced Topics
   in Neuroscience (Subtitle required)
   *PSY 566 Advanced Topics
   in Social Psychology (Subtitle required)

Of the 15 credit hours of courses from this list, (1) at least 6 credit hours must be in the same core discipline, where core disciplines are biology, computer science, linguistics, philosophy, and psychology; and (2) no more than 6 credit hours from any single discipline will count towards satisfaction of the requirement.

*Only by approval of the Director of Cognitive Science. The main criterion for approval will be the extent to which the course, as taught during the semester for which the student seeks cognitive science credit, contains a sufficient amount of materials relevant to cognitive science. The Director will make this determination by consultation with relevant faculty from the department teaching the course (including the instructor of the course), in conjunction with the criteria for course inclusion outlined on the Cognitive Science webpage.

For more information, contact: Camille Harmon, camille.harmon@uky.edu; 859-257-3966. http://idp.uky.edu/cognitive-science

Environmental and Sustainability Studies

Environmental considerations permeate almost every facet of modern life, and concern for “the environment” is practically universal as we approach the twenty-first century. The minor in Environmental and Sustainability Studies is designed to provide students with the opportunity to become conversant in a range of environmental topics, whether as private citizens in their daily lives or as professional members of corporate, government, legal, medical, and educational circles.

The minor draws on topics and perspectives from the natural and physical sciences, the social sciences, and the humanities to underscore the interdisciplinary nature of environmental issues and problems. Students taking the minor are encouraged to integrate the program with their major study focus in order to gain a competitive advantage in grappling with environmental topics.

The minor in Environmental and Sustainability Studies requires 21 hours of course work including the following:

- ENS 201 Environmental and Sustainability Studies I: Humanities and Social Sciences ............................................. 3
- ENS 202 Environmental and Sustainability Studies II: Natural Science and Policy ............................................. 3
- PHI 336 Environmental Ethics ............................................. 3
- ENG 425 Environmental Writing ............................................. 3
- plus 3 credit hours from each of the ENS Areas of Expertise: Economics, Environment, Society ............................................. 9

**Economics**


**Environment**


**Society**


Alternative elective courses may be approved by the Environmental and Sustainability Studies Program Director.

For further information, contact: Director Betsy Beymer-Farris, bbeymer-farris@uky.edu, 849 Patterson Office Tower 0027, 859-257-5194. https://ens.as.uky.edu

**Indian Culture**

This minor is designed to allow students to develop a more profound understanding of Indian culture. The curriculum is strongly interdisciplinary, encompassing courses in linguistics, anthropology, English, geography, mathematics, philosophy, political science, and sociology.

Students completing the minor will possess: (1) a well-rounded, multidisciplinary understanding of the culture and geography of India and of contemporary Indian society and politics; and (2) a high degree of preparedness to pursue careers in business or teaching that require knowledge of Indian society and its traditions.

The minor in Indian Culture requires 18 hours of course work, as follows:

- 12 hours of courses on India from anthropology, English, geography, linguistics, mathematics, philosophy, political science, sociology, and independent studies in India. Students choose from the following courses:
### Latin American, Caribbean, and Latino Studies

The minor in Latin American, Caribbean, and Latino Studies provides instruction and broad exposure to the society and culture of Latin America. The minor requires a minimum of 18 credit hours to be distributed as follows:

**Preminor Requirement**

1. LAS 201 Introduction to Latin America ........................3

**Minor Requirements**

Complete 3 credit hours of language instruction in Spanish, Portuguese, or French (above the 200 level) or an indigenous language spoken in Latin America; and complete 12 credit hours of approved courses across at least three of the following disciplines: anthropology, Hispanic studies, history, Latin American studies, linguistics, geography, political science, sociology, and writing, rhetoric and digital studies. All courses need to have at least 75 percent Latin American, Caribbean or Latino content. Other courses, including independent studies and education abroad courses, may be counted with the approval from the LACLAS Director.

