

College of Arts and Sciences

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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

Students pursuing the Bachelor of Arts or the Bachelor of Science select from these majors: anthropology, biology, chemistry, classics, economics, English, foreign language and international economics, French, geography, geology, German, history, Latin American studies, linguistics, mathematical economics, mathematics, philosophy, physics, political science, psychology, Russian studies, sociology, Spanish, and topical studies. For more information on degree programs, visit: www.as.uky.edu/.

ADMISSION

Admission requirements are the same as those of the University, except for the topical studies major. Prospective students should see the college Web site: www.as.uky.edu/.

"When first arriving at the University of Kentucky, I was introduced into a vast field of knowledge, learning how my area of study overlapped with other areas of the sciences and humanities. Broadening my horizons, I now have a more inter-disciplinary approach to research and life. The College of Arts and Sciences provides many opportunities in areas of research and knowledge expanding one's ability to evaluate and analyze information that are vital tools in everyday life. I have learned that a liberal arts education is a never-ending education. My knowledge will never end for there is something new to be learned each day that extends beyond the classroom with an Arts and Sciences education."

– Ashley McFarland
Major in Psychology and Sociology

"Math is everywhere; correspondingly, so are chemistry, biology, psychology, and history. The value of a liberal arts education is depicted by its diversity: nowhere else on campus can the variety of approaches and ideas espoused within the College of Arts and Sciences be found. Exposure to these variable forms of thought prepares the student to better understand the world in which he or she lives."

– Ryan Mabry
Major in Math

PROGRAMS AND SERVICES

Academic Advising

Academic advising in the College of Arts and Sciences is provided by professional advisors, graduate students and selected faculty in the department of the student's major during advising conferences and throughout the year. A&S freshmen and sophomores see a professional advisor located in the A&S Advising Center on the second floor of the Patterson Office Tower. Advising appointments may be made at: www.as.uky.edu/advising/sasy/.

Arts and Sciences juniors and seniors should contact the department of their major and request an advisor. However, the A&S professional advisors located in the A&S Advising Center on the second floor of the Patterson Office Tower are available for all A&S students needing authoritative information about University or College requirements.

Arts and Sciences freshmen and sophomores on academic probation will have a STOP placed on their record. All A&S students on probation are expected to meet with an Arts and Sciences professional advisor located in the A&S Advising Center on the second floor of Patterson Office Tower at the beginning of each semester and before the last day to withdraw from classes. Questions concerning these meetings should be addressed to the A&S 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 called APEX (www.uky.edu/degreeaudit/). Students are expected to view their personalized degree audit prior to any advising session where scheduling for classes will be discussed.

Routine questions concerning USP, 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 staff in the A&S Advising Center, 257 Patterson Office Tower, (859) 257-8712; or www.as.uky.edu/. All forms, except the Application for Degree, are located at this Web site.

Dean's List

A student who completes at least **12 credits** of "letter" grades with a **3.60** or higher grade-point average with no "I" grades listed for the fall or spring semester will be named to the Dean's List in the College of Arts and Sciences. CLEP, AP, special exam, remedial course work (MA 108R) 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.

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 (page 72). 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 and announced at the College Baccalaureate Recognition Ceremony.

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 page 102. 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 of Arts and Sciences, contact Cindy Iten, Director of A&S Advising, 257 Patterson Office Tower, (859) 257-8712, or www.as.uky.edu/. Students interested in scholarships in a specific major should contact the individual department.

College Policy on Learning Disabilities

The College of Arts and Sciences anticipates that virtually all of its students will satisfy all of its requirements. However, any student who believes that he or she can show evidence – by diagnostic testing and/or psychological evaluation – that he or she has a learning disability which warrants course substitution of any specific college requirement may request such an exception from the Assistant Dean of Undergraduate Affairs in the College. Students should begin their inquiries and/or discussions in the UK Disability Resource Center, 102 Alumni Gym.

Readmission After a Two-Year Absence

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

Students with extenuating circumstances may petition the Assistant Dean of Undergraduate Affairs for permission to continue

under the degree requirements that were in effect during their previous enrollment in the UK system.

