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: 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’s website: 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 and 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 129-131. Address questions to the department awarding honors. Departmental honors are indicated on the student’s final transcript.

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 inter-
# 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>
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 the natural sciences.†
   c. Students must take six college hours in the social sciences.†
   d. Students must take six college hours in disciplines in the humanities.
3. Complete at least 120 credit hours in courses acceptable to the College of Arts and Sciences.‡
4. Complete at least 90 credit hours in Arts and Sciences courses.‡
5. Complete at least 39 credit hours in courses numbered at or above the 300 level.‡
6. Complete at least 39 credit hours within the major. At least 24 of these hours must be at or above the 300 level.
7. Complete at least one course that includes some laboratory or field experience. (See the description of the College Laboratory or Field Experience Requirement which follows.)
8. Attain an overall grade-point average of at least 2.0.
9. Attain a grade-point average of at least 2.0 in all major requirements courses (including all premajor courses).
10. Complete a minimum of six credit hours of free electives. These college electives cannot be counted towards UK Core, college or major requirements.
11. Complete University graduation requirements, the Graduation Composition and Communication Requirement, and the residence requirement.

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

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.
11. Complete University graduation requirements, the Graduation Composition and Communication Requirement, and the residence requirement.

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

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

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

b. Physical education one-hour service courses (KHP) are accepted as electives only 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.

c. A maximum of 16 semester credit hours earned in military science (AMS) and aerospace studies (AFS) 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.

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

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

f. Courses transferred from other institutions and judged by the College to be equivalent or comparable to Arts and Sciences courses are acceptable.

g. Usually the College will apply only six hours of technical course work taken at any institution.

h. 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 1 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 history of music and theatre; TAD 370; all economics courses; all undergraduate courses in the Department of Computer Sciences (CS); all undergraduate courses in the Department of Communication (COM); and all American Sign Language courses officially transferred to the student’s UK record.

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

5. The following courses will count toward the required 60 credit hours in the physical, biological and/or mathematical sciences hours for the Bachelor of Science degree: all courses with a MA prefix (except MA 108R); all anatomy courses; all physiology courses; all biochemistry courses; all statistics courses; all computer science courses; DHN 101; ECO 391; GEO 130, GEO 230, GEO 351, GEO 451G, and GEO 530; PHI 120 and PHI 320; PSY 215, PSY 216, PSY 312, PSY 456, and PSY 565; and ANT 230, 332, and 333.

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 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 Social Science requirement.

Social Sciences

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

1. All courses offered by Arts and Sciences departments or programs within the disciplines of the natural sciences including courses with the following departmental prefixes: ANT, 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 Social Science requirement.

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. AAS 200, 235, 326, 328, 336, 417G, 432, 471
   b. ANT 101, 102, 201, 202, 442, 443
   c. CHE 101, 102, 201, 202
   d. CLA 101, 121, 151, 152, 201, 202, 251, 252
   e. ENG 102, 207, 405, 407, 507, 509
   f. FR 101, 102, 106, 201, 202, 204, 307, 310, 507, 553, 557
   g. GER 011, 101, 102, 201, 202, 205, 206, 211, 212, 217, 308, 310, 507, 553, 612
   h. HIS 101, 102, 201, 202
   i. ITA 101, 102, 201, 202
   j. JPN 101, 102, 201, 202, 301, 302, 401, 402, JPN/GEO 334, JPN/GEO 551
   k. LIN 520, 521
   l. PHI 120, 320
   m. PS 417G, 471
   n. RUS 101, 102, 201, 202, 301, 302, 401, 404, 501, 502
   o. SPA 011, 101, 102, 103, 151, 201, 202, 203, 205, 210, 211, 215, 302, 313, 413, 501, 506, 553
   p. 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

Biology – BIO 111, 155, 209
Chemistry – CHE 111, 113
Earth and Environmental Sciences – EES 160, 220
Physics – PHY 211, 213, 241, 242

Social and Behavioral Sciences

Anthropology – ANT 230, 541, 585
Geography – GEO 406
Political Science – PS 372
Psychology – PSY 100, 215
Sociology – SOC 302, 303

University of Kentucky 2018-2019 Undergraduate Bulletin 132
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 300 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
- mapping and GIS
- mathematics
- microbiology
- military leadership
- modern and classical languages, literatures and cultures
- neuroscience
- philosophy
- physics
- political science
- professional and technical writing
- psychology
- sociology
- Spanish
- statistics
- writing, rhetoric and digital studies
Interdisciplinary minors are available in:

- African American 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 institutional including KCTCS. Beyond these 6 credit hours, courses will be evaluated 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.

**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, 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. Please note that a maximum of 1 credit hour of KHP 107 will count toward degree requirements, regardless how many credits are earned.

**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.
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

POC Years

Junior Semesters
AFS 312 fall semesters
AFS 314 spring semesters

Senior Semesters
AFS 412 fall semesters
AFS 414 spring semesters

The leadership laboratories are largely cadet-planned and conducted under the concept that they provide leadership training experiences that will improve the cadets’ capabilities as Air Force officers. This also involves three hours of physical training each week. Leadership laboratory is open to students who are members of the Air Force Reserve Officer Training Corps or are eligible to receive Leadership Training and Leadership Development with the Air Force Base in Alabama. FT students receive

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 educate each student as a potential member of its officer corps. FT courses include cadet orientation, survival training, officer training, physical training, organizational and functional aspects of an Air Force base, career orientation, small arms familiarization, first aid, and other supplemental training.

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

Minor in Military Leadership

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

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

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

Guided Electives
two of the following courses (6 credits):
CLD 230 Intrapersonal Leadership ................ 3
CLD 530 Fundamentals of Organizational Leadership ................ 3
HIS 119 War and Society, 1350-1914 ............. 3
HIS 121 War and Society, 1914-1945 ............. 3
HIS 122 War and Society Since 1945 ............. 3
HIS 357 Japan at War, 1850 to the Present ........ 3
GEO 109 Digital Mapping ......................... 3
GEO 130 Earth’s Physical Environment ........... 3
GEO 133 Science and Policy of Natural Hazards .... 3
GEO 160 Lands and Peoples of the Non-Western World ........ 3
GEO 162 Introduction to Global Environmental Issues ........ 3
GEO 163 Global Conflicts ......................... 3
GEO 172 Human Geography ....................... 3
GEO 222 Cities of the World ...................... 3
GEO 255 Geography of the Global Economy ...... 3
GEO 261 Global Dynamics of Health and Disease .... 3
GWS 302 Gender Across the World (Subtitle required) .......... 3

ANT 160 Cultural Diversity in the Modern World ..... 3
PSY 320 Introduction to Forensics: Psychology and Legal Issues .......... 3
A-H 360 Visual Culture of Politics ................. 3
PS 101 American Government .................... 3
PS 230 Introduction to International Relations .......... 3
SOC/CLD 380 Globalization:
A Cross-Cultural Perspective ..................... 3
GER 342 War, Peace, and Terror in Germany and Europe .......... 3
IPN 351 The Japanese Experience of the Twentieth Century .......... 3
WRD 204 Technical Writing ....................... 3

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 services, 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.


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 131.

UK Core Requirements

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

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

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

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

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

College of Arts and Sciences
V. Composition and Communication I
CIS/WRD 110 Composition and Communication I ........................................... 3

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

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

VIII. Statistical Inferential Reasoning
ANT 360 Statistics in Anthropology ................................................................. 3
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 .................................................. 3
ANT 330 North American Cultures ................................................................. 3
or One course from approved list ................................................................. 3

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

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

Graduation Composition and Communication Requirement (GCCR)
ANT 582 Senior Integrative Seminar ............................................................... 3

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

College Requirements
I. Foreign Language (placement exam recommended) ........................................... 0-14
II. Disciplinary Requirements
   a. Natural Science (partially completed by Premajor Requirement) .............. 3
   b. Social Science (completed by Premajor Requirement) ............................ 3
   c. Humanities ......................................................................................... 6
III. Laboratory or Field Work (can be completed by Major Requirement) ......... 3
IV. Electives .................................................................................................. 6
College Requirement hours: ......................................................................... 15-29

Major Requirements
ANT 220 Introduction to Cultural Anthropology ............................................. 3
ANT 230 Introduction to Biological Anthropology ........................................ 3
ANT 240 Introduction to Archaeology ............................................................ 3
ANT 582 Senior Integrative Seminar ............................................................... 3

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

From Outside the Major Department
Choose 6 hours outside Anthropology at the 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.

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 131.

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

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

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

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

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
ANT 230 Introduction to Biological Anthropology....................................... 3
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 ................................................................. 3
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 .................................................. 3
ANT 330 North American Cultures ................................................................. 3
or One course from approved list ................................................................. 3

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

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

Graduation Composition and Communication Requirement (GCCR)
ANT 582 Senior Integrative Seminar ............................................................... 3

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

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

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

Major Requirements
ANT 220 Introduction to Cultural Anthropology ............................................. 3
ANT 230 Introduction to Biological Anthropology ........................................ 3
ANT 240 Introduction to Archaeology ............................................................ 3
ANT 582 Senior Integrative Seminar ............................................................... 3

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

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

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

Electives
Choose electives to lead to the minimum total of 120 hours required for graduation ................................................................. 4
Total Minimum Hours
Required for Degree .................................................................. 120

*Course used towards completion of a UK Core Requirement.

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

Preminor Courses (9 hours)
Students must take ANT 220, 230, 240.

Additional Courses (12 hours)*
Students must take four ANT courses from at least two subdisciplines. Two courses must be at the 200 level or above and two courses must be at the 300 level or above.
**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 131.

**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 137 Calculus I With Life Science Applications  
or MA 113 Calculus I  
or 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)**

Choose one of three options:

1. BIO 425 Biology Seminar (Subtitle required)  
   and BIO 350 Animal Physiology ................................. 5
2. BIO 425 Biology Seminar (Subtitle required)  
   and BIO 430G Plant Physiology .................................. 5
3. WRD 204 Technical Writing ................................. 3

**Graduation Composition and Communication Requirement hours (GCCR) .............................................. 3-5**

**College Requirements**

Humansities – 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 .......................... 6
Graduation Writing Requirement (choose any GWR Humanities 300-level course; this will also count as one of the two Humanities courses in the College Requirements)

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

**Premajor Requirements**

BIO 148 Introductory Biology I ..................................... 3
BIO 152 Principles of Biology II .................................... 3
BIO 155 Laboratory for Introductory Biology I  
or BIO 198 Scholars Biology Research ......................... 1-2
†CHE 105 General College Chemistry I ....................... 4
CHE 111 General Chemistry I Laboratory ...................... 1
CHE 107 General College Chemistry II ......................... 3
CHE 113 General 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 430G Plant Physiology ........................................ 4

**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

**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: ........................................... 18-21

Biology Electives  ......................................................... 4-9

**Biology Electives – A minimum of 6 of the 4-9 upper-level elective credit hours must be BIO courses (i.e., have a BIO prefix). If fewer than 6 hours are required to complete the requirements, all hours must be upper-level elective BIO courses. A maximum of 3 credits of independent research course work may be used in this section.**

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

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

#### Option B – Topical Focus Option

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

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

Biology Electives  ......................................................... 13-15

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

**Total Hours Option B ........................................... 25-27**
College of Arts and Sciences

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 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 Development 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 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 333 Advanced Organic Chemistry Laboratory ..........2
CHE 550 Biological Chemistry 1 ......................................3
CHE 552 Biological Chemistry II .....................................3
CHE 532 Spectrometric Identification of Organic Molecules ..................................................................2
MUPAT 598 Clinical Microbiology ...................................3
ANA 442 Molecular and Cellular Neurobiology ................3

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

**Ecology and Evolutionary Biology Track**

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

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

BIO 300 General Entomology .............................................3
BIO 337 Mathematical Modeling in the Life Sciences ..........3
BIO 351 Plant Kingdom ..................................................3
BIO 375 Behavioral Ecology and Sociobiology ..............3
BIO 395 Research in Biology
(maximum 3 credits toward track) ................................1-3
*BIO 430G Plant Physiology .............................................4
BIO 440 Comparative and Functional Anatomy ...............4
BIO 445 The Biology of Sex .............................................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 ......................................................3
BIO 568 Insect Behavior ..................................................3
*BIO 325 Ecology ..........................................................4
**BIO 380 Special Topics in Biology
(Intermediate Level) (Subtitle required) .........................1-4

**Courses from Outside the Biology department:**

CHE 365 Environmental Chemistry ....................................3
EES 401G Invertebrate Paleobiology and Evolution ........3
FOR 340 Forest Ecology ..................................................4
PLS 500G Biogeochmistry ................................................4
PLS 302 Ecology of Economic Plants .............................3
PGY 512 Evolutionary Medicine .....................................4
FOR 370 Wildlife Ecology and Management ...................4
FOR 435 Conservation Biology .........................................4
FOR 510 Herpetology .....................................................4
FOR 530 Freshwater Ecology ...........................................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.

**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 230 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 ................................4
STA 580 Biostatistics I ..................................................2

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

**College of Agriculture, Food and Environment**

ABT/AGR/ASC/ENT 460 Introduction to Molecular Genetics .........................................................3
ASC 364 Reproductive Physiology of Farm Animals ..........4
ASC 378 Animal Nutrition and Feeding ................................4
ENT 310 Insect 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 .............................................3
ENT 568 Insect Behavior ..............................................4
FOR 340 Forest Ecology ..................................................4
FOR 370 Wildlife Biology and Management ....................4
FOR 435 Conservation Biology .......................................4
ENT/FOR 502 Forest Entomology ....................................3
ENT 530 Freshwater Ecology ...........................................4
FOR 510 Herpetology .....................................................4
FSC 530 Food Microbiology ............................................5
NRE 420G Anatomy of Vascular Plants ..........................4
NRE 450G Biogeochmistry ..............................................3
PLS 320 Woody Horticultural Plants .............................4
PLS 330 Herbaceous Horticultural Plants 1 ......................2
PLS 332 Herbaceous Horticultural Plants 2 ......................2
PLS 366 Fundamentals of Soil Science ............................4
PLS 450G Biogeochmistry ..............................................3
PLS 562 Ecology of Economic Plants ..............................3

University of Kentucky
2018-2019 Undergraduate Bulletin

138
College of Medicine

ANA 410G Neurobiology of Brain and Spinal Cord Disorders ........... 3
ANA 442 Molecular and Cellular Neurobiology ......................... 3
ANA 511 Introduction to Human Anatomy ............................. 5
ANA 512 Microscopy and Ultrastructure ................................. 4
ANA 516 Selected Topics in Advanced Neuroscience ..................... 3
Some other anatomy courses at the 500-level are acceptable, but they are usually restricted to professional students.

BCH 401G Fundamentals of Biochemistry ................................ 3
MI/BIO 494G Immunobiology ............................................... 3
MI 595 Immunobiology Laboratory ........................................ 2
MFPAT 598 Clinical Microbiology ........................................... 3
PGY 412G Principles of Human Physiology Lectures ..................... 4
PGY 412G is acceptable as an elective for upper level biology credit only if a student does not complete BIO 350. It does NOT substitute for BIO 350 or BIO 430G.

PGY 431 Introduction to Neuroendocrinology ........................... 3
PGY 417 Genomics and Epigenetics ....................................... 2
PGY 512 Evolutionary Medicine ............................................ 3
PGY 560 Pathophysiology: Integrative Study in Physiology and Medicine ........................................................... 1
PGY 502 Systems, Cellular and Molecular Physiology ................. 5

TOX 509 Environmental and Regulatory Toxicology .................... 2
Unacceptable courses often mistakenly thought to be acceptable. These courses are not acceptable electives for Biology majors:

ANA 209 Principles of Human Anatomy ................................. 3
PGY 206 Elementary Physiology .......................................... 3
Other courses may be accepted at the discretion of the Director of Undergraduate Studies in the Department of Biology.

Genetics, Genomics, and Bioinformatics Track

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

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

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). The 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 ................................................ 3
BIO 446 Neurophysiology Laboratory .................................... 3
BIO 494G Immunobiology .................................................... 3
BIO 502 Systems, Cellular and Molecular Physiology .................. 5
BIO 507 Biology of Sleep and Circadian Rhythms ...................... 3
BIO 535 Comparative Neurobiology and Behavior .................... 3

Courses from Outside the Biology department:

STATA 570 Basic Statistical Analysis ........................................ 4
STATA 580 Biostatistics I ..................................................... 2
ABT/BENT 460 Introduction to Molecular Genetics .................... 2
PGY 417 Genomics and Epigenetics ....................................... 2
Other courses can be accepted by the Director of Undergraduate Studies in Biology on a case by case basis.

*Sublist 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 physiological go hand and hand in addressing the functional mechanisms which regulate behavior. This track will prepare professionals in health science areas (MD, DO, DDS, and PT), researchers in the function of animals and plants (MS/PhD), and ecologists.

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

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

Courses Outside the Biology department:

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

PLS 566 Soil Microbiology .................................................. 3
PLS 567 Methods in Soil Microbiology .................................. 1
PAPA 400G Principles of Plant Pathology ............................... 3
PLS 320 Woody Horticultural Plants .................................... 4
PLS 366 Fundamentals of Soil Science ................................... 4

BIO 525 Advanced Physiology ............................................. 3
*BIO 350 Animal Physiology .............................................. 4
BIO 410 Vertebrate Endocrinology ...................................... 3
**BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) ................................................. 1-4

Plant Biology Track

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

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

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

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

Courses Outside the Biology department:

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

University of Kentucky 2018-2019 Undergraduate Bulletin
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 physician’s assistant programs. A biology degree with a pre-professional health emphasis also prepares students for careers as research scientists, research lab technicians, microbiologists, genetic counselors, biology teachers, and many other general biology careers.