List of approved courses usually taught by affiliate faculty:

- **ANT 320 Andean Civilization** ....................................3
- **ANT 322 Ancient Mexican Civilizations** ......................3
- **ANT 324 Contemporary Latin American Cultures** ........3
- **ANG 328 The Ancient Maya** ........................................3
- **GEO 324 Geography of Central and South America** ..........3
- **HIS 206 History of Colonial Latin America, 1492 to 1810** ....3
- **HIS 207 History of Modern Latin America, 1810 to Present** .3
- **HIS 208 History of the Atlantic World** ..........................3
- **HIS 562 Modern Mexico** ...........................................3
- **HIS 563 The History of Women in Latin America** ............3
- **HIS 564 History of Brazil** ..........................................3
- **LAS 395 Independent Work in Latin American Studies** .......3
- **PS 426G Latin American Government and Politics** ..........3
- **PS 538 Conflict and Cooperation in Latin American Relations** .3
- **SOC 350 Topics in Sociology (Subtitle required)** ............3
- **SOC 432 Race and Ethnic Relations** ..............................3
- **SPA 314 Civilization of Spanish America** .......................3
- **SPA 322 Literature, Life and Thought of Spanish America** ....3
- **SPA 332 Spanish and Latin American Business Environments** .3
- **SPA 438G Literature of Social Protest in Spanish America** ....3
- **SPA 474 Topics in Hispanic Studies (Subtitle required)** ....3

*Course subtitle must focus on Latin American, Caribbean and/or Latino studies.

For more information, consult the Director of Latin American Studies. [http://laclas.as.uky.edu/](http://laclas.as.uky.edu/)

### World Religions

The minor in World Religions offers an expansive orientation to the diversity of human religious phenomena and the place these have in a complex, global society and its intellectual traditions. The minor requires a minimum of 18 credits as follows:

**Required**

- **ANT 335 Religion in Everyday Life** ............................3
- Complete 15 credit hours from at least three different areas from the list provided. 9 of the 15 credit hours must be at the 300-level or above and 6 of the 15 credit hours must be from a prefix outside of their major. Students must take course work from at least two different prefixes. A course used to satisfy one area may not be used to satisfy another area in the minor.

**Area 1: Judaism**

- **HIS 323 The Holocaust** ...........................................3
- **HJS 325 Jewish Thought and Culture II: From the Expulsion from Spain to the Present** ........................................3
- **HJS 330 A History of Western Religious Thought** ..........3
- **HJS 495 Independent Study in Judaic Studies** ...............3

**Area 2: Christianity**

- **CLA 190 Introduction to the New Testament** .................3
- **CLA 191 Christianity, Culture, and Society: A Historical Introduction** .................................................................3
- **HJS 391 Christians in the Roman Empire** .......................3
- **HJS 340 A History of Western Religious Thought** ..........3
- **HJS 512 Carolingian Empire** .......................................3
- **HJS 513 Medieval Institutions** ..................................3
- **HIS 520 The Era of the Reformation** ...............................3
- **HJS 546 The Byzantine Empire** ...................................3
- **CLA/HJS 390 Backgrounds to and Early History of Christianity to 150 CE** .........................................................3
- **ENG 271 The Bible as Literature** ................................3
- **HJS 191 A History of World Religions (Subtitle required)** ....3
- **PHI 504 Islamic and Jewish Philosophy and the Classical Tradition** .................................................................3

**Area 3: Islam**

- **AIS 228 Islamic Civilization** .......................................3
- **AIS 330 Islamic Civilization II** .....................................3
- **AIS 338 Women and Islam** ...........................................3
- **AIS 340 Fundamentalism and Reform in Islam** ..............3
- **AIS 345 Islamic Mysticism** ..........................................3
- **AIS 410 Theology and Law in Islam** ...............................3
- **AIS 430 Islam in America** ...........................................3
- **AIS 440 Introduction to the Quran** ................................3
- **HJS 191 A History of World Religions (Subtitle required)** ....3
- **PHI 504 Islamic and Jewish Philosophy and the Classical Tradition** .................................................................3

**Area 4: Central and East Asian Religion**

- **ANT 327 Culture and Societies of India and South Asia** ....3
students must: 1) complete APP 200, Introduction to Appalachian Studies (which also satisfies the UK Core requirement in U.S. citizenship); 2) to satisfy an Appalachian engagement requirement (either through APP 399, the Appalachian Studies practicum course, or a relevant internship, service-learning course, or practicum in another program); and 3) to complete a capstone project either through APP 399, the Appalachian Studies Practicum, or a course approved as the capstone experience by the Appalachian Studies Program Director.