ACADEMIC SUSPENSION AND REINSTATEMENT

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

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

THE BACHELOR OF ARTS AND BACHELOR OF SCIENCE DEGREES

Students must complete **four** areas of requirements to obtain a UK Arts and Sciences degree. The four areas are: University Studies Program (USP); 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 University Studies Program 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 University Studies Program 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 University Studies program (USP).¹

2. Complete the following college requirements:

a. Foreign Language Requirement. Students must satisfy one of the following options:

1. satisfy the third and fourth semester of a college-level sequence in one language (including sign language) by successfully completing each semester course, or by demonstrating equivalent competency on a departmentally approved placement exam; **or**
2. successfully complete three college-level semester courses in one language and two college-level semester courses in a second language. (Two college-level semester courses are considered equal to two years of a foreign language in secondary school. No other equivalencies are given for more years of foreign language as indicated on transcripts), or demonstrate equivalent competency on a departmentally approved placement exam (all options include sign language); **or**
3. attain the Undergraduate German Studies Certificate (contact the Department of Modern and Classical Languages, Literatures and Cultures for more information);

Courses taken to satisfy options 1, 2 or 3 above may not be taken pass/fail; **or**

4. To demonstrate your proficiency in a language not taught at UK, contact the Office of International Affairs with regard to taking a proficiency exam. You are responsible for any costs related to testing. All A&S students are encouraged to take a foreign language placement exam at the time of their initial enrollment at UK or during their advising conference; **or**
5. If you have a specific language-learning disability that is certified through the UK Disability Resource Center, you may petition the College for a substitution of course work in lieu of completing the language courses normally taken for the foreign language requirement; **or**
6. International students, excluding native speakers of English, automatically fulfill this requirement; **or**
7. International students who graduated from a U.S. high school and are unable to provide proficiency exam results may petition the Assistant Dean for a waiver of the College foreign language requirement; students must provide official documentation establishing that English is their second language.

When appropriate, courses used to satisfy **b** through **d** below also can be used to satisfy the USP Cross-Cultural and Electives requirements.[†]

b. Students must take **six** college hours in disciplines in the natural sciences.[†]

c. Students must take **six** college hours in disciplines in the social sciences.[†]

Guide to A&S Departmental Honors Requirements

Major	Cumulative GPA	Criteria
Anthropology	3.5	Senior honors thesis related to general issues within the topical sub-discipline; formation of a 3-person advisory committee (the DUS always serves as one of these three); a thesis defense. Normally, students enroll in ANT 581 to receive course credit for their Senior Honors Thesis preparation. (30 pages, double-spaced.)
Biology	3.5	6 credit hours of BIO 395, Research in Biology. 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 poster at a professional meeting, a thesis, or some form of public presentation approved by the Director of Undergraduate Studies in Biology.
Chemistry	3.5	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.
Classics	3.5	3.5 cumulative GPA or above and the completion of 300-level course in Greek or Latin with a grade of B or above.
Economics	3.2	3.2 cumulative GPA or above and 3.2 major GPA.
English	3.75	1) 3.75 cumulative GPA or above in courses taken at UK which count or could count toward the English major and premajor. 2) At least 8 such courses taken at UK (i.e., not transferred).
FLIE-French	3.5	3.5 cumulative GPA and a 3.75 major GPA or above.
FLIE-German	3.5	3.5 cumulative GPA or above.
FLIE-Japanese	3.5	3.5 cumulative GPA and a 3.75 major GPA or above.
FLIE-Russian	3.5	3.5 cumulative GPA and a 3.75 major GPA or above.
FLIE-Spanish	3.5	3.5 cumulative GPA or above in 300-500 level Spanish courses.
French	3.5	3.5 cumulative GPA and a major GPA of 3.75 or above.
Geography	3.5	3.5 cumulative GPA and major GPA of 3.5 or above. Students should express their interest with graduating with Departmental Honors in a short letter to the Director of Undergraduate Studies in Geography before the last semester of course work begins.
Geology	3.5	3.3 cumulative GPA and senior thesis or 3.5 cumulative GPA or above.
German	3.5	3.5 cumulative GPA or above.
History	3.3	3.3 cumulative GPA or above and successful completion of the HIS 470/471 sequence with grades of A or B in both courses.
Latin American Studies	3.5	3.5 cumulative GPA or above in 300-500 level Latin American Studies and Spanish courses.
Linguistics	3.75	3.75 cumulative GPA or above in courses taken at UK which count or could count toward the linguistics major and premajor. At least 8 such courses taken at UK (i.e., not transferred).
Mathematical Economics	3.2	3.2 cumulative GPA or above and 3.2 major GPA or above.
Mathematics	3.5	3.5 cumulative GPA or above.
Philosophy	3.5	3.5 cumulative GPA or above.
Physics	3.4	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 three-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.
Political Science	3.5	3.5 cumulative GPA or above, and successful completion of an honors thesis. Students normally fulfill the thesis requirement by taking PS 490, Honors in Political Science, offered during the spring semester. Should that option be unavailable, however, students might be able to arrange writing a thesis under faculty guidance as part of PA 395, the department's Independent Study course.
Psychology	3.5	3.5 major GPA or above and either successfully completing of PSY 495 and PSY 496 or serving as PSI CHI president or PSI CHI vice president.
Russian Studies	3.5	3.5 cumulative GPA and a 3.75 major GPA or above.
Sociology	3.5	3.5 cumulative GPA or above.
Spanish	3.5	3.5 cumulative GPA or above in 300-500 level Spanish courses.
Topical	3.6	3.6 cumulative GPA or above and recommendation of the Associate Dean based on the final thesis.