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

BIO 302 Introduction to Neuroscience ...................... 3
BIO 305 Introduction to Neuroscience Techniques ...... 4
BIO 308 General Microbiology .................................. 3
BIO 309 Microbiology Laboratory .................................. 2
BIO 394/395/397 Research in Neuroscience/Biology/ Microbiology (maximum 3 credits toward track) ... 1-3
BIO 405 Human Genetics ........................................... 3
BIO 410 Vertebrate Endocrinology ............................... 3
BIO 440 Comparative and Functional Anatomy .......... 4
BIO 445 The Biology of Sex ......................................... 3
BIO 446 Neurophysiology Laboratory ......................... 3
BIO 494C 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 315 Introduction to Cell Biology ......................... 4
*BIO 350 Animal Physiology ..................................... 4
**BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle 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
MI/PAT 598 Clinical Microbiology ...................... 3
PGY 360 Pathophysiology: Integrative Study in Physiology and Medicine .................................. 1
PSY 459 Neuropharmacology: Drugs and Behavior .... 3
PSY 512 Evolutionary Medicine .............................. 3
PGY 431 Introduction to Neuroendocrinology ............. 3

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

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

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

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

Bachelor of Science with a major in BIOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

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 College 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)

Choose one of three options:

1. BIO 425 Biology Seminar (Subtitle required) ............... 3
   and
   BIO 350 Animal Physiology .................................. 5

2. BIO 425 Biology Seminar (Subtitle required) ............... 3
   and
   BIO 430G Plant Physiology .................................. 5

3. WRD 204 Technical Writing ................................... 3

Graduation Composition and Communication Requirement hours (GCCR) ..................... 3-5

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 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 Chemistry II Laboratory ............... 2
MA 137/138 Calculus I/II With Life Science Applications or
MA 113/114 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
or
PHY 231/241 General University Physics/Laboratory
AND
PHY 213 General Physics
or
PHY 232/242 General University Physics/Laboratory

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 Biology 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 cellular and molecular 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 Biology 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 401G Fundamentals of Biochemistry ...................... 3
CHE 233 Organic Chemistry Laboratory II .................... 1
CHE 533 Advanced Organic Chemistry Laboratory .......... 2
CHE 550 Biological Chemistry I .................................... 3
CHE 552 Biological Chemistry II .................................. 3
CHE 532 Spectrometric Identification of Organic Molecules ..................................................... 2
MUPAT 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 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 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 533 Advanced Organic Chemistry Laboratory .......... 2
CHE 550 Biological Chemistry I .................................... 3
CHE 552 Biological Chemistry II .................................. 3
CHE 532 Spectrometric Identification of Organic Molecules ..................................................... 2
MUPAT 598 Clinical Microbiology .................................. 3
ANA 442 Molecular and Cellular Neurobiology ............... 3

Other courses from Outside the Biology department:
CHE 233 Organic Chemistry Laboratory II .................... 1
EES 401G Invertebrate Paleobiology and Evolution .......... 3
FOR 340 Forest Ecology ................................................ 4
PLS 450G Biogeochemistry ........................................ 3
PLS 502 Ecology of Economic Plants ......................... 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

*Subtitle must be approved by Director of Undergraduate Studies.
**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 ...................... 3
CHE 446G Physical Chemistry for Engineers ................... 3
CHE 532 Spectrometric Identification of Organic Molecules ..................................................... 2
CHE 533 Advanced Organic Chemistry Laboratory .......... 2
CHE 550 Biological Chemistry I .................................... 3
CHE 552 Biological Chemistry II .................................. 3
CHE 558 Hormone Receptors and Cell Signals ................. 3
CHE 565 Environmental Chemistry ............................... 3

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

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

Statistics
(Biology usually accepts only one of the following for each student)
STA 570 Basic Statistical Analysis .................................. 4
STA 580 Biostatistics I .................................................. 2

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

College of Agriculture, Food and Environment
ABT/AGR/ASC/ENT 460 Introduction to Molecular Genetics ..................................................... 3
The Genetics, Genomics, and Bioinformatics Track

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

12 upper-level guided elective hours out of the required 13-15 hours of guided electives must be completed from the courses listed below. Of those 12 hours, a maximum of 3 hours can be independent research (BIO 394/395/397). 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) .......................................................... 3**

Courses from Outside the Biology department:

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

College of Medicine

ANA 410G Neurobiology of Brain and Spinal Cord Disorders .................... 3
ANA 442 Molecular and Cellular Neurobiology .................................... 3
ANA 511 Introduction to Human Anatomy ........................................... 5
ANA 512 Microscopy and Utrastructure ............................................ 4
ANA 516 Selected Topics in Advanced Neuroscience .......................... 3
BCH 401G Fundamentals of Biochemistry ....................................... 3
ME/BIO 494G Immunobiology .......................................................... 3
MI 595 Immunobiology Laboratory ................................................... 2
MUPAT 598 Clinical Microbiology .................................................... 3
PGY 412G Principles of Human Physiology Lectures ................................... 4
PGY 412G is acceptable as an elective for upper level biology credit ONLY if a student DOES NOT complete BIO 350. It DOES NOT substitute for BIO 350 or BIO 430G.

PGY 431 Introduction to Neuroendocrinology .................................... 3
PGY 417 Genomics and Epigenetics ................................................... 2
PGY 512 Evolutionary Medicine .......................................................... 3
PGY 560 Pathophysiology: Integrative Study in Physiology and Medicine ................................................... 1
PGY 502 Systems, Cellular and Molecular Physiology ..................... 5
TOX 509 Environmental and Regulatory Toxicology .......................... 2

Unacceptable courses often mistakenly thought to be acceptable. These courses are not acceptable electives for Biology majors:

ANA 209 Principles of Human Anatomy ............................................ 3
PGY 206 Elementary Physiology ....................................................... 3

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

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 that regulate behavior. This track will prepare professionals in health science areas (MD, DO, DDS, and PT), researchers in the function of animals and plants (MS /PhD), and ecologists.

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

**BIO 350 Animal Physiology .......................................................... 4**
**BIO 410 Vertebrate Endocrinology ............................................... 3**
**BIO 380 Special Topics in Biology (Intermediate Level) (Subtitle required) .......................................................... 3**

Courses from Outside the Biology department:

- ASC 364 Reproductive Physiology of Farm Animals ......................... 4
- ENT 568 Insect Behavior ................................................................ 4
- ME 595 Immunobiology Laboratory ................................................... 2
- PGY 502 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.**

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-
Pre-Professional Track

The Pre-Professional Track in the biology major broadly explores organizational structure and function in the context of preparing students for health-related professional programs. The courses in this track give 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 elective courses 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 Outside the Biology department:

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. **Substitutes must be approved by the 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 ................................. 4
BCH 401G Fundamentals of Biochemistry ................. 3
BIO 309 Microbiology Laboratory .......................... 2
BIO/MI 494G, 595, 598

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.

Minor in Biology

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

Preminor Requirements

BIO 148 Introductory Biology 1 ................................. 4
BIO 152 Principles of Biology 2 ............................. 3
BIO 155 Laboratory for Introductory Biology 1 ....... 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.

Minor in Medical Genetics

The minor in Medical Genetics consists of 19 hours as follows:

Minor Requirements

BIO 308 General Microbiology ................................. 4
BCH 401G Fundamentals of Biochemistry ................. 3
BIO 309 Microbiology Laboratory .......................... 2
BIO/MI 494G, 595, 598

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.

Minor in Neurology

The minor in Neurology consists of 19 hours as follows:

Minor Requirements

BIO 308 General Microbiology ................................. 4
BCH 401G Fundamentals of Biochemistry ................. 3
BIO 309 Microbiology Laboratory .......................... 2
BIO/MI 494G, 595, 598

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.

Minor in Neuroscience

The minor in Neuroscience consists of 19 hours as follows:

Minor Requirements

BIO 308 General Microbiology ................................. 4
BCH 401G Fundamentals of Biochemistry ................. 3
BIO 309 Microbiology Laboratory .......................... 2
BIO/MI 494G, 595, 598

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.
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. For all majors CHE 109 and CHE 110 have been defined as equivalent to CHE 105. 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 131.

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 College 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) ....... 6

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

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

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

Premajor Requirements

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

MA 114 Calculus II .......................................................... 4

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

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

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

CHE 113 General Chemistry II Laboratory .................................. 2

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

Major Requirements

Major Core Requirements

CHE 226 Analytical Chemistry ........................................... 3

CHE 230 Organic Chemistry I ............................................. 3

CHE 231 Organic Chemistry Laboratory I ............................ 1

CHE 232 Organic Chemistry II ............................................ 3

CHE 233 Organic Chemistry Laboratory II ............................ 1

CHE 440G Introductory Physical Chemistry .......................... 3

CHE 441 Physical Chemistry Laboratory ............................... 2

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

Other Course Work Required for the Major

Chemistry Major Field Options

Choose 21 hours at the 300-500 level with a prefix of ANA, BCH, BIO, CHE, CME, CS, EES, MA, MI, MSE, PAT, PGY, 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 recommended for students having a minimum GPA of 3.0 in CHE courses. Other courses may be approved by the Undergraduate Program Committee. Students working towards teaching accreditation may count 6 hours taken at the 300+ level from the College of Education. A maximum of 9 hours in undergraduate research or reading courses may be counted; such courses require approval of the Undergraduate Program Committee if the courses do not carry the CHE prefix .

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

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

<table>
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<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>CHE 107 General College Chemistry II</td>
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<tr>
<td>MA 114 Calculus II</td>
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<tr>
<td>CIS/WRD 111 Composition and Communication II</td>
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<tr>
<td>UK Core – Humanities</td>
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Sophomore Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>First Semester</td>
<td>3</td>
<td>CHE 230 Organic Chemistry I</td>
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<tr>
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<td>CHE 231 Organic Chemistry Laboratory I</td>
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<td>PHY 211 General Physics</td>
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<td></td>
<td>STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning</td>
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<td>UK Core – Social Sciences</td>
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Second Semester

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<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>CHE 226 Analytical Chemistry</td>
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<td>CHE 232 Organic Chemistry II</td>
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<td>CHE 233 Organic Chemistry Laboratory II</td>
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<td>PHY 213 General Physics</td>
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<td>UK Core – Citizenship - USA</td>
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Junior Year

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<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>First Semester</td>
<td>3</td>
<td>CHE 440G Introductory Physical Chemistry</td>
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<td>WRD 310 Writing in the Natural Sciences</td>
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<td>Foreign Language II</td>
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<td>A&amp;S Humanities</td>
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<td>Major Field Option*</td>
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Second Semester

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<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>CHE 441 Physical Chemistry Laboratory</td>
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<tr>
<td>Foreign Language II*</td>
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<td>A&amp;S Social Science</td>
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<tr>
<td>Major Field Option*</td>
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<td>Major Field Option*</td>
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Senior Year

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<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>First Semester</td>
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<td>Foreign Language III</td>
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<td>Major Field Option*</td>
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<td></td>
<td>Major Field Option*</td>
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<td>A&amp;S Humanities</td>
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<td>UK Core – Global Dynamics</td>
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Second Semester

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Major Field Option*</td>
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<tr>
<td>Major Field Option*</td>
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<td>A&amp;S Social Science</td>
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<td>Elective</td>
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<td>300+ Elective</td>
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*Major field options (21 credits) must be chosen from courses at the 300- to 500-level with the prefixes CHE, ANA, BCH, BIO, CHE, CS, EES, MA, MI, MSE, PAT, PGY, PHA, PHR, PHY, PM, RM or STA. Credit will not be given for both BCH 401G and CHE.
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 131.

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) .............................................. 33

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

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

Premajor Requirements

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

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

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

Other Course Work Required for the Major

From the Major Department:
CHE 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); BCH 401G.

From the Mathematics Department
MA 213 Calculus III ......................................................... 3
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

First Semester

CHE 105 General College Chemistry I ............................ 4
MA 114 Calculus II ......................................................... 4
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

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

Second Semester

CHE 231 Organic Chemistry Laboratory I ....................... 1
CHE 232 Organic Chemistry II ........................................... 3
MA 322 Matrix Algebra and Its Applications ............... 3
PHY 232 General University Physics ............................. 4
PHY 242 General University Physics Laboratory .......... 1
UK Core – Social Sciences .................................................. 3

Junior Year

First Semester

CHE 532 Spectrometric Identification of Organic Molecules ......................................................... 2
CHE 547 Principles of Physical Chemistry I .................... 3
Foreign Language* .......................................................... 4
STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning ......................................................... 3
A&S Humanities ............................................................. 3

Second Semester

CHE 410G Inorganic Chemistry ....................................... 2
CHE 441 Physical Chemistry Laboratory ....................... 2
CHE 442G Thermodynamics and Kinetics ........................ 3
CHE 550 Biological Chemistry I ....................................... 3
CHE 552 Biological Chemistry II ..................................... 3

Senior Year

First Semester

CHE 412 Inorganic Chemistry Laboratory ....................... 2
CHE 422 Instrumental Analysis ........................................... 4
CHE 550 Biological Chemistry I ....................................... 3
WRD 310 Writing in the Natural Sciences ......................... 3
UK Core – Field Option ..................................................... 3
Foreign Language III ...................................................... 3

Second Semester

MA 322 Matrix Algebra and Its Applications ............... 3
Electives ................................................................. 6
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.

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 131.

**UK Core Requirements**

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

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<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
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<td>I. Intellectual Inquiry in Arts and Creativity</td>
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<td>II. Intellectual Inquiry in the Humanities</td>
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<td>III. Intellectual Inquiry in the Social Sciences</td>
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<tr>
<td>IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences</td>
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<td>V. Composition and Communication I</td>
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<td>VI. Composition and Communication II</td>
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<tr>
<td>VII. Quantitative Foundations</td>
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<td>VIII. Statistical Inferential Reasoning</td>
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<td>IX. Community, Culture and Citizenship in the USA</td>
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<td>X. Global Dynamics</td>
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<tr>
<td>UK Core hours:</td>
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**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
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**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 522 Analytical Chemistry ........................</td>
<td></td>
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<tr>
<td>CHE 230 Organic Chemistry I ...........................</td>
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<td></td>
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<tr>
<td>CHE 231 Organic Chemistry Laboratory ................</td>
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<td></td>
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<tr>
<td>CHE 232 Organic Chemistry II ..........................</td>
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<tr>
<td>BIO 304 Principles of Genetics or BIO 308 General Microbiology</td>
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<td></td>
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<tr>
<td>or BIO 315 Introduction to Cell Biology .......... 3-4</td>
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<td></td>
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<tr>
<td>CHE 410G Inorganic Chemistry I ........................</td>
<td></td>
<td></td>
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<tr>
<td>CHE 412 Inorganic Chemistry Laboratory ..............</td>
<td></td>
<td></td>
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<tr>
<td>CHE 440G Introductory Physical Chemistry .......... 3</td>
<td></td>
<td></td>
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<tr>
<td>CHE 441 Physical Chemistry Laboratory .............. 2</td>
<td></td>
<td></td>
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<tr>
<td>CHE 454 Biological Chemistry Laboratory .......... 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 422 Instrumental Analysis or CHE 532/533 Spectrometric Identification of Organic Molecules/Advanced Organic Chemistry Laboratory</td>
<td></td>
<td></td>
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<tr>
<td>CHE 550 Biological Chemistry I ........................</td>
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<td></td>
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<tr>
<td>CHE 552 Biological Chemistry II ......................</td>
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</tbody>
</table>

**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 General University Physics ................... 2
*PHY 241 General University Physics ........................ 4

**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**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>First Semester Hours</td>
<td></td>
<td></td>
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<tr>
<td>CHE 105 General College Chemistry I .............. 4</td>
<td></td>
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<tr>
<td>CHE 111 General Chemistry I Laboratory ........... 1</td>
<td></td>
<td></td>
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<tr>
<td>MA 113 Calculus I ....................................... 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS/WRD 110 Composition and Communication I ...... 3</td>
<td></td>
<td></td>
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<tr>
<td>CIS/WRD 111 Composition and Communication II ...... 3</td>
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</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Second Semester Hours</td>
<td></td>
<td></td>
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<tr>
<td>CHE 107 General College Chemistry II ................</td>
<td></td>
<td></td>
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<tr>
<td>CHE 113 General Chemistry II Laboratory .......... 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA 114 Calculus II ....................................... 4</td>
<td></td>
<td></td>
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<tr>
<td>BIO 148 Introductory Biology I ........................</td>
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<td></td>
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<tr>
<td>BIO 155 Laboratory for Introductory Biology ...... 1</td>
<td></td>
<td></td>
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<tr>
<td>CIS/WRD 111 Composition and Communication II ...... 3</td>
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**Junior Year**

<table>
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<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>First Semester Hours</td>
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<tr>
<td>CHE 440G Introductory Physical Chemistry .......... 3</td>
<td></td>
<td></td>
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<tr>
<td>CHE 442 Instrumental Analysis or CHE 440G Introductory Physical Chemistry ............. 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 532 Spectrometric Identification of Organic Molecules ........................................ 2</td>
<td></td>
<td></td>
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<tr>
<td>CHE 550 Biological Chemistry I ........................</td>
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<td></td>
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<tr>
<td>CHE 552 Biological Chemistry II ........................</td>
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<tr>
<td>Major Core hours: ....................................... 34-35</td>
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</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>First Semester Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*CHE 442G Introductory Physical Chemistry ........ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 442 Instrumental Analysis or CHE 440G Introductory Physical Chemistry ............. 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 532 Spectrometric Identification of Organic Molecules ........................................ 2</td>
<td></td>
<td></td>
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<tr>
<td>CHE 550 Biological Chemistry I ........................</td>
<td></td>
<td></td>
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<tr>
<td>CHE 552 Biological Chemistry II ........................</td>
<td></td>
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<tr>
<td>Major Core hours: ....................................... 34-35</td>
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</table>

**Senior Year**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Semester Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 444 Physical Chemistry Laboratory ............ 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA 213 Calculus III ..................................... 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA 214 Calculus II ....................................... 4</td>
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<tr>
<td>CIS/WRD 110 Composition and Communication I ...... 3</td>
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<tr>
<td>CIS/WRD 111 Composition and Communication II ...... 3</td>
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</tbody>
</table>

**Certification Requirements**

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

*CHE 442G may be substituted for CHE 440G.

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

*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 is certified by the American Chemical Society.
Bachelor of Science with a major in CHEMISTRY

Materials Option

12 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 131.

UK Core Requirements

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

I. Intellectual Inquiry in Arts and Creativity

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

II. Intellectual Inquiry in the Humanities

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

III. Intellectual Inquiry in the Social Sciences

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

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

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

V. Composition and Communication I

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

VI. Composition and Communication II

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

VII. Quantitative Foundations

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

VIII. Statistical Inferential Reasoning

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

IX. Community, Culture and Citizenship in the USA

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

X. Global Dynamics

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

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

Graduation Composition and Communication Requirement (GCCR)

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

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

College Requirements

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

II. Disciplinary Requirements

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

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

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

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

Premajor Requirements

*MA 113 Calculus I ......................................................... 4
MA 114 Calculus II .......................................................... 4
*CHE 105 General College Chemistry I ......................... 4
CHE 107 General College Chemistry II ......................... 4
*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 410G 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 566 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 422/523/535/550 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

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

Second Semester

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

Sophomore Year

First Semester

CH 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

MSE 201 Materials Science ............................................. 3
CHE 547 Principles of Physical Chemistry I ................... 3
CHE 532 Spectrometric Identification of Organic Molecules .................................................. 2
CHE 576 Polymer Chemistry ............................................. 3
WRD 310 Writing in the Natural Sciences ....................... 3
A&S Humanities ............................................................... 3

Second Semester

CHE 410G Inorganic Chemistry ....................................... 2
CHE 533 Advanced Organic Chemistry Laboratory ....... 2
CHE 441 Physical Chemistry Laboratory ......................... 2
CHE 516 Inorganic Chemistry Laboratory ......................... 3
Foreign Language II* ......................................................... 4
A&S Free Elective ............................................................ 3

Senior Year

First Semester

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

Second Semester

CHE 566 Organic Materials: Characterization and Devices .................................................. 3
CHE 567 Organic Materials: Fabrication Laboratory ....... 2
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.
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 131.

**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) ............................................ 4

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

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

Elections ........................................................................................................... 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 3

or

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

*PHY 211 General Physics ............................................ 3

or

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

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

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**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.

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**Bachelor of Arts with a major in GEOLOGICAL SCIENCES**

**120 hours (minimum)**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

**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

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**Other Course Work Required for the Major**

From the Major Department:

Elective I ................................................................. 6

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

Elective II ............................................................... 6

Choose 6 additional hours of 300+ EES or related courses

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

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

Total Minimum Hours: ........................................... 120

*Course used towards completion of a UK Core Requirement.

**Bachelor of Science with a major in GEOLOGICAL SCIENCES**

**120 hours (minimum)**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

**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

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College of Arts and Sciences

University of Kentucky
2018-2019 Undergraduate Bulletin

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 131.