Remaining courses may be chosen from the Appalachia-related course listings publicized on the Appalachian Studies website each term, or a student may propose additional courses with a rationale accepted by the Appalachian Studies Program Director. Course work for the undergraduate certificate must be taken from within at least two colleges at UK. This requirement is significant offering of this certificate program, given the Appalachian Center and Appalachian Studies Program’s service to the entire university community. The purpose of the requirement is to encourage students to explore curricular possibilities outside the college in which their major is administratively housed, in a program of study truly committed to interdisciplinary perspectives.

Appalachian Studies Curriculum

The Certificate in Appalachian Studies curricula are as follows:

- A minimum of 12 credits of course work taken for a letter grade.
- At least 12 credits must be 200 level or above, and a minimum of 6 credits must be at the 300-level or above.
- The student must complete a 3-credit breadth component. The breadth component requires that a student take courses in at least two colleges, with a minimum of three credits to be completed in a discipline other than the student’s major.
- Student must earn a C or better in each required certificate course to receive the certificate.
- Certificates will only be awarded to students who successfully complete a degree, or have completed a four-year degree.
- No more than 9 credits taken for a certificate can be used to satisfy the requirements for the student’s bachelor’s degree, a minor, or another certificate, exclusive of free or unrestricted electives.

Examples of Programs of Study

Here are three examples of programs of study for students successfully completing the Appalachian Studies undergraduate certificate:

- APP 200 Introduction to Appalachian Studies ............... 3
- APP 399 Practicum ...................................................... 1-6
- JOU 485 Community Journalism .................................. 3

This student could satisfy the engagement requirement through APP 399 at UK’s Robinson Center for Appalachian Resource Sustainability in Breathitt County on youth agicultural entrepreneurship, and satisfy the capstone requirement through a paper for Community Interaction on participatory evaluation of a proposed economic development project in Appalachia.

- APP 200 Introduction to Appalachian Studies ............... 3
- MUS 301 Appalachian Music ....................................... 3
- "ENG 450G Studies in American Literature (Subtitle required) .................................................. 3
- APP 399 Practicum ...................................................... 1-6
- "ENG 450G subtitle must focus on some aspect of Appalachian literature.

This student could satisfy the engagement requirement and the capstone experience together by creating and implementing a program on the multicultural history of the banjo for students at a 4-H camp in the Appalachian region.

- APP 200 Introduction to Appalachian Studies ............... 3
- EES 385 Hydrology and Water Resources ..................... 3
- FOR 460 Forest Hydrology and Watershed Management ........ 3
- APP 399 Practicum ...................................................... 1-6

This student could satisfy the engagement requirement by serving as an Appalachian Center intern for the KY Riverkeeper, helping to create a waterway trail, and satisfy the capstone experience requirement through drafting a management plan for a forest in the Appalachian region.

For more information, contact: Appalachian Studies Associate Director, Kathryn Engle, kathryn.engle@uky.edu; Room 204, 624 Maxwell Court, 0347; 859-257-6882.

appalachiancenter.as.uky.edu

Undergraduate Certificate in Global Studies

The Certificate in Global Studies is designed to show collaboration across all the undergraduate colleges in creating a focus for students’ scholarly work in international settings. Successful completers of this interdisciplinary Certificate have demonstrated their preparedness to live and work in a global community. There are four components: globally focused course work, second language course work, credit-bearing education abroad experience, and co-curricular programming.