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.²

4. Complete at least **90** credit hours in Arts and Sciences courses.³

5. Complete at least **39** credit hours in courses numbered at or above the 300 level.⁴

6. Complete at least **six** credit hours of premajor courses in the departmental major. This is not required for the Topical Studies Major or the Foreign Language and International Economics Major.

7. Complete at least **42** credit hours within the major and courses outside the major (excluding premajor course work). At least 24 of these hours must be at or above the 300 level.

8. Complete at least one course in disciplines from the natural sciences or social sciences that includes some laboratory or field experience. (See the description of the *College Laboratory or Field Experience Requirement* which follows.)

9. Attain an overall grade-point average of at least 2.0.

10. Attain a grade-point average of at least 2.0 in all major requirements courses (including all premajor courses).

11. Complete a minimum of **six** credit hours of free electives. These college electives cannot be counted towards University Studies Program or Arts and Sciences major requirements.

12. Complete University graduation requirements: Inference Requirement, University Writing Requirement (which includes the First Year Writing Requirement and the Graduation Writing Requirement), and the residence requirement.

†See *College Core Requirements for B.A. and B.S. Degrees* 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 University Studies program (USP) requirements.¹

2. Complete the following college requirements:

a. Foreign Language Requirement. Students must satisfy one of the following options:

1. satisfy the third and fourth semester of a college-level sequence in one language (including sign language) by successfully completing each semester course, or by demonstrating equivalent competency on a departmentally approved placement exam; **or**

2. successfully complete three college-level semester courses in one language and two college-level semester courses in a second language. (Two college-level semester courses are considered equal to two years of a foreign lan-

guage in secondary school. No other equivalencies are given for more years of foreign language as indicated on transcripts), or demonstrate equivalent competency on a departmentally approved placement exam (all options include sign language); **or**

3. attain the Undergraduate German Studies Certificate (contact the Department of Modern and Classical Languages, Literatures and Cultures for more information);

Courses taken to satisfy options 1, 2 or 3 above may not be taken pass/fail; **or**

4. To demonstrate your proficiency in a language not taught at UK, contact the Office of International Affairs with regard to taking a proficiency exam. You are responsible for any costs related to testing. All A&S students are encouraged to take a foreign language placement exam at the time of their initial enrollment at UK or during their advising conference; **or**

5. If you have a specific language-learning disability that is certified through the UK Disability Resource Center, you may petition the College for a substitution of course work in lieu of completing the language courses normally taken for the foreign language requirement; **or**

6. International students, excluding native speakers of English, automatically fulfill this requirement; **or**

7. International students who graduated from a U.S. high school and are unable to provide proficiency exam results may petition the Assistant Dean for a waiver of the College foreign language requirement; students must provide official documentation establishing that English is their second language.

