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 life-long 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/.

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/.

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.

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, but 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>
</tr>
</thead>
<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>
</tr>
<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>
</tr>
<tr>
<td>Geography</td>
<td>3.5</td>
<td>3.5 cumulative GPA and major GPA of 3.5 or above.</td>
</tr>
<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>
</tr>
</tbody>
</table>

– continued on next page –
### Guide to A&S Departmental Honors Requirements, continued

<table>
<thead>
<tr>
<th>Major</th>
<th>Cumulative GPA</th>
<th>Criteria</th>
</tr>
</thead>
<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>
</tr>
<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>
</tr>
<tr>
<td>Neuroscience</td>
<td>3.5</td>
<td>Neuroscience majors are eligible for honors in neuroscience if they: (1) Have an overall GPA of 3.5 or above at graduation. (2) Complete two scholars courses or two 400G, 500 or 600 level or a combination of a scholars course and a 400G/500/600 BIO course. (3) Complete 6 credit hours of an independent research experience. (4) Give a public presentation of one’s research results. Such 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>Philosophy</td>
<td>3.5</td>
<td>3.5 cumulative GPA or above in PHI courses, plus a senior thesis. Students are encouraged to enroll in PHI 395 for support in writing the senior thesis.</td>
</tr>
<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 astronomy. All students awarded department honors will have fully participated in independent study or research including the preparation of a final report; participation with a high grade in a 3-credit-hour PHY 395 or participation in a summer research experience are ways of achieving this. Other factors such as citizenship, leadership in the Society of Physics Students, and other meritorious activity will be considered in the selection of seniors for graduation with honors.</td>
</tr>
<tr>
<td>Political Science</td>
<td>3.5</td>
<td>In order to graduate with departmental honors in political science, a student must obtain at least a 3.5 GPA in the major and at least a 3.25 overall GPA. Additionally, honor students must complete PS 490, Honors in Political Science. In this course, students will be expected to carry out a major research project. Should that option be unavailable, however, students will have an opportunity to arrange completion of a major research project under faculty guidance as part of PS 395, the department’s Independent Study course, subject to approval from the Director of Undergraduate Studies.</td>
</tr>
<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>
</tr>
<tr>
<td>Sociology</td>
<td>3.5</td>
<td>3.5 cumulative GPA or above.</td>
</tr>
<tr>
<td>Topical</td>
<td>3.6</td>
<td>3.6 cumulative GPA or above and recommendation of the Associate Dean based on the final thesis.</td>
</tr>
<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 3.5 or above in 400-level WRD courses.</td>
</tr>
</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 should 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.

College Requirements for a Bachelor of Science 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 Science 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 three college hours in disciplines in the natural sciences.
   c. Students must take three college hours in disciplines in the social sciences.
   d. Students must take three 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 60 credit hours in the physical, biological and/or mathematical sciences.
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 requirements).
10. Complete a minimum of six credit hours of free electives. These college electives cannot be counted towards UK Core, college or major requirements.
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 for the 60 credit hour limit and may count toward the total 120 minimum hours needed to graduate. Only one successful completion of multiple completions of the same KHP course will count.
3. A maximum of 16 semester credit hours earned in military science (AMS) and aerospace studies (APS) are acceptable towards fulfilling both the College 90-hour and 120-hour requirement for the B.A. or B.S. degree. AMS/HIS 320 is not included in this 16 hour limit.
4. 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.
5. All courses offered by the College of Arts and Sciences are acceptable with the exception of MA 108R.
6. Courses transferred from other institutions and judged by the College to be equivalent or comparable to Arts and Sciences courses are acceptable.
7. Usually the College will apply only six hours of technical course work taken at any institution.
8. 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 and the College.
   i. Courses with an “S” grade designation or a “place holder” designation such as NSE (National Student Exchange) for one credit hour cannot be counted as credit toward 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 music 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 requirement, 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 other Science requirement.
   a. ANA 209
   b. ANT 105, 230, 332, 333, 335
   c. CGS 500
   d. DHIN 101
   e. ENS 200, 202, 400
   f. ENT 110, 300
   g. GEO 130, 135, 230, 351, 451G, 530
   h. PGY 206
   i. PLS 104
   j. 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 core 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, ECO, 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:
   a. AAS 200, 235, 301, 326, 328, 336, 400, 401, 417G, 422, 541, 550, 560
   b. ANT 515
   c. ANT/LIN 516
   d. ANT/LIN 519
   e. ANT/JPN 321
   f. CGS 500
   g. ENS 200, 400
   h. GEO/JPN 334
   i. 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:
   a. AAS 200, 235, 328, 336, 417G, 423, 471
   b. AMS 101, 102, 201, 202, 442, 443
   c. CHI 101, 102, 201, 202
   d. CLA 131
   e. ENGL 102, 205, 407, 507, 509
   f. FR 011, 101, 102, 106, 201, 202, 204, 307, 310, 507
   g. GER 011, 101, 102, 201, 202, 205, 206, 211, 212, 307
   h. HJS 101, 102, 201, 202
   i. HPS 101, 102, 201, 202
   j. ITA 101, 102, 201, 202
   k. JPN 101, 102, 201, 202
   l. LAT 101, 102, 201, 202
   m. LIN 520, 521
   n. PHI 120, 320
   o. PS 417G, 471
   p. RUS 101, 102, 201, 202, 301, 302, 401, 404, 501, 502
   q. SPA 011, 101, 102, 103, 151, 201, 202, 203, 205, 210, 211, 215, 302, 313, 413, 501, 506, 553
   r. 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:
   a. AMS 201
   b. ANT 515, 516, 519
   c. ART 100
   d. CGS 500
   e. GWS 201, 506
   f. 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
   a. Biology – BIO 111, 155, 209
   b. Chemistry – CHE 111, 113
   c. Earth and Environmental Sciences – EES 160, 220
   d. Physics – PHY 211, 213, 241, 242

Social and Behavioral Sciences
   a. Anthropology – ANT 230, 541, 585
   b. Geography – GEO 406
When appropriate, other upper level courses may be used to satisfy this requirement by petition.

MAJOR REQUIREMENTS

A major concentration in the College of Arts and Sciences consists of at least a 39-credit-hour program, referred to as the “major requirements.” Each department or program has specified the requirements for their majors, as listed in this Bulletin under each relevant heading and as outlined in the online degree audit system within myUK GPS (Graduation Planning System).

Aside from any exceptions explicitly approved by the Arts and Sciences Educational Policy Committee and the Undergraduate Council, however, major requirements must conform to the following restrictions:

1. A total of 39 credits is required in the major requirements.
2. Courses electively taken pass-fail will not count toward UK Core, major/minor, or College requirements.
3. At least 24 credits must be in courses at the 200 level or above.
4. A minimum of 18 credits in a department, taken at the 200 level or above, is required for a major.
5. An overall grade-point average of at least 2.0 in all courses listed for the major requirements, including all premajor courses. This includes all grade attempts except those for which repeat options or academic bankruptcy has been approved.

Students are expected to review and understand all degree requirements listed in the online degree audit system within myUK GPS (Graduation Planning System).

Students who have taken courses (200 level or above) outside the college should talk with their academic advisor to see if these courses are applicable to their major requirements.

Topical Studies Majors

Students who have multiple interests or interests which do not fall into departmental areas may select a topic for concentration instead of a departmental major. Topical Studies offers academic flexibility and allows students to cut across departmental and college lines in constructing meaningful and imaginative programs. Courses in several departments might be selected to pursue special interests – Asian studies, for instance. Other examples might be African American studies or human studies.

Each Topical Studies major is designed and directed by the student in consultation with a faculty advisor in the general area of study, and in consultation with the topical studies advisor in the A&S Advising Center and an Arts and Sciences Associate Dean.

Topical Studies is the only selective admission program in the College of Arts and Sciences. The student must have a cumulative UK grade-point standing of at least 2.5 to be accepted to Topical Studies. The specific requirements of the topical studies major are that the student must meet UK Core and College requirements, must enroll in and complete at least 30 credit hours after formal admission, and complete the 39-hour major requirements (see preceding section entitled “Major Requirements”). Except for electives, all of the student’s work must be related to the topic. Additionally, in the senior year, the student must complete a comprehensive paper or project that serves to integrate his or her topical studies field. Frequently, it is advantageous to begin writing this paper or project in the context of an independent work course or a seminar, with the instructor’s approval. The paper or project proposal must be approved by a faculty advisor, an Arts and Sciences Associate Dean, and the Topical Studies advisor before significant work has begun on the project. Students must submit the final paper or project for review and approval no later than eight weeks before finals during the semester the student intends to graduate. The paper should be submitted to the Associate Dean no later than six weeks before the final exam week during the semester the student intends to graduate. Departmental honors for topical studies majors are determined by the Associate Dean and the Topical Studies advisor. To be eligible for departmental honors, a student must have a cumulative GPA of at least 3.6 and a final paper or project that has been judged to be outstanding.

For more information, contact the Arts and Sciences Topical Studies advisor in the A&S Advising Center (202 Patterson Office Tower); or visit the Topical Studies major website at: www.as.uky.edu/topical-studies.

A Second Major

A student may obtain a second major by meeting all requirements in two departments. 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 or her second major to the A&S Advising Center, 202 Patterson Office Tower. He or she must have an advisor in both departments. If one of the majors is in another college, the student is still required to know the list of requirements from the other college. The student who completes requirements for a second major will receive only one degree, but his or her transcript and diploma will reflect the two majors.

For information on second majors (not the same as second degree), consult the Graduation Requirements section of this Bulletin.

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
- 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.

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 includes four 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: cadre 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.
X. Global Dynamics  
AAS 100 Introduction to African Studies  
or one course from approved list  

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

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

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 Africana 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 328 Geography of the Middle East and North Africa ................................................... 3  
AAS/GEO 336 Geography of Sub-Saharan Africa ................................................... 3  
AAS/HIS 360 Race and Sports in America ................................................... 3  
AAS/SOC 335 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/SW 523 Social Perspectives on Racism and Ethnic Prejudices in America ................................................... 3  
AAS/EED 545 Psychology of the Black Experience ................................................... 3  
AAS/EDC 550 Education in a Culturally Diverse Society ................................................... 3  
AAS/PS 417G 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 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 about 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 health, public health policy, medicine and health sciences, planning and 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  
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  
or One course from approved list ................................................... 3  

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

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

ANT 582 Senior Integrative Seminar ............................ 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
c. Humanities ............................................................................. 6

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

IV. Electives ............................................................................. 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 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

*B 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

or

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

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

ANT 230 Introduction to Biological Anthropology

or

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

or

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

or

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

or

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

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

Graduation Composition and Communication Requirement (GCCR)

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

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 and its 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 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 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 439Q Plant Physiology ........................................ 4
   • BIO 445 The Biology of Sex ....................................... 4
   • 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 – 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 GWRC 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 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 or
   • BIO 439Q Plant Physiology ...................................... 4
   • BIO 315 Introduction to Cell Biology ......................... 4
   • BIO 325 Ecology .................................................. 4
   • STA 296 Statistical Methods and Motivations ............ 3
   • BIO 425 Biology Seminar (Subtitle required) 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

**Other Major hours: ........................................... 7-9**

**Options**

Complete one of the following options. Students cannot mix and match requirements from the two options. An option must be completed in its entirety.

**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

   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

   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, molecular, and integrative mechanisms by which organisms regulate life processes. Students will learn about the molecular 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 .................................... 2
- BIO 429 Developmental Biology ...................................... 3
- BIO 494G Immunobiology ............................................. 3
- BIO 394/395/397 Research in Neuroscience/Biology/ Microbiology (maximum 3 credits toward track) .................. 1-3
- BIO 495G Bacterial Pathogenesis .................................... 3
- BIO 302 Systems, Cellular and Molecular Physiology .......... 3
- BIO 510 Recombinant DNA Techniques Laboratory ............ 4
- BIO 520 Bioinformatics ............................................... 3
- BIO 527 Stem Cells, Tissue Engineering, and Regenerative Medicine ........................................ 5
- BIO 582 Virology ......................................................... 3
- BIO 542 Histology ....................................................... 5
- 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 552 Biological Chemistry I .................................. 3
- CHE 533 Advanced Organic Chemistry Laboratory .......... 2
- 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
- GEO 401G Invertebrate Paleobiology and Evolution ............ 3
- PSY 459 Neuropharmacology: Drugs and Behavior ............ 3
- STA 570 Basic Statistical Analysis ................................ 3
- STA 580 Biostatistics I ............................................... 2
- WRD 305 Writing Public Science ................................ 3
- WRD 310 Writing in the Natural Sciences ....................... 3
- 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 510 Herpetology ................................................ 4
- FSC 530 Food Microbiology ......................................... 5
- NRE 420G Taxonomy of Vascular Plants ......................... 4
- NRE 450G Biogeography ............................................ 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 Biogeography ............................................ 3
- PLS 502 Ecology of Economic Plants ........................... 3
- PLS 566 Soil Microbiology .......................................... 3
- PLS 567 Methods in Soil Microbiology ......................... 1
- PPA 400G Principles of Plant Pathology ....................... 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 this 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 404G Plant Physiology** ........................................ 4
- **BIO 440 Comparative and Functional Anatomy** .......... 4
- **BIO 445 The Biology of Sex** ....................................... 4
- 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 ........................................... 3
- BIO 559 Ornithology ..................................................... 4
- BIO 568 Invertebrate Zoology ......................................... 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
- EES 401G Invertebrate Paleobiology and Evolution .......... 3
- FOR 340 Forest Ecology ............................................. 4
- FOR 370 Wildlife Biology and Management ..................... 4
- FOR 435 Conservation Biology ..................................... 3
- FOR 510 Herpetology ................................................ 4
- FSC 530 Food Microbiology ......................................... 5
- NRE 420G Taxonomy of Vascular Plants ......................... 4
- NRE 450G Biogeography ............................................ 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 Biogeography ............................................ 3
- PLS 502 Ecology of Economic Plants ........................... 3
- PLS 566 Soil Microbiology .......................................... 3
- PLS 567 Methods in Soil Microbiology ......................... 1
- 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

**Anthropology**

- ANT 332 Human Evolution ........................................... 3

**Chemistry**

- 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 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 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.