Faculty Director: Dr. Julie Human, Department of Modern and Classical Languages, Literatures and Cultures.

Details and requirements for the Global Studies Certificate are listed below.

The Certificate of Global Studies will allow students to demonstrate their preparedness to live and work in a global community. By taking a series of courses with an international focus that amplifies the global dimension of their majors, by engaging in a credit-bearing education abroad experience, by enhancing their experience with a second language, and by participating in internationally-focused co-curricular activities, students
will expand their view of the world and their place in it, and their perspectives on their own societies at home.

As the workplace seeks employees who can work in international or multicultural teams, and as participation in U.S. society increasingly demands the skills of global citizenship, students will benefit from an additional degree credential, alongside their major(s) and/or minor(s), that demonstrates their dedication to and experience with global perspectives. Having this Certificate on the transcript will also show that the students are interested in the international facets of their academic and/or pre-professional training, which will be attractive to potential graduate programs or employers.

The structure of the Certificate of Global Studies offers an academic credential as well as a coherently planned academic core, for students who otherwise might simply take a smattering of international courses or participate in some type of isolated international experience. At the heart of the Certificate is the required Education Abroad experience (study abroad, internship, research abroad), but the Certificate’s structure is designed to make that experience integral to the undergraduate program of study. A coherent program in which the time abroad is both preceded and followed by appropriate opportunities for reflection, and bolstered by rigorous academic course work, will enhance the impact of the international experience. Research has demonstrated that one advantage of education abroad is that, when appropriately designed, it can move students from dependent to independent learners, and can help them to acquire interpersonal and intercultural competence.

This Certificate facilitates development of both objective and subjective intercultural experience. It will appeal to a wide range of students. It is intended to encourage study abroad and cross-cultural experiences, and facilitate and credential that experience. Students in semester-long study abroad experiences as well as those students undertaking international programs during an 8-week summer period, a 4-week term abroad, or even a 1- or 2-week “study tour” will benefit by study in situ. The Undergraduate Certificate in Global Studies offers a curriculum and co-curriculum to bolster the learning that takes place abroad.

In the Certificate curriculum, the skills that are acquired during the student’s experience abroad is reinforced by course work that situates that experience in both academic and preprofessional growth, beyond that which is in the major or minor course of study. If the course work takes place before the program abroad, the student will be more receptive to the experience, better prepared to cope with cultural difference, and more educated about socio-historical contexts. If the course work takes place after the student’s return, it offers opportunities for reflection and enrichment of the lessons learned abroad. In either case, the experiential learning in the international context goes hand-in-hand with course work that has an intercultural and global focus. The Certificate curriculum is designed to be feasible across the array of UK academic majors. If the student already has selected a major with an international focus, the Certificate’s additional course work and required component abroad will extend and deepen that curriculum. And if the student has a major that does not have a visible and discrete international focus, the Certificate structure offers the student a context within which to understand the major from an international perspective.

Global Studies Curriculum

The Certificate of Global Studies curricula are as follows:

- A minimum of 12 credits of course work taken for a letter grade.
- At least 12 credits must be 200 level or above, and a minimum of 6 credits must be at the 300-level or above.
- The student must complete a three-credit breadth component. The breadth component requires that a student take courses in at least two disciplines, with a minimum of three credits to be completed in a second discipline.
- Student must earn a C or better in each required certificate course to receive the certificate.
- Certificates will be awarded to students who successfully complete a degree, or have completed a four-year degree.
- No more than nine credits taken for a letter grade.
- A minimum of 6 credits must be at the 300-level or above.
- A minimum of 12 credits must be 200 level or above, and a minimum of 6 credits must be at the 300-level or above.