When appropriate, courses used to satisfy **b** through **d** below also can be used to satisfy the USP Cross-Cultural and Electives requirements.†

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.²

4. Complete at least **90** credit hours in Arts and Sciences courses.³

5. Complete at least **60** credit hours in the physical, biological and/or mathematical sciences.⁵

6. Complete at least **six** credit hours of premajor courses in the departmental major. This is not required for the Topical Studies Major or the Foreign Language and International Economics Major.

7. Complete at least **42** credit hours within the major and courses outside the major (ex-

cluding premajor course work). At least 24 of these hours must be at or above the 300 level.

8. Complete at least one course in disciplines from the natural sciences or social sciences that includes some laboratory or field experience. (See the description of the *College Laboratory or Field Experience Requirement* which follows.)

9. Attain an overall grade-point average of at least 2.0.

10. Attain a grade-point average of at least 2.0 in all major requirements courses (including all premajor requirements).

11. Complete a minimum of **six** credit hours of free electives. These college electives cannot be counted towards University Studies Program or any other Arts and Sciences major or college requirements.

12. Complete University graduation requirements: Inference Requirement, University Writing Requirement (which includes the First Year Writing Requirement and the Graduation Writing Requirement), and the residence requirement.

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

NOTES

1. See the *University Studies Program* section of this Bulletin for a detailed explanation of the requirements.

With regard to the A&S departments which provide an alternate route for satisfying the USP Oral Communication Requirement, please use the following guide:

Aerospace Studies – AFS 311, 313, 411, 413 (complete all)

Anthropology – COM 199 plus ANT 582

Chemistry – COM 199 plus CHE 572 (taken twice in separate semesters)

Economics – COM 199 plus ECO 499

German – GER 206 plus GER 307

Military Science – AMS 301, 302, 341, 342 (complete all)

Russian and Eastern Studies – COM 199 plus RUS 499

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** acceptable 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 Assistant Dean of Undergraduate Affairs 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 faculty advisor and the Assistant Dean of Undergraduate Affairs.
- i. A maximum of 30 semester credit hours taken through UK's Independent Study Program.
- j. Courses with an "S" grade designation or a "place holder" designation such as ISP (Study Abroad, 1 credit hour) or NSE (National Student Exchange, 1 credit hour) **cannot** be counted as credit toward a bachelor's degree.
3. Courses classified as Arts and Sciences courses for purposes of the 90-hour requirement include all courses offered by the College of Arts and Sciences; all art history courses; all courses in music and theatre appreciation and ART 100 plus the history of music and theatre; ARC 820, ARC 822; KHP 290; 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, 233 and ARC 820 and 822 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, with the exception of ARC 820 and 822.
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 courses listed under the USP Natural Sciences area; all anatomy courses; all physiology courses; all biochemistry courses; all statistics courses; all computer science courses; ECO 391; GEO 130, GEO 251, GEO 351, GEO 441G, and GEO 530; PHI 120 and PHI 320; NFS 101; 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. Degrees

To satisfy the Arts and Sciences college core requirement, students complete **three to six** college hours in the disciplines of the natural sciences, social sciences, and humanities.

Students may also use other courses taught at UK if they are listed within the approved sections of the University Studies Program. Please refer to the course listing under VI., VII. and VIII. of the University Studies Program in this Bulletin or the *Schedule of Classes*.

Natural Sciences

- 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, GLY, PHY**.
- 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.
 - ANA 209
 - ANT 230, 332, 333
 - CGS 500
 - ENS 200, 400
 - ENT 110, 300
 - GEO 130, 251, 351, 441G, 530
 - NFS 101
 - PGY 206
 - PLS 104
 - PSY 312, 456, 565

Students may count any hours in excess of six (six being the requirement for completing the Natural Sciences area of the Disciplinary Requirement for the University Studies Program) toward fulfillment of the "college hours" required in Arts and Sciences in the Natural Sciences area of the USP Disciplinary Requirement. This will be on an "hours" basis rather than on a "course number" basis. Students may find themselves with one to four credits available for use in meeting the college hours requirement in Natural Sciences. This course work beyond the six hours of USP will apply to all Arts and Sciences students regardless of where the course work was completed, i.e., main campus or transfer credit. This rule applies **only** to the A&S Natural Sciences area.