**Writing, Rhetoric, and Digital Studies**

- WRD 305 Writing Public Science ................................ 3
- WRD 310 Writing in the Natural Sciences ....................... 3
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, AFT 460); emphasis on development (BIO 404, 405, 429, 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

**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 and Spinal Cord Disorders ..........3
ANA 442 Molecular and Cellular Neurobiology ..................................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.

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 sciences 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 430G Plant Physiology .................................................4
*Bio 440 Comparative and Functional Anatomy .............................4
*Bio 445 The Biology of Sex ..................................................4
*Bio 446 Neurophysiology Laboratory ......................................3
*Bio 449G 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 395 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 Plants .......................................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 organismal 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 excel in this track can go on to enroll in a variety of professional programs, including medical, dental, optometry, veterinary, and 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 .... 5
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) (Subtile 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.

<table>
<thead>
<tr>
<th>Total Hours Option B</th>
<th>25-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Minimum Hours</td>
<td>Required for Degree</td>
</tr>
</tbody>
</table>

**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 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 ................................................ 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.

<table>
<thead>
<tr>
<th>Oral Communication Requirement</th>
<th>BIO 425 Biology Seminar (Subtitle required)</th>
<th>1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication Requirement</td>
<td>Choose one course from the following 8 options:</td>
<td></td>
</tr>
<tr>
<td>BIO 398 Research and Writing in Biology</td>
<td>..... 1-3</td>
<td></td>
</tr>
<tr>
<td>BIO 404 Advanced Genetics</td>
<td>..... 3</td>
<td></td>
</tr>
<tr>
<td>BIO 405 Human Genetics</td>
<td>..... 3</td>
<td></td>
</tr>
<tr>
<td>BIO 418 Ecological Genetics</td>
<td>..... 3</td>
<td></td>
</tr>
<tr>
<td>BIO 430G Plant Physiology</td>
<td>..... 4</td>
<td></td>
</tr>
<tr>
<td>BIO 445 The Biology of Sex</td>
<td>..... 3</td>
<td></td>
</tr>
<tr>
<td>WRD 305 Writing Public Science</td>
<td>..... 3</td>
<td></td>
</tr>
<tr>
<td>WRD 310 Writing in the Natural Sciences</td>
<td>..... 3</td>
<td></td>
</tr>
</tbody>
</table>

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

**College Requirements**

- Humanities – one course ........................................ 3
- Social Science – one course .................................... 3
- 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 .................................... 3
BIO 152 Principles of Biology .................................... 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 Chemistry II Laboratory ..................... 2
MA 137/138 Calculus I/II With Life Science Applications 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 or BIO 430G Plant Physiology ......................................................... 4
  - STA 296 Statistical Methods and Motivations ............ 3
  - BIO 425 Biology Seminar (Subtitle required) 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
PHY 211 General Physics .................................................. 3
PHY 231/241 General University Physics/Laboratory ............. 3
PHY 213 General Physics .................................................. 3
PHY 232/242 General University Physics/Laboratory ............. 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 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 ...................................... 2
BIO 429 Developmental Biology ........................................ 3
BIO 494G 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 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.

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

Courses from Outside the Biology department:

CHE 565 Environmental Chemistry .................................. 3
EES 401G Invertebrate Paleobiology and Evolution ........... 3
FOR 340 Forest Ecology .................................................. 4
PSY 459 Neuropharmacology: Drugs and Behavior ........... 3
PGY 512 Evolutionary Medicine ....................................... 3
FOR 370 Wildlife Biology and Management ....................... 4
FOR 435 Conservation Biology ......................................... 3
FOR 510 Herpetology ...................................................... 4
FOR 530 Freshwater Ecology ........................................... 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 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 ....................................................... 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
College of Agriculture, Food and Environment

**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, STA 579, STA 580, BIO 460); emphasis on development (BIO 404, 405, 429, 445, 527, PGY 417); and emphasis on evolution (BIO 461, 508, 514).

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.

**Courses from Outside the Biology department:**

*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 remain-
Courses Outside the Biology department:

**BIO 380 Special Topics in Biology (Intermediate Level) (Substitute 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 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.

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

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

Pre-Professional Track

The Pre-Professional Track in the biology major broadly explores organismal 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 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 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 .......................................................................................... 5
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 350 Animal Physiology ............................................................................................................................... 4
**BIO 380 Special Topics in Biology (Intermediate Level) (Substitute 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 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.

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

**Substitute 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
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 Neuropharmacology: Drugs and Behavior ............................................................................................... 3
PGY 512 Evolutionary Medicine ............................................................................................................................ 3
PGY 431 Introduction to Neuroendocrinology ........................................................................................................ 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/FOR 461 Introduction to Population Genetics .................................................................................. 3
CPH 310 Disease Detectives: Epidemiology in Action .......................................................................................... 3
FSC 530 Food Microbiology ................................................................................................................................. 5
PLS 566 Soil Microbiology .................................................................................................................................. 3
PLS 567 Methods in Soil Microbiology ................................................................................................................. 1
PPA 500 Microbiology of Plant Health and Disease .............................................................................................. 3

Other microbiology-related courses at the 300-level or above, as 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):

**Minor in Biology**

The minor in Biology consists of 21 hours of course work to include:

**Preminor Requirements**

BIO 148 Introduction to Biology .................................................. 3
BIO 152 Principles of Biology .......................................................... 3
BIO 155 Laboratory for Introductory Biology .......................................................... 1

**Minor Requirements**

BIO 303 Introduction to Evolution .................................................. 4
BIO 304 Principles of Genetics .......................................................... 4

**Minor Electives**

Approved 300+ level BIO courses or other courses from the approved list. At least 3 of the 6 minor electives must be BIO courses (i.e., have a BIO prefix). Up to 3 hours of life science independent research course work can be counted here.

Approved list:

(Not: BIO 208 and BIO 209 CANNOT be used to satisfy the upper-level elective requirement for the Minor in Biology.)

AND


EES 401G

PSY 459

STA 570, 580 (Biology usually accepts only one of these courses for each student. Other STA courses may be accepted at the discretion of your advisor, and this may depend upon the area of biology in which you choose to specialize.)

ART 460

ASC 364, 378

ENT 310, 320, 402, 460, 561, 564, 568

FOR 340, 402

FSC 530

NRE 320, 420G, 450G, 455G

PLS 320, 330, 332, 366, 450G, 502, 566, 567

PPA 400G

ANA 511, 512, 516 (some other anatomy courses at the 500-level are accepted, but are usually restricted to professional students)

BCH 410G

MI 494Q, 595, 598

PGY 412G, 560, 590 (PGY 412G is acceptable as an elective for upper level biology credit ONLY if a student does not complete BIO 350: PGY 412G but does NOT substitute for BIO 350 or BIO 450G)

TOX 509

Other courses may be accepted at the discretion of the Director of Undergraduate Studies in the Department of Biology.
CHEMISTRY

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

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

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

Major Field Options

Choose 21 hours at the 300+ level with a prefix of ANA, BCH, BIH, CHE, CME, CS, EES, MA, MI, MSE, 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 course does not carry the CHE prefix.

From the Physics Department

*PHY 211/213 General Physics or

*PHY 231/232 General University Physics

and

*PHY 241/242 General University Physics Laboratory ................................................................. 10

Other Major hours: .................................................... 31

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 I .................................................. 4

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

Major Field Option .................................................... 3
University of Kentucky
2019-2020 Undergraduate Bulletin

College of Arts and Sciences

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 441 Physical Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Foreign Language III</td>
<td></td>
</tr>
<tr>
<td>A&amp;S Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Major Field Option</td>
<td>3</td>
</tr>
<tr>
<td>Major Field Option</td>
<td>3</td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 113 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MA 114 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>*CHE 105 General College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 107 General College Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>*CHE 111 General Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHE 113 General Chemistry II Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

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

Major Requirements

Major Core Requirements

CHE 226 Analytical Chemistry                                          | 3     |
CHE 230 Organic Chemistry                                             | 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                                        | 3     |
CHE 552 Biological Chemistry II                                      | 3     |

Total Core hours: .................................. 33

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 422/522/533/550 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.

Curriculum for B.S. in Chemistry

Traditional Option

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 105 General College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 111 General Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CIS/WRD 110 Composition and Communication I</td>
<td>3</td>
</tr>
<tr>
<td>MA 113 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>UK 101 Academic Orientation</td>
<td>1</td>
</tr>
<tr>
<td>UK Core – Arts and Creativity</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 107 General College Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHE 113 General Chemistry II Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>MA 114 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CIS/WRD 111 Composition and Communication II</td>
<td>3</td>
</tr>
<tr>
<td>UK Core – Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 226 Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHE 230 Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>MA 213 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHY 231 General University Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHY 241 General University Physics Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 552 Spectrometric Identification of Organic Molecules</td>
<td>2</td>
</tr>
<tr>
<td>CHE 547 Principles of Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language*</td>
<td>4</td>
</tr>
<tr>
<td>STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>A&amp;S Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 410G Inorganic Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHE 441 Physical Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHE 442G Thermodynamics and Kinetics</td>
<td>3</td>
</tr>
<tr>
<td>CHE 533 Advanced Organic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Foreign LanguageII*</td>
<td>4</td>
</tr>
<tr>
<td>UK Core – Citizenship - USA</td>
<td>3</td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 412 Inorganic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHE 422 Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHE 350 Biological Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>WRD 310 Writing in the Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Major Field Option</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language III*</td>
<td>3</td>
</tr>
</tbody>
</table>

Certification Requirements

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

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

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)
   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

Military Core Requirements

CHE 226 Analytical Chemistry                                      | 3     |
CHE 230 Organic Chemistry                                         | 3     |
MA 213 Calculus III                                               | 4     |
PHY 231 General University Physics                                | 4     |
PHY 241 General University Physics Physics Laboratory             | 1     |

SOPHOMORE YEAR

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 226 Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHE 230 Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>MA 213 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHY 231 General University Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHY 241 General University Physics Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 231 Organic Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHE 232 Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>MA 322 Matrix Algebra and Its Applications</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>UK Core – Social Sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

JUNIOR YEAR

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 552 Spectrometric Identification of Organic Molecules</td>
<td>2</td>
</tr>
<tr>
<td>CHE 547 Principles of Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language*</td>
<td>4</td>
</tr>
<tr>
<td>STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>A&amp;S Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 410G Inorganic Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHE 441 Physical Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHE 442G Thermodynamics and Kinetics</td>
<td>3</td>
</tr>
<tr>
<td>CHE 533 Advanced Organic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Foreign LanguageII*</td>
<td>4</td>
</tr>
<tr>
<td>UK Core – Citizenship - USA</td>
<td>3</td>
</tr>
</tbody>
</table>

SENIOR YEAR

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 412 Inorganic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHE 422 Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHE 350 Biological Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>WRD 310 Writing in the Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Major Field Option</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language III*</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Field Option</td>
<td>3</td>
</tr>
<tr>
<td>A&amp;S Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>UK Core – Global Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

*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

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 Major 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
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 BIO 308 General Microbiology
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 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 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
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 152 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 CHE 532 Spectrometric Identification of Organic Molecules .................................................. 4
CHE 550 Biological Chemistry I .............................................................. 3
CHE 552 Biological Chemistry II ............................................................. 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 BIO 308 General Microbiology
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.
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

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

V. Composition and Communication I

CIS/WRD 111 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 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
CHE 412 Inorganic Chemistry Laboratory ....................... 2
CHE 441 Physical Chemistry Laboratory ......................... 2
CHE 516 Inorganic Chemistry Laboratory ......................... 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 556 Organic Materials: Characterization and Devices .......................... 3
CHE 567 Organic Materials: Fabrication Laboratory ............. 2
CHE 576 Polymer Chemistry .......................................... 3

Major Core hours: ............................................. 40

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

ST 120 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 II* ........................................... 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 537 Polymer Chemistry ........................................ 3

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

Second Semester

CHE 4106 Inorganic Chemistry .................................... 2

CHE 533 Advanced Organic Chemistry Laboratory ............ 2

CHE 516 Inorganic Chemistry Laboratory ....................... 3

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 576 Polymer Chemistry ........................................ 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 211/231 General Physics or .................................. 10

PHY 231/241 General University Physics and Laboratory ........... 5

PHY 232/242 General University Physics and Laboratory ........... 5

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

CHE 107 General College Chemistry II ......................... 3

University of Kentucky 2019-2020 Undergraduate Bulletin 146
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 Science 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
- 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 II ................. 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)
   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
## 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)**
- 9

**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 450G 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 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

### 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

**Other Major hours:** .......................................................... 0-18

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

*Course used towards completion of a UK Core Requirement.

### 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 ... 9

### 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 degrees — 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 (GCCR)

ECO 499 Seminar in Economics (Subtitle required) ....... 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** ............................................. 1

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

**College Requirement hours: **................................. 19-33

### Premajor Requirements

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

- **MA 123 Elementary Calculus and its Applications**
- **MA 162 Finite Mathematics and its Applications** .... 4-7

- ECO 201 Principles of Economics I ................................. 3
- ECO 202 Principles of Economics II ................................. 3
- STA 296 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 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 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  
**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 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: ........................................................................... 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

**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 296 Statistical Methods and Motivations ............................. 3

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

Major Requirements  
ECONOMIC 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

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

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 ....................... 3
- 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 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)  
ENG 330 Text and Context (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) ............... 0-6

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

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

**College Requirement hours:** .................................................. 19-33

**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 (Subtitle required) .................. 3

*ENG 240 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 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.