Credit-Bearing Education Abroad

Students must enroll in 12 hours of globally focused course work at the 200 level or above, in conformance with UK requirements for undergraduate certificates. As noted above at least 12 credits must be 200 level or above, and a minimum of 6 credits must be at the 300-level or above. “Globally focused course work” is satisfied as follows:

- Any course that has been deemed as appropriate for the A&S International Studies major/minor, at the 200+ level; this compendium of courses from across the university currently numbers over 230 courses.
the qualifying events are listed on the Global Studies web site: www.as.uky.edu/gs-international-activities-us; or students may hear of others from professors, friends, and organizations located both on and off campus. To find out if an activity can be used for this requirement, contact the Certificate of Global Studies Director. After the Director has approved an activity as the co-curricular event, students will write a reflective essay placing their responses within the context of the other experiences gained while earning the Certificate of Global Studies (including education abroad, language learning, and coursework). Note: Descriptions of courses, study abroad, and language acquisition in your essay will be compared to those recorded on your transcript.

When both of the essays have been reviewed and accepted as complete by the Certificate of Global Studies Director, the Director will submit this information along with a list of other required components that you have completed to a staff member who will update MyUK to reflect completion of the certificate.

Undergraduate Certificate in International Film Studies

Cinema, sometimes referred to as the seventh art, was one of the great contributions to twentieth-century world culture. It will continue to be no less important in the twenty-first century and beyond where it continues to be transformed by its contact with even more recent technologies such as digital media and evolving entertainment and artistic platforms such as the internet and social media.

The certificate in International Film Studies is an interdisciplinary program that allows students to bring the knowledge they have gathered in their home departments to bear on their work in film studies. The certificate in International Film Studies emphasizes, in a comparative global context, how the language and history of film intersect with closely related movements in other artistic media, in philosophy and history, and in different cultural traditions.

The certificate in International Film Studies has three goals: 1) to introduce students to the history and theoretical vocabulary of cinema; 2) to provide a comparative approach through which students may reflect upon the nature and problematic concept of national film styles and their relation to each other in a globalized world; 3) to foster expertise in film analysis and its expression. Upon completion of the Undergraduate Certificate in International Film Studies, students will be able to:

1. analyze the formal and technical aspects of film language and style;
2. recognize and define the primary aesthetic movements of world cinema, and situate them in social and historical context;
3. develop a critical language appropriate to the analysis of film;
4. communicate their analyses effectively in written and spoken form.

Admission Requirements

Students will be required to have accumulated at least 30 hours of course credit and have a cumulative GPA of at least 3.0.

The Undergraduate Certificate in International Film Studies is organized around three conceptual and methodological elements:

I. Introduction to Film Studies

Each student is required to take one film class designated as an introduction to Film Studies (see “Curriculum” list, below). This course will not only introduce students to the history of film, but to the technical vocabulary of film study, from basic principles of mise-en-scene, cinematography, editing, and sound to more theoretical questions of narrative, authorship, and formal design, as well as broader considerations concerning the nature of the image and visual language.

This component of the International Film Studies certificate also introduces students to the appropriate techniques of film analysis and strategies of analytical expression.

II. Comparative International Film

Students will be required to take Film Studies courses from several national film traditions (see below) and to explore cinema as an international art form. Students will examine the earliest days of filmmaking in the late nineteenth century when the language of film was basically uniform, the national film styles that began to emerge during and after World War 1, as well as the new internationalization of film today that more explicitly puts, for example, Chinese and American film languages in dialogue with each other.

III. Certificate Capstone Project

In the final Film Studies course that a student takes and plans to count as part of the International Film Studies Certificate, the student will complete a research paper under the guidance of the faculty member teaching the course (see “Certificate Capstone Project” in Curriculum, 3. Capstone Course, below). Students must enroll, concurrently, in one (1) hour of MCL 592 Research Practicum (Film Studies Capstone).

Program

NOTE: Students may only take courses listed in the curriculum below once. If a student takes a course in area no. 1 (Introduction to Film Studies), for example, that student may not repeat that course in area no. 2 (Comparative International Film).

The Undergraduate Certificate in International Film Studies requires sixteen (16) hours of course work in Film Studies.