Social Sciences

- All courses offered by Arts and Sciences departments or programs within the disciplines of the social sciences including courses with the following departmental prefixes: **AC, ANT, APP, ECO, GEO, GWS, PS, PSY, SOC**.
- The following courses may also be used to satisfy the Arts and Sciences College requirement for course work within the discipline of social sciences:
 - AAS 200, 235, 328, 336, 417G, 432, 471
 - ANT/LIN 319
 - ANT/ENG/LIN 515
 - ANT/ENG/LIN 516
 - ANT/JPN 321
 - CGS 500
 - ENS 200, 400
 - GEO/JPN 334
 - GEO/JPN 551
- The following course **may NOT** be used in the social sciences area: GWS 201.

Humanities

- Excluding the courses listed below**, all courses offered by Arts and Sciences departments or programs within the disciplines of the humanities, including courses with the following prefixes: **A-H, AAS, CLA, ENG, FR, GER, HIS, HON, JPN, LAS, LIN, PHI, RS, RUS, SPA**.
- The following courses may NOT be used in the humanities area:**
 - AAS 200, 235, 328, 336, 417G, 431G, 432, 471
 - AIS 101, 102, 201, 202, 442, 443
 - CHI 101, 102, 201, 202
 - CLA 101, 102, 131, 151, 152, 201, 202, 251, 252
 - ENG 101, 102, 104, 105, 203, 204, 205, 207, 306, 405, 407, 507, 509
 - FR 011, 101, 102, 106, 201, 202, 203, 204, 300, 306, 307, 310, 312, 406, 412, 507, 516, 553, 570
 - GER 011, 101, 102, 201, 202, 205, 206, 211, 212, 307, 308, 310, 507, 553, 612
 - HJS 101, 102, 201, 202
 - ITA 101, 102, 201, 202
 - JPN 101, 102, 201, 202, 301, 302, JPN/GEO 334, JPN/GEO 551
 - LIN 520, 521
 - PHI 120, 320
 - RUS 101, 102, 201, 202, 301, 302, 403, 404, 501, 502
 - SPA 011, 101, 102, 103, 141, 142, 201, 202, 203, 210, 211, 241, 242, 302, 313, 413, 501, 506, 553
- The following courses may also be used to satisfy the Arts and Sciences College requirement for course work within the discipline of humanities:
 - AMS 201
 - ANT 319, 515, 516
 - ART 100
 - CGS 500
 - GWS 201, 506
 - MUS 203, 222, 301, 302, 303, 325

College Laboratory or Field Experience Requirement

The college requires its students to complete at least one course which 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 hypothetical testing under supervised conditions. The approved courses for the laboratory requirement are:

Natural Sciences

- Biology** – BIO 105*, 107*, 111, 151, 153, 209
 - Chemistry** – CHE 106, 111, 113, 115
 - Physics** – PHY 211, 213, 241, 242
 - Geological Sciences** – GLY 111, 112*, 115, 220
- *Offered only at KCTCS.

Social and Behavioral Sciences

- Anthropology** – ANT 541, 585
- Geography** – GEO 300
- Political Science** – PS 372
- Psychology** – PSY 100, 215
- Sociology** – SOC 302, 303

When appropriate, other upper level courses may be used to satisfy this requirement by petition.

MAJOR REQUIREMENTS

A major in the College of Arts and Sciences is composed of premajor courses (except Foreign Language and International Economics and Topical Studies majors) and a 42-hour program referred to as the "major requirements." Each department has specified the requirements for their majors, which includes a minimum of 18 hours of 200-level and above courses in that department, with the provision that this minimum may be set at 15 hours by a department with approval of the Arts and Sciences Educational Policy Committee and the Undergraduate Council if there are special reasons for a lower minimum. Specific requirements for each departmental major are listed in this Bulletin under each department heading and are outlined in APEX (the electronic degree audit system) at: www.uky.edu/degreeaudit/.