**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 518 Advanced History of the English Language .......... 3
- ENG 519 Introduction to Old English ............................ 3
- or other Early Period subtitled courses as designated at the 300-400 level .......................................................... 3

**Diversity Requirement** .........................................................

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 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 370 Literature Across Borders .................................. 3
- ENG 4600J Studies in African-American Literature (Subtitle required) ......................... 3
- ENG 470G Comparative and Transnational Studies in Literature (Subtitle required) ............. 3
- ENG 490C Studies in Language and Gender (Subtitle required) ................................. 3

Any other course designated as a Diversity course at the 200-500 level .......................................................... 3

**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 (Subtitle required) ............................................. 3
- ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) ....................................... 3
- ENG 507 Advanced Workshop in Creative Writing (Subtitle required) ............................................. 6

*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 (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: .................. 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 (Subtitle required) .......... 6
- ENG 260 Introduction to Black Writers (Subtitle required) ........ 3
- ENG 290 Introduction to Women’s Literature (Subtitle required) 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

**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);
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 518 Advanced History of the English Language ....... 3
ENG 519 Introduction to Old English ......................... 3

or other Early Period subtitled courses as designated at the 300–400 level ................................................. 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 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 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 490G Studies in Literature and Gender (Subtitle required) ................................................................. 3

any other course designated as a Diversity course at the 200–500 level .......................................................... 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 (Minor 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 among 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.S. degree, 9 additional hours in the sciences are required that can be applied toward the 60-hour science requirement. Choose from among the applicable courses in the natural, physical, mathematical, and computer sciences ................................................................. 9

Major hours: ............................................................ 39–42

Other Electives

Choose electives and other courses to lead to the minimum total of 120 hours of course work and 60 hours of science credits required for graduation.

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

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

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

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

ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) or
ENG 507 Advanced Workshop in in Creative Writing (Subtitle required) ................................................. 3

plus one additional Creative Writing course:
ENG 107 Writing Craft: Introduction to Creative Writing ENG 207 Beginning Workshop in Creative Writing (Subtitle required) ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) ENG 507 Advanced Workshop in Creative Writing (Subtitle required) ................ 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 English

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

Any one ENG Historical Survey course:

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 200+ 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.
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.

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.

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: Humanities 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
PHI 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)
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 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 3
AIS 345 Islamic Mysticism 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 3
CHI 331 Introduction to Chinese Culture, 1840 to Present 3
FR 103 French Cinema 3
FR 205 The French Graphic Novel 3
GER 103 Fairy Tales in European Context 3
GER 305 German Film Today 3
MCL 100 The World of Language 3
MCL 135 Vampires: Evolution of a Sexy Monster 3
MCL 200 Global Literacy 3
MCL 270 Introduction to Folklore and Mythology 3
RUS 275 Russian Film 3
RUS 371 The Russian Cultural Imagination: 900-1900 3
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present 3
SPA 371 Latin American Cinema (Subtitle required) 3
SPA 372 Spanish Cinema (Subtitle required) 3
or any area course ................................................. 3

III. Intellectual Inquiry in the Social Sciences

AIS 410 Theology and Law in Islam 3
AIS 420 Introduction to Islamic Studies (Subtitle required) 3
AIS 430 Islam in America 3
AIS 435 Topics in Islamic Studies (Subtitle required) 3
AIS 436 Islamic Civilization 3
AIS 437 Islamic Mysticism 3
AIS 440 Fundamentalism and Reform in Islam 3
AIS 450 Islamic Ethics 3
AIS 451 Women and Islam 3

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 Microeconomic Theory 3
ECO 404 Macroeconomic Theory 3
ECO 405 Macroeconomic Theory 3

Language Core Requirement: Arabic

AIS 202 Intermediate Modern Standard Arabic 3
AIS 311 Arabic for Business and Media I 3
AIS 312 Arabic for Business and Media II 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

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

MCL/SPA 300 Contact Zones: Cultivating Intercultural Competence 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: .............................. 16-30

Language Core Requirement

MCL/SPA 300 Contact Zones: Cultivating Intercultural Competence 3

Language Core hours: ......................................... 3

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 Microeconomic Theory 3
ECO 404 Macroeconomic Theory 3
ECO 405 Macroeconomic Theory 3

Language Core Requirement: Arabic

AIS 202 Intermediate Modern Standard Arabic 3
AIS 311 Arabic for Business and Media I 3
AIS 312 Arabic for Business and Media II 3

plus at least 12 hours from the following:
AIS 228 Islamic Civilization 3
AIS 301 Advanced Modern Standard Arabic I 3
AIS 302 Advanced Modern Standard Arabic II 3
AIS 320 Modern Arabic Literature and Film in Translation 3
AIS 330 Islamic Civilization II 3
AIS 331 Classical Arabic Literature (in English) 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 435 Topics in Islamic Studies (Subtitle required) 3

College Requirement hours: .............................. 27

Language Core Requirement: Arabic

AIS 202 Intermediate Modern Standard Arabic 3
AIS 311 Arabic for Business and Media I 3
AIS 312 Arabic for Business and Media II 3

plus at least 12 hours from the following:
AIS 228 Islamic Civilization 3
AIS 301 Advanced Modern Standard Arabic I 3
AIS 302 Advanced Modern Standard Arabic II 3
AIS 320 Modern Arabic Literature and Film in Translation 3
AIS 330 Islamic Civilization II 3
AIS 331 Classical Arabic Literature (in English) 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 435 Topics in Islamic Studies (Subtitle required) 3
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-Modern to 1840 .... 3
CHI 345 Introduction to Early Chinese Thought ........... 3
CHI 395 Independent Work in Chinese ...................... 3
CHI 401 Advanced Chinese I .................................. 3
CHI 402 Advanced Chinese II ................................ 3
CHI 430 Popular Culture in Modern China ................ 3
CHI 450 Hermit, Immortals and Madmen ................... 3
CHI 511 Literary Chinese ....................................... 3
* A-H 310 Asian Art and Culture (Subtitle required) ..... 3
* 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
* A&S 300 Special Course (Subtitle required) .............. 3
Other courses as approved by the advisor

Chinese core hours: ................................. 21

*Subtitle required.

Language Core Requirement: French

FR 204 Introduction to French and Francophone Studies .... 3
FR 214 France Today ......................................... 3
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 I .... 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 515 Studies in Major Authors (Subtitle required) ............. 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 335 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 ....................... 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
JPN 320 Introduction to Japanese Culture, Premodern to 1868 .... 3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present .... 3
JPN 350 Special Topics in Regional Politics (Subtitle required) .... 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 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change .... 3
RUS 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
### Language Core Requirement: Spanish

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 310 Spanish Composition</td>
<td>3</td>
</tr>
<tr>
<td>Through Textual Analysis</td>
<td></td>
</tr>
<tr>
<td>SPA 302 Spanish for Business Professionals</td>
<td>3</td>
</tr>
<tr>
<td>SPA 332 Spanish and Latin American Business Environments</td>
<td>3</td>
</tr>
<tr>
<td>SPA 420 Spanish in the World</td>
<td></td>
</tr>
<tr>
<td>plus 9 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>SPA 312 Civilization of Spain</td>
<td>3</td>
</tr>
<tr>
<td>SPA 313 Advanced Spanish Language</td>
<td>3</td>
</tr>
<tr>
<td>SPA 314 Civilization of Spanish America</td>
<td>3</td>
</tr>
<tr>
<td>SPA 323 Introduction to Spanish Translation</td>
<td>3</td>
</tr>
<tr>
<td>SPA 350 Hispanic Cities (Subtitle required)</td>
<td></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 397 Independent Work in Spanish</td>
<td></td>
</tr>
<tr>
<td>SPA 399 Field Based/Community Based Education</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Core hours:</td>
<td>21</td>
</tr>
</tbody>
</table>

### Electives

Students should work closely with their advisor to complete the UK Core requirements.

**Total Minimum Hours Required for Degree** 120

*Course used towards completion of a UK Core Requirement*

### 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........... 3
AIS 345 Islamic Mysticism                                       .... 3
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 ....... 3
CHI 331 Introduction to Chinese Culture, 1840 to Present .......... 3
FR 103 French Cinema                                             .... 3
FR 205 The French Graphic Novel                                  .... 3
FR 225 French Film Noir                                          .... 3
GER 103 Fairy Tales in European Context                         .... 3
GER 305 German Film Today                                        .... 3
MCL 100 The World of Language                                   ...... 3
MCL 135 Vampires: Evolution of a Sexy Monster                   ...... 3
MCL 200 Global Literacy                                          ...... 3
MCL 270 Introduction to Folklore and Mythology                  ...... 3

### RUS 275 Russian Film

RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present

### Economics Core Requirement

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 296 Statistical Methods and Motivations</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201 Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202 Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 391 Economic and Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 401 Intermediate Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECO 402 Intermediate Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECO 300+ Any 300+ level ECO course</td>
<td>3</td>
</tr>
<tr>
<td>plus two of the following:</td>
<td></td>
</tr>
<tr>
<td>ECO 471 International Trade</td>
<td>3</td>
</tr>
<tr>
<td>ECO 472 International Monetary Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 474I Economic Development</td>
<td>3</td>
</tr>
</tbody>
</table>

### Economics Core hours: 27

**College Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Foreign Language (placement exam recommended)</td>
<td>0-14</td>
</tr>
<tr>
<td>II. Disciplinary Requirements</td>
<td></td>
</tr>
<tr>
<td>a. Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>b. Social Science</td>
<td></td>
</tr>
<tr>
<td>c. Humanities</td>
<td></td>
</tr>
<tr>
<td>III. Laboratory or Field Work</td>
<td>1-3</td>
</tr>
<tr>
<td>IV. Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**College Requirement hours:** 16-30

### Language Core Requirement: Arabic

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 202 Intermediate Modern Standard Arabic</td>
<td>3</td>
</tr>
<tr>
<td>AIS 311 Arabic for Business and Media I</td>
<td>3</td>
</tr>
<tr>
<td>AIS 312 Arabic for Business and Media II</td>
<td>3</td>
</tr>
<tr>
<td>plus at least 12 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>AIS 228 Islamic Civilization</td>
<td>3</td>
</tr>
<tr>
<td>AIS 301 Advanced Modern Standard Arabic I</td>
<td>3</td>
</tr>
<tr>
<td>AIS 302 Advanced Modern Standard Arabic II</td>
<td>3</td>
</tr>
<tr>
<td>AIS 320 Modern Arabic Literature and Film in Translation</td>
<td></td>
</tr>
<tr>
<td>AIS 330 Islamic Civilization</td>
<td>3</td>
</tr>
<tr>
<td>AIS 331 Classical Arabic Literature (in English)</td>
<td>3</td>
</tr>
<tr>
<td>AIS 338 Women and Islam</td>
<td>3</td>
</tr>
<tr>
<td>AIS 340 Fundamentalism and Reform in Islam</td>
<td>3</td>
</tr>
<tr>
<td>AIS 345 Islamic Mysticism</td>
<td>3</td>
</tr>
<tr>
<td>AIS 410 Theology and Law in Islam</td>
<td></td>
</tr>
<tr>
<td>AIS 430 Islam in America</td>
<td></td>
</tr>
<tr>
<td>AIS 435 Topics in Islamic Studies (Subtitle required)</td>
<td></td>
</tr>
<tr>
<td>AIS 440 Introduction to the Qur’an</td>
<td></td>
</tr>
<tr>
<td>AIS 442 Arabic Reading I</td>
<td></td>
</tr>
<tr>
<td>AIS 443 Arabic Reading II</td>
<td></td>
</tr>
<tr>
<td>ANT 222 Middle East Cultures</td>
<td></td>
</tr>
<tr>
<td>ANT 331 Anthropology of North Africa</td>
<td></td>
</tr>
<tr>
<td>GEO 328 Geography of the Middle East and North Africa</td>
<td></td>
</tr>
<tr>
<td>HIS 549 History of the Middle East</td>
<td></td>
</tr>
<tr>
<td>HIS 550 Studies in Mid-East History and Politics (Subtitle required)</td>
<td></td>
</tr>
<tr>
<td>PS 410 Topics in Regional Politics (Subtitle required)</td>
<td></td>
</tr>
</tbody>
</table>

**Arabic Core hours:** 21

**College Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 301 Advanced Intermediate Chinese I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 302 Advanced Intermediate Chinese II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 331 Introduction to Chinese Culture, 1840 to Present</td>
<td>3</td>
</tr>
<tr>
<td>plus 12 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>CHI 320 Gender Politics in Chinese Literature</td>
<td>3</td>
</tr>
<tr>
<td>CHI 321 Introduction to Contemporary Chinese Film</td>
<td></td>
</tr>
<tr>
<td>CHI 322 Self and Society in Chinese Culture</td>
<td>3</td>
</tr>
<tr>
<td>CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840</td>
<td>3</td>
</tr>
<tr>
<td>CHI 345 Introduction to Early Chinese Thought</td>
<td>3</td>
</tr>
<tr>
<td>CHI 395 Independent Work in Chinese</td>
<td>1-3</td>
</tr>
<tr>
<td>CHI 401 Advanced Chinese I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 402 Advanced Chinese II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 430 Popular Culture in Modern China</td>
<td>3</td>
</tr>
<tr>
<td>CHI 450 Hermits, Immortals and Madmen</td>
<td>3</td>
</tr>
<tr>
<td>CHI 511 Literary Chinese</td>
<td>3</td>
</tr>
<tr>
<td>*A-H 310 Asian Art and Culture (Subtitle required)</td>
<td></td>
</tr>
<tr>
<td>*HIS 355 Topics in Non-Western History</td>
<td>3</td>
</tr>
</tbody>
</table>
Language Core Requirement: French

FR 204 Introduction to French and Francophone Studies 3
FR 214 France Today 3
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 3
(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 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 335 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&I 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 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/GEKO 334 Environment, Society and Economy of Japan 3
JPN 351 The Japanese Experience of the Twentieth Century 3
JPN 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
plus 9 hours from the following:
JPN 263 Studies in Japanese Culture (Subtitle required) 3
JPN 300 Japanese Conversation and Writing 3
JPN 301 Japanese Literature through Film 3
JPN 314 Linguistics and Society 3
JPN 410G Special Topics in Japanese Language (Subtitle required) 3
JPN 443G Survey of Japanese Literature I 3
HIS 502 A History of the Japanese Republic 3
HIS 503 A History of the Japanese Empire 3
HIS 509 Japanese Law 3
HIS 519 Japanese Art and Culture 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:
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
Russian Core hours: 21

Language Core Requirement: 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
Russian Core hours: 21
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

Graduation Composition and Communication Requirement (GCCR)

GWS 599 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 ..................................................... 6
   b. Social Science ..................................................... 6
   c. Humanities ........................................................ 3

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

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

College Requirement hours: ........................................... 22-36

Premajor Requirements

*GWS 200 Sex and Power .................................................. 3
*GWS 201 Gender and Popular Culture .................................. 3

Premajor hours: ......................................................... 6

Major Requirements

Core Courses

GWS 250 Social Movements .................................................. 3
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

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

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).