- 3 hours may be, but are not required to be, at the 100 level
- 6 hours must be at the 300 level or above

Introduction to Film Studies

Choose one of the following for 3 hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 280 Introduction to Film</td>
<td>3</td>
</tr>
<tr>
<td>FR 103 French Cinema</td>
<td>3</td>
</tr>
<tr>
<td>GER 305 German Film Today</td>
<td>3</td>
</tr>
<tr>
<td>JPN 283 Japanese Film</td>
<td>3</td>
</tr>
</tbody>
</table>

Comparative International Film

Choose three of the following for 9 hours. The three courses must come from three separate national film traditions:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 321 Introduction to Contemporary Chinese Film</td>
<td>3</td>
</tr>
<tr>
<td>CLA 100 Ancient Stories in Modern Films</td>
<td>3</td>
</tr>
<tr>
<td>ENG 180 Great Movies (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 280 Introduction to Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 284 History of Film I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 285 History of Film II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 380 Film and Genre (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 384 Literature and Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 480G Studies in Film (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>FR 103 French Cinema</td>
<td>3</td>
</tr>
<tr>
<td>FR 225 Russian Film Noir</td>
<td>3</td>
</tr>
<tr>
<td>*FR 325 French Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>FR 335 War, Literature, Film</td>
<td>3</td>
</tr>
<tr>
<td>GER 305 German Film Today</td>
<td>3</td>
</tr>
<tr>
<td>GER 361 German Cinema</td>
<td>3</td>
</tr>
<tr>
<td>JPN 283 Japanese Film</td>
<td>3</td>
</tr>
<tr>
<td>PHI 393 Philosophy of Film</td>
<td>3</td>
</tr>
<tr>
<td>RUS 275 Russian Film</td>
<td>3</td>
</tr>
<tr>
<td>RUS 535 Russian Visual Studies (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 371 Latin American Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 372 Spanish Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 529 Themes in Modern and Contemporary Spanish Literature, Culture and Film (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 539 Themes in Latin American Literature, Culture and Film (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>WRD 311 History of Documentary</td>
<td>3</td>
</tr>
<tr>
<td>WRD 312 Introduction to Documentary</td>
<td>3</td>
</tr>
<tr>
<td>WRD 412G Advanced Documentary Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Certificate Capstone Project

Choose one Capstone course for 3 hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 321 Introduction to Contemporary Chinese Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 380 Film and Genre (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 384 Literature and Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 400G Studies in Film (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>*FR 325 French Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>FR 335 War, Literature, Film</td>
<td>3</td>
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<tr>
<td>GER 361 German Cinema</td>
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</tr>
<tr>
<td>PHI 393 Philosophy of Film</td>
<td>3</td>
</tr>
<tr>
<td>RUS 535 Russian Visual Studies (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 371 Latin American Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 372 Spanish Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>**SPA 529 Themes in Modern and Contemporary Spanish Literature, Culture and Film (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 539 Themes in Latin American Literature, Culture and Film (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>WRD 311 History of Documentary</td>
<td>3</td>
</tr>
<tr>
<td>WRD 312 Introduction to Documentary</td>
<td>3</td>
</tr>
<tr>
<td>WRD 412G Advanced Documentary Production</td>
<td>3</td>
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</tbody>
</table>

Capstone Practicum

MCL 592 Research Practicum (Subtitle required) | 1

Total hours required | 16
Undergraduate Certificate in Peace Studies

The purpose of the Peace Studies program is to develop students with increased interests and understanding of issues of peace and justice from individual to global levels; to provide them with basic skills in peaceful communication, nonviolent and transformative conflict resolution; and to help them develop peaceful and cooperative cultures. The Peace Studies program will empower students to understand and reduce conflict at multiple levels, and will provide them with conflict resolution skills that are increasingly valued by employers, graduate programs, and are much needed in our communities.

A Peace Studies certificate offers a valuable credential and an appealing focus for students in many disciplines. While UK offers a plethora of courses relevant to Peace Studies, this is the single program that brings these elements into a coherent peacemaking focus. Because Peace Studies is inherently interdisciplinary, it can create an important context that may be missed when courses are completed within the framework of a single discipline. Students in Peace Studies will be better prepared to take advantage of co-curricular opportunities at UK. Many avenues also exist for fruitful synergy between the Peace Studies program and a student’s major and minor fields.