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

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

College Requirements

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

II. Disciplinary Requirements

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

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

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

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

Premajor Requirements

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

MA 114 Calculus II ......................................................... 4

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

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

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

CHE 113 General Chemistry II Laboratory ................. 2

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

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

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

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

Premajor hours: ..................................................... 29

Major Requirements

Major Core Requirements

EES 323 Field Work in Regional Geology ................... 6

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

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

EES 459G Sedimentary Geology .................................... 4

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

EES 490 Earth Dynamics .................................................. 3

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

Other Course Work Required for the Major

From the Major Department:

Elective I ................................................................. 6

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 231/233/241/242 General University Physics ........ 10

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

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

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

*Course used towards completion of a UK Core Requirement.
**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 131.

**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 116 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

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

**College Requirements**

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

II. Disciplinary Requirements

a. Social Science ..................................................................6

b. Mathematics (completes the Premajor Requirement) ..................6

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

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

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

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

**Pre-major 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**

**Major Core Requirements**

ECO 391 Economic and Business Statistics ................................3

ECO 401 Intermediate Microeconomic Theory ....................................3

ECO 402 Intermediate Macroeconomic Theory ..................................3

ECO 499 Seminar in Economics (Subtitle required) ............................3

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

**Other Course Work Required for the Major**

From the Major Department:

Choose 9-15 hours of 300+ level economics courses of which at least 6 must be at the 400+ level ........................................9-15

From Outside the Major Department

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

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

**Electives**

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

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

*Course used towards completion of a UK Core Requirement.

**Minor in Economics**

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

ECO 201 Principles of Economics I ..............................................3

ECO 202 Principles of Economics II .............................................3

ECO 401 Intermediate Microeconomic Theory

or

ECO 402 Intermediate Macroeconomic Theory ................................3

Three additional economics courses at the 300-level or above .................................................................9

**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. Social Science ..................................................................6

b. Mathematics (completes the Premajor Requirement) ..................6

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

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

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

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

**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 131.

**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. Social Science ..................................................................6

b. Mathematics (completes the Premajor Requirement) ..................6

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

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

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

College Requirement hours: .................................................19-33
Major Core Requirements

*Course used towards completion of a UK Core Requirement.

Premajor Requirements

*Eng 230 Introduction to Literature (Subtitle required) ..................... 3
*Eng 260 Introduction to Black Writers .................................... 3
*Eng 290 Introduction to Women’s Literature ......................... 3

Premajor Requirements

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 320 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 480G 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 (Major Electives) primarily at the 300-level and above. Of these required seven courses:

- two courses must be at the 400-level, of which one must be above Eng 407 (i.e., not Eng 401, 405, or 407);
- two courses maximum may be counted from additional Historical Surveys (surveys cannot be double-counted for the Historical Survey Requirement and for the total Eng course requirement);
- two courses maximum may be counted from 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.A. degree, 9 additional hours at the 200+ level outside English are required in allied departments and programs in Arts, Humanities, Social Sciences, and Education. Applicable departments and programs include (by prefix): A&S, AAS, AIS, ANT, APP, CHI, CLA, EDC, EDU, EPE, GER, GWS, HIS, HIM, HON, IAS, ITA, JOU, JPN, LAS, LIN, MAS, MCL, PHI, PS, RS, SPA, ST, WRD

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) taken twice ................................ 6
- submission of a portfolio for evaluation by the Creative Writing staff six weeks prior to graduation

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

Bachelor of Science with a major in ENGLISH

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Courses with an Eng prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. For the Eng B.S. in particular, majors are allowed to apply an additional 9 hours of elective course work towards the science requirement. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

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

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) ..................... 3
*Eng 260 Introduction to Black Writers .................................... 3
*Eng 290 Introduction to Women’s Literature .......................... 3

Premajor hours: .................................................. 3
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 320 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 ................................................................. 0-2
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

Major 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 320 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 ................................................................. 0-2
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 (Major Electives) primarily at the 300-level and above. Of these required seven courses:

• two courses must be at the 400-level, of which one must be above ENG 407 (i.e., not ENG 401, 405, or 407);
• two courses maximum may be counted from additional Historical Surveys (surveys cannot be double-counted for the Historical Survey Requirement and for the total ENG course requirement);
• two courses maximum may be counted from 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 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 207 Beginning Workshop in Creative Writing (Subtitle required) ...................................................... 3
ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) or

ENG 307 Advanced Workshop in in Creative Writing (Subtitle required) ...................................................... 3
plus one additional Creative Writing course:
ENG 107 Writing Craft: Introduction to Creative Writing ...................................................... 3
ENG 207 Beginning Workshop in Creative Writing (Subtitle required) ...................................................... 3
ENG 407 Intermediate Workshop in Creative Writing (Subtitle required) ...................................................... 3
ENG 507 Advanced Workshop in Creative Writing (Subtitle required) ...................................................... 3

Minor in English

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

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

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

Four more ENG courses, with a maximum of one 100-level course and a minimum of two 300+ level courses ...................................................... 12
Combinations may include:
1. any one 100-level ENG course plus one 200-level ENG introductory course (e.g. ENG 230, ENG 260, ENG 280, ENG 290) or a 300+ level ENG course, plus any two ENG courses at the 300+ level; or
2. any two 200-level ENG introductory courses, plus any two ENG courses at the 300+ level; or
3. any one 200-level ENG introductory course, plus any three ENG courses at the 300+ level; or
4. any four ENG courses at the 300+ level.

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 se-
lected 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. See the complete description of College requirements for a Bachelor of Arts degree on page 131.

UK Core Requirements

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

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

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

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

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

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

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

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

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

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

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

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

Graduation Composition and Communication Requirement (GCCR)

ENS 400 Senior Seminar (Subtitle required) ................................... 3

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

College Requirements

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

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

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

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

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

Required Core Courses

<table>
<thead>
<tr>
<th>Hours</th>
<th>Required Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ENS 201 Environmental and Sustainability Studies I: Humanities and Social Sciences</td>
</tr>
<tr>
<td>3</td>
<td>ENS 202 Environmental and Sustainability Studies II: Natural Science and Policy</td>
</tr>
<tr>
<td>3</td>
<td>ENG 425 Environmental Writing</td>
</tr>
<tr>
<td>3</td>
<td>ENS 300 Special Topics (Subtitle required)</td>
</tr>
<tr>
<td>3</td>
<td>PHI 336 Environmental Ethics</td>
</tr>
<tr>
<td>3</td>
<td>ENS 400 Senior Seminar (Subtitle required)</td>
</tr>
</tbody>
</table>

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

AREAS OF EXPERTISE

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

Area 1 – Economics

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

AEC 303 Microeconomic Concepts in Agricultural Economics .......... 3
AEC 324 Agricultural Law .................................................... 3
AEC 326 Principles of Environmental Law .................................. 3
AEC 445S Introduction to Resource and Environmental Economics .... 3
AEC/ECO 479 Public Economics ............................................. 3
AEc 483 Regional Economics ................................................. 3
AEc 532 Agriculture and Food Policy ...................................... 3
AEC/NRE 545 Resource and Environmental Economics ............... 3
ANT 225 Culture, Environment, and Global Issues ...................... 3
ANT 311 Anthropology of Globalization .................................... 3
ANT 322 Ancient Mexican Civilizations .................................... 3
ANT 338 Economic Anthropology ............................................ 3
ANT 340 Development and Change in the Third World ................ 3
ANT 375 Ecology and Social Practice ...................................... 3
ANT 470G Regional American Ethnography ................................ 3
ANT 532 Anthropology of the State ......................................... 3
ANT 543 Cultural Resource Management ................................... 3
*ECO 201 Principles of Economics I ....................................... 3
ECO 202 Principles of Economics II ........................................ 3
ECO 401 Intermediate Microeconomic Theory ............................ 3
ECO 410 Current Issues in Economics (Subtitle required) .............. 3
ECO 473G Economic Development ......................................... 3
ENS 395 Independent Work ................................................... 3
FOR 280 Forest Resource Policy and Law .................................. 3
FOR 325 Economic Botany: Plants and Human Affairs .................. 3
GEO 231 Environment and Development .................................... 3
GEO 235 Environmental Management and Policy ....................... 3
GEO 255 Geography of the Global Economy ............................. 3
GEO 260 Geographies of Development in the Global South .......... 3
GEO 321 Land, People, and Development in Appalachia ............... 3
GEO 442G Political Geography ............................................. 3
GEO 455 Globalization and the Changing World Economy ............ 3
GEO 550 Sustainable Resource Development and Environmental Management .................................................. 3
NRE 201 Natural Resources and Environmental Science ............... 3
NRE 381 Natural Resource and Environmental Policy Analysis ....... 3
STA 210 Statistics: A Force in Human Judgment ......................... 3
STA 296 Statistical Methods and Motivations ............................. 3
STA 320 Introductory Probability ............................................ 3
*ECO 201 is required for Area 1.

Area 2 – Environment

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

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

Area 3 – Society

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

ANT 221 Native People of North America ............ 3
ANT 225 Culture, Environment and Global Issues .... 3
ANT 245 Food Culture and Society ................... 3
ANT 303 Topics in the Anthropology of Food and Nutrition (Subtle required) .................. 3
ANT 311 Anthropology of Globalization ............... 3
ANT/AAS 326 Contemporary African Lives .......... 3
ANT 340 Development and Change in the Third World ......................................................... 3
ANT 342 North American Archaeology ................. 3
ANT 375 Ecology and Social Practice .................. 3
ANT 4706 Regional American Ethnography ............ 3
ANT 525 Applied Anthropology ........................ 3
ANT 545 Historical Archaeology ........................ 3
ANT 555 Eastern North American Archaeology ....... 3
ARC 314 History and Theory III: 20th Century and Contemporary Architecture ...................... 3
ARC 315 World Architecture and Urbanism ............ 3
ENG 339 Author Studies (Subtle required) ............. 3
ENG 401 Special Topics in Writing (Subtle required) .......................................................... 3
ENS 395 Independent Work ................................ 3
GEO 231 Environment and Development ............... 3
GEO 285 Introduction to Planning ....................... 3
GEO 321 Land, People, and Development in Appalachia .................................................. 3
GEO 331 Global Environmental Change ............... 3
GEO 431 Political Ecology .................................. 3
GEO 485U Urban Planning and Sustainability ....... 3
HIS 240 History of Kentucky ............................. 3
LA 205 History of Landscape Architecture .......... 3
PHI 361 Biology and Society (Subtle required) ....... 3
PS 391 Special Topics in Political Science (Subtle required) .................................................. 3
SAG 201 Cultural Perspectives on Sustainability .... 3
SOC 302 Sociological Research Methods ............... 3
SOC/CLD 360 Environmental Sociology ............... 3
SOC 363 Environmental Justice ........................ 3
SOC/CLD 380 Globalization: A Cross-Cultural Perspective .................................................. 3
SOC/CLD 420 Sociology of Communities ............... 3
SOC/CLD 517 Rural Sociology ............................ 3
SOC/ANT/CLD 534 Sociology of Appalachia ............ 3

From Outside the Major Department

Choose hours outside Environmental and Sustainability Studies at the 300+ level. 200+ level courses used to satisfy College Requirements can also be counted here.

Subtotal: Other Major hours: ..................................... 6

Electives

Electives should be selected to complete the 120 hours required for graduation.

Subtotal: Electives ................................................. minimum of 6

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

FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS

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

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

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 131.

UK Core Requirements

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

I. Intellectual Inquiry in Arts and Creativity

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

II. Intellectual Inquiry in the Humanities

AIS 320 Modern Arabic Literature and Film in Translation
AIS 345 Islamic Mysticism
CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
CHI 331 Introduction to Chinese Culture, 1840 to Present
FR 103 French Cinema
FR 205 The French Graphic Novel
FR 225 French Film Noir
GER 103 Fairy Tales in European Context
GER 305 German Film Today
MCL 100 The World of Language
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 200 Global Literacy
MCL 270 Introduction to Folklore and Mythology
RUS 275 Russian Film
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present
SPA 372 Experiments in Life and Art: Spanish Culture 1900-Present

III. Intellectual Inquiry in the Social Sciences

AIS 430 Islam in America
ECO 101 Contemporary Economic Issues
MCL 135 Vampires: Evolution of a Sexy Monster
MCL 270 Introduction to Folklore and Mythology
RUS 370 Russian Folklore (in English)

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 Reasoning

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

IX. Community, Culture and Citizenship in the USA

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, 1440 to Present
GER 342 War, Peace, and Terror in Germany and Europe
GER 361 Russian Cinema
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present
JPN 331 The Japanese Experience of the Twentieth Century
RUS 370 Russian Folklore (in English)
RUS 371 The Russian Cultural Imagination: 900-1900
RUS 372 Experiments in Life and Art: Russian Culture 1900-Present

XII. English Language Core Requirement

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

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 401 Intermediate Microeconomic Theory ...... 3
ECO 402 Intermediate Macroeconomic Theory ...... 3
ECO 300+ Any 300+ level ECO course ................. 3

plus two of the following:

ECO 471 International Trade ................................. 3
ECO 472 International Monetary Economics .......... 3
ECO 473G Economic Development ....................... 3

Economics Core 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
### Language Core Requirement: French

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 204 Introduction to French and Francophone Studies</td>
<td>3</td>
</tr>
<tr>
<td>FR 214 France Today</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>FR 215 Visual Cultures</td>
<td></td>
</tr>
<tr>
<td>FR 307 French for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>plus 12 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>FR 310 French Phonetics</td>
<td></td>
</tr>
<tr>
<td>FR 311 Introduction to French Linguistics</td>
<td></td>
</tr>
<tr>
<td>FR 324 Studies in French Literature</td>
<td></td>
</tr>
<tr>
<td>(Subtitle required)</td>
<td></td>
</tr>
<tr>
<td>FR 325 French Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>FR 344 The Literary Text (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>FR 350 Francophone Cultures (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>FR 410 French in Performance</td>
<td></td>
</tr>
<tr>
<td>FR 425 Media Studies</td>
<td></td>
</tr>
<tr>
<td><strong>French Core hours:</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

### Language Core Requirement: German

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 206 Spoken Communication</td>
<td>3</td>
</tr>
<tr>
<td>GER 307 Intermediate German Composition and Conversation I</td>
<td></td>
</tr>
<tr>
<td>GER 310 German for International Business and Professions</td>
<td></td>
</tr>
<tr>
<td>plus 12 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>GER 311 Introduction to German Literature: Themes (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>GER 312 German Popular Forms (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>GER 317 History of German Culture</td>
<td></td>
</tr>
<tr>
<td>GER 319 Contemporary German Literature and Culture</td>
<td></td>
</tr>
<tr>
<td>GER 342 War, Peace, and Terror in Germany and Europe</td>
<td></td>
</tr>
<tr>
<td>GER 352 German-Speaking Europe (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>GER 361 German Cinema</td>
<td></td>
</tr>
<tr>
<td>GER 363 Germanic Mythology</td>
<td></td>
</tr>
<tr>
<td>GER 395 Independent Work in German</td>
<td>1-3</td>
</tr>
<tr>
<td>GER 507 Advanced German Composition and Conversation</td>
<td></td>
</tr>
<tr>
<td>GER 515 Studies in Major Authors</td>
<td></td>
</tr>
<tr>
<td>GER 516 Studies in Genre</td>
<td></td>
</tr>
<tr>
<td>GER 550 Multidisciplinary German Studies Seminar (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td><strong>German Core hours:</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

### Language Core Requirement: Italian

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

### Language Core Requirement: Japanese

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPN 301 Advanced Japanese I</td>
<td>3</td>
</tr>
<tr>
<td>JPN 302 Advanced Japanese II</td>
<td></td>
</tr>
<tr>
<td>plus one of the following modern Japanese cultural-social studies courses:</td>
<td></td>
</tr>
<tr>
<td>JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present</td>
<td></td>
</tr>
<tr>
<td>JPN/GEO 334 Environment, Society and Economy of Japan</td>
<td></td>
</tr>
<tr>
<td>JPN 351 The Japanese Experience of the Twentieth Century</td>
<td></td>
</tr>
<tr>
<td>HIS 357 Japan at War, 1850 to the Present</td>
<td></td>
</tr>
<tr>
<td>plus 12 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>A-H 310 Asian Art and Culture (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>A-H 311 The Arts As Soft Power: The Japanese Tea Ceremony</td>
<td></td>
</tr>
<tr>
<td>GEO 333 Geography of East Asia</td>
<td></td>
</tr>
<tr>
<td>GEO 365 Special Topics in Regional Geography (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>GEO 406 Field Studies in Geography (Subtitle required)</td>
<td></td>
</tr>
<tr>
<td>GEO/PJN 491G Japanese Landscapes</td>
<td></td>
</tr>
<tr>
<td>GEO/PJN 551 Japanese Multinational Corporations</td>
<td></td>
</tr>
<tr>
<td>HIS 295 East Asia to 1800</td>
<td></td>
</tr>
<tr>
<td>HIS 296 East Asia Since 1600</td>
<td></td>
</tr>
<tr>
<td>HIS 357 Japan at War, 1850 to the Present</td>
<td></td>
</tr>
<tr>
<td>(if not taken as part of the modern Japanese cultural-social studies courses specified above)</td>
<td></td>
</tr>
<tr>
<td>JPN 283 Japanese Film</td>
<td></td>
</tr>
<tr>
<td>JPN 320 Introduction to Japanese Culture, Premodern to 1868</td>
<td></td>
</tr>
<tr>
<td>JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present</td>
<td></td>
</tr>
<tr>
<td>(if not taken as part of the modern Japanese cultural-social studies courses specified above)</td>
<td></td>
</tr>
<tr>
<td>JPN/GEO 334 Environment, Society and Economy of Japan</td>
<td></td>
</tr>
<tr>
<td>(if not taken as part of the modern Japanese cultural-social studies courses specified above)</td>
<td></td>
</tr>
<tr>
<td>JPN 351 The Japanese Experience of the Twentieth Century</td>
<td></td>
</tr>
<tr>
<td>JPN/GEO 334 Environment, Society and Economy of Japan</td>
<td></td>
</tr>
<tr>
<td>JPN/GEO 334 Environment, Society and Economy of Japan</td>
<td></td>
</tr>
<tr>
<td>JPN 420G Pre-Modern Literary and Visual Arts of Japan</td>
<td></td>
</tr>
<tr>
<td>JPN 421G Contemporary Literary and Visual Arts of Japan</td>
<td></td>
</tr>
<tr>
<td>JPN 520 Japanese Linguistics and Society</td>
<td></td>
</tr>
<tr>
<td>and/or other related courses with the approval of the major advisor</td>
<td></td>
</tr>
<tr>
<td><strong>Japanese Core hours:</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

### Language Core Requirement: Russian

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUS 301 Conversation and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>RUS 302 Advanced Intermediate Russian II</td>
<td></td>
</tr>
<tr>
<td>RUS 372 Experiments in Life and Art: Russian Culture 1900-Present</td>
<td></td>
</tr>
<tr>
<td>plus 12 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>ANT 329 Cultures and Societies of Eurasia and Eastern Europe: Socialism and Post-Socialist Change</td>
<td></td>
</tr>
<tr>
<td>ANT 432 Anthropology of Eastern Europe and Russia</td>
<td></td>
</tr>
<tr>
<td>GEO 329 Geography of the Former Soviet Union</td>
<td></td>
</tr>
<tr>
<td>HIS 385 History of Russia to 1825</td>
<td></td>
</tr>
<tr>
<td>HIS 386 History of Russia Since 1825</td>
<td></td>
</tr>
<tr>
<td>HIS 534 Russia in the 19th Century</td>
<td></td>
</tr>
<tr>
<td>HIS 535 Russia in the 20th Century</td>
<td></td>
</tr>
<tr>
<td>HIS 536 Intellectual and Cultural History of Russia to 1800</td>
<td></td>
</tr>
<tr>
<td><strong>Russian Core hours:</strong></td>
<td><strong>21</strong></td>
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</table>
### Language Core Requirement: Spanish