Courses used for the General Education requirements may also be used toward the major.

From Outside the Major Department

Select 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

*Course used towards completion of a UK Core Requirement.

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 .................................................... 3
or
GWS 201 Gender and Popular Culture .................................... 3

GWS 250 Social Movements .................................................. 3
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.

University of Kentucky

2019-2020 Undergraduate Bulletin

157
GEOGRAPHY

Geography analyzes and explains the location of 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/.

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

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: ....................................................... 18

Graduation Composition and Communication Requirement (GCCCR)
GEO 499 Senior Research Seminar ............................... 3

Graduation Composition and Communication Requirement hours (GCCCR) .......................... 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

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

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

College Requirement hours: ................................. 19-33

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 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.

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 451G 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 485G 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

GIS Focus

Suggested Courses:
GEO 109 Digital Mapping .......................................... 3
GEO 164 iWorlds: Global Information Geographies .......... 3
GEO 409 Advanced GIS ........................................... 3
GEO 509 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 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 442G Political Geography ..................................... 3
GEO 455 Globalization and the Changing World Economy .... 3
GEO 475 Health and Medical Care ................................. 3
GEO 490E 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

GEOGRAPHY TRACKS

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)
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 ........................................ 4

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 509 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
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.

University of Kentucky 2019-2020 Undergraduate Bulletin
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

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 or 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
plus:
GEO 172 Human Geography ............................................................... 3
GEO 221 Immigrant America: A Geographic Perspective ......................... 3
GEO 240 Geography and Gender ......................................................... 3
GEO 320-GEO 336 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

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 221 Immigrant America: A Geographic Perspective ......................... 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

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
GEO 235 Environmental Management and Policy ................................... 3
GEO 285 Introduction to Planning .......................................................... 3
GEO 309 Introduction to GIS ................................................................. 3
GEO 422 Urban Geography ................................................................. 3
GEO 455 Globalization and the Changing World Economy ...................... 3
GEO 485G Urban Planning and Sustainability ....................................... 3
GEO 550 Sustainable Resource Development and Environmental Management ................................................................. 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 Practicum 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.

Geography majors can also minor in Mapping and GIS, but no more than 6 credits can be used to cover both major and minor requirements.

HEALTH, SOCIETY, AND POPULATIONS

The undergraduate program in Health, Society, and Populations (HSP) focuses on understanding health outcomes and their unequal distribution as a product of multiple interacting influences, including health care, behaviors, environmental conditions, genetic and biological factors, and social and cultural characteristics of groups and individuals. The B.A. in HSP provides graduates with a broad liberal-arts education in addition to a concentration on social science based approaches to population health. Students may further specialize in three areas: Global Health, Health Ecologies, and Social Inequalities in Health and Illness. HSP students 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Intellectual Inquiry in Arts and Creativity</strong></td>
<td></td>
</tr>
<tr>
<td>Choose one course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>II. Intellectual Inquiry in the Humanities</strong></td>
<td></td>
</tr>
<tr>
<td>Choose one course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>III. Intellectual Inquiry in the Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>Recommended:</td>
<td></td>
</tr>
<tr>
<td>PSY 100 Introduction to Psychology</td>
<td>4</td>
</tr>
<tr>
<td><strong>IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>Choose one course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>V. Composition and Communication I</strong></td>
<td></td>
</tr>
<tr>
<td>CIS/WRD 110 Composition and Communication I</td>
<td>3</td>
</tr>
<tr>
<td><strong>VI. Composition and Communication II</strong></td>
<td></td>
</tr>
<tr>
<td>CIS/WRD 111 Composition and Communication II</td>
<td>3</td>
</tr>
<tr>
<td><strong>VII. Quantitative Foundations</strong></td>
<td></td>
</tr>
<tr>
<td>Recommended – one of the following:</td>
<td></td>
</tr>
<tr>
<td>MA 111 Introduction to Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MA 113 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MA 123 Elementary Calculus and Its Applications</td>
<td>4</td>
</tr>
<tr>
<td>MA 137 Calculus I with Life Science Applications</td>
<td>4</td>
</tr>
<tr>
<td><strong>VIII. Statistical Inferential Reasoning</strong></td>
<td></td>
</tr>
<tr>
<td>Choose one course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>IX. Community, Culture and Citizenship in the USA</strong></td>
<td></td>
</tr>
<tr>
<td>Choose one course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>X. Global Dynamics</strong></td>
<td></td>
</tr>
<tr>
<td>Choose one course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>UK Core hours:</strong></td>
<td><strong>30-32</strong></td>
</tr>
</tbody>
</table>

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

HSP 499 Health, Society, and Populations Capstone (Subtitle required) .................................................................................................................. 3

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

**College Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Foreign Language</strong></td>
<td></td>
</tr>
<tr>
<td>(placement test recommended)</td>
<td>6-14</td>
</tr>
<tr>
<td><strong>II. Disciplinary Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>a. Natural Science (may be satisfied by major requirements)</td>
<td>0-6</td>
</tr>
<tr>
<td>b. Social Science (may be satisfied by major requirements)</td>
<td>0-6</td>
</tr>
<tr>
<td>c. Humanities</td>
<td>6</td>
</tr>
<tr>
<td><strong>III. Laboratory or Field Work</strong></td>
<td></td>
</tr>
<tr>
<td>(PSY 100 recommended)</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>IV. Electives</strong></td>
<td></td>
</tr>
<tr>
<td>College Requirement hours:</td>
<td><strong>19-29</strong></td>
</tr>
</tbody>
</table>

**Major Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>V. Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>MA 137 Calculus I with Life Science Applications</td>
<td>4</td>
</tr>
<tr>
<td>MA 111 Introduction to Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MA 113 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MA 123 Elementary Calculus and Its Applications</td>
<td>4</td>
</tr>
<tr>
<td><strong>VII. Quantitative Foundations</strong></td>
<td></td>
</tr>
<tr>
<td>Recommended – one of the following:</td>
<td></td>
</tr>
<tr>
<td>MA 109 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MA 111 Introduction to Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MA 113 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MA 123 Elementary Calculus and Its Applications</td>
<td>4</td>
</tr>
<tr>
<td>MA 137 Calculus I with Life Science Applications</td>
<td>4</td>
</tr>
</tbody>
</table>

**Math**

Choose one of the following (3-4 hours):

- MA 109 College Algebra (3)
- MA 111 Introduction to Contemporary Mathematics (3)
- MA 113 Calculus I (4)
- MA 123 Elementary Calculus and Its Applications (4)
- MA 137 Calculus I with Life Science Applications (4)

**Writing**

(3 hours):

- WRD 205 Writing and Rhetoric (Subtitle required)
- 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 (4)
- ANA 110 Anatomy and Physiology for Nursing II (4)
- *ANA 209 Principles of Human Anatomy (3)
- *BIO 102 Human Ecology (3)
- *BIO 103 Basic Ideas of Biology (3)
- *BIO 148 Introductory Biology I (3)
- *BIO 206 Principles of Microbiology (3)
- *CHE 102 Introductory General Chemistry (3)
- *CHE 108 Introduction to Inorganic, Organic, and Biochemistry without Laboratory (3)
- *PGY 206 Elementary Physiology (3)

**Social Science Approaches to Health**

(9 hours): Required

- HSP/SOC 255 Medicine, Health, and Society (3)
- plus two of the following:
  - ANT 429 Survey of Medical Anthropology (3)
  - GEO 475 Health and Medical Care in Space and Time (3)
  - PSY 223 Developmental Psychology (3)
  - SOC 355 Sociology of Health and Illness (3)

**Topics in Society and Health**

(12 hours):

For a total of four additional courses, choose any remaining courses from the Social Science Approaches to Health category above, or from the following list. Students must choose courses from at least two different disciplines:

- *ANT 225 Culture, Environment and Global Issues (3)
- *ANT 251 Global Health Inequalities (3)
- *ANT 303 Topics in Anthropology of Food and Nutrition (Subtitle required) (3)
- *ANT 333 Contemporary Human Variation (3)
- *GEO 544 Human Population Dynamics (3)
- *GRN 250 Aging in Today’s World (3)
- *KHP 270 Introduction to Health Education and Promotion (3)
- *KHP 590 Advanced Health Concepts (3)
- **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 AAPPL (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 in his/her first 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 myUG. As with many other 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 course for her/his current skill level. Thus, after two years, the student will need to retake 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 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

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)

SPA 323 Introduction to Spanish Translation ................... 3

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

College Requirements

I. Foreign Language (completed by Premajor Requirement)

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

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

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

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 10 300+ level Spanish courses to include at least 4 courses at the 400+ level from any of the 3 available options and that fulfill the requirements for one of the three options listed below ................................................................. 30

From Outside the Major Department:

Choose 3 courses outside Spanish (SPA) with any of the following prefixes at the 200+ level that complement the major. Courses used to satisfy College requirements may also count here. Courses with prefixes not listed below must be approved by the Director of Undergraduate Studies .... 9

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
EDC – 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

Through Textual Analysis ................................. 3

**Specialty Option Courses**
Choose 18 credit hours from Language and Linguistics courses:
* These courses must have a focus on language or linguistics.

*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

**These courses must have a focus on literature or culture.**

**Total SPA hours: ................................................................. 30**

**Option B – Spanish Literature and Culture**

**Required Course**
SPA 310 Spanish Composition

Through Textual Analysis ........................................ 3

**Specialty Option Courses**
Choose 18 credit hours from Literature and Culture courses:
* These courses must have a focus on literature or culture.

**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

*These courses must have a focus on language or linguistics.**

**Total SPA hours: ................................................................. 30**

**Option C – Spanish (General)**

**Required Course**
SPA 310 Spanish Composition

Through Textual Analysis ........................................ 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

*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** 1-15

Total SPA hours: 30

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 .......... 3
SPA 401 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
SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .......... 3
SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) .......... 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
SPA 464 Contemporary 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

**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 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
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

Major 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 ................................................................. 24

From Outside the Major Department
Choose 15 hours outside History at the 300+ level, 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 ......................................................... 15

Other 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

*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 HIS 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

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 ........................................... 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 ................................................................. 24

From Outside the Major Department
Choose 15 hours outside History at the 300+ level, 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 ......................................................... 15

Other 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

*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. A 6-hour 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 1600
   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.
INTERNATIONAL STUDIES

International Studies is an interdisciplinary program that encourages students to explore global issues in disciplines such as anthropology, economics, history, political science, geography, foreign languages, English and the arts. Students will choose coursework focused around a central theme and geographical region. Cultural knowledge will be developed further through expanded foreign language study. The program culminates in a capstone senior project. Study abroad is highly encouraged, although not required, for the International Studies major.

A degree in International Studies will prepare students for careers in business, government, non-government organizations, philanthropic agencies, or the arts. The major also prepares students for graduate study in the humanities, social sciences, international affairs, law, public health and communications.

Bachelor of Arts with a major in INTERNATIONAL 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. A complete description of College requirements for a Bachelor of Arts degree can be found 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

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 480GO 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 I .......................... 3

ENG 242 Survey of British Literature II .......................... 3

ENG 274 Classics of Western Literature .......................... 3

ENG 342 Shakespeare .......................... 3

ENG 440GO Studies in British Literature (Subtitle required) .......................... 3

FR 141 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: .......................... 3
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 Germanic 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 I ............................... 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: 900-1900 .......... 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) ))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))}
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 295 East Asia to 1800 ................................................................................. 3
HIS 296 East Asia Since 1600 ............................................................................. 3
HIS 593 East Asian History Since World War II ................................................... 3
HIS 597 Westerners in East Asia, 1839 to the Present ........................................... 3
HIS 598 China in Revolution, 1895-1976 ............................................................... 3
^INT 350 Special Topics in International Studies (Subtitle required) ......................... 3
INT 399 Internship in International Studies .......................................................... 3
ITA 443G Survey of Italian Literature I .................................................................. 3
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 ............................... 3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present .......................... 3
JPN 351 The Japanese Experience of the Twentieth Century ................................. 3
JPN 400G Topics in Japan Studies (Subtitle required) ........................................... 3
JPN 405 Seminar in Japanese and Asian Studies (Subtitle required) ...................... 3
JPN 421G Contemporary Literary and Visual Arts of Japan ..................................... 3
JPN 430G Self and Other: The Politics of Culture in Japan-U.S. Relationship .......... 3
JPN 451G Social Movements in Modern Japan ..................................................... 3
JPN 461G Japanese Colonialism and Its Legacies ............................................... 3
PHI 343 Asian Philosophy .................................................................................. 3
PHI 504 Islamic and Jewish Philosophy and the Classical Tradition ....................... 3
^PS 410 Topics in Regional Politics (Subtitle required) ........................................ 3
^SOC 444 Topics in Political Sociology (Subtitle required) ................................... 3
*The subtitle for this course must directly relate to the East, South, and Southeast concentration. You must check with the IS director or advisor for verification prior to taking the course.