Program Requirements

The Peace Studies certificate is designed to be easily combined with a broad array of majors and minors across UK’s colleges and departments, and will increase a student’s credit hours needed for graduation only under rare circumstances. The Peace Studies program requires 12 credit hours. Six of the 12 required hours come from Peace Studies courses. These include the 'portal' course, PCE 201, which introduces students to Peace Studies, and the capstone course, PCE 410, which concludes the program.

Peace Studies Courses

*PCE 201 Introduction to Peace Studies .......................... 3
**PCE 410 Peace Studies Capstone Seminar .................. 3
*Meets UK Core requirement for Inquiry in the Social Sciences
**Meets UK Core requirement for Citizenship-Global Dynamics

Peace Studies Electives

Peace Studies electives are selected from existing courses in the University catalog and reflect both different departments and colleges. They are grouped into four Focus Areas:

Focus Area I: Peacebuilding ........................................ 0-6
Addresses systems and infrastructure needed to create more peaceful societies.

Focus Area II: Peacemaking ....................................... 0-6
Addresses leadership skills, skills for resolving and transforming conflict.

Focus Area III: Promoting Understanding, Cooperation, and Development ........................................ 0-6
Addresses cross cultural issues, international organizations, economic and social development.

Focus Area IV: Addressing Global and Regional Pressures .......................................................... 0-6
Addresses problems of population, scarcity, trade, sustainability, ecosystems, climate, and immigration.

Undergraduate Certificate in Sexuality Studies

This Certificate in Sexuality Studies allows students to explore human sexuality in a profoundly interdisciplinary way. It encompasses scientific and medical fields as well as humanities and social sciences, and encourages the study of sexuality transhistorically and crossculturally. The goal of offering the certificate is three-fold. 1) To train students for fields in which knowledge of diverse perspectives on sexuality is important – including health-related fields, human resources-related fields, and international scholarship or business. 2) To provide students with an opportunity for transformative exploration of the relationship between sexuality and society. 3) To provide leadership in promoting sexuality education with an intersectional and interdisciplinary approach on the college level that profoundly enhances abstinence-only education offered in public high schools. At least 8 credit hours must be at the 200 level or above, and a minimum of 6 credit hours must be at the 300 level or above.

Core Courses (8 credits)

GWS 200 Sex and Power ........................................... 3
KHP 220 Sexuality Education ................................. 2
Choose one from either:
GWS 410 Introduction to Queer Theory ................. 3
GWS 506 History of Sexuality in the U.S. ............... 3

Elective courses (6 credits)

Courses on the core list above that are not used to satisfy core requirements may be used to satisfy the elective requirements.

Choose one from the following:

ANT 251 Global Health Inequalities ............................ 3
FAM 253 Human Sexuality: Development, Behavior and Attitudes ................................. 3
PSY 563 Advanced Topics in Developmental Psychology: (Subtitle required) ............. 3
PGY 401G Human Reproduction, Technology, and Society .................................................. 3
CPH 203 Sexual Health .............................................. 3

Choose one from the following:

GWS 250 Social Movements ..................................... 3
GWS 302 Gender Across the World (Subtitle required) ...................................................... 3
GWS 300 Topics in Gender and Women’s Studies (Subtitle required) .................................. 3
GWS 301 Crossroads (Subtitle required) ................. 3
GWS 309 Health, History, and Human Diversity .... 3
GWS 430 Gender, Power, Violence ......................... 3

Program Requirements

• An application submitted through the Central Advising Office in the College of Arts and Sciences
• 3.0 overall GPA and in good academic standing
• An application submitted through the Central Advising Office in the College of Arts and Sciences

Admissions Criteria

• A minimum second semester freshman;
• 3.0 overall GPA and in good academic standing;

Program

The Undergraduate Certificate in Social Sciences Research requires a minimum of 12 credit hours. All courses for the certificate must be completed with a combined average GPA of 3.2 or better. If a class is only offered as a pass/fail, then a student may include a ‘pass’ grade in that class. However, 12 credit hours for the certificate must be completed in graded course work. All credit hours must be at 200+ level; 6 of these credits must be at 300+ level. At least one course (3 credit hours) must be from a department other than the student’s major; no more than 10 credits may also satisfy requirements for the student's major. The certificate requires that a minimum of 3 credit hours be an independent research project, and that students make a presentation of their research in a public forum (this must be included in the learning contract for the independent research project). Students must successfully complete a Bachelor’s degree to earn the certificate.