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 310</td>
<td>Spanish Composition Through Textual Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SPA 302</td>
<td>Spanish for Business Professionals</td>
<td>3</td>
</tr>
<tr>
<td>SPA 332</td>
<td>Spanish and Latin American Business Environments</td>
<td>3</td>
</tr>
<tr>
<td>SPA 420</td>
<td>Spanish in the World</td>
<td>3</td>
</tr>
<tr>
<td>plus 9 hours from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPA 312</td>
<td>Civilization of Spain</td>
<td>3</td>
</tr>
<tr>
<td>SPA 313</td>
<td>Advanced Spanish Language</td>
<td>3</td>
</tr>
<tr>
<td>SPA 314</td>
<td>Civilization of Spanish America</td>
<td>3</td>
</tr>
<tr>
<td>SPA 323</td>
<td>Introduction to Spanish Translation</td>
<td>3</td>
</tr>
<tr>
<td>SPA 350</td>
<td>Hispanic Cities (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 371</td>
<td>Latin American Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 372</td>
<td>Spanish Cinema (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>SPA 373</td>
<td>Spanish Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPA 399</td>
<td>Field Based Community Based Education</td>
<td>3</td>
</tr>
<tr>
<td>+any 400-level SPA course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spanish Core hours:** 21

### Electives

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

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

*Course used towards completion of a UK Core Requirement*

### 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 131.

### 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

#### II. Intellectual Inquiry in the Humanities

- **Arts Core Requirement:**
  - **US Core Requirement:**
  - **World Civilization Core Requirement:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 320</td>
<td>Modern Arabic Literature and Film in Translation</td>
<td>3</td>
</tr>
<tr>
<td>AIS 345</td>
<td>Islamic Mysticism</td>
<td>3</td>
</tr>
<tr>
<td>CHI 330</td>
<td>Introduction to Chinese Culture, Pre-Modern to 1480</td>
<td>3</td>
</tr>
<tr>
<td>CHI 331</td>
<td>Introduction to Chinese Culture, 1840 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

#### III. The Disciplinary Core Requirement: Economics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 202</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 203</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 391</td>
<td>Economic and Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 401</td>
<td>Intermediate Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECO 402</td>
<td>Intermediate Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECO 300</td>
<td>300+ level ECO course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Language Core Requirement:**

- **MCL/SPA 300 Contact Zones:** Cultivating Intercultural Competence

**Language Core hours:** 3

### Economics Core Requirement

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

#### II. Disciplinary Requirements

- **Natural Science:**
- **Social Science:**
- **Humanities:**

#### III. Laboratory or Field Work 1

#### IV. Electives 6

**College Requirement hours:** 16-30

### Language Core Requirement

- **Arabic Core Requirement:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 202</td>
<td>Intermediate Modern Standard Arabic</td>
<td>3</td>
</tr>
<tr>
<td>AIS 311</td>
<td>Arabic for Business and Media I</td>
<td>3</td>
</tr>
<tr>
<td>AIS 312</td>
<td>Arabic for Business and Media II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Economics Core Requirement**

- **Arabic Core hours:** 21

### Language Core Requirement

- **Chinese Core Requirement:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 301</td>
<td>Advanced Intermediate Chinese I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 302</td>
<td>Advanced Intermediate Chinese II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 331</td>
<td>Introduction to Chinese Culture, 1840 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

**Arabic Core requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 301</td>
<td>Advanced Intermediate Chinese I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 302</td>
<td>Advanced Intermediate Chinese II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 331</td>
<td>Introduction to Chinese Culture, 1840 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

**Arabic Core hours:** 21
GER 361 German Cinema ................................................ 3
GER 352 German-Speaking Europe in Germany and Europe ................................................ 3
GER 312 German Popular Forms (Subtitle required) ..... 3
 GER 401 Advanced Chinese I 3
GER 402 Advanced Chinese II 3
GER 430 Popular Culture in Modern China ………3
GER 450 Hermits, Immortals and Madmen ………3
GER 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 or FR 215 Visual Cultures ……………………3
FR 307 French for Business and Economics ……………………3
plus 12 hours from the following:
FR 310 French Phonetics ……………………3
FR 311 Introduction to French Linguistics ……………………3
FR 324 Studies in French Literature (Subtitle required) ……………………3
FR 325 French Cinema (Subtitle required) ……………………3
FR 344 The Literary Text (Subtitle required) ……………………3
FR 350 Francophone Cultures (Subtitle required) ……………………3
FR 410 French in Performance ……………………3
FR 425 Media Studies ……………………3
French Core hours: ……………………21

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

German Core hours: ……………………21

Language Core Requirement: Italian
ITA 263 Studies in Italian Culture (Subtitle required) ……………………3
ITA 300 Italian Conversation and Writing ……………………3
ITA 301 Italy from Fascism to the Present ……………………3
ITA 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 321 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
JPN 320 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
plus one of the following modern Japanese cultural-social studies courses:
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
JPN/334 Environment, Society and Economy of Japan ……………………3
JPN/334 Environment, Society and Economy of Japan ……………………3
plus 12 hours from the following:
A-H 310 Asian Art and Culture (Subtitle required) ……………………3
A-H 311 The Arts As Soft Power: The Japanese Tea Ceremony ……………………3
JPN 302 Advanced Japanese II ……………………3
JPN 301 Advanced Japanese I ……………………3
JPN 320 Advanced Japanese II ……………………3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
JPN/334 Environment, Society and Economy of Japan ……………………3
JPN/491G Japanese Landscapes ……………………3
JPN/551 Japanese Multinational Corporations ……………………3
HIS 295 East Asia to 1800 ……………………3
HIS 296 East Asia Since 1600 ……………………3
HIS 357 Japan at War, 1850 to the Present ……………………3
JPN 320 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
Language Core Requirement: Japanese
JPN/511 The Arts As Soft Power: The Japanese Tea Ceremony ……………………3
JPN/406 Field Studies in Geography (Subtitle required) ……………………3
GEO/JPN 491G Japanese Landscapes ……………………3
GEO/JPN 551 Japanese Multinational Corporations ……………………3
HIS 295 East Asia to 1800 ……………………3
HIS 296 East Asia Since 1600 ……………………3
HIS 357 Japan at War, 1850 to the Present ……………………3
JPN 351 The Japanese Experience of the Twentieth Century (if not taken as part of the modern Japanese cultural-social studies courses specified above) ……………………3
JPN 283 Japanese Film ……………………3
JPN 320 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present ……………………3
JPN/334 Environment, Society and Economy of Japan ……………………3
JPN/334 Environment, Society and Economy of Japan ……………………3
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 
ANT 432 Anthropology of Eastern Europe and Russia ................................................................. 3
GEO 329 Geography of the Former Soviet Union ................................................................. 3
HIS 385 History of Russia to 1825 ................................................................. 3
HIS 386 History of Russia Since 1825 ................................................................. 3
HIS 534 Russia in the 19th Century ................................................................. 3
HIS 535 Russia in the 20th Century ................................................................. 3
HIS 536 Intellectual and Cultural History of Russia to 1800 ................................................................. 3
HIS 537 Intellectual and Cultural History of Russia from 1800 to the Present ................................................................. 3
PS 429G Government and Politics in Russia and the Post-Soviet States ................................................................. 3
RUS 275 Russian Film ................................................................. 3
RUS 370 Russian Folklore (in English) ................................................................. 3
RUS 371 The Russian Cultural Imagination: 900-1900 ................................................................. 3
RUS 4100 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
RUS Core hours: ........................................................................ 21

Language Core Requirement: Spanish
SPA 310 Spanish Composition
Through Textual Analysis ................................................................. 3
SPA 302 Spanish for Business Professionals ................................................................. 3
SPA 332 Spanish and Latin American Business Environments ................................................................. 3
SPA 420 Spanish in the World ................................................................. 3
plus 9 hours from the following:
SPA 312 Civilization of Spain ................................................................. 3
SPA 313 Advanced Spanish Language ................................................................. 3
SPA 314 Civilization of Spanish America ................................................................. 3
SPA 323 Introduction to Spanish Translation ................................................................. 3
SPA 350 Hispanic Cities (Subtitle required) ................................................................. 3
SPA 371 Latin American Cinema (Subtitle required) ................................................................. 3
SPA 372 Spanish Cinema (Subtitle required) ................................................................. 3
SPA 397 Independent Work in Spanish ................................................................. 3
SPA 399 Field Based/Community Based Education ................................................................. 3
*any 400-level SPA course 
Spanish Core hours: ........................................................................ 21

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

Total Minimum Hours Required for Degree ........................................ 120
*Course used towards completion of a UK Core Requirement

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 131.

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
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).

From Outside the Major Department
Choose 12 hours outside GWS at the 300+ level. 200+ level courses used to satisfy College requirements can also be counted here.

Other Major hours: ................................................................. 12

Total Minimum Hours Required for Degree ........................................ 120
*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
or
GWS 201 Gender and Popular Culture ........................................ 3
GWS 250 Social Movements
or
GWS 340 History of Feminist Thought to 1975 ........................................ 3
GWS 350 Feminist Theory ........................................ 3

Plus an additional 9 hours of electives to be selected with the
approval of the Director of Undergraduate Studies in the Department of Gender and Women’s Studies.

Courses used for the Gender and Women’s Studies topical major, minor or graduate certificate must be taught by a Gender and Women’s Studies Affiliated Faculty.

Gender and Women’s Studies also offers an Undergraduate Certificate in Sexuality Studies, listed on page 198.

For further information, contact the department manager, Gender and Women’s Studies, 112 Breckinridge Hall, (859) 257-1388.

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**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 131.

**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)**

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

**Major Requirements**

**Major Core Requirements**

GEO 130 Earth’s Physical Environment ........................................... 3

GEO 172 Human Geography .................................................. 3

GEO 200 Orientation to Geography .................................................. 3

GEO 406 Field Studies in Geography (Subtitle required) .......................... 3

GEO 309 Introduction to GIS .................................................. 3

GEO 499 Senior Research Seminar .................................................. 3

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

**Methods Requirements**

Choose one methods course from the following options:

GEO 305 Elements of Cartography .................................................. 3

GEO 310 Data Explorations and Applications in Everyday Life .................................................. 3

GEO 311 Qualitative Methods in Geography .................................................. 3

GEO 409 Advanced GIS .................................................. 3

**Methods hours:** .................................................. 3

**Other Course Work Required for the Major**

**Geography Tracks** .................................................. 18

Choose at least 18 hours of additional geography courses to include: no more than 3 hours of 100-level courses; no more than 6 hours of GEO 560 and GEO 399; a minimum of 3 hours of 400+ level courses (not including GEO 409, 406, or 499). The following focus areas represent specializations within Geography and are provided as guidelines. Most students will find it useful to concentrate their 18 hours within these focus areas, but this is not a requirement. On completion of 15 hours within any focus area, the Geography Department will award a certificate of completion of studies in the area of specialization. Consult with your advisor in making selections of courses.

**GEOGRAPHY TRACKS**

**Environmental Geography Option**

Suggested Courses:

GEO 135 Global Climate Change .................................................. 3

GEO 162 Introduction to Global Environmental Issues .................................................. 3

GEO 210 Environmental Science .................................................. 3

GEO 225 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 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 345 Transportation Geography .................................................. 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 345 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 505 Practicum in Cartography .................................................. 3

GEO 310 Data Explorations and Applications in Everyday Life .................................................. 3

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University of Kentucky 2018-2019 Undergraduate Bulletin
College of Arts and Sciences

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 475G Medical Geography ....................................... 3
GEO 490G American Landscapes ..................................... 3
GEO 544 Human Population Dynamics ................................ 3
GEO 545 Transportation Geography .................................. 3
GEO 546 Tourism and Recreation Geography ...................... 3

International Studies Option
Suggested Courses:
GEO 163 Global Conflicts ............................................. 3
GEO 221 Immigrant America:
A Geographic Perspective ............................................. 3
GEO 222 Cities of the World .......................................... 3
GEO 255 Geography of the Global Economy ..................... 3
GEO 326 Geography of Europe ....................................... 3
GEO 328 Geography of the Middle East
and North Africa ............................................................ 3
GEO 329 Geography of the Former Soviet Union ................. 3
GEO 331 Global Environmental Change ......................... 3
GEO 334 Environment, Society and Economy of Japan ........ 3
GEO 546 Tourism and Recreation Geography ...................... 3

Design Your Own Geography Major Option
Any Geography courses fulfilling the requirements for the major.

Major hours: ................................................................. 39

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

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

Bachelor of Science with a major in GEOGRAPHY

120 hours (minimum)
Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with a GEO prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

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)
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

College Requirement hours: 13-27

Major Requirements

Major Core Requirements
GEO 130 Earth’s Physical Environment ................................ 3
GEO 172 Human Geography ............................................ 3
GEO 200 Orientation to Geography .................................... 3
GEO 406 Field Studies in Geography (Subtitle required) ....... 3
GEO 309 Introduction to GIS ............................................ 3
GEO 499 Senior Research Seminar .................................... 3

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

Methods Requirements
Choose one methods course from the following options:
GEO 305 Elements of Cartography .................................... 3
GEO 310 Data Explorations and Applications
in Everyday Life ............................................................ 3
GEO 311 Qualitative Methods in Geography ....................... 3
GEO 409 Advanced GIS ............................................... 3

Methods hours: ............................................................. 3

Other Course Work Required for the Major

Geography Tracks .......................................................... 18
Choose at least 18 hours of additional geography courses to include:
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 selec-
tions 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 310 Data Explorations and Applications
in Everyday Life ............................................................ 3
GEO 415 Map Interpretation ......................................... 3
GEO 365 Special Topics in Geography
(Subtitle required) ....................................................... 3

University of Kentucky
2018-2019 Undergraduate Bulletin
160
### 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 442 Global Political Geography ....................................... 3
- GEO 455 Globalization and the Changing World Economy .......... 3
- GEO 475G Medical Geography ............................................... 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.

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

### Minor in Geography

The minor in Geography requires a minimum of 18 hours, 15 of which must be in courses at the 200+ level, taken within the department as follows:

The courses below are suggested courses; all GEO courses count toward the minor.

#### K-12 Teaching and Administration

Take 6 for 18 credit hours:

- GEO 172 Human Geography ................................................. 3
- GEO 130 Earth’s Physical Environment .................................... 3
- GEO 200 Orientation to Geography ....................................... 3
- GEO 220 U.S. Cities ......................................................... 3
- GEO 222 Cities of the World .............................................. 3
- GEO 320-365 Regional Geography Courses ............................ 3
- GEO 452G World Geography for Teachers .............................. 3
- GEO 430G Physical Geography for Teachers ............................ 3

#### Geosciences

Take 6 for 18 credit hours:

- GEO 130 Earth’s Physical Environment .................................... 3
- GEO 230 Weather and Climate ............................................. 3
- GEO 331 Global Environmental Change .................................. 3
- GEO 331 Global Environmental Change .................................. 3
- GEO 451G Fluvial Forms and Processes .................................. 3
- GEO 550 Biogeography and Conservation ................................ 3
- GEO 531 Landscape Ecology ................................................ 3
- GEO 51 Physical Landscapes ............................................... 3

### Social Sciences and Humanities

Take 6 for 18 credit hours:

- GEO 160 Lands and Peoples of the Non-Western World ............. 3
- GEO 161 Global Inequalities ................................................ 3
- GEO 162 Introduction to Global Environmental Issues ............... 3
- GEO 163 Global Conflicts .................................................. 3
- GEO 172 Human Geography .................................................. 3
- GEO 221 Immigrant America: A Geographic Perspective .......... 3
- GEO 240 Geography and Gender .......................................... 3
- GEO 302-GEO 336 Regional Geography Courses .................... 3
- GEO 422 Urban Geography .................................................. 3
- GEO 442 Global Political Geography ..................................... 3
- GEO 470G America’s Cultural Geographies ............................ 3
- GEO 550 Sustainable Resource Development and Environmental Management .................................................. 3
- GEO 585 Aging and Environment ......................................... 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 ............................................. 3
- GEO 331 Global Environmental Change .................................. 3
- GEO 231 Environment and Development .................................. 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 .................................................. 3
- GEO 164 iWorlds: Global Information Geographies ......... 3
- GEO 172 Human Geography .................................................. 3
- GEO 221 Immigrant America: A Geographic Perspective .......... 3
- GEO 240 Geography and Gender .......................................... 3
- GEO 255 Geography of the Global Economy ................................ 3
- GEO 260 Geographies of Development in the Global South ........... 3
- GEO 302-GEO 336 Regional Geography Courses .................... 3
- GEO 422 Urban Geography .................................................. 3
- GEO 442G Political Geography ............................................. 3
- GEO 470G America’s Cultural Geographies ............................ 3
- GEO 550 Sustainable Resource Development and Environmental Management .................................................. 3
- GEO 585 Aging and Environment ......................................... 3

### Minor in Mapping and GIS

The minor in Mapping and GIS requires 18 hours as follows:

- **Introduction to Digital Mapping** (3 hours)
  - GEO 109 Digital Mapping .................................................. 3
- 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 131.

UK Core Requirements

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

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

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

III. Intellectual Inquiry in the Social Sciences Recommended:

- PSY 100 Introduction to Psychology .......................... 4
- MA 111 Introduction to Contemporary Mathematics ........... 3
- MA 113 Calculus I .................................................. 3
- MA 123 Elementary Calculus and Its Applications ........... 4
- MA 137 Calculus I with Life Science Applications ........... 4

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

V. Composition and Communication I

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

VI. Composition and Communication II

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

VII. Quantitative Foundations

Recommended – one of the following:

- MA 111 Introduction to Contemporary Mathematics .......... 3
- MA 113 Calculus I .................................................. 3
- MA 123 Elementary Calculus and Its Applications ........... 4
- MA 137 Calculus I with Life Science Applications ........... 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: .............................................. 30-32

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

I. Foreign Language

(placement test recommended) ...................................... 6-14

II. Disciplinary Requirements

a. Natural Science

(may be satisfied by major requirements) .................. 0-6

b. Social Science

(may be satisfied by major requirements) .................. 0-6
c. Humanities ........................................................ 6

III. Laboratory or Field Work

(PSY 100 recommended) ........................................... 1-3

IV. Electives

College Requirement hours: ........................................ 19-29

Major Requirements

Major courses that also fulfill the A&S College requirements are marked with “+”; major courses that also fulfill UK Core areas are marked with “*”. 24 credit hours within the major must be at the 300+ level.

Statistics

Choose one of the following (3 hours):

- STA 207C Statistical Methodologies and Applications .......... 3
- *SOC 235 Quantitative Social Analysis .......................... 3
- GEO 309 Introduction to GIS ..................................... 3

Math

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

- MA 109 College Algebra ............................................ 3

Writing

Select one of the following (3 hours):

- WRD 205 Writing and Rhetoric (Subtitle required)
- see HSP advisor for appropriate subtitles ........................ 3

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
*MA 209 Principles of Human Anatomy .......................... 3
*MA 102 Human Ecology ............................................ 3
*MA 103 Basic Ideas of Biology .................................... 3
*MA 148 Introductory Biology I ..................................... 3
*MA 206 Principles of Microbiology ............................. 3

Other courses from at least two different disciplines:

- CHE 104 Introductory General Chemistry .................. 3
- CHE 108 Introduction to Inorganic, Organic, and Biochemistry without Laboratory .................. 3

Electives

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

Total Minimum Hours

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

HISPANIC STUDIES

The Department of Hispanic Studies aims to develop students’ Spanish language skills, to deepen their understanding of Spanish-speaking cultures and literatures domestically and abroad, to sharpen their critical thinking, and to heighten their awareness of their role as local and global citizens in a pluralistic society. The department offers a major with three specialty options and a minor in Spanish.