Europe

A-H 332 Medieval (Subtitle required) ................................................................. 3
A-H 334 Reframing 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 335 War, Literature, Film ............................................................................. 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 Holocaust ....................................................................................... 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.

University of Kentucky 2019-2020 Undergraduate Bulletin 168
Latin America

ANT 242 Origins of New World Civilization .......................... 3
ANT 320 Andean Civilization .................................................. 3
ANT 322 Ancient Mexican Civilizations ..................................... 3
ANT 324 Contemporary Latin American Cultures ....................... 3
ANT 328 The Ancient Maya .......................................................... 3
ENG 440G Studies in British Literature (Subtitle required) .......... 3
FR 204 Introduction to French and Francophone Studies ...... 3
FR 263 African and Caribbean Literature and Culture of French Expression in Translation (Subtitle required) .......... 3
HIS 206 History of Colonial Latin America, 1492-1810 ............. 3
HIS 207 History of Modern Latin America, 1810 to Present ...... 3
HIS 208 History of the Atlantic World ...................................... 3
HIS 561 Culture, Ideas, and Society in Latin America .............. 3
HIS 562 Modern Mexico ............................................................ 3
HIS 563 History of the Women in Latin America ...................... 3
HIS 564 History of Brazil .......................................................... 3
INT 350 Special Topics in International Studies (Subtitle required) .......... 3
INT 399 Internship in International Studies .......................... 3
LAS 201 Introduction to Latin America .................................. 3
PS 410 Topics in Regional Politics (Subtitle required) .......... 3
PS 426 Latin American Government and Politics ..................... 3
PS 538 Conflict and Cooperation in Latin American Relations .... 3
SOC 444 Topics in Political Sociology (Subtitle required) .......... 3
SPA 314 Civilization of Spanish America ................................. 3
SPA 315 Introduction to Hispanic Literature ................................ 3
SPA 322 Literature, Life and Thought of Spanish America .......... 3
SPA 361 Latin American Literature in Translation (Subtitle required) .......... 3
SPA 371 Latin American Cinema (Subtitle required) ................. 3
SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .......... 3
SPA 480 Hispanic Kentucky ........................................................ 3

Russia and Eurasia

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
ENG 440G Studies in British Literature (Subtitle required) .......... 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
INT 350 Special Topics in International Studies (Subtitle required) .......... 3
INT 399 Internship in International Studies .......................... 3
PS 410 Topics in Regional Politics (Subtitle required) .......... 3
PS 427G East European Politics .............................................. 3
PS 429G Government and Politics in Russia and the Post-Soviet States ................................................................. 3
RUS 261 Introduction to Russian Studies ............................... 3
RUS 275 Russian Film ............................................................... 3
RUS 370 Russian Folklore (in English) ................................. 3
RUS 371 The Russian Cultural Imagination: 900-1900 ................ 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

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.

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

VI. Composition and Communication II
   Choose one course from approved list ................................. 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
*Students must take WRD 430 for BLS students.

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

College Requirements

I. Foreign Language ........................................................... 6-19
II. Disciplinary Requirements
   a. Natural Science ........................................................... 6
   b. Social Science ........................................................... 6
   c. Humanities ............................................................... 6
   III. Electives ................................................................. 6

College Requirement hours: ........................................... 30-43

Major Requirements

Students must take 24 credit hours within ONE of the Major Areas: Humanities, Social Sciences, or Natural/Physical/Mathematical Sciences. At least 12 of these hours must be at the 300-level or above and another 6 hours must be at the 400-level or above. In addition, all BLS students must also take WRD 430 for BLS students, which serves as the senior capstone course. This will help students synthesize and evaluate their previous course work and lead to the production of a final project that will be required for graduation. Students will also submit their final portfolio to their WRD 430 instructor. Courses used to satisfy UK Core requirements cannot be used to satisfy major requirements.

Humanities

Select courses from the following prefixes: AIS, CHL, CLA, ENG, FR, GER, GWS, HIS, HJS, ITA, JPN, LAS, LIN, MCL, PHI, RUS, SPA, WRD.

Social Sciences

Select courses from the following prefixes: ANT, APP, ENS, GEO, HSP, IAS, PCE, PS, PSY, SOC, ST.

Natural/Physical/Mathematical Sciences

Select courses from the following prefixes: AST, BIO, CHE, EES, GLY, MA, PHY, STA.

Major Requirement hours: ........................................... 24
Guided Electives
Students must take at least 12 credit hours in ANY of the three Major Areas: Humanities, Social Sciences, or Natural/Physical/Mathematical Sciences. At least 3 of these must be at the 300-level or above. Courses used to satisfy UK Core requirements cannot be used to satisfy major requirements.

Guided Electives ........................................... 12

Free Electives
Students may take a total of 14-27 hours of free electives to bring the total number of hours to 120. Free electives may not be counted toward the UK Core or A&S requirements.

Free Electives .................................................. 14-27

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

Linguistics
The Department of Linguistics offers an interdisciplinary curriculum designed to develop an understanding of the nature and implications of human language. The Linguistics Department provides solid foundations in phonological and grammatical analysis, as well as opportunities to investigate the social, cultural, psychological, and physical aspects of language use.

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.

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
LIN 311 Language in U.S. Society ............................. 3

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

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

Graduation Composition and Communication Requirement (GCCR)
LIN 222 Introduction to Linguistics II:
Language in Context ............................................. 3

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

College Requirements
I. Foreign Language (completed by Premajor Requirements)
II. Disciplinary Requirements
   a. Natural Science ............................................... 6
   b. Social Science ............................................... 6
   c. Humanities (completed by Major Requirements)
III. Laboratory or Field Work .................................... 1

IV. Electives
Choose electives to lead to the minimum total of 120 hours required for graduation ............ 9

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

Bachelor of Science with a major in Linguistics

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 LIN 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 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 ANT or SOC 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
LIN 311 Language in U.S. Society ............................. 3

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

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

Graduation Composition and Communication Requirement (GCCR)
LIN 222 Introduction to Linguistics II:
Language in Context ............................................. 3

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

College Requirements
I. Foreign Language (completed by Premajor Requirements)
II. Disciplinary Requirements
   a. Natural Science ............................................... 3
   b. Social Science ............................................... 3
   c. Humanities (completed by Major Requirements)
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
Minor in Linguistics

The minor in Linguistics requires 18 hours of coursework 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 ......................................................................................................................... 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 area courses .............................................................................................................................................. 15

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, HIS, 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 ........................................ 15

Total Minimum Hours

Required for Degree ............................................ 120

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 Inference
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 (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 ....................................................... 8

or
MA 114 Calculus II .................................................... 8

or
MA 137 Calculus I with Life Science Applications ................. 8

or
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 ......................................... 3

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

Other Major 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.

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
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 .............................................. 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
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

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 ...

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

For the Mathematics Component
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 ...

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

*Course used towards completion of a UK Core Requirement.
College of Arts and Sciences

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: ............................................... 3

Graduation Composition and Communication Requirement (GCCR)
MA 391 Mathematics: Composition and Communication .............................................. 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

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
CS 215 Introduction to Program Design, Abstraction and Problem Solving ............... 4
MA 213 Calculus III ............................................... 4
MA 214 Calculus IV ................................................. 3
MA/CS 321 Introduction to Numerical Methods .................................................. 3
MA 322 Matrix Algebra and its Applications ..................................................... 3
STA 321 Basic Statistical Theory I .................................................. 3
plus a two-semester sequence chosen from the following:
MA/CS 340 Applicable Algebra
and
MA/CS 415G Combinatorics and Graph Theory

MA 432G Methods of Applied Mathematics I
and
MA 433G Introduction to Complex Variables

MA 481G Differential Equations
and
MA 483G Introduction to Partial Differential Equations

MA/CS 416G Introduction to Optimization
and
MA/STA 417G Decision Making Under Uncertainty ...

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) ................................................. 6

From Outside the Major Department
Nine hour supporting program chosen from one area outside mathematics. The Department 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 ............................ 9

Other Major hours: ...................................................... 15

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

*Course used towards completion of a UK Core Requirement.

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.

Option B – Mathematical Sciences

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
CS 215 Introduction to Program Design, Abstraction and Problem Solving ............... 4
MA 213 Calculus III ............................................... 4
MA 214 Calculus IV ................................................. 3
MA/CS 321 Introduction to Numerical Methods .................................................. 3
MA 322 Matrix Algebra and its Applications ..................................................... 3
STA 321 Basic Statistical Theory I .................................................. 3
plus a two-semester sequence chosen from the following:
MA/CS 340 Applicable Algebra
and
MA/CS 415G Combinatorics and Graph Theory

MA 432G Methods of Applied Mathematics I
and
MA 433G Introduction to Complex Variables

MA 481G Differential Equations
and
MA 483G Introduction to Partial Differential Equations

MA/CS 416G Introduction to Optimization
and
MA/STA 417G Decision Making Under Uncertainty ...

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) ................................................. 6

From Outside the Major Department
Nine hour supporting program chosen from one area outside mathematics. The Department 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 ............................ 9

Other Major hours: ...................................................... 15

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

*Course used towards completion of a UK Core Requirement.

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 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: ...................................................... 31

Graduation Composition and Communication Requirement (GCCR)
MA 391 Mathematics: Composition and Communication .............................................. 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 ............................................... 3
III. Laboratory or Field Work .......................................................... 1
IV. Electives ........................................................................ 6

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

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
CS 215 Introduction to Program Design, Abstraction and Problem Solving ............... 4
MA 213 Calculus III ............................................... 4
MA 214 Calculus IV ................................................. 3
MA/CS 321 Introduction to Numerical Methods .................................................. 3
MA 322 Matrix Algebra and its Applications ..................................................... 3
STA 321 Basic Statistical Theory I .................................................. 3
plus a two-semester sequence chosen from the following:
MA/CS 340 Applicable Algebra
and
MA/CS 415G Combinatorics and Graph Theory

MA 432G Methods of Applied Mathematics I
and
MA 433G Introduction to Complex Variables

MA 481G Differential Equations
and
MA 483G Introduction to Partial Differential Equations

MA/CS 416G Introduction to Optimization
and
MA/STA 417G Decision Making Under Uncertainty ...

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) ................................................. 6

From Outside the Major Department
Nine hour supporting program chosen from one area outside mathematics. The Department 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 ............................ 9

Other Major hours: ...................................................... 15

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

*Course used towards completion of a UK Core Requirement.

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.

Option B – Mathematical Sciences

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 ................................................ 4
MA 261 Introduction to Number Theory .................................................. 3
MA 322 Matrix Algebra and its Applications ..................................................... 3

Major Core hours: ...................................................... 10
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 471G/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, 471G, 472G.
May not include MA 322. ............................................. 18

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. .................. 14

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: ......................................................... 11

Major Requirements
CS 215 Introduction to Program Design, Abstraction and Problem Solving ........................................... 4
MA 213 Calculus III ............................................. 4
MA 214 Calculus IV ............................................. 4
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
plus a two-semester sequence chosen from the following:
MA/CS 340 Applicable Algebra
and
MA/CS 415G Combinatorics and Graph Theory
MA 432G Methods of Applied Mathematics I
and
MA 433G Introduction to Complex Variables
MA 481G Differential Equations
and
MA 483G Introduction to Partial Differential Equations
MA/CS 416G Introduction to Optimization
and
MA/STA 417G Decision Making Under Uncertainty ... 6

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) ......................... 6

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 ......................................................... 9

Other Major hours: .................................................. 15

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation ........................................ 0-9

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

*Course used towards completion of a UK Core Requirement.

Minor in Mathematics

The minor in Mathematics requires 21 hours of coursework to include:
1. MA 113/114 Calculus I and II and ................................ 8
   MA 213 Calculus III ............................................ 4
   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, 320, MA 321, MA 327, MA 330, MA 341,
   MA 351, 361, or any 400 level math course.

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.