1. One research design/methods course, chosen from the following:

ANT 302 Ethnographic Methods:
Doing Anthropology ............................................... 3
ANT 525 Applied Anthropology .............................. 3
ANT 541 Archaeological Method and Theory .............. 3
ANT 543 Cultural Resource Management .................. 3
ANT 385 Field Laboratory in Archeological Research .......... 3-6

COM 365 Introduction to Communication Research Methods .................................................. 3
COM 553 Critical Analysis of Communication and Persuasion in Popular Culture .......................... 3
EDP/EPE/KHP 520 Program Evaluation ..................... 3

Undergraduate Certificate in Social Sciences Research
GEO 311 Qualitative Methods in Geography ................ 3
GEO 406 Field Studies in Geography
  (Subtitle required) ..................................................... 3
GWS 400 Doing Feminist Research ............................... 3
LIN/SOC 508 Discourse Analysis .................................. 3
PS 372 Introduction to Political Analysis ..................... 3
PSY 215 Experimental Psychology ................................ 4
SOC 302 Sociological Research Methods ...................... 3

2. One quantitative/technical methods course chosen from the following:
   AEC 490 Quantitative Methods and Price Analysis ...... 3
   ECO 391 Economic and Business Statistics ............... 3
   EPE/EDP/EDC 522 Psychological and Educational Tests and Measurements .......................... 3
   EPE/EDP 557 Gathering, Analyzing, and Using Educational Data .................................. 3
   EPE/EDP 558 Gathering, Analyzing, and Using Educational Data II ............................ 3
   GEO 309 Introduction to GIS ..................................... 3
   GEO 310 Data Explorations and Applications
     in Everyday Life ..................................................... 3
   GEO 409 Advanced GIS ............................................. 3
   PSY 216 Applications of Statistics in Psychology ...... 4
   SOC 303 Quantitative Sociological Analysis ............. 3
   STA 296 Statistical Methods and Motivations ........... 3

3. One independent study (or equivalent), chosen from the following. Included as part of this course requirement is the program requirement for a presentation of research in public forum. This requirement will be included in the learning contract for the independent study/research course.
   AEC 395 Independent Research in
     Agricultural Economics ........................................ 1-3
   ANT 399 Field Based/Community Based Education
     in Anthropology .................................................... 1-15
   ANT 581 Independent Work in Anthropology ............. 1-4
   COM 395 Independent Work ...................................... 1-3
   ECO 395 Individual Work in Economics .................. 1-6
   ENS 395 Independent Work .................................... 3
   GEO 499 Senior Research Seminar ............................ 3
   GEO 560 Independent Work in Geography ................... 3
   GWS 395 Undergraduate Research
     in Gender and Women's Studies ............................ 1-3
   HSP 499 Health, Society and Populations Capstone
     (Subtitle required) .............................................. 3
   LIN 395 Independent Work ...................................... 3
   PS 395 Independent Work .................................... 1-6
   PSY 393 Research in Neuroscience .......................... 1-6
   PSY 394 Research in Psychology .............................. 3
   PSY 395 Independent Work in Psychology ................ 1-12
   PSY 495 Senior Thesis Seminar ................................ 4
   PSY 496 Senior Thesis Research ................................ 4
   SOC 395 Independent Work .................................... 1-3
   SOC 565 Independent Work ..................................... 3

4. One 'outside area course', which must be a course from a department other than the student's major, chosen from the courses listed above.