Hispanic Studies Department Policy for Spanish Language Placement Exams

The Spanish language placement exam – currently the 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 the best interest of both that student and the other students in the class.

Sometimes, students take the placement exam at the start of their time at the university but choose not to take language classes immediately. If a student does not choose to enroll in Spanish classes the semester following the administration of the placement exam, the placement score is valid for another two years and is reported on the student’s advising profile on myGPS. As with many skills, language ability begins to degrade over time if those skills are not employed regularly. Pedagogically, it is important that the student be placed into the appropriate class for her/his current skill level. Thus, after two years, the student will need to repeat the placement exam in the Hispanic Studies departmental office before enrolling in course work in Spanish.

Once a student has chosen to take a class in the Spanish language sequence – or has chosen to transfer credit from another institution as Spanish language credit – the placement exam is no longer an option for that student. The exam serves as a placement exam and will not be used to determine language competency beyond recommended placement for continued study. Therefore, no student may take the AAPPL placement exam to satisfy language requirements if they have already taken Spanish language course work at UK or if they have transferred in Spanish language course work from another college or university, since that course work determines the placement of the student in the language series.

If you have any questions regarding the use and scope of the placement exam, please contact the Hispanic Studies department directly at (859) 257-2565.

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### Bachelor of Arts with a major in SPANISH

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 131.

### 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)**

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

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

**College Requirement hours:** .................................... 19

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### Major Requirements

#### Major Core Requirement

SPA 310 Spanish Composition

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

#### Major core hours: .................................................. 3

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### 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

CBS – 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

JOU – Journalism
**SPA 399 Field Based/ Community Based Education .......................... 1-15
**SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .......................... 3
SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) .......................... 3
SPA 432 18th and 19th Century Spanish Studies (Subtitle required) .......................... 3
SPA 434 Spanish Literature of the 20th Century .......................... 3
SPA 438G 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 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 6 credit hours from either list .......................... 6
*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:

*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 323 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 420 Spanish in the World .......................... 3
SPA 423 Advanced Spanish Translation .......................... 3
SPA 430 Introduction to Spanish Linguistics .......................... 3
SPA 451 Spanish Linguistics .......................... 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 6 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 Spanish America .......................... 3
SPA 324 The Theatre in Spain and Spanish America .......................... 3
SPA 350 Hispanic Cities (Subtitle required) .......................... 3
SPA 361 Latin American Literature in Translation (Subtitle required) .......................... 3
SPA 371 Latin American Cinema (Subtitle required) .......................... 3
SPA 372 Spanish Cinema (Subtitle required) .......................... 3
*SPA 397 Independent Work in Spanish .......................... 3
SPA 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
*These courses must have a focus on literature or culture.

**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 323 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 451 Spanish Linguistics .......................... 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 341 Latin American Literature in Translation (Subtitle required) .................. 3
- **SPA 371 Latin American Cinema (Subtitle required) ........ 3
- SPA 372 Spanish Cinema (Subtitle required) .................... 3
- **SPA 397 Independent Work in Spanish .......................... 3
- **SPA 399 Field Based/
  - Community Based Education .................................... 1-15
- **SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .................. 3
- SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) .................. 3
- SPA 432 18th and 19th Century Spanish Studies (Subtitle required) .................. 3
- **SPA 438G Literature of Social Protest in Spanish America .... 3
- SPA 440 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

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**Minor in Spanish**

The minor in Spanish requires a total of 21 hours based on the following distribution:

**Prerequisites**
- SPA 210 Spanish Grammar and Syntax .......................... 3
- SPA 211 Intermediate Spanish Conversation .................... 3

**Required Core Course**

- SPA 310 Spanish Composition
  - Through Textual Analysis .......................................... 3
  - plus 12 credit hours at the 300-level or above. At least 3 credit hours must be from the Language and Linguistics courses listed below; at least 3 credit hours must be from the Literature and Culture courses listed below:

**Language and Linguistics Courses**

- SPA 300 Contact Zones: Cultivating Intercultural Competence .................. 3
- SPA 302 Spanish for Business Professionals ...................... 3
- SPA 313 Advanced Spanish Language ................................ 3
- SPA 323 Introduction to Spanish Translation .................... 3
- SPA 397 Independent Work in Spanish ............................ 3
- SPA 399 Field Based/Community Based Education ................ 3
- SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .................. 3
- SPA 410 Advanced Spanish Grammar ................................ 3
- SPA 413 Spanish Phonetics .......................................... 3
- SPA 420 Spanish in the World ....................................... 3
- SPA 423 Advanced Spanish Translation ............................ 3
- SPA 430 Introduction to Spanish Linguistics ..................... 3
- SPA 480 Hispanic Kentucky ........................................ 3
- SPA 497 Hispanic Studies Honors Thesis ...................... 3
- SPA 501 Spanish Phonetics, Pronunciation and Phonemics ........ 3
- SPA 506 Introduction to Comparative Spanish, Portuguese, and Italian Linguistics .................. 3

**Literature and Culture Courses**

- SPA 300 Contact Zones: Cultivating Intercultural Competence .................. 3
- SPA 312 Civilization of Spain ........................................ 3
- SPA 314 Civilization of Spanish America ........................ 3
- SPA 315 Introduction to Hispanic Literature .................... 3
- SPA 320 Literature, Life and Thought of Spain .................. 3
- SPA 322 Literature, Life and Thought of Spanish America ...... 3
- SPA 324 The Theatre in Spain and Spanish America ............ 3
- SPA 361 Latin American Literature in Translation (Subtitle required) .................. 3
- **SPA 371 Latin American Cinema (Subtitle required) ........ 3
- SPA 372 Spanish Cinema (Subtitle required) .................... 3
- SPA 397 Independent Work in Spanish ............................ 3
- **SPA 399 Field Based/Community Based Education ............. 3
- **SPA 400 Special Topics in Hispanic Literatures and Languages (Subtitle required) .................. 3
- SPA 424 Medieval and Early Modern Spanish Studies (Subtitle required) .................. 3
- SPA 432 18th and 19th Century Spanish Studies (Subtitle required) .................. 3
- SPA 438G Literature of Social Protest in Spanish America .... 3
- SPA 440 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

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**HISTORY**

**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 131.

**UK Core Requirements**

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

1. **Intellectual Inquiry in Arts and Creativity**
   - Choose one course from approved list ................................ 3

2. **Intellectual Inquiry in the Humanities**
   - Choose one course from approved list ................................ 3

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

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

5. **Composition and Communication I**
   - CIS/WRD 110 Composition and Communication I .................. 3

6. **Composition and Communication II**
   - CIS/WRD 111 Composition and Communication II .................. 3

7. **Quantitative Foundations**
   - Choose one course from approved list ................................ 3

8. **Statistical Inferential Reasoning**
   - Choose one course from approved list ................................ 3

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

10. **Global Dynamics**
    - Choose one course from approved list ................................ 3

**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**

1. **Foreign Language (placement exam recommended) .................. 0-14

2. **Disciplinary Requirements**
   - a. Natural Science ................................................. 6
   - b. Social Science ............................................... 6
   - c. Humanities (completed by Major Requirements) ................ 6

3. **Laboratory or Field Work ........................................ 1

4. **Electives ......................................................... 6

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

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University of Kentucky 2018-2019 Undergraduate Bulletin 165

College of Arts and Sciences

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Premajor Requirements

HIS 104 A History of Europe through the Mid-Seventeenth Century

*HIS 105 A History of Europe from the Mid-Seventeenth Century to the Present

OR

HIS 106 Western Culture: Science and Technology I

*HIS 107 Western Culture: Science and Technology II

OR

*HIS 108 History of the United States Through 1876

*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.

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 131.

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 Requirements hours: .................................................. 13-27

Premajor Requirements

HIS 104 A History of Europe through the Mid-Seventeenth Century

*HIS 105 A History of Europe from the Mid-Seventeenth Century to the Present

OR

HIS 106 Western Culture: Science and Technology I

*HIS 107 Western Culture: Science and Technology II

OR

*HIS 108 History of the United States Through 1876

*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 105 A History of Europe through the Mid-Seventeenth Century
   HIS 106 Western Culture: Science and Technology I
   HIS 107 Western Culture: Science and Technology II
   HIS 108 History of the United States Through 1876
   HIS 109 History of the United States Since 1877
   HIS 202/203 History of the British People to the Restoration
   HIS 212/213 History of the United States Since 1877
   HIS 229/230 The Ancient Near East and Greece to the Death of Alexander the Great
   HIS 231/232 The Hellenistic World
   HIS 233/234 The Roman World
   HIS 235/236 The Medieval World
   HIS 371/372 The Renaissance
   HIS 373/374 The Early Modern World
   HIS 375/376 The Enlightenment
   HIS 377/378 The Industrial Revolution
   HIS 379/370 The Modern World
   HIS 380/381 The Contemporary World

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 course work 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 131.

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 or minor 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

2. 15 credit hours with an area concentration and 12 credit hours in a thematic 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 320 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 480G 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

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 4406 Studies in British Literature (Subtitle required) .......... 3

FR 214 France Today ......................... 3

FR 215 Visual Cultures ........................................... 3

FR 225 French Film Noir ......................... 3

FR 263 African and Caribbean Literature and Culture of French Expression in Translation (Subtitle required) .......... 3

FR 324 Studies in French Literature (Subtitle required) .......... 3

FR 325 French Cinema (Subtitle required) .......... 3

FR 504 Topics in French Literature and Culture (Subtitle required) .......... 3

GER 263 The German Cultural Tradition I ............... 3

GER 264 The German Cultural Tradition II .......... 3

GER 311 Introduction to German Literature: Themes (Subtitle required) .......... 3

GER 312 German Popular Forms (Subtitle required) .......... 3

GER 317 History of German Culture ................. 3

College of Arts and Sciences
Global Development

The Global Development concentration focuses on social justice, sustainable economic development, public health, global interconnection, public service and managing global businesses.

AEC 309 International Agricultural, World Food Needs and U.S. Trade in Agricultural Products 3
AEC 471 International Trade 3
AIS 340 Women and Islam 3
AIS 340 Fundamentalism and Reform in Islam 3
AIS 435 Topics in Islamic Studies (Subtitle required) 3
AIS 440 Introduction to the Quran 3
ANT 241 Origins of Old World Civilization 3
ANT 242 Origins of New World Civilization 3
ANT 245 Food Culture and Society 3
ANT 324 Contemporary Latin American Cultures 3
AEC 510 International Trade and Agricultural Marketing 3
ENG 440 Studies in British Literature 3
FR 350 Francophone Cultures (Subtitle required) 3
GEO 222 Cities of the World 3
GEO 231 Environment and Development 3
GEO 250 Geographies of Development in the Global South 3
GEO 442G Political Geography 3
GER 342 War, Peace, and Terror in Germany and Europe 3
GWS 250 Social Movements 3
HIS 561 Culture, Ideas, and Society in Latin America 3
HIS 562 Modern Mexico 3
HIS 563 The History of Women in Latin America 3
HIS 564 History of Brazil 3
JOU 319 World Media Systems 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
PS 427G East European Politics 3
PS 428G Latin American Government and Politics 3
PS 439 Latin American and the Middle East 3
PS 499J Special Topics in Political Science (Subtitle required) 3
PS 518G International Trade and Development 3
PS 530 Global Poverty: Responses Across Cultures 3
PS 538 Conflict and Cooperation in Latin American Relations 3
SOC 444 Topics in Political Sociology (Subtitle required) 3
SW 320 Global Poverty: Responses Across Cultures 3

Area Concentrations

(12-15 credit hours in one theme and from at least two departments)

Africa and the Middle East
AIS 228 Islamic Civilization 3
AIS 330 Islamic Civilization II 3
AIS 331 Arabic Language and Culture (in English) 3
AIS 338 Women and Islam 3
AIS 340 Fundamentalism and Reform in Islam 3
AIS 435 Topics in Islamic Studies (Subtitle required) 3
AIS 440 Introduction to the Quran 3
ANT 241 Origins of Old World Civilization 3
ANT 242 Origins of New World Civilization 3
ANT 245 Food Culture and Society 3
ANT 324 Contemporary Latin American Cultures 3

Comparative Politics and Societies

The Comparative Politics and Societies concentration focuses on how states and institutions interact in a global environment. It studies international struggles for political, social, and economic equality and international efforts to guarantee human rights.

AEC 471 International Trade 3
AIS 338 Women and Islam 3
AIS 340 Fundamentalism and Reform in Islam 3
AIS 435 Topics in Islamic Studies (Subtitle required) 3
AIS 440 Introduction to the Quran 3
ANT 241 Origins of Old World Civilization 3
ANT 242 Origins of New World Civilization 3
ANT 245 Food Culture and Society 3
ANT 324 Contemporary Latin American Cultures 3

The subtitle for this course must directly relate to the Global Development Concentration. You must check with the IS director or advisor for verification prior to taking the course.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPN 451G</td>
<td>Social Movements in Modern Japan</td>
</tr>
<tr>
<td>JPN 461G</td>
<td>Japanese Colonialism and Its Legacies</td>
</tr>
<tr>
<td>PHI 343</td>
<td>Asian Philosophy</td>
</tr>
<tr>
<td>PHI 504</td>
<td>Islamic and Jewish Philosophy and the Classical Tradition</td>
</tr>
<tr>
<td>PS 410</td>
<td>Topics in Regional Politics (Subtitle required)</td>
</tr>
<tr>
<td>SOC 444</td>
<td>Topics in Political Sociology (Subtitle required)</td>
</tr>
</tbody>
</table>

*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.*

### East, South, and Southeast Asia

**A-H 310** Asian Art and Culture (Subtitle required) 3
**ANT 241** Origins of 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

### Europe

**A-H 323 Medieval (Subtitle required) 3**
**A-H 334 Reframing Renaissance Art**
**ANT 241** Origins of 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 480** 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 440** 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
**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 Eastern 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 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 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 522** Europe and the world in the Age of Revolution (1760-1815) 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 since 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

### 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

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*University of Kentucky 2018-2019 Undergraduate Bulletin*
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: 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 the Arts and Creativity

Choose one course from approved list

II. Intellectual Inquiry in the Humanities

Choose one course from approved list

Other Requirements

RUS 380 Love and Death in 19th Century Russian Literature

RUS 381 Writing, Revolution & Reaction in modern Russian Literature

*The substitute for this course must directly relate to the Russia and Eurasia concentration. You must check with the IS director or advisor for verification prior to taking the course.

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 thematic or 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.

College Requirements

I. Foreign Language

Choose one course from approved list

II. Disciplinary Requirements

a. Natural Science

b. Social Science

c. Humanities

III. Electives

Choose one course from approved list

UK Core hours: 30

Graduation Composition and Communication Requirement (GCCR)

*WRD 430 Advanced Workshop

Graduation Composition and Communication Requirement hours (GCCR):

*Students must take WRD 430 for BLS students.

II. Mathematical Sciences

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, CHI, CLA, ENG, FR, GER, GWS, HIS, HJS, ITA, JPN, LAS, LIN, MCL, PHIL, RUS, SPA, WRD.

Social Sciences

Select courses from the following prefixes: ANT, APP, ENS, GEO, HISP, IAS, PSE, 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
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 131.

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 Natural, Physical, and Mathematical Sciences
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 Humanities
Choose one course from approved list ........................................... 3

IV. Intellectual Inquiry in the Social Sciences
Choose one ANT or SOC course from approved list ..................... 3

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

VI. Writing Skills Requirement
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 I: Theoretical Foundations and Analysis ........................................... 3
LIN 222 Introduction to Linguistics II: Language in Context ........................................... 3

College Requirements

I. Foreign Language (completed by PreMajor Requirements)
Choose one course from approved list ........................................... 3

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

III. Laboratory or Field Work
Choose one course from approved list ........................................... 1

IV. Electives
Choose one course from approved list ........................................... 6

College Requirement hours: ........................................... 19

Premajor Requirements

Complete the third and fourth semesters of a foreign language (or the equivalent) ........................................... 6-8

Premajor hours: ........................................... 6-8

Major Requirements

Major Core Requirements
LIN 221 Introduction to Linguistics I: Theoretical Foundations and Analysis ........................................... 3
LIN 222 Introduction to Linguistics II: Language in Context ........................................... 3
plus four major area courses:
LIN 500 Phonetics ........................................... 3
LIN 505 Linguistic Morphology ........................................... 3
LIN 512 Analysis of English Syntax ........................................... 3
LIN 515 Phonological Analysis ........................................... 3
plus 15 additional hours of LIN courses of which six (6) or more must be at the 500 level and distinct from the major area courses ........................................... 15

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

Other Course Work Required for the Major

For the related component:
Choose 15 hours of additional courses relevant to the major chosen from the following prefixes, or courses approved by the Director of Undergraduate Studies:
AIS, ANT, APP, BIO, CHI, CLA, COM, CS, CSD, ENG, FR, GEO, GER, GWS, HIS, HJS, ICT, INT, ISC, ITA, JOU, JPN, LAS, MA, MCL, PHI, PS, PSY, RUS, SOC, SPA, STA, TSL, WRD (200-level or above)

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

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 131.

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 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

College Requirements

I. Foreign Language (completed by Premajor Requirements)
Choose one course from approved list ........................................... 3

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

III. Laboratory or Field Work
Choose one course from approved list ........................................... 1

IV. Electives
Choose one course from approved list ........................................... 6

College Requirement hours: ........................................... 13

Premajor Requirements

Complete the third and fourth semesters of a foreign language (or the equivalent) ........................................... 6-8

Premajor hours: ........................................... 6-8

Major Requirements

Major Core Requirements
LIN 221 Introduction to Linguistics I: Theoretical Foundations and Analysis ........................................... 3
LIN 222 Introduction to Linguistics II: Language in Context ........................................... 3
plus four major area courses:
LIN 500 Phonetics ........................................... 3
LIN 505 Linguistic Morphology ........................................... 3
LIN 512 Analysis of English Syntax .................. 3
LIN 515 Phonological Analysis ....................... 3
plus 15 additional hours of LIN courses of which six (6) or
more must be at the 500 level and distinct from the major area
courses .................................................. 15

Major core hours: ...................................... 33

Other Course Work Required for the Major
For the related component:
Choose 15 hours of additional courses relevant to the major
coursework to include:
Choose one phonetics/phonology course:
LIN 509 Formal Semantics
or
LIN 516 Grammatical Typology ..................... 3
Choose one morphosyntax/semantic course:
LIN 512 Analysis of English Syntax
LIN 505 Linguistic Morphology
LIN 509 Formal Semantics
or
LIN 516 Grammatical Typology ..................... 3
Choose two other LIN courses at 300 level or above .... 6

MINOR IN LINQUISTICS

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 300 Phonetics
or
LIN 515 Phonological Analysis ....................... 3
Choose one morphosyntax/semantic course:
LIN 512 Analysis of English Syntax
LIN 505 Linguistic Morphology
LIN 509 Formal Semantics
or
LIN 516 Grammatical Typology ..................... 3
Choose two other LIN courses at 300 level or above .... 6

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 131.