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 .................. 3
   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 .......................................................... 3
   AIS 320 Modern Arabic Literature and Film in Translation ..... 3
   AIS 345 Islamic Mysticism ............................................................... 3
   CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 ......................................................... 3
   CHI 331 Introduction to Chinese Culture, 1840 to Present ................................................................. 3
   CLA 135 Greek and Roman Mythology .......................................................... 3
   CLA 191 Christianity, Culture, and Society: A Historical Introduction ........................................... 3
   CLA 229 The Ancient Near East and Greece to the Death of Alexander the Great ................................................. 3
   FR 103 French Cinema ................................................................. 3
   FR 205 The French Graphic Novel ................................................. 3
   FR 225 French Film Noir ........................................................................ 3
   GER 103 Fairy Tales in European Context ......................................................... 3
   GER 305 German Film Today ................................................................. 3
   ITA 263 Studies in Italian Culture (Subtitle required) ......................................................... 3
   JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ......................................................... 3
   JPN 322 Introduction to Japanese Culture, Meiji (1868) to Present ......................................................... 3
   MCL 343 Global Horror ........................................................................ 3
   MCL 200 Global Literacy ........................................................................ 3
   MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards ................................................. 3
   RUS 275 Russian Film ........................................................................ 3
   RUS 371 The Russian Cultural Imagination: 900-1900 ......................................................... 3
   RUS 372 Experiments in Life and Art: Russian Culture 1900-Present or any area course ................................................................. 3

III. Intellectual Inquiry in the Social Sciences
   CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 ......................................................... 3
   CHI 331 Introduction to Chinese Culture, 1840 to Present ................................................................. 3
   CLA 135 Greek and Roman Mythology .......................................................... 3
   CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840 ......................................................... 3
   CHI 331 Introduction to Chinese Culture, 1840 to Present ................................................................. 3
   MCL 200 Global Literacy ........................................................................ 3
   MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards ................................................. 3
   RUS 275 Russian Film ........................................................................ 3
   RUS 371 The Russian Cultural Imagination: 900-1900 ......................................................... 3
   RUS 372 Experiments in Life and Art: Russian Culture 1900-Present 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 ................................................................. 3
   MCL 355 Democracy – Ancient and American 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
   ITA 355 Topics in Italian Cinema (Subtitle required) ......................................................... 3
   JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868 ......................................................... 3
   JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ......................................................... 3
   JPN 351 The Japanese Experience of the Twentieth Century ......................................................... 3
   MCL 324 The City in the Twentieth Century: Tokyo, Shanghai, Paris ......................................................... 3
   MCL 343 Global Horror ........................................................................ 3
   MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards ................................................. 3

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. 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, HJS, 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 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 ........................................................................ 3
   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 ........................................................................ 3
   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

College of Arts and Sciences
Track Electives

In addition, the student must complete 12 hours in courses appropriate to the study of Classics at the 200 level or above 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)
- AHS 228 Islamic Civilization
- ANT 240 Introduction to Archaeology
- ENG 271 The Bible as Literature
- HIS 330 A History of Western Religious Thought (I)
- HIS 370 Early Middle Ages
- HIS 500 Preclassical and Classical Greece
- HIS 501 Fourth-Century Greece and the Hellenistic World
- HIS 502 A History of the Roman Republic
- HIS 503 A History of the Roman Empire
- HIS 504 Greek and Roman Medicine
- HIS 546 The Byzantine Empire
- HIS 324 Jewish Thought and Culture I: From Ancient Israel to the Middle Ages
- MCL 270 Introduction to Folklore and Mythology
- MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards
- PHIL 260 History of Philosophy I: From Greek Beginnings to the Middle Ages
- PHIL 503 Topics in Ancient Philosophy

Total Elective hours: 12
Major Requirement hours: 42

MCL / Modern and Classical Studies

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
- JPN/ANT 321 Introduction to Japanese Culture, Pre-Modern to 1868
- JPN/ANT 322 Introduction to Japanese Culture, Meiji (1868) to Present
- JPN 301 Advanced Japanese I
- JPN 302 Advanced Japanese II

Total Elective hours: 12
Major Requirement hours: 42

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
CHI 331 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 333 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
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

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 MCLLL in an area other than the student’s field of concentration (AIS, CHI, CLA, FR, GER, HJS, 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

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 / 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: .............................. 42

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 310 Asian Art and Culture (Subtitle required) ........................................... 3
ANT 240 Introduction to Archaeology ......................... 3
CHI 302 Advanced Intermediate Chinese II ............... 3
ENG 271 The Bible as Literature ........................................... 3
GER, HJS, ITA, JPN, RUS). This requirement can also be fulfilled by MCL 135, 190, 270, 310, 311, 324, 343, 360, and 390 ........................................... 3

Track Requirement 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

PHI 343 Asian Philosophy ........................................... 3
PR 419 The Governments and Politics of Eastern Asia .... 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

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 310 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
PR 419 The Governments and Politics of Eastern Asia .... 3

If topic is appropriate.

Total Elective hours: .............................. 18

Major Requirement hours: .............................. 42
MCL / Japan Studies

Track Requirements
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868
JPN/ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present
JPN 351 The Japanese Experience of the Twentieth Century
or
JPN 357 Japan at War, 1850 to the Present
JPN 301 Advanced Japanese I
JPN 302 Advanced Japanese II

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
JPN 283 Japanese Film
MCL 324 The City in the Twentieth Century: Tokyo, Shanghai, Paris
A-H 310 Asian Art and Culture (Subtitle required)
A-H 311 The Arts as Soft Power: The Japanese Tea Ceremony
A-H 311 The Arts as Soft Power: The Japanese Tea Ceremony
HIS 295 East Asia to 1800
HIS 296 East Asia Since 1600
HIS 357 Japan at War, 1850 to the Present
GEO/JPN 334 Environment, Society and Economy of Japan
GEO/JPN 491G Japanese Landscapes
GEO/JPN 551 Japanese Multinational Corporations

Total Elective hours: ................................. 18
Major Requirement hours: ................................. 42

MCL / Russian Studies

Track Requirements
RUS 301 Conversation and Composition I
RUS 302 Advanced Intermediate Russian II
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present

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
RUS 275 Russian Film
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
ANT 432 Anthropology of Eastern Europe and Russia
HIS 385 History of Russia to 1825
HIS 386 History of Russia Since 1825
HIS 534 Russia in the 19th Century
HIS 535 Russia in the 20th Century

Total Elective hours: ................................. 18
Major Requirement hours: ................................. 42
Total Minimum Hours Required for Degree: ................................. 120

MCL / French and Francophone Studies

Track Requirements
FR 204 Introduction to French and Francophone Studies
FR 214 France Today
FR 215 Visual Cultures
FR 410 French in Performance
FR 425 Media Studies
FR 470G Topical Seminar I (Subtitle required)
FR 471G Topical Seminar II (Subtitle required)

Track Requirement hours: ................................. 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

Total Elective hours: ................................. 15
Major Requirement hours: ................................. 42

MCL / German Studies

Track Requirements
GER 305 Intermediate German Composition and Conversation I
GER 308 Intermediate German Composition and Conversation II
GER 311 Introduction to German Literature: Themes (Subtitle required)
GER 312 German Popular Forms (Subtitle required)

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
GER 206 Spoken Communication
MCL 343 Global Horror
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

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
MCL 200 Global Literacy
MCL 375 Language Study Abroad
MCL 376 Cultural Studies Abroad
MCL 591 Language Practicum (Subtitle required)
MCL 592 Research Practicum (Subtitle required)
MCL 593 Internship
MCL 595 Topics in Folklore and Myth (Subtitle required)
MCL 596 Topics in Culture (Subtitle required)
MCL 597 Topics in Comparative Literary Studies (Subtitle required)

MCL / Arabic and Islamic Studies

Core Requirements
Arabic language course at the 300 level
AIS 228 Islamic Civilization
AIS 330 Islamic Civilization II

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+
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: 1952 to the Present
HIS 550 Studies in Mid-East History and Politics (Subtitle required)
PS 410 Topics in Regional Politics (Subtitle required)

Total Elective hours: ................................. 9

MCL / Chinese Studies

Core Requirements
Students must complete 6 hours from among the following courses:
CHI 301 Advanced Intermediate Chinese I
CHI 302 Advanced Intermediate Chinese II
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 331 Introduction to Chinese Culture, 1840 to Present

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
- HIS 355 Topics in Non-Western History Since 1789
- HIS 597 Westerners in East Asia
- 1839 to the Present

Total Elective hours: 12

*Approved for the minor when the topic of the course is appropriate 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

CLA 135 Greek and Roman Mythology
CLA 100 Ancient Stories in Modern Films
GER 103 Fairy Tales in European Context

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
- CLA 382 Greek and Roman Religion
- FR 263 African and Caribbean Literature
- and Culture of French Expression in Translation

Core Requirements

- GER 307 Intermediate German Composition
- and Conversation I
- GER 308 Intermediate German Composition
- and Conversation II

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)

Total Elective hours: 12

MCL / French and Francophone Studies

Core Requirements

- FR 204 Introduction to French
- and Francophone Studies

FR 214 France Today
FR 215 Visual Cultures

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+
- MCL 343 Global Horror
- GER 206 Spoken Communication

Total Elective hours: 12

MCL / German Studies

Core Requirements

- GER 307 Intermediate German Composition
- and Conversation I
- GER 308 Intermediate German Composition
- and Conversation II

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+
- MCL 343 Global Horror
- GER 206 Spoken Communication

Total Elective hours: 12

MCL / Italian Studies

Core Requirements

- ITA 300 Italian Conversation and Writing
- ITA 301 Italy from Fascism to the Present

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+
- A-H 105 World Art Before 1400
- A-H 106 Renaissance to Modern Art

Total Elective hours: 12

Total Hours Required: 18

University of Kentucky
2019-2020 Undergraduate Bulletin

College of Arts and Sciences
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

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 137 Calculus I with Life Science Applications or MA 113 Calculus I ............................................... 4

VIII. Statistical Inferential Reasoning

STA 296 Statistical Methods and Motivations ................. 3

or

PSY 215 Experimental Psychology and

PSY 216 Applications of Statistics in Psychology ........... 8

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 204 Technical Writing ........................................... 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) 

b. Social Science .......................................................... 3
c. Humanities ................................................................... 3

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

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

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 Chemistry I ......................................... 3

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

CHE 107 General College Chemistry I ............................. 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., ANA 394, BIO 394, 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

BIO 446 Neurophysiology Laboratory .................................. 3

*BIO 535 Comparative Neurobiology and Behavior .................................................. 3

CHE 556 Elements of Neurochemistry ............................. 3

PSY 459 Neuropharmacology: Drugs and Behavior .......... 3

PGY 431 Introduction to Neuroendocrinology .................. 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 ....................................... 4

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 231 General University Physics and

PHY 241 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
AN 410G Neurobiology of Brain and Spinal Cord Disorders ................. 3
AN 417G Functional Human Neuroanatomy ........................................ 3
AN 442 Molecular and Cellular Neurobiology ...................................... 3
AN 605 Neurobiology of CNS Injury and Repair ................................... 3
AN 625 Introduction to Functional MRI ................................................. 1
ANA 780 Special Topics in Neurobiology ........................................... 1-3

**Biology**

*BIO 394 Research in Neuroscience .............................................. 1-3
BIO 446 Neurophysiology Laboratory .............................................. 3
BIO 507 Biology of Sleep and Circadian Rhythms ............................. 3
BIO 535 Comparative Neurobiology and Behavior .............................. 3
BIO 638 Developmental Neurobiology ............................................. 3
BIO 650 Animal Physiology Laboratory ............................................. 3

**Chemistry**

CHE 556 Elements of Neurochemistry.............................................. 3

**Cognitive Science**

CGS 500 Cognitive Science in Theory and Practice ............................ 3

**Communication Sciences and Disorders**

CSD 571 Neural Bases of Speech, Language, and Hearing ................... 4

**Psychology**

*PSY 393 Research in Neuroscience .............................................. 1-3
PSY 459 Neuropharmacology: Drugs and Behavior .............................. 3

Other neuroscience-related courses at the 200-level or above, as approved by DUS in Biology

Total Hours: ......................................................... 18
*No more than six hours from research courses may apply to the 12 hours of electives.

---

**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.

---

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

Suggested:

PHI 315 Philosophy and Science Fiction ...................................... 3

**II. Intellectual Inquiry in the Humanities**

Suggested — one of the following:

PHI 100 Introduction to Philosophy: Knowledge and Reality

PHI 260 History of Philosophy I: From Greek Beginnings to the Middle Ages

PHI 270 History of Philosophy II: From the Renaissance to the Present Era

PHI 310 Philosophy of Human Nature

PHI 317 Existentialist Thought and Literature

PHI 380 Death, Dying and the Quality of Life ................................... 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**

Suggested:

PHI 120 The Art of Thinking: An Introduction to Logic ....................... 3

**VIII. Statistical Inferential Reasoning**

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

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

Suggested — one of the following:

PHI 130 Introduction to Philosophy: Morality and Society

PHI 205 Food Ethics

PHI 335 The Individual and Society

PHI 340 Introduction to Feminism and Philosophy

PHI 361 Biology and Society (Subtitle required) ................................ 3

**X. Global Dynamics**

Suggested:

PHI 343 Asian Philosophy ......................................................... 3

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

---

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

PHI 350 Metaphysics and Epistemology ........................................ 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) .......................... 6

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

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

**College Requirement hours: ....................................................... 19-33**

---

**Premajor Requirements**

PHI 260 History of Philosophy I: From Greek Beginnings to the Middle Ages ........................................... 3

PHI 270 History of Philosophy II: From the Renaissance to the Present Era ........................................... 3

Premajor hours: ................................................................. 6

---

**Major Requirements**

**Major Core Requirements**

PHI 320 Symbolic Logic I ............................................................... 3

PHI 330 Ethics or

PHI 335 The Individual and Society ................................................ 3

PHI 350 Metaphysics and Epistemology ........................................ 3

**Major Core hours: ..................................................................... 9**

---

**Other Course Work Required for the Major**

From the Major Department:

Choose 15 hours of PHI 500+ level courses with at least one course from each group below ........................................... 15

Group A: PHI 503, 504, 506, 509, 513, 514, 515, 516, 517

Group B: PHI 519, 530, 531, 535, 537, 540, 545, 592

Group C: PHI 520, 550, 560, 561, 562, 565, 570, 575

Choose 3 hours from any of the group courses listed above or the following:

PHI 300, 305, 310, 317, 330, 332, 334, 335, 336, 337, 340, 343, 361, 380, 395, 500 ................................ 3

From Outside the Major Department

Choose 18 hours at the 200+ level; up to 4 hours may come from Philosophy courses ........................................... 18

Other Major hours: ................................................................. 36

---

**Electives**

Choose electives to lead to the minimum total of 120 hours required for graduation ........................................... 9

**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://pas.uky.edu/

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

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 Requirements) 
   b. Social Science ......................................................... 6
   c. Humanities ............................................................ 6

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

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

Premajor Requirements

*PHY 231/233/241/242 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
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: ................................................. 13-16

Total Minimum Hours
   Required for Degree .................................................. 121

*Course used towards completion of a UK Core Requirement.