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 (GCCCR)
ECO 401G Applied Econometrics ...................... 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
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
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
or
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 ............. 3
MA 417G Decision Making Under Uncertainty .... 3
STA 525 Introductory Statistical Inference .......... 9
or
MA 417G Advanced Calculus I ....................... 3
MA 427G Advanced Calculus II ..................... 3
MA 417G Decision Making Under Uncertainty .... 9

For the Economics Component
ECO 401G Applied Econometrics .................... 3
One 300+ level economics course ..................... 3
One 400+ level economics course ..................... 3

For the Statistics Component
Choose STA 296 or a higher level statistics course .... 3

Other Major hours: ..................................... 21
Electives
Choose electives to lead to the minimum total of 120 hours required for graduation. ................................. 6

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

*Course used toward 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 toward 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 131.

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 401G 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

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

Premajor Requirements
Choose one of the following two sequences:
MA 113 Calculus I ...................................................... 4
MA 114 Calculus II ...................................................... 4
OR
MA 137 Calculus I with Life Science Applications ................. 8
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
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 ..................... 3
MA 417G Decision Making Under Uncertainty ............. 9
STA 525 Introductory Statistical Inference ...................... 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 .............................................. 6

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

*Course used toward completion of a UK Core Requirement.

MATHMATICS

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 131.

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 ...................................................... 6
b. Social Science ...................................................... 6
c. Humanities ...................................................... 6
III. Laboratory or Field Work ........................................ 1
IV. Electives ............................................................. 6

College Requirement hours: .......................... 25-39
MA/CS 416G Introduction to Optimization

MA 481G Differential Equations

MA/CS 340 Applicable Algebra

and

A two-semester sequence chosen from the following:

MA 322 Matrix Algebra and its Applications

or

CS 115 Introduction to Computer Programming

Premajor hours: ............................................. 11

Major Requirements

Major Core Requirements

MA 213 Calculus III .......................................................... 4

MA 214 Calculus IV

or

MA 261 Introduction to Number Theory .................................. 3

MA 322 Matrix Algebra and its Applications ........................... 3

Premajor 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 137 Calculus I with Life Science Applications .... 4

MA 114 Calculus II

or

MA 138 Calculus II with Life Science Applications .... 3

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/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:

and

MA/CS 340 Applicable Algebra

and

CS/MA 432G Combinatorics and Graph Theory

and

MA 432G Methods of Applied Mathematics I

and

MA 433G Introduction to Complex Variables

and

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 ...

MA/CS 416G Introduction to Optimization

Premajor hours: ............................................. 11

Major Core Requirements

MA/CS 340 Applicable Algebra

or

MA 144 Calculus II

or

CS 115 Introduction to Computer Programming

Premajor hours: ............................................. 11

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

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 131.

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

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

Premajor 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 ..................................................... 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/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:

and

MA/CS 340 Applicable Algebra

and

CS/MA 432G Combinatorics and Graph Theory

and

MA 432G Methods of Applied Mathematics I

and

MA 433G Introduction to Complex Variables

and

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 ...

MA/CS 416G Introduction to Optimization

Premajor hours: ............................................. 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 415 Combinatorics and Graph Theory
MA 432G Methods of Applied Mathematics I
and
MA 433G Introduction to Complex Variables
MA 481G Differential Equations
and
MA 482G Introduction to Partial Differential Equations
MA/CS 416G 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 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 course work to include:
1. MA 113/114 Calculus I and II and .................. 8
2. MA 213 Calculus III ................................. 4
   or equivalent
3. MA 322 Matrix Algebra and Its Applications .... 3
   or equivalent
4. 6 additional hours of mathematics courses numbered greater than 213. Possible courses include: MA 214, MA 261, MA 270, MA 325, MA 341, MA 351, MA 361, or any 400 level math course.

MILITARY SCIENCE AND LEADERSHIP
(Active 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.

Scholarships

Students interested in Army ROTC scholarships should contact the Army ROTC Admissions Office (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 KHP 107 and AMS 250 or 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., 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 operations/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 upper division Army ROTC students receive up to $500 per month tax-free 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 136 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 131.

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

II. Intellectual Inquiry in the Humanities

Choose one of the following courses
AIS 228 Islamic Civilization
AIS 320 Modern Arabic Literature and Film in Translation
AIS 345 Islamic Mysticism
CHI 330 Introduction to Chinese Culture,
Pre-Modern to 1840
College of Arts and Sciences

Graduation Composition and Communication Requirement (GCCR)
MCL 495 Modern and Classical Languages, Literatures and Cultures Capstone 3

College Requirements
I. Foreign Language (completed by Major Requirement)
II. Disciplinary Requirements
  a. Natural Science 3-6
  b. SocialScience 3-6
  c. Humanities (completed by Major Requirements)
III. Laboratory or Field Work 1
IV. Electives 6

College Requirement hours: 19

MCL Common Core
MCL 100 The World of Language 3
MCL 200 Global Literacy 3
Cross-Disciplinary Requirement: a course at or above the 200-level offered by MCLCC 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 311 Arabic for Business and Media I 3
AIS 312 Arabic for Business and Media 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

MCL / Classics
Track Requirements
To graduate, the student must complete either Greek to the CLA 252 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.

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 approved by the major advisor on a case-by-case basis.

University of Kentucky 2018-2019 Undergraduate Bulletin
A-H 314 Ancient (Subtitle required) .................. 3
AIS 228 Islamic Civilization ............................. 3
ANT 240 Introduction to Archaeology ................. 3
ENG 271 The Bible as Literature ........................ 3
HIS 330 A History of Western Religious Thought (I) . 3
HIS 370 Early Middle Ages .............................. 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 546 The Byzantine Empire .......................... 3
HIS 324 Jewish Thought and Culture I: 
From Ancient Israel to the Middle Ages .......... 3
MCL 270 Introduction to Folklore and Mythology .. 3
MCL 360 Catastrophes and Calamities in the
Greco-Roman World and Afterwards ............... 3
PHI 260 History of Philosophy I:  
From Greek Beginnings to the Middle Ages ....... 3
PHI 503 Topics in Ancient Philosophy ............... 3

**Total Elective hours** : 12
**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
- HIS 357 Japan at War, 1850 to the Present
- JPN 301 Advanced Japanese I
- JPN 302 Advanced Japanese II

**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
- 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 / French and Francophone Studies

**Track Requirements**

- FR 204 Introduction to French and Francophone Studies
- OR FR 214 France Today
- OR FR 215 Visual Cultures
- OR FR 410 French in Performance
- OR FR 425 Media Studies
- OR FR 470G Topical Seminar I (Subtitle required)
- OR 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 307 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

**Total Elective hours** : 18

### 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

**Total Elective hours** : 18

### UK Core Requirements

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

#### I. Intellectual Inquiry in the Arts and Creativity

- MCL 311 The World of Autobiography
- MCL 312 The Art of Adaptation

#### II. Intellectual Inquiry in the Humanities

Choose one of the following courses

- AIS 228 Islamic Civilization
- AIS 320 Modern Arabic Literature and Film in Translation
- AIS 345 Islamic Mysticism
- CHI 330 Introduction to Chinese Culture, Pre-Modern to 1840
- CHI 331 Introduction to Chinese Culture, 1840 to Present
- CLA 135 Greek and Roman Mythology
- CLA 191 Christianity, Culture, and Society: 
  A Historical Introduction
- CLA 229 The Ancient Near East and Greece 
  to the Death of Alexander the Great
- FR 103 French Cinema
- FR 205 The French Graphic Novel
- GER 103 Fairy Tales in European Context
- GER 305 German Film
- GER 103 Fairy Tales in European Context
- GER 305 German Film
- GWS 250 Women and Gender in the Ancient Near East
- ITA 263 Studies in Italian Culture (Subtitle required)
- MCL 135 Vampires: Evolution of a Sexy Monster
- MCL 270 Introduction to Folklore and Mythology
- MCL 343 Global Horror
- MCL 360 Catastrophes and Calamities in the Greco-Roman World and Afterwards
- RUS 275 Russian Film
- RUS 371 The Russian Cultural Imagination: 900-1900
- RUS 372 Experiments in Life and Art: 
  Russian Culture 1900-Present

#### III. Intellectual Inquiry in the Social Sciences

- AIS 430 Islam in America
- MCL 135 Vampires: Evolution of a Sexy Monster
- MCL 270 Introduction to Folklore and Mythology
- RUS 370 Russian Folklore (in English)

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

Choose one course from approved list

#### V. Composition and Communication I

CIS/WRD 110 Composition and Communication I
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):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCL 375</td>
<td>Language Study Abroad</td>
<td>1-12</td>
</tr>
<tr>
<td>MCL 376</td>
<td>Cultural Studies Abroad</td>
<td>1-12</td>
</tr>
<tr>
<td>MCL 591</td>
<td>Language Practicum (Subtitle required)</td>
<td>1-6</td>
</tr>
<tr>
<td>MCL 592</td>
<td>Research Practicum (Subtitle required)</td>
<td>1-9</td>
</tr>
<tr>
<td>MCL 593</td>
<td>Internship</td>
<td>1-12</td>
</tr>
<tr>
<td>MCL 595</td>
<td>Topics in Folklore and Myth (Subtitle required)</td>
<td>3-6</td>
</tr>
<tr>
<td>MCL 596</td>
<td>Topics in Culture (Subtitle required)</td>
<td>3-6</td>
</tr>
<tr>
<td>MCL 597</td>
<td>Topics in Comparative Literary Studies (Subtitle required)</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**Tracks**

### MCL / Arabic and Islamic Studies

#### Track Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 228</td>
<td>Islamic Civilization</td>
<td>3</td>
</tr>
<tr>
<td>AIS 311</td>
<td>Arabic for Business and Media I</td>
<td>3</td>
</tr>
<tr>
<td>AIS 312</td>
<td>Arabic for Business and Media II</td>
<td>3</td>
</tr>
<tr>
<td>AIS 330</td>
<td>Islamic Civilization II</td>
<td>3</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 300+</td>
<td>courses</td>
<td></td>
</tr>
<tr>
<td>ANT 222</td>
<td>Middle East Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ANT 326</td>
<td>Contemporary African Lives</td>
<td>3</td>
</tr>
<tr>
<td>ANT 327</td>
<td>Culture and Societies of India</td>
<td>3</td>
</tr>
<tr>
<td>and South Asia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 328</td>
<td>Geography of the Middle East and North Africa</td>
<td>3</td>
</tr>
<tr>
<td>and South Asia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 330</td>
<td>Geography of the Indian Subcontinent</td>
<td>3</td>
</tr>
<tr>
<td>GEO 336</td>
<td>Geography of Sub-Saharan Africa</td>
<td>3</td>
</tr>
<tr>
<td>PHI 504</td>
<td>Islamic and Jewish Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>and the Classical Tradition</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 301</td>
<td>Advanced Intermediate Chinese I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 302</td>
<td>Advanced Intermediate Chinese II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 330</td>
<td>Introduction to Chinese Culture, Pre-Modern to 1840</td>
<td>3</td>
</tr>
<tr>
<td>CHI 331</td>
<td>Introduction to Chinese Culture, 1840 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 300+</td>
<td>courses</td>
<td></td>
</tr>
<tr>
<td>HIS 355</td>
<td>Topics in Non-Western History Since 1789</td>
<td>3</td>
</tr>
<tr>
<td>HIS 597</td>
<td>Westerners in East Asia, 1839 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIS 598</td>
<td>China in Revolution, 1895-1976</td>
<td>3</td>
</tr>
</tbody>
</table>

### MCL / Classics

#### Track Requirements

To graduate, the student must complete either Greek to the CLA 252 level or Latin to the 202 level either by successfully completing the specified course, or by successfully completing a course above the 200 level in either language, or by demonstrating the equivalent competency.

**Total Requirement hours: 18**

#### Track Electives

In addition, the student must complete 12 hours in courses appropriate to the study of Classics at the 200 level or above not prefixed CLA (courses cross-listed CLA also fulfill this requirement). The following courses are automatically accepted to fulfill this requirement, but other courses may be approved by the major advisor on a case-by-case basis.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I 314</td>
<td>Ancient (Subtitle required)</td>
<td>3</td>
</tr>
<tr>
<td>AIS 228</td>
<td>Islamic Civilization</td>
<td>3</td>
</tr>
<tr>
<td>ANT 240</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 271</td>
<td>The Bible as Literature</td>
<td>3</td>
</tr>
<tr>
<td>HIS 330</td>
<td>A History of Western Religious Thought (I)</td>
<td>3</td>
</tr>
<tr>
<td>HIS 370</td>
<td>Early Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>HIS 500</td>
<td>Preclassical and Classical Greece</td>
<td>3</td>
</tr>
<tr>
<td>HIS 501</td>
<td>Fourth-Century Greece and the Hellenistic World</td>
<td>3</td>
</tr>
<tr>
<td>HIS 502</td>
<td>A History of the Roman Republic</td>
<td>3</td>
</tr>
<tr>
<td>HIS 503</td>
<td>A History of the Roman Empire</td>
<td>3</td>
</tr>
<tr>
<td>HIS 504</td>
<td>Greek and Roman Medicine</td>
<td>3</td>
</tr>
<tr>
<td>HIS 546</td>
<td>The Byzantine Empire</td>
<td>3</td>
</tr>
<tr>
<td>HIS 324</td>
<td>Jewish Thought and Culture I: From Ancient Israel to the Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>MCL 270</td>
<td>Introduction to Folklore and Mythology</td>
<td>3</td>
</tr>
<tr>
<td>MCL 360</td>
<td>Cataclysms and Calamities in the Greco-Roman World and Afterwards</td>
<td>3</td>
</tr>
<tr>
<td>PHI 260</td>
<td>History of Philosophy I: From Greek Beginnings to the Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>PHI 503</td>
<td>Topics in Ancient Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Elective hours: 12**

**Major Requirement hours: 42**

### MCL / French and Francophone Studies

#### Track Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 204</td>
<td>Introduction to French and Francophone Studies</td>
<td>3</td>
</tr>
<tr>
<td>FR 214</td>
<td>France Today</td>
<td>3</td>
</tr>
<tr>
<td>FR 215</td>
<td>Visual Cultures</td>
<td>3</td>
</tr>
<tr>
<td>FR 410</td>
<td>French in Performance</td>
<td>3</td>
</tr>
</tbody>
</table>
### MCL / German Studies

**Track Requirements**
- GER 307 Intermediate German Composition and Conversation I ................................. 3
- GER 308 Intermediate German Composition and Conversation II .................................. 3
- GER 311 Introduction to German Literature: Themes (Subtitle required) ........................... 3
- GER 312 German Popular Forms (Subtitle required) .......................................................... 3

**Track Electives**
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+ courses
- GER 206 Spoken Communication .................................................................................. 3
- MCL 343 Global Horror ...................................................................................................... 3

**Total Elective hours** ........................................................................................................... 12

**Major Requirement hours:** .............................................................................................. 12

### 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 for all tracks and/or those courses listed below.

**MCL / Arabic and Islamic Studies**

**Core Requirements**
- Arabic language course at the 300 level ........................................................................ 3
- AFS 228 Islamic Civilization ......................................................................................... 3
- AFS 330 Islamic Civilization II ..................................................................................... 3

**Total Core hours:** ............................................................................................................ 9

**Elective Requirements**
Students must choose an additional 9 hours from the list of elective courses approved for all tracks and/or those courses listed below.
- AFS 300+
- ANT 222 Middle East Cultures ..................................................................................... 3
- ANT 331 Anthropology of North Africa ......................................................................... 3
- GEO 328 Geography of the Middle East and North Africa ........................................ 3
- HIS 549 History of the Middle East: 1952 to the Present ............................................... 3
- HIS 550 Studies in Middle East History and Politics (Subtitle required) ....................... 3
- PS 410 Topics in Regional Politics (Subtitle required) .................................................. 3

**Total Elective hours** ........................................................................................................ 9

### MCL / Chinese Studies

**Core Requirements**
- CHI 301 Advanced Intermediate Chinese I ................................................................. 3
- CHI 302 Advanced Intermediate Chinese II ................................................................... 3
- CHI 330 Introduction to Chinese Culture, Pre-Morden to 1840 ..................................... 3
- CHI 331 Introduction to Chinese Culture, 1840 to Present ............................................... 3

**Total Core hours:** ............................................................................................................ 6

**Elective Requirements**
Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below.
- CHI 300+
- *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

**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 ....................................................... 3
- CLA 135 Greek and Roman Mythology ......................................................................... 3
- CLA 100 Ancient Stories in Modern Films ................................................................... 3
## 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
- GER 363 Germanic Mythology
- RUS 370 Russian Folklore (in English)

Students choose 3 additional elective hours that may include those listed above not applied above and/or the following:

- CLA 462 Topics in Classical Literature (Subtitle required)
- GER 263 The German Cultural Tradition I
- GER 312 German Popular Forms (Subtitle required)
- AAS 200 Introduction to African-American Studies
- AAS 254 History of Colonial and Post-Colonial Africa
- ANT 220 Introduction to Cultural Anthropology
- ANT 241 Origins of Old World Civilization
- ANT 242 Origins of New World Civilization
- ANT 245 Food Culture and Society
- ANT 301 History of Anthropological Theory
- ANT 401 Gender Roles in Cross-Cultural Perspective
- ANT 450 Symbols and Culture
- ANT 470 G Regional American Ethnicity
- APP 200 Introduction to Appalachian Studies
- *APP 300 Topics in Appalachian Studies (Subtitle required)
- ENG 271 The Bible as Literature
- *ENG 492G Cultural Studies (Subtitle required)
- ENG 519 Introduction to Old English
- HIS 521 European Social History, 1400-1800
- LAS 201 Introduction to Latin America
- *LIN 317 Language and Society (Subtitle required)
- MAT 247 Dress and Culture
- MUS 300 History of Jazz
- MUS 301 Appalachian Music
- *SOC 350 Topics in Sociology (Subtitle required)
- GWS 200 Sex and Power
- GWS 201 Gender and Popular Culture
- *GWS 300 Topics in Gender and Women’s Studies (Subtitle required)
- *GWS 301 Crossroads (Subtitle required)
- *GWS 302 Gender Across the World (Subtitle required)

Other courses approved by the minor advisor.