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

First Semester Hours
   MA 113 Calculus I ....................................................... 4
   CIS-WRD 110 Composition and Communication I ............ 3
   UK Core ................................................................. 3
   UK Core ............................................................... 3

Second Semester
   MA 114 Calculus II .................................................... 4
   PHY 231 General University Physics .............................. 4
   PHY 241 General University Physics Laboratory .......... 1
   UK Core ............................................................... 3
   UK Core ............................................................... 3

Sophomore Year

First Semester
   MA 213 Calculus III .................................................... 4
   PHY 232 General University Physics .............................. 4
   PHY 242 General University Physics Laboratory .......... 1
   Foreign Language ....................................................... 4
   *CS 115 Introduction to Computer Programming or Major Related Electives .............................................. 3

Second Semester
   MA 214 Calculus IV .................................................... 3
   Major Related Electives .............................................. 3
   PHY 306 Theoretical Methods of Physics ........................ 3
   PHY 228 Optics, Relativity and Thermal Physics ............ 3
   Foreign Language ....................................................... 4
   Electives ................................................................. 3

Junior Year

First Semester
   CHE 105 General College Chemistry I ............................. 4
   PHY 335 Data Analysis for Physicists ............................ 2
   Foreign Language ....................................................... 3
   *MA 322 Matrix Algebra and Its Applications or Major Related Electives .............................................. 3
   PHI 300 ................................................................. 3
   Electives ................................................................. 3

Second Semester
   CHE 107 General College Chemistry II .......................... 3
   PHY 361 Principles of Modern Physics ............................ 3
   Foreign Language ....................................................... 3
   **Social Sciences 300+ .................................................. 3
   Major Related Electives .............................................. 3

Senior Year

First Semester
   PHY 3XX ................................................................. 3
   PHY 4XX ................................................................. 3
   **Social Sciences 300+ .................................................. 3
   Major Related Electives .............................................. 3
   Electives ................................................................. 3

Second Semester
   PHY 435 Intermediate Physics Laboratory .................... 3
   PHY 4XX (suggested) .................................................. 3
   PHY 5XX (suggested) .................................................. 3
   Electives ................................................................. 5
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 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 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 (completed by Premajor Requirement) ............... 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

Pre-major Requirements

*PHY 231/232/241/242 General University Physics and Laboratory ........................................... 10
or with permission of the Director of Undergraduate Studies:

*PHY 211/215 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 I ............................ 3
PHY 521 Introduction to Quantum Mechanics II ............................ 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:

AST/PHY 395 Independent Work in Astronomy/Physics ................. 3
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

College of Arts and Sciences

*Course used towards completion of a UK Core Requirement.

Suggested Curriculum for B.S. in Physics

(NoTE: 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 Hours
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
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 Hours
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
MA 214 Calculus IV ................................................................. 3
PHY 306 Theoretical Methods of Physics ...................................... 3
PHY 361 Principles of Modern Physics ........................................... 4
Foreign Language ....................................................................... 3
UK Core ...................................................................................... 3

Junior Year

First Semester Hours
PHY 404G Mechanics ............................................................... 3
PHY 416G Electricity and Magnetism ............................................ 3
UK Core ...................................................................................... 3
Foreign Language ....................................................................... 3
*MA 322 Matrix Algebra and Its Applications
or Major Related Electives ....................................................... 3

Second Semester
PHY 417G Electricity and Magnetism ............................................ 3
Foreign Language ....................................................................... 3
UK Core ...................................................................................... 3
Major Related Electives .............................................................. 3
Elective ....................................................................................... 3

Senior Year

First Semester Hours
PHY 402G Electronic Instrumentation and Measurements ............ 3
PHY 520 Introduction to Quantum Mechanics I ............................ 3
PHY 522 Thermodynamics and Statistical Physics ...................... 3
PHY 300+ course ....................................................................... 3
Elective ....................................................................................... 3

Second Semester
PHY 521 Introduction to Quantum Mechanics II .......................... 3
PHY 535 Advanced Physics Laboratory ........................................ 3
Social Sciences 300+ .................................................................. 3
Elective ....................................................................................... 4

*A total of 14 credit hours in math, computer science, chemistry, engineering or other areas related to physics but outside the department must be completed to satisfy the college requirement. One-hundred-level freshman courses may not be counted for the Major Requirements except for CS 115 which may be counted.

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
related fields – Political Science courses at UK for pursuing graduate work in political science and determined by their interests and/or career goals. Advanced studies in one or more of the fields as work in each of these four areas, then pursue concepts, and analytical methods that shape how diplomatic, military, and economic outcomes within political systems outside the United States, usually explorations, policies, and mass behaviors observed in political system, including the high-demand sub-enforcement, 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 coursework fulfills other degree requirements.

Astronomy Concentration

For students with an interest in astronomy, the Department offers the B.S. degree in physics with a concentration in astronomy. Among the Major Requirements, AST/PHY 591 Astrophysics I – Stars and AST/PHY 592, Astrophysics II – Galaxies and Interstellar Material are strongly recommended as courses within the area of concentration. AST 395, Independent Work in Astronomy, may be substituted for one of the laboratory courses of Requirement Three, subject to the work being done in astronomy and astrophysics. Students are encouraged, though not required, to enroll in AST 191, The Solar System, and AST 192, Stars, Galaxies and the Universe.

POLITICAL SCIENCE

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 coursework 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) .............. 6

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
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, HJS, JPN, MCL, and RUS.

Major/Core hours: ............................................. 39

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.

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 Comparative Politics

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 .................. 3

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

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

III. Laboratory or Field Work (completed by PS 372) .................. 6

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

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 at least 15 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, HJS, JPN, MCL, and RUS.

Major/Core hours: ............................................. 39

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.

Minor in Political Science
The minor in Political Science requires a pre-requisite 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 Comparative Politics

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
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 (partially completed by PSY 312; and to complete this requirement, consider PSY 456 as the Advanced Lecture/Lab or PSY 365 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, 4393, 394, 395, 390, 4549, 558

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, 4393, 394, 395, 390, 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.

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

*Course used toward completion of the College Natural Science requirement.

Bachelor of Science with a major in
PSYCHOLOGY

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 .................................................. 3
or
PSY 312 Brain and Behavior .................................................. 3
PSY 313 Personality and Individual Differences .................................................. 3
PSY 314 Social Psychology and Cultural Processes .................................................. 3

Major Core hours: .................................................. 116

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

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 PST 312) .................................................. 3
b. Social Science (completed by Premajor Requirement) .................................................. 3
c. Humanities .............................................................. 3
III. Laboratory or Field Work (completed by Premajor Requirement) .................................................. 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, 4393, 394, 395, 390, 4549, 558

University of Kentucky
2019-2020 Undergraduate Bulletin
186
From Outside the Major Department
Choose 14 hours outside Psychology at the 300+ level. 200+ level courses used to satisfy College requirements can also be counted here .......................................................... 14

Other Major hours: ............................................. 26

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation.................................................. 5

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.

+Course used towards completion of the College 60-hour requirement.

++Course used toward completion of the College Natural Science requirement.

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

SOCIOLGY
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) ............... 6
IV. Electives .................................................. 6

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

Premajor Requirements
Any two sociology courses at the 100 or 200 level (including CLD 102) .................................. 6

Premajor hours: .................................................. 6

Major Core Requirements
SOC 302 Sociological Research Methods ......................... 3
SOC 303 Quantitative Sociological Analysis ......................... 3
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 ........................................... 5

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

*Course used towards completion of a UK Core Requirement.

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

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

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

Premajor Requirements
Any two sociology courses at the 100 or 200 level (including CLD 102) .................................. 6

Premajor hours: .................................................. 6

Major Core Requirements
SOC 302 Sociological Research Methods ......................... 3
SOC 303 Quantitative Sociological Analysis ......................... 3
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 ........................................... 5

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

*Course used towards completion of a UK Core Requirement.
Major 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

**Premajor 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) ......................... 3
- or
- SOC 304 and SOC 305 ........................................... 3
- or
- SOC 302 and SOC 304............................................. 3

**Total Hours** ......................................................... 15-17

---

**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.

Research is being actively pursued in statistical theory and methods, both parametric and nonparametric, 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.

---

**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 the breadth of knowledge indicative of a 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.

---

**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
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 the 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 ............................................ 3
ECO 202 Principles of Economics ............................................ 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 Urban 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 1786 .............. 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 in the U.S. Since 1930 ...... 3
APP 300 Topics in Appalachian Studies (Subtitle required) ...... 3
APP 399 Practicum ............................................................. 3

WRD 222 Current Events and Public Engagement: U.S. Citizens, Global Citizens ......................................................... 3

American Communities & Identities
AAS 200 Introduction to African-American Studies .................. 3
AAS 420 African-American Religious Experience .................... 3
ANT 341 Appalachian English .............................................. 3
APP 200 Introduction to Appalachian Studies ....................... 3
AAS 168/ENG 168 All That Speak of Jazz: An Intellectual Inquiry Into Jazz and Democracy ......................................... 3
ENG 425 Environmental Writing .......................................... 3
GEO 221 Immigrant America: A Geographic Perspective .......... 3
GEO 285 Introduction to Planning ......................................... 3
GEO 321 Land, People, and Development in Appalachia .......... 3
GEO 322 Geography of Kentucky ......................................... 3
GEO 485G Urban Planning and Sustainability ....................... 3
GWS 360 LGBTQ History in the United States ....................... 3
AAS 360/HIS 360 Race and Sports in America ....................... 3
HIS 579 History of the New South ........................................ 3
HIS 580 History of Appalachia ............................................. 3
PS 456G Appalachian Politics ............................................. 3
PS 461G Civil Liberties ....................................................... 3
PS 470G American Political Parties ..................................... 3
PS 471/AAS 471 Race, Ethnicity and Politics ......................... 3
PS 479 Women and Politics ............................................... 3
AAS 235/SOC 235 Inequalities in Society ................................ 3
SOC 446 Mass Incarceration ............................................... 3
ANT 534/SOC 534 Sociology of Appalachia ......................... 3
HIS 360/AAS 360 Race and Sports in America ....................... 3
HIS 312 The Making of Modern Kentucky ............................ 3
HIS 240 History of Kentucky ............................................. 3
HIS 404 U.S. Women’s History to 1900 ............................... 3
HIS 405 U.S. Women’s History Since 1900 ......................... 3
HIS 578 History of the Old South ........................................ 3
APP 200 Introduction to Appalachian Studies ....................... 3
SPA 208 U.S. Latino Culture and Politics .............................. 3
SPJ 302 Spanish for Business Professionals .......................... 3

Literary Arts
ENG 260 Introduction to Black Writers ................................... 3
ENG 265 Survey of African-American Literature ..................... 3
ENG 266 Survey of African-American Literature ..................... 3
ENG 352 American Literature and Cultures to 1900 ............... 3
ENG 353 American Literature and Cultures Post-1900 ............ 3
ENG 355 American Poetic Traditions .................................... 3
ENG 357 Contemporary American Literature ....................... 3
ENG 368 Contemporary African-American Voices .................. 3
ENG 450G Studies in American Literature (Subtitle required) .... 3
ENG 460G Studies in African-American Literature (Subtitle required) ................................................................. 3
ENG 168/AAS 168 All That Speak of Jazz: An Intellectual Inquiry Into Jazz and Democracy ......................................... 3
AAS 264 Introduction to Black Writers ................................... 3

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 nonprofit 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 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 Arts and Creativity**

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

**V. Composition and Communication I**

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

**VI. Composition and Communication II**

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

Three hours of WRD courses at the 200-level or above ........................................... 3

Twelve hours of WRD courses at the 300-level (excluding WRD 300) ......................... 12

Twelve hours of WRD courses at the 400-500 level (excluding WRD 430) .................... 12

From Outside 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 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 Arts and Creativity**

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

---

**College Requirements**

**Core Courses**

Graduation Composition and Communication Requirement (GCCR)

WRD 430 Advanced Workshop (Subtitle required) .................................................. 3

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

**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

---

University of Kentucky

2019-2020 Undergraduate Bulletin

190
Electives
Free Electives ......................................................... 6
Elective hours: ....................................................... 6
Total Minimum Hours Required for Degree ................. 120

Minor in Writing, Rhetoric, and Digital Studies

The minor in Writing, Rhetoric, and Digital Studies requires 18 hours as follows:

Prerequisite
Complete the Composition and Communication Core requirement: either WRD/CIS 110 and WRD/CIS 111; or WRD/CIS 112.