### MCL / French and Francophone Studies

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Total Core hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 204 Introduction to French and Francophone Studies</td>
<td>3</td>
</tr>
<tr>
<td>FR 214 France Today</td>
<td></td>
</tr>
<tr>
<td>FR 215 Visual Cultures</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Core hours</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**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)

### MCL / German Studies

**Core Requirements**

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

### 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**

### MCL / Italian Studies

**Core Requirements**

- ITA 201 Intermediate Italian
- ITA 202 Intermediate Italian

### 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
- A-H 314/CLA 314 Ancient (Subtitle required)
- A-H 334 Reframing Renaissance Art
- A-H 335 Early Modern Art and Visual Culture, 1400-1700 (Subtitle required)
- CLA 100 Ancient Stories in Modern Films
- CLA 135 Greek and Roman Mythology
- CLA 191 Christianity, Culture, and Society: A Historical Introduction
- CLA 210 The Art of Greece and Rome
- CLA/HIS 230 The Hellenistic World and Rome to the Death of Constantine
- CLA/HIS 391 Christians in the Roman Empire
- CLA/HIS 509 Roman Law
- HIS 120 The World at War, 1939-45
- HIS 121 War and Society, 1914-1945
- HIS 502 A History of the Roman Republic
- HIS 503 A History of the Roman Empire
- HIS 519 The Era of the Renaissance

**Total Elective hours**

### MCL / Japan Studies

**Core Requirements**

- JPN 301 Advanced Japanese I
- JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868
- JPN/ANT 321 Introduction to Japanese Culture, Meiji (1868) to Present

**Elective Requirements**

Students must choose an additional 9 hours from the list of elective courses approved for all tracks and/or those courses listed below:

- JPN 300+
- JPN 283 Japanese Film
- A-H 310 Asian Art and Culture (Subtitle required)
- GEO/JPN 334 Environment, Society and Economy of Japan
- GEO/JPN 491 Japanese Landscapes
- GEO/JPN 551 Japanese Multicultural Corporations
- HIS 295 East Asia to 1800
- HIS 296 East Asia Since 1800
- HIS 357 Japan at War, 1850 to the Present

### MCL / Russian Studies

**Core Requirements**

- RUS 300 Conversation and Composition I
- RUS 302 Advanced Intermediate Russian II

### Elective Requirements

Students must choose an additional 12 hours from the list of elective courses approved for all tracks and/or those courses listed below:

- RUS 300+
- RUS 275 Russian Film
- 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**

**Total Hours Required**

### 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, including Biology, Anatomy and Neurobiology, and Psychology. 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 131.

UK Core Requirements

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

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

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

III. Intellectual Inquiry in the Social Sciences
PSY 100 Introduction to Psychology or equivalent transfer ........................................ 3-4

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences
CHE 101 General Chemistry I .................................................. 3
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 137 Calculus I with Life Science Applications or MA 113 Calculus I .................................................. 4

VIII. Statistical Inferential Reasoning
STA 296 Statistical Methods and Motivations ........................ 3
and
PSY 215 Experimental Psychology ........................................ 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 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) ............ 3
   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 College Chemistry I ................................... 4
CHE 111 General Chemistry I Laboratory ............................. 1
CHE 107 General College Chemistry II ................................. 3
CHE 113 General Chemistry II Laboratory ........................... 2
MA 137 Calculus I With Life Science Applications or MA 113 Calculus I .................................................. 4
PSY 100 Introduction to Psychology ..................................... 4

Premajor/Preprofessional Requirement hours: ........................................ 25

Program Core

BIO 302 Introduction to Neuroscience ................................ 3
BIO 305 Introduction to Neuroscience Techniques .............. 4
*ANA 394 Independent Research in Neurobiology and Neuroscience or BIO 394 Research in Neuroscience or PSY 393 Research in Neuroscience ........................................ 6
BIO 315 Introduction to Cell Biology or BIC 401G Fundamentals of Biochemistry or CHE 550/552 Biological Chemistry II ................................ 3-6
BIO 426 Neuroscience Seminar .......................................... 1
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 ............................ 3
PHY 211/213 General Physics .............................................. 10
or
PHY 231/232 General University Physics Laboratory .......... 10

**WRD 204 Technical Writing ............................................ 3

Program Core hours: .................................................. 38-41

Guided Electives

Students will choose at least one course from each of the four thematic areas below. Some courses are listed in more than one area. However, the same course cannot be used to satisfy two thematic requirements.

A. Cellular/Molecular
ANA 442 Molecular and Cellular Neurobiology .................. 3
CHE 556 Elements of Neurochemistry ................................ 3
*BIO 510 Recombinant DNA Techniques Laboratory ............. 4

B. Physiology
BIO 446 Neurophysiology Laboratory ................................. 3
*BIO 535 Comparative Neurobiology and Behavior ............ 3

C. Neuroanatomy
BIO 440 Comparative and Functional Anatomy .................. 4
ANA 417G Functional Human Neuroanatomy ..................... 3
PSY 312 Brain and Behavior .............................................. 3
ANA 299 Principles of Human Anatomy .............................. 3

D. Integrated
PSY 312 Brain and Behavior .............................................. 3
BIO 375 Behavioral Ecology and Sociobiology ..................... 3
ANA 410G Neurobiology of Brain and Spinal Cord Disorders ........................................ 3
*ANA 516 Selected Topics in Advanced Neuroscience ............ 3

*BIO 507 Biology of Sleep and Circadian Rhythms ............ 3
CGS 500 Cognitive Science in Theory and Practice ............ 3
*CSD 571 Neural Bases of Speech, Language, and Hearing ........................................ 3
PSY 459 Neuropharmacology: Drugs and Behavior ............ 3
BIO 447 Animal Senses ..................................................... 3

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

Guided Elective hours: ................................................ 12-14

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation ........................................ 6

Total Minimum Hours

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

**Fulfills the Graduation Composition and Communication requirement.

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
ANA 410G Neurobiology of Brain and Spinal Cord Disorders ........................................ 3
ANA 417G Functional Human Neuroanatomy ........................................ 3
ANA 442 Molecular and Cellular Neurobiology ........................................ 3
ANA 605 Neurobiology of CNS Injury and Repair ........................................ 3
ANA 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 567 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 ........................................ 3

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.
College of Arts and Sciences

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 131.

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

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) ............

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

Odd Core hours: .................................................. 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, radiology, biophysics, law, meteorology, oceanography, geophysics, environmental sciences, management, or the teaching of physics and/or physical science at the junior and senior high school levels. By working closely with an advisor, the student with special interests can take advantage of opportunities to take several other courses from one or more departments outside physics, or double major in physics and another area. For a description of suggested curricula, visit our website at: https://pa.as.uky.edu/.

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 131.

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
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)
CIS/WRD 110 Composition and Communication I ...... 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) .............................................. 6
b. Social Science ............................................................ 6
c. Humanities ............................................................. 6
III. Laboratory or Field Work (completed by Premajor Requirement) ................................ 6
IV. Electives ..................................................................... 6

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

Premajor Requirements
*PHY 231/232/241/242 General University Physics and Laboratory ................................................ 10
or with permission of the Director of Undergraduate Studies:
*PHY 211/213 General Physics .......................... (10)
PHY 228 Optics, Relativity and Thermal Physics ...... 3
CHE 105 General College Chemistry I ................ 4
CHE 107 General College Chemistry II ............. 3
*MA 113 Calculus I ............................................... 4
MA 114 Calculus II ............................................... 4

Premajor hours: ..................................................... 28

Major Requirements
Major Core Requirements
PHY 306 Theoretical Methods of Physics ............... 3
PHY 335 Data Analysis for Physicists .................. 2
PHY 361 Principles of Modern Physics .................. 3
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

*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 Hours
*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 or
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 Hours
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 Hours
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

*B 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. A total of 42 hours in physics and related areas must be taken to satisfy the major requirement.

**The Bachelor of Arts requires the completion of six hours in humanities and social sciences as a college requirement. It also requires the completion of 39 hours at or above the 300 level.

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 131.

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
College of Arts and Sciences

Graduation Composition and Communication Requirement (GCCCR)
PHY 535 Advanced Physics Laboratory 3

Graduation Composition and Communication Requirement hours (GCCCR) 3

College Requirements
I. Foreign Language (placement exam recommended) 0-14
II. Disciplinary Requirements
a. SocialScience 3
b. Humanities 3
III. Laboratory or Field Work (completed by Premajor Requirement) 6

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

Premajor Requirements
*PHY 231/232/241/242 General University Physics and Laboratory 10
or with permission of the Director of Undergraduate Studies:
*PHY 211/213 General Physics .........................(10)
PHY 228 Optics, Relativity and Thermal Physics 3
CHE 105 General College Chemistry I 4
CHE 107 General College Chemistry II 3
*MA 113 Calculus I 4
MA 114 Calculus II 4

Premajor hours: .......................... 28

Major Requirements
Major Core Requirements
PHY 306 Theoretical Methods of Physics .......... 3
PHY 335 Data Analysis for Physicists 2
PHY 361 Principles of Modern Physics ........... 3
PHY 404G Mechanics .................................. 3
PHY 416G/417G Electricity and Magnetism ....... 6
PHY 520 Introduction to Quantum Mechanics I .... 3
PHY 521 Introduction to Quantum Mechanics II ... 3
PHY 535 Advanced Physics Laboratory ........... 4
MA 213 Calculus III 4
MA 214 Calculus IV 4

plus two different courses from the following:
AST/PHY 395 Independent Work in Astronomy/Physics 3
PHY 402G Electronic Instrumentation and Measurements 3
PHY 445 Intermediate Physics Laboratory ........ 3
PHY 508 Computational Physics 3

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

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

*Course used towards completion of a UK Core Requirement.

Suggested Curriculum for B.S. 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.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 .............................................. 4

Second Semester
MA 214 Calculus IV ........................................... 4
PHY 306 Theoretical Methods of Physics ............ 3
PHY 361 Principles of Modern Physics ............... 3
Foreign Language .............................................. 4

Junior Year

First Semester Hours
PHY 404G Mechanics ....................................... 3
PHY 416G Electricity and Magnetism .................. 3
UK Core ....................................................... 3

Second Semester
PHY 417G Electricity and Magnetism .................. 3
Foreign Language .............................................. 3
UK Core ....................................................... 3
Major Related Electives ................................. 3
Elecitive ...................................................... 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 (suggested) 3
PHY 300+ course .............................................. 3
Elecitive ...................................................... 4

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

Minors 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
MA 113 Calculus I or
MA 137 Calculus I
With Life Science Applications 3
MA 114 Calculus II or
MA 138 Calculus II
With Life Science Applications 3
PHY 228 Optics, Relativity and Thermal Physics 3
MA 213 Calculus III or
PHY 361 Principles of Modern Physics 3

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 subfield 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
demonstrates the relationship between political, social, and economic outcomes within that system; and

- Theory/Methodology – study of the values, concepts, and analytical methods that shape how people evaluate political life.

Degree recipients take introductory course work in each of these four areas, then pursue advanced studies in one or more of the fields as determined by their interests and/or career goals.

In addition to conveying information about politics and government – necessary background for pursuing graduate work in political science and related fields – Political Science courses at UK are designed to provide students with a broad liberal arts education. Graduates leave the program having cultivated their analytical abilities and having exercised their written and spoken communication skills. Such disciplinary training leads to a wide variety of careers, many of which have no direct political or governmental connection, but is particularly helpful in preparing students for careers such as law, policy analysis, governmental administration, diplomatic service, journalism, lobbying, and other sorts of political activity.

Currently the department offers two degree: a Bachelor of Arts and a Bachelor of Science. Most majors choose to pursue the B.A. The primary difference is that B.A. students must complete a minimum of 39 hours at the 300+ level, a requirement that students can fulfill using courses already needed for the major. Earning the B.S. degree, on the other hand, requires completing a minimum of 60 hours in natural, physical, mathematical, and computer sciences. Little of that course work fulfills other degree requirements.

Bachelor of Arts with a major in POLITICAL SCIENCE

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are 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 131.

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

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)

c. Humanities (choose 300+ level courses) .............. 6

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

IV. Electives

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/Introductory 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. Those 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. You must take at least 6 hours from one department and 6 hours from another department. Special topics courses and other offerings related to the concentration may be substituted, subject to the approval of the Director of Undergraduate Studies ............................................ 15

AAS 200, 420 (also acceptable are AAS courses cross-listed with courses eligible to serve as Major Requirements)

ACC 407

AEC 324, 471, 479, 510, 532

AIS 228, 330

ANT 300

ANT – 220, 221, 324, 326, 327, 340, 401, 433, 435, 532, 534

APP 200

BSC – all 200+ level courses

COM 249, 449, 453

ECO – all 200+ level courses

EDC 326, 346

EDL 401

EPE – all 200+ level courses

FAM 509, 544, 563

FIN 423

FR 350, 550

GEO – 222, 240, 260, all 300+ level courses

GER 264, 317, 319

GWS 200, 350

HIS – all 200+ level courses

HJS 234, 325

HON – all 200+ level courses (except independent work)

HSM 354

JOU 204, 531, 535

JPN 320, 321, 334, 451G, 461G

LAS 201

MAS 310, 319, 520

MGT 340, 341

MKT 310, 340, 450

NRE – all 300+ level courses

PHI – all 200+ level courses

PSY – all 200+ level courses

RUS 371, 372

SOC – all 200+ level courses

SPA 312, 314

ST 500

STA – all 200+ level courses

SW 222, 320, 430, 505, 523, 571

WRD 204

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 131.

### 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>I. Intellectual Inquiry in Arts and Creativity</th>
<th>Choose one course from approved list .......... 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Intellectual Inquiry in the Humanities</td>
<td>Choose one course from approved list .......... 3</td>
</tr>
<tr>
<td>III. Intellectual Inquiry in the Social Sciences</td>
<td>*PS 230 Introduction to International Relations ........ 3</td>
</tr>
<tr>
<td>IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences</td>
<td>Choose one course from approved list .......... 3</td>
</tr>
<tr>
<td>V. Composition and Communication I</td>
<td>CIS/WRD 110 Composition and Communication I .......... 3</td>
</tr>
<tr>
<td>VI. Composition and Communication II</td>
<td>CIS/WRD 111 Composition and Communication II .......... 3</td>
</tr>
<tr>
<td>VII. Quantitative Foundations</td>
<td>Choose one course from approved list .......... 3</td>
</tr>
<tr>
<td>VIII. Statistical Inferential Reasoning</td>
<td>Choose one course from approved list .......... 3</td>
</tr>
<tr>
<td>IX. Community, Culture and Citizenship in the USA</td>
<td>PS 101 American Government ......................... 3</td>
</tr>
<tr>
<td>X. Global Dynamics</td>
<td>PS 210 Introduction to Comparative Politics .......... 3</td>
</tr>
<tr>
<td>UK Core hours: .................................................. 30</td>
<td></td>
</tr>
</tbody>
</table>

### Graduation Composition and Communication Requirement (GCCR)

WRD 304 Writing in the Social Sciences .......... 3

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

### College Requirements

<table>
<thead>
<tr>
<th>I. Foreign Language (placement exam recommended)</th>
<th>0-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Disciplinary Requirements</td>
<td></td>
</tr>
<tr>
<td>a. Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>b. Social Science (completed by Premajor Requirements)</td>
<td>3</td>
</tr>
<tr>
<td>c. Humanities</td>
<td>3</td>
</tr>
<tr>
<td>III. Laboratory or Field Work (completed by PS 372)</td>
<td>3</td>
</tr>
<tr>
<td>IV. Electives</td>
<td>6</td>
</tr>
<tr>
<td>College Requirement hours: .................. 12-26</td>
<td></td>
</tr>
</tbody>
</table>

### Premajor/Introductory Requirements

| Field One – American Politics | PS 101 American Government .......................... 3 |
| Field Two – Comparative Politics | PS 210 Introduction to Comparative Politics |
| 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. Those 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 |
| 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. You must take at least 6 hours from one department and 6 hours from another department. Special topics courses and other offerings related to the concentration may be substituted, subject to the approval of the Director of Undergraduate Studies .......... 15 |
| AAS 200, 420 (also acceptable are AAS courses cross-listed with courses eligible to serve as Major Requirements) | ACC 407 AEC 324, 471, 479, 510, 532 AIS 228, 330 AN 300 ANT 220, 221, 324, 326, 327, 340, 375, 401, 433, 435, 532, 534 APP 200 BSC 2 all 200+ level courses COM 249, 449, 453 ECO 2 all 200+ level courses EDC 326, 346 EDL 401 EPE 2 all 200+ level courses FAM 509, 544, 563 FIN 423 |
| FR 350, 550 GEO 222, 240, 260, all 300+ level courses GER 264, 317, 319 GWS 200, 350 HIS 2 all 200+ level courses IJS 324, 325 HOM 2 all 200+ level courses ISM 354 JOU 204, 531, 535 JPN 320, 321, 334, 451G, 461G LAS 201 MAS 310, 319, 520 MGT 340, 341 MKT 310, 340, 450 NRE 2 all 200+ level courses PHI 2 all 200+ level courses PSY 2 all 200+ level courses RUS 371, 372 SOC 2 all 200+ level courses SPA 312, 314 ST 500 STA 2 all 200+ level courses WRD 204 |
| 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 131.
UK Core Requirements
See the UK Core section of this Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

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

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

III. Intellectual Inquiry in the Social Sciences
PSY 100 Introduction to Psychology or approved equivalent transfer course .......................... 3-4

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

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

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

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

VIII. Statistical Inferential Reasoning
PSY 215 Experimental Psychology ................................. 4
PSY 216 Applications of Statistics in Psychology .................. 4
Electives .......................... 0-5
Choose from: PSY 302, 320, 331, 333, 350, †393, 394, 395, 399, 459, 558

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

Bachelor of Science with a major in PSYCHOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: with the exception of PSY 215, PSY 216, PSY 312, PSY 393, PSY 456, PSY 459, and PSY 565, courses with a PSY prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

UK Core Requirements

*PSY 195 Orientation to Psychology ................................. 1
*PSY 215 Experimental Psychology ................................. 4

Premajor hours: ........................................ 8-9

Major Requirements

Major Core Requirements
*PSY 216 Applications of Statistics in Psychology .......................... 4
plus four of the following five courses:
PSY 223 Developmental Psychology ................................. 3
PSY 311 Learning and Cognition ................................. 3
PSY 312 Brain and Behavior ................................. 3
PSY 313 Personality and Individual Differences .......................... 3
PSY 314 Social Psychology and Cultural Processes .......................... 3

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

Other Course Work Required for the Major
From the Major Department:
Advanced Lecture/Lab ........................................ 4
Choose from: PSY 427, 430, 440, 450, 456, 460, 552
Capstone Option ........................................ 3-8
Choose from: PSY 495 and 496, 499, 500, 534, 535, 561, 562, 563, 564, 565, 566
Electives .......................... 0-5
Choose from: PSY 302, 320, 331, 333, 350, †393, 394, 395, 399, 459, 558
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.
†Course used toward completion of the College Natural Science requirement.

Bachelor of Science with a major in PSYCHOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: with the exception of PSY 215, PSY 216, PSY 312, PSY 393, PSY 456, PSY 459, and PSY 565, courses with a PSY prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

UK Core Requirements

*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
FPSY 312 Brain and Behavior ................................. 3
PSY 313 Personality and Individual Differences .......................... 3

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

Other Course Work Required for the Major
From the Major Department:
Advanced Lecture/Lab ........................................ 4
Choose from: PSY 427, 430, 440, 450, 456, 460, 552
Capstone Option ........................................ 3-8
Choose from: PSY 495 and 496, 499, 500, 534, 535, 561, 562, 563, 564, 565, 566
Electives .......................... 0-5
Choose from: PSY 302, 320, 331, 333, 350, †393, 394, 395, 399, 459, 558
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.
†Course used toward completion of the College Natural Science requirement.

Bachelor of Science with a major in PSYCHOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: with the exception of PSY 215, PSY 216, PSY 312, PSY 393, PSY 456, PSY 459, and PSY 565, courses with a PSY prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.

UK Core Requirements

*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
FPSY 312 Brain and Behavior ................................. 3
PSY 313 Personality and Individual Differences .......................... 3

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

Other Course Work Required for the Major
From the Major Department:
Advanced Lecture/Lab ........................................ 4
Choose from: PSY 427, 430, 440, 450, 456, 460, 552
Capstone Option ........................................ 3-8
Choose from: PSY 495 and 496, 499, 500, 534, 535, 561, 562, 563, 564, 565, 566
Electives .......................... 0-5
Choose from: PSY 302, 320, 331, 333, 350, †393, 394, 395, 399, 459, 558
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.
†Course used toward completion of the College Natural Science requirement.