Minor Requirements
WRD 300 Introduction to Writing, Rhetoric, and Digital Studies ......................................................... 3
plus 15 hours of additional WRD courses, 9 of which must be at the 300 and 400 level ......................... 15

Minor in Professional and Technical Writing

The minor in Professional and Technical Writing requires 18 hours of course work to include:

Minor Prerequisites
Students must fulfill the Composition and Communication Core requirement: WRD/CIS 110 Composition and Communication I ......................................................... 3
WRD/CIS 111 Composition and Communication II ........................................................................ 3
or WRD/CIS 112 Accelerated Composition and Communication II (WRD) ........................................ 3

Minor Requirements
WRD 204 Technical Writing ............................................. 3
WRD 300 Introduction to Writing, Rhetoric, and Digital Studies ......................................................... 3
WRD 306 Introduction to Professions in Writing .................................................................................. 3
WRD 406 Topics in Professional Writing (Subtopic required) .............................................................. 3

Minor Electives
Choose 6 hours from the following:
WRD 203 Business Writing ............................................. 3
WRD 208 Multimedia Writing ........................................... 3
WRD 225 Craft Writing ..................................................... 3
WRD 301 Style for Writers .............................................. 3
WRD 304 Writing in the Social Sciences ......................... 3
WRD 305 Writing Public Science ....................................... 3
WRD 310 Writing in the Natural Sciences ......................... 3
WRD 322 Rhetoric and Argument .................................... 3
WRD 405 Editing English Prose ....................................... 3
WRD 408 Digital Composing ........................................... 3

INTERDISCIPLINARY MINORS

African American and Africana Studies

The minor in African American and Africana Studies provides students with an opportunity to examine the contributions of established academic disciplines towards the understanding of African peoples, particularly those peoples in the New World. It also provides a framework for research and analysis of issues which focus on African American experiences in artistic, literary, historical, and sociopolitical environments. The minor requires 21 hours of study as follows:

1. AAS 200 Introduction to African-American and Africana Studies
2. AAS 400 Special Topics in African-American and Africana Studies
3. AAS 401 Independent Reading and Research in African-American and Africana Studies
4. a. At least 6 hours of course work in the humanities (as approved by the African American and Africana Studies Committee). Among these are:
   AAS/ENG 264 Introduction to Black Writers
   AAS/FR 263 African and Caribbean Literature and Culture of French Expression (Subtopic required) FR 504 Topics in French Literature and Culture (if appropriate)
   AAS/HIS 254 History of Colonial and Post-Colonial Africa
   AAS/HIS 260 African American History to 1865
   AAS/HIS 261 African American History 1865-Present AAS/HIS 360 Race and Sports in America
   HIS 585 The Age of Jim Crow, 1880-1930
   AAS/MUS 300 History of Jazz
   b. At least 6 hours in the social sciences (as approved by the African American and Africana Studies Committee). Among these are:
   AAS/ANT 325 Contemporary African Lives
   AAS/EUD 550 Education in a Culturally Diverse Society
   AAS/GEO 336 Geography of Sub-Saharan Africa
   PS 417G Survey of Sub-Saharan Politics
   PS 461G Civil Liberties
   AAS/Ps 471 Race, Ethnicity and Politics
   AAS/SOC 235 Inequalities in Society
   AAS/SOC 432 Race and Ethnic Relations
   AAS/SOC 433 Topics in Social Inequalities (Subtopic required)

NOTE: Courses in English and history are strongly recommended.

For further information, email aaas@uky.edu; 112 Breckinridge Hall 10056, 859-257-2284.  https://aaas.as.uky.edu/

American Studies

American studies draws together diverse disciplines to examine the historical and contemporary forms and issues of our national life. The program in American Studies takes as its field of study any peoples, cultural expressions and social institutions, however or whenever identified as “American.” Program curricula link faculty, courses, and students across a range of humanities, arts, and social science departments.

The minor centers on two interdisciplinary seminars on selected topics in American studies. 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 460, HIS 461, HIS 463, HIS 464, HIS 465, HIS 466, HIS 467, HIS 572, HIS 573, HIS 574, HIS 575, HIS 576, HIS 577, HIS 578, HIS 579, 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 (Subtopic required)
   APP 395 Independent Study
   APP 399 Practicum
   GEO 365 Special Topics in Regional Geography (Subtopic 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.as.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:
ANT 327 Culture and Societies of India and South Asia ........................................... 3
GEO 330 Geography of the Indian Subcontinent ..................................................... 3
GEO 365 Special Topics in Regional Geography (Subtitle required) ....................... 3
GEO 565 Topics in Geography ................................................................................... 3
*GWS 302 Gender Across the World (Subtitle required) ..................................... 3
LIN 395 Independent Work ...................................................................................... 3
MA 330 History of Mathematics ............................................................................. 3
*MUS 330 Music in the World (Subtitle required) ................................................ 3
PHI 343 Asian Philosophy ....................................................................................... 3
PS 420G Governments and Politics of South Asia ................................................... 3
SOC 380 Globalization: A Cross-Cultural Perspective ............................................. 3

Fernheimer, of course work as follows:

http://lacls.as.uky.edu/jewish-studies

Students in the Indian Culture minor program will be encouraged to participate in a study program in India in the course of their undergraduate education. For more information, contact: Professor Srimati Basu, 214 Breckinridge Hall, 859-257-4372; srimati.basu@uky.edu or Professor Mark P. Whitaker, 214 Lafferty Hall, 859-257-2611; mark.whitaker@uky.edu

Jewish Studies

The interdisciplinary minor in Jewish Studies provides students with the opportunity to become acquainted with the culture, language, literature, religion, history, and philosophy of the Jewish people from antiquity to the present. For more information, visit:
mcl.as.uky.edu/jewish-studies

The minor in Jewish Studies requires 18 hours of course work as follows:

1. Required Courses
   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

2. Elective Courses
   HJS 101 Elementary Hebrew .................................................................................. 3
   HJS 102 Elementary Hebrew .................................................................................. 3
   HJS 201 Intermediate Hebrew ............................................................................... 3
   HJS 202 Intermediate Hebrew ................................................................................ 3
   HJS 326 The Jewish Experience in America ......................................................... 3
   HJS 327 Women in Judaism .................................................................................. 3
   HJS 495 Independent Study in Judaic Studies ..................................................... 3
   PHI 504 Islamic and Jewish Philosophy and the Classical Tradition ....................... 3
   CLA 390 Backgrounds to and Early History of Christianity to 150 CE ...................... 3
   HIS 330 A History of Western Religious Thought (I) ........................................... 3
   HIS 323 The Holocaust ......................................................................................... 3
   HIS 425 Topics in Judaic Studies (Subtitle required) ......................................... 3

And other courses with significant Judaic studies content, as approved by the Director, to a maximum of 6 credit hours.

For further information, contact: Director Janice Fernheimer, jfernheimer@uky.edu; 1457 Patterson Office Tower 0027, 859-257-1994. http://mcl.as.uky.edu/jewish-studies

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 and the Caribbean .................. 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 428G 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://lacls.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 110 Introduction to the Old Testament/Hebrew Bible .................................... 3
HIS 323 The Holocaust ......................................................................................... 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
HJS 326 The Jewish Experience in America ......................................................... 3
HJS 327 Women in Judaism .................................................................................. 3

CLAS/HIS 390 Backgrounds to and Early History of Christianity to 150 CE ............. 3
ENG 271 The Bible as Literature ............................................................................. 3
HIS 191 A History of World Religions (Subtitle required) .................................... 3
PHI 504 Islamic and Jewish Philosophy and the Classical Tradition ....................... 3

Area 2: Christianity

CLA 190 Introduction to the New Testament ....................................................... 3
CLA 191 Christianity, Culture, and Society: A Historical Introduction ....................... 3
CLA/HIS 391 Christians in the Roman Empire ...................................................... 3
HIS 330 A History of Western Religious Thought ................................................. 3
HIS 512 Carolingian Empire .................................................................................... 3
HIS 513 Medieval Institutions Since the 10th Century ............................................. 3
HIS 520 The Era of the Reformation ..................................................................... 3
HIS 546 The Byzantine Empire ............................................................................. 3
CLAS/HIS 390 Backgrounds to and Early History of Christianity to 150 CE ......... 3
HIS 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
HIS 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

University of Kentucky

2019-2020 Undergraduate Bulletin

193
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

**Undergraduate Certificate in Appalachian Studies**

Students in any college may earn the Undergraduate Certificate in Appalachian Studies. The certificate is interdisciplinary (requiring course work in at least two colleges) and combines critical analysis with experiential education in the Appalachian region. The course work and practicum are tailored for each student in consultation with the program director to make the interdisciplinary certificate relevant to the student’s major, interests, and career plans.

A student planning a health science career might choose a practicum with Green Forests Work, a reforestation and public education program in central Appalachia. The Appalachian Studies faculty spans ten colleges at UK and there are diverse courses available each semester to students enrolled in the certificate program.

The 12-hour certificate program focuses on understanding the Appalachian region, particularly Appalachian Kentucky, in historical, social/cultural, physical, and comparative context. All 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 a 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 curriculum 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

**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 pre- 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 course work 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 nine credits taken for a course 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.

The Undergraduate Certificate in Global Studies has four interlocking components: 1) globally focused course work, 2) second language course work, 3) credit-bearing education abroad component, and 4) co-curricular programming.

Globally Focused Course Work

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.
- Any course within the UK Core category of Global Dynamics, at the 200+ level.
- Any courses taken abroad as part of the education abroad component.
- Other courses can be considered, by petition to the faculty Director, if they are deemed to meet the learning outcomes of the Global Dynamics or International Studies course categories.

Second Language Course Work

For an academic credential that certifies a student as a global scholar, experience with a second language is required at a level beyond that required for all undergraduates. Language ability enriches the international experience; further, because language courses incorporate significant cultural materials and exercise analytical facilities, they provide the tools for expanded student awareness and interaction within the international experience. Students may satisfy this requirement in one of two ways:

- Complete the third semester of a language sequence (e.g., level 201), or the proficiency equivalent thereof;
- Complete the first-semester level or above, or demonstrate the proficiency equivalent thereof, or a language not previously studied in high school.

Credit-Bearing Education Abroad

Students will participate in an education abroad experience that involves at least one academic credit hour. Internationally oriented experiences undertaken within the U.S. will not satisfy this requirement; students must travel to a non-U.S. region to fulfill the requirement. Examples might include, but are not limited to:

- Education abroad programs facilitated by UK faculty or select customized programs offered in conjunction with Education Abroad at UK;
- University-wide or departmental education abroad exchange programs;
- Education abroad programs facilitated through UK consortia;
- Education abroad programs hosted by international institutions in which UK students are directly enrolled; and
- Education Abroad programs facilitated by third-party providers and other internship/service-learning based programs.

Co-Curricular Programming

Successful completers of the Certificate of Global Studies will have participated in at least two approved co-curricular activities with an international focus after returning to the U.S. from education abroad. These co-curricular activities may include lectures, performances, workshops, volunteer work, or conferences. Some of
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-scène, 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 I, 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 one time. 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:
ENG 280 Introduction to Film ................................. 3
FR 103 French Cinema ............................................. 3
GER 305 German Film Today .................................. 3
JPN 283 Japanese Film ............................................ 3

Comparative International Film
Choose three of the following for 9 hours. The three courses must come from three separate national film traditions:
CHI 321 Introduction to Contemporary Chinese Film .......... 3
CLA 100 Ancient Stories in Modern Films ..................... 3
ENG 180 Great Movies (Subtitle required) .................... 3
ENG 280 Introduction to Film .................................... 3
ENG 284 History of Film I ......................................... 3
ENG 285 History of Film II ......................................... 3
ENG 380 Film and Genre (Subtitle required) .................. 3
ENG 384 Literature and Film ..................................... 3
ENG 4808 Studies in Film (Subtitle required) ............... 3
FR 103 French Cinema ............................................. 3
FR 225 French Film Noir .......................................... 3
*RFR 325 French Cinema (Subtitle required) ................ 3
FR 335 War, Literature, Film ................................... 3
GER 305 German Film Today .................................. 3
GER 361 German Cinema ........................................ 3
JPN 283 Japanese Film ............................................ 3
PHI 393 Philosophy of Film ...................................... 3
RUS 275 Russian Film ............................................ 3
RUS 535 Russian Visual Studies (Subtitle required) ........ 3
SPA 371 Latin American Cinema (Subtitle required) ....... 3
SPA 372 Spanish Cinema (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
WRD 311 History of Documentary ................................ 3
WRD 312 Introduction to Documentary ....................... 3
WRD 412G Advanced Documentary Production ............ 3

Certificate Capstone Project
Choose one Capstone course for 3 hours:
CHI 321 Introduction to Contemporary Chinese Film .......... 3
ENG 380 Introduction to Film ..................................... 3
ENG 384 History of Film I ......................................... 3
ENG 4808 Studies in Film (Subtitle required) ............... 3
*RFR 325 French Cinema (Subtitle required) ................ 3
FR 335 War, Literature, Film ................................... 3
GER 305 German Film Today .................................. 3
GER 361 German Cinema ........................................ 3
PHI 393 Philosophy of Film ...................................... 3
RUS 335 Russian Visual Studies (Subtitle required) ........ 3
SPA 371 Latin American Cinema (Subtitle required) ....... 3
SPA 372 Spanish Cinema (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
WRD 311 History of Documentary ................................ 3
WRD 312 Introduction to Documentary ....................... 3
WRD 412G Advanced Documentary Production ............ 3

Practicum
MCL 592 Research Practicum (Subtitle required) .......... 1
Total hours required ............................................. 16
Focus Area I: Peacebuilding
Addresses systems and infrastructure needed to create more peaceful societies.

Focus Area II: Peacemaking
Addresses leadership skills, skills for resolving and transforming conflict.

Focus Area III: Promoting Understanding, Cooperation, and Development
Addresses cross cultural issues, international organizations, economic and social development.

Focus Area IV: Addressing Global and Regional Pressures
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
CPI 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
Choose one from either:
GWS 410 Introduction to Queer Theory .......... 3
or GWS 506 History of Sexuality in the U.S. .......... 3

*Subtitle must be related to the field of sexuality studies.

Admissions Criteria
• A minimum second semester freshman;
• 3.0 overall GPA and in good academic standing;
• An application submitted through the Central Advising Office in the College of Arts and Sciences.

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 9 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
   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
GEO 311 Qualitative Methods in Geography ................................. 3
GEO 406 Field Studies in Geography
  (Subtitle required) .......................................................... 3
GWS 400 Doing Feminist Research .............................................. 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 ....................................... 1-3
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.