Bachelor of Science with a major in PSYCHOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: with the exception of PSY 215, PSY 216, PSY 312, PSY 393, PSY 456, PSY 459, and PSY 565, courses with a PSY prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on page 131.
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 131.

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 from approved list 3

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

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

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

V. Composition and Communication
   CIS/WRD 110 Composition and Communication I 3
   CIS/WRD 111 Composition and Communication II 3

VI. Composition and Communication
   CIS/WRD 110 Composition and Communication I 3
   CIS/WRD 111 Composition and Communication II 3

VII. Quantitative Foundations
   Choose one from approved list 3

VIII. Statistical Inferential Reasoning
   Choose one from approved list 3

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

X. Global Dynamics
   Choose one 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

Other Course Work Required for the Major

From the Major Department:

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

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

Total Minimum Hours Required for Degree: 120

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.

Other Major hours: 26

SOCIOLOGY

Sociology emphasizes the study of human behavior and basic social processes. The discipline provides excellent preparation for careers in a variety of occupations and professions including planning and community development, law, public relations and advertising, personnel administration, private business and government administration, health and human services, family relations, criminal justice fields, and others.

Students 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,
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 .................................................. 3
b. Social Science (completed by Premajor and Major Requirements) ..................... 3
c. Humanities ....................................................... 3

III. Laboratory or Field Work (completed by Major Requirement) .................. 3

IV. Electives .......................................................... 12-26

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

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 or PSY 216 Applications of Statistics in Psychology .... 3-4
SOC 304 Classical Sociological Theory ............................... 3

Major Core hours: ........................................... 9-10

Other Course Work Required for the Major
From the Major Department:
Choose 18 hours of 300+ level Sociology courses, at least 6 of which must be at the 400+ level ............... 18

From Outside the Major Department
Choose 15 hours outside Sociology at the 300+ level. Maximum of 3 hours of 200+ level courses used to satisfy College requirements can also be counted here. ................... 15

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

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

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

*Course used towards completion of a UK Core Requirement.

---

Minor 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 ............................... 3
- PS 372 Introduction to Political Analysis .......................... 3
- AN 302 Ethnographic Methods: Doing Anthropology .............. 3
- SW 450 Social Work Research ....................................... 3
- COM 365 Introduction to Communication Research Methods .................................................. 3-4

or

SOC 339 Introduction to Criminology .................................. 3

**Minor Electives**
9 hours from the following courses, 3 which must be at the 400-level:

- SOC 350 Topics in Sociology (Subtitle required) ............... 3
- SOC 438 Cross-National Crime ....................................... 3
- SOC 439 Topics in Crime, Law and Deviance (Subtitle required) .................. 3

To complete the 9 hours, students may take one course from the following:

- PS 360 Politics of Law and Courts .................................. 3
- PS 415G Comparative Judicial Politics ............................. 3
- PS 437G Dynamics of International Law .......................... 3
- PS 463G Judicial Politics ................................................. 3
- PS 465G Constitutional Law ............................................. 3
- PS 467G Gender, Power and Violence ............................... 3
- PS 471 The Psychology of Adjustment .............................. 3
- PS 333 Abnormal Psychology ......................................... 3
- PS 534 Child Pathopsychology ...................................... 3
- SW 512 Social Work in the Criminal Justice System ............ 3
- SW 580 Topical Seminar in Social Work ........................... 1-4
- SW 505 Child Welfare Services ...................................... 2-3
- SW 571 Social Work and the Law .................................... 3
- COM 314 The Dark Side of Interpersonal Communication and Relationships .................. 3

*The subtitle for this course must directly relate to criminology.*

---

Minor in Sociology

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

**Prerequisites**
SOC 101 Introduction to Sociology or
CLD 102 The Dynamics of Rural Social Life ....................... 3

and

Any other 100- or 200-level sociology course ....................... 3

Preminor hours: .................................................. 6

**Minor Requirements**
Students complete an additional 15 hours in sociology, at least 3 of which must be at the 400 level or above and must include one of the following six-hour blocks:

- SOC 302 and SOC 303 (or PSY 216) ............................... 3

or

- SOC 304 and SOC 305 ................................................. 3

or

- SOC 302 and SOC 304 .................................................. 3

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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 non-parametric, linear models, inference, stochastic processes, applied probability, and biostatistics.

Consultation on statistical analysis and interpretation of data is provided to research workers on and off the campus. Particular attention is paid to the consulting needs of graduate students.

---

Minor in Statistics

The minor in Statistics is aimed specifically at social and life science students, as well as students in the traditional mathematical sciences. A minimum of 16 hours of course work is required to complete the minor, as follows:

Complete one of the following:

- STA 296 Statistical Methods and Motivations
- STA 321 Basic Statistical Theory I
- STA 525 Introductory Statistical Inference

Complete one of the following:

- STA 281 Probability and Statistics
- Using Interactive Computer Techniques
- STA 320 Introductory Probability
- STA 524 Probability

**Plus**

- STA 570 Basic Statistical Analysis

Complete one additional STA course approved by the
Director of Undergraduate Studies .............................. 3 - 4

Complete one course from the student’s area approved by the
Director of Undergraduate Studies .............................. 3-4

**Total Hours** .................................................. 16-18

---

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, Mar-
keting, Finance, and Economics. Students will thus attain the fundamentals of a Business degree within the broader scope of skills and methods of inquiry associated with the liberal arts. This degree will be beneficial for a wide range of students: students who plan to work in business, technological, cultural, community, and human-service settings; students who wish to combine the liberal arts with a more applied field; and students for whom a traditional intracollege major is too limiting. Students will be equipped with the flexible skills associated with a liberal arts degree, and who are also well-positioned to succeed in a twenty-first century entrepreneurial economy.

Bachelor of Arts with a major in US CULTURE AND BUSINESS PRACTICES

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the major requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 131.

UK Core Requirements

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

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

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

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

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

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

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

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

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

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

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

UK Core Hours ....................................................................................................................... 30

Graduation Composition and Communication Requirement (GCCR)

USB 495 Senior Capstone Seminar .................................................................................... 3

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

College Requirements

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

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

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

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

College Requirement hours: ............................................................................................ 25-39

Major Requirements

USB 201 US Culture and Business Studies ....................................................................... 3
USB 495 Senior Capstone Seminar .................................................................................... 3
ECO 201 Principles of Economics I ................................................................................. 3
ECO 202 Principles of Economics II ................................................................................. 3
MGF 292 Introduction to Entrepreneurship ....................................................................... 3
FIN 250 Personal Investing and Financial Planning ..................................................... 3
MKT 300 Marketing Management...................................................................................... 3
MGMT 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 490G American Landscapes ..................................................................................... 3
GWS 301 Crossroads (Subtitle required) .......................................................................... 3
GWS 306 History of Sexuality in the U.S. ....................................................................... 3
HIS 108 History of the United States Through 1876 ....................................................... 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 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 .......................................................................................................... 1-6
WDR 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 405G 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 Appalachian ....................................................................................... 3
PS 456G Appalachian Politics ........................................................................................... 3
PS 461G Civil Liberties ................................................................................................... 3
PS 470G American Political Parties .................................................................................. 3
PS 471/AAAS 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 112 The Making of Modern Kentucky ...................................................................... 3
HIS 240 History of Kentucky ............................................................................................ 3
HIS 404 U.S. Women’s History Since 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
SPA 302 Spanish for Business Professionals .................................................................... 3

Literary Arts

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 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 African-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
**Writing, Rhetoric, and Digital Studies**

The major in Writing, Rhetoric, and Digital Studies focuses on the humanistic study of writing and rhetoric in its various genres, contexts (social, historical, political), and media (print and digital, textual and visual). Students in the program study rhetoric and composition theory, practice writing in various forms (including professional and technical writing), and consider the emerging dynamics of digital composition.

The major prepares students to enter publishing, business, industry, or non-profit organizations. Students focusing on writing in digital environments may find employment with multimedia firms or web design organizations. For those interested in graduate work, the major prepares students to enter English education, rhetoric and composition, professional writing, and law.

The major in Writing, Rhetoric, and Digital Studies is grounded in the foundational idea that writing and rhetoric are important not only for professional success, but also for the development of an informed, engaged citizenry.

**Bachelor of Arts with a major in Writing, Rhetoric, and Digital Studies**

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the Major Requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on page 131.

**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

**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. .................................................. 3

**Total Major hours:** .......................................... 39

**Electives**

Free Electives ............................................................................. 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 131.

**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

**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. .................................................. 3

**Total Major hours:** .......................................... 39
College of Arts and Sciences

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
or WRD/CIS 111 Composition and Communication II
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 (Subtitle 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 (Subtitle 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 326 Contemporary African Lives
      - AAS/EED 550 Education in a Culturally Diverse Society
      - AAS/ANT 361 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 (Subtitle required)

NOTE: Courses in English and history are strongly recommended.

For further information, email aaas@uky.edu; 112 Breckinridge Hall 0056, (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 472, HIS 473, 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

http://american-studies.as.uky.edu/

Appalachian Studies

This minor offers the student with serious interests in Appalachian regional studies an opportunity to pursue a minor concentration to complement a major in one of the university’s professional or liberal arts programs. This interdisciplinary program enables students to comprehend more fully the history, health, social structure, environment, and culture of the region – its people, its challenges, and its future.

The minor in Appalachian Studies requires 18 hours of course work to include the following:

1. APP 200 Introduction to Appalachian Studies
2. Choose 15 hours of Appalachian Studies courses. These courses must be chosen from the list below, or current courses listed on the website approved by the Director of Appalachian Studies:
   - APP 300 Topics in Appalachian Studies (Subtitle required)
   - APP 395 Independent Study
   - APP 399 Practicum
   - GEO 365 Special Topics in Regional Geography (Subtitle required) (if appropriate)
### Cognitive Science

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 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 500</td>
<td>Cognitive Science in Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>*ANT 332 Human Evolution</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 375 Behavioral Ecology and Sociobiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 535 Comparative Neurobiology and Behavior</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 550 Advanced Physiology</td>
<td>3</td>
<td></td>
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<tr>
<td>BIO 556 Communication Biology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM 350 Language and Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CS 375 Logic and Theory of Computing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(may not be combined with PHI 520)</td>
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<td></td>
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<tr>
<td>CS 463G Introduction to Artificial Intelligence</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CS 521 Computational Sciences</td>
<td>3</td>
<td></td>
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<tr>
<td>CS 536 Situated Computing</td>
<td>3</td>
<td></td>
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<tr>
<td>CS 575 Models of Computation</td>
<td>3</td>
<td></td>
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<tr>
<td>(may not be combined with PHI 520)</td>
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</tbody>
</table>

### 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENS 201</td>
<td>Environmental and Sustainability Studies I: Humanities and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ENS 202</td>
<td>Environmental and Sustainability Studies II Natural Science and Policy</td>
<td>3</td>
</tr>
<tr>
<td>PHI 336</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 425</td>
<td>Environmental Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

plus 3 credit hours from each of the ENS Areas of Expertise: Economics, Environment, Society | 9 |

### 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
**College of Arts and Sciences**

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

*The subtitle for this course must directly relate to the field of Indian culture.

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

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**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](http://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 ......................................................................................... 4
   - HJS 102 Elementary Hebrew ......................................................................................... 4
   - 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](http://mcl.as.uky.edu/jewish-studies)

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**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 LACLUS 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 426 Latin American Government and Politics ........................................................... 3
- *PS 536 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://lacas.as.uky.edu/](http://lacas.as.uky.edu/)

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**World Religions**

The minor in World Religions offers an expository 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
- HIS 323 The Holocaust .................................................................................................... 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
- HIS 326 The Jewish Experience in America .................................................................... 3
- HIS 327 Women in Judaism ............................................................................................ 3
- CLA/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 1: Judaism**

- HJS 110 Introduction to the Old Testament/Hebrew Bible ........................................... 3
- HIS 330 A History of Western Religious Thought ......................................................... 3
- HIS 512 Carolingian Empire ............................................................................................. 3
- HIS 513 Medieval Institutions Since the Mid-10th Century ........................................ 3
- HIS 520 The Era of the Reformation ............................................................................... 3
- HIS 546 The Byzantine Empire ....................................................................................... 3
- CLA/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 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
- Since the Mid-10th Century ............................................................................................ 3
- HIS 520 The Era of the Reformation ............................................................................... 3
- HIS 546 The Byzantine Empire ....................................................................................... 3
- CLA/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
- CHI 345 Introduction to Early Chinese Thought ............................................................ 3
Students must:

- critical analysis with experiential education in the Appalachian region.
The course work and practicum with Green Forests Work, a reforestation and management plan for a forest in the Appalachian region.

**Examples of Programs of Study**

Here are three examples of programs of study for students successfully completing the Appalachian Studies undergraduate certificate:

- 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 following Appalachian-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 graduate certificate must be taken from within at least two colleges at UK. This requirement is significant for the following Appalachian-related course:

**Area 1: Basic Knowledge and Engagement**

- A student interested in sustainable agriculture or elementary education might do a practicum course, or a relevant internship, service-learning course, or practicum in another program.

**Area 5: Appalachian Ethical Reasoning**

- ANS 399 Practicum ............................. 1-6

**Area 7: Appalachian Engagement**

- This student could satisfy the engagement requirement by doing a program on the multicultural history of the banjo for credit for the Appalachian Studies undergraduate certificate:

- A minimum of 12 credits of course work taken for a letter grade.

- 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 course.

- 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
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, our students will benefit from an additional degree credential, alongside their major(s) and/or minor(s), that demonstrates their dedication to and experience with global perspectives. Having this Certificate on the transcript will also show that the students are interested in the international facets of their academic and/or pre-professional training, which will be attractive to potential graduate programs or employers.

The structure of the Certificate of Global Studies offers an academic credential as well as a coherently planned academic core, for students who otherwise might simply take a smattering of international courses or participate in some type of isolated international experience. At the heart of the Certificate is the required Education Abroad experience (study abroad, internship, research abroad), but the Certificate’s structure is designed to make that experience integral to the undergraduate program of study. A coherent program in which the time abroad is both preceded and followed by appropriate opportunities for reflection, and bolstered by rigorous academic course work, will enhance the impact of the international experience. Research has demonstrated that one advantage of education abroad is that, when appropriately designed, it can move students from dependent to independent learners, and can help them to acquire interpersonal and intercultural competence.

This Certificate facilitates development of both objective and subjective intercultural experience. It will appeal to a wide range of students. It is intended to encourage study abroad and cross-cultural experiences, and facilitate and credential that experience. Students in semester-long study abroad experiences as well as those students undertaking international programs during an 8-week summer period, a 4-week term abroad, or even a 1- or 2-week “study tour” will benefit by study in situ. The Undergraduate Certificate in Global Studies offers a curriculum and co-curriculum to bolster the learning that takes place abroad. Students gain both interpersonal and intercultural competence and are able to credential it (by enrolling in a defined certificate course of study).

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 internationally aware perspective.

Global Studies Curriculum

The Certificate of Global Studies curricula are as follows:

- A minimum of 12 credits of course work taken for a letter grade.
- At least 12 credits must be 200 level or above, and a minimum of 6 credits must be at the 300-level or above.
- The student must complete a three-credit breadth component. The breadth component requires that a student take courses in at least two disciplines, with a minimum of three credits to be completed in a second discipline.
- Student must earn a C or better in each required certificate course to receive the certificate.
- Certificates will 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 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.

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. All language courses taken at UK provide linguistic competence and sophistication beyond what is provided in high school or by other means. The language ability enriches the international experience; further, because UK 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.
- Enroll in a language not previously studied in high school, at the first-semester level or above, or demonstrate the proficiency equivalent thereof.

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.
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 an increasingly “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 UG in International Film Studies 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).
The purpose of the Peace Studies program is to develop students with increased interests and understanding of issues of peace and justice from individual to global levels; to provide them with basic skills in peaceful communication, nonviolent and transformative conflict resolution; and to help them develop peaceful and cooperative cultures. The Peace Studies program will empower students to understand and reduce conflict at multiple levels, and will provide them with conflict resolution skills that are increasingly valued by employers, graduate programs, and are much needed in our communities.

A Peace Studies certificate offers a valuable credential and an appealing focus for students in many disciplines. While UK offers a plethora of courses relevant to Peace Studies, this is the single program that brings these elements into a coherent peacemaking focus. Because Peace Studies is inherently interdisciplinary, it can create an important context that may be missed when courses are completed within the framework of a single discipline. Students in Peace Studies will be better prepared to take advantage of co-curricular opportunities at UK. Many avenues also exist for fruitful synergy between the Peace Studies program and a student’s major and minor fields.

**Undergraduate Certificate in Peace Studies**

- **Peace Studies Electives**
  - Peace Studies electives are selected from existing courses in the University catalog and reflect both different departments and colleges. They are grouped into four Focus Areas:
    - **Focus Area I: Peacebuilding** 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 Social Sciences Research**

- **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...
1. One research design/methods course, chosen from the following:
   - ANT 302 Ethnographic Methods: Doing Anthropology ..................................................... 3
   - ANT 541 Archaeological Method and Theory ................................................................. 3
   - ANT 525 Applied Anthropology ................................................................. 3
   - ANT 543 Cultural Resource Management ............................................................. 3
   - ANT 385 Field Laboratory in Archaeological Research .............................................. 3-6
   - GEO 311 Qualitative Methods in Geography ......................................................... 3
   - GEO 406 Field Studies in Geography (Subtitle required) ...................................... 3
   - GWS 400 Doing Feminist Research ............................................................... 3
   - LIN/SOC 508 Discourse Analysis ............................................................................. 3
   - PS 372 Introduction to Political Analysis .................................................................. 3
   - PSY 215 Experimental Psychology ........................................................................... 4
   - SOC 302 Sociological Research Methods ............................................................... 3
   - EDP/EPE/KHP 520 Program Evaluation .................................................................... 3
   - COM 365 Introduction to Communication Research Methods .................................... 3
   - COM 553 Critical Analysis of Communication and Persuasion in Popular Culture .... 3

2. One quantitative/technical methods course chosen from the following:
   - GEO 309 Introduction to GIS ................................................................................. 3
   - GEO 310 Data Explorations and Applications in Everyday Life .................................. 3
   - GEO 409 Advanced GIS ......................................................................................... 3
   - SOC 303 Quantitative Sociological Analysis ............................................................ 3
   - STA 269 Statistical Methods and Motivations .......................................................... 3
   - PSY 216 Applications of Statistics in Psychology .................................................... 4
   - ECO 391 Economic and Business Statistics ............................................................. 3
   - AEC 490 Quantitative Methods and Price Analysis ................................................. 3
   - EPE/EDP 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

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.
   - ANT 399 Field Based/Community Based Education in Anthropology ...................... 1-15
   - ANT 581 Independent Work in Anthropology ...................................................... 1-4
   - ENS 395 Independent Work ..................................................................................... 3
   - GEO 560 Independent Work in Geography ............................................................. 3
   - GEO 499 Senior Research Seminar ......................................................................... 3
   - GEO 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
   - AEC 395 Independent Research in Agricultural Economics ..................................... 1-3
   - ECO 395 Individual Work in Economics .................................................................. 1-6
   - COM 395 Independent Work ................................................................................... 1-6

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.