General requirements are as follows:

- A premajor of at least 6 credits in the department is required, except for Topical Studies Majors and Foreign Language and International Economics Majors.
- A total of 42 credits is required in the major requirements, excluding the premajor courses.
- 100-level courses may not be counted in the major requirements except in the area of premajor.
- Courses *electively* taken pass-fail will not be listed.
- At least 24 credits must be in courses at the 300 level or above.
- In addition to premajor requirements, a minimum of 18 credits in a department is required for a major.
- At least 14 credits for the major requirements must be **outside** the major department.

8. 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 used for which repeat options or academic bankruptcy has been approved.

Students are expected to review and understand all degree requirements listed on the University's online degree audit system, APEX.

Students who have taken courses (200 level or above) outside the college should talk with their faculty 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, human studies, and gender and women's 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 University and College requirements, must enroll in and complete at least 30 credit hours after formal admission, and complete the 42-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 the 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 (257 Patterson Office Tower); or visit the Topical Studies major Web site at: www.as.uky.edu/Admin/.

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. The student must indicate his or her second major to the A&S Advising Center, 257 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 degrees), consult the *Academic 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. The student must indicate his/her double degree in his/her primary college. If both degrees are in Arts and Sciences, he or she must have an advisor in both departments. The student may elect to receive the degrees simultaneously, if college and departmental requirements can be met simultaneously. For information regarding double degrees (not the same as double majors), consult the *Academic Requirements* section of this Bulletin. Students are expected to be knowledgeable of requirements for any major in Arts and Sciences by checking the University's online degree audit system, APEX.

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
- classical civilization
- economics
- English

- folklore and mythology
- French
- geography
- geology
- German
- Greek
- history
- Latin
- Latin American studies
- linguistics
- mathematics
- philosophy
- physics
- political science
- psychology
- Russian
- sociology
- Spanish
- statistics

Interdisciplinary minors are also available in:

- African American studies
- American studies
- Appalachian studies
- cognitive science
- environmental studies
- gender and women's studies
- Indian culture
- Islamic studies
- Japan studies
- Judaic studies

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 Foreign Language and International Economics Major.

For more information about choosing or declaring a minor, students should review the requirements in APEX at: www.uky.edu/degreeaudit/; 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, 257 Patterson Office Tower.

Awarded minors appear on the student's final transcript but not on their diploma.

The Preparation of Teachers

Any Arts and Sciences student intending to seek teaching certification should so indicate to his or her faculty 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 six hours of technical course work taken at any accredited institution including KCTCS. Beyond these six credit hours, courses will be evaluated on an individual basis and as it applies to the student's baccalaureate degree program.

Independent Work Courses

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

Experiential Education and Internship Courses

The College of Arts and Sciences accepts experiential education and internship courses (such as EXP 396, departmental 399 courses,) on a pass-fail basis only, regardless of which college is offering the courses. A total of 12 credit hours in these courses may be counted toward the 120 credit hours required for graduation. For ANT 399 and SPA 399, a maximum of 15 semester credit hours can be earned. 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 **one** credit hour of KHP 107 will count toward degree requirements, regardless how many credits are earned.

AEROSPACE STUDIES (Air Force ROTC)

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

Admission to the Program

Non-scholarship freshmen and sophomores may register for Air Force Studies (AFS) courses without incurring a military commitment.

Sophomores and other students with four semesters of school remaining in a graduate or undergraduate status may qualify to enter the two-year program, which places them directly into the Professional Officer Course (POC) after completion of field training. The applicant must complete the Air Force Officer Qualifying Test, a medical evaluation, a physical fitness test, an interview with a board of Air Force officers, and be selected by AFROTC Headquarters.

Applicants for the POC attend a four- or six-week field training session during the summer usually preceding the semester they will enter the POC. Cadets who have completed the first two years of AFROTC attend a four-week camp; those who have not attend for six weeks.

Cadets receive travel pay to and from field training and are paid for their time there.

Requirements

An academic major in aerospace studies is not offered. However, by successfully completing either the two-year or the four-year Air Force ROTC program, a qualified student may concurrently earn a commission as an active duty Air Force Second Lieutenant while completing requirements for a degree. A student may enroll in any Air Force ROTC course at the same time that registration for other undergraduate courses is accomplished.

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 the GMC and POC also take leadership laboratory classes.

In the GMC, there are four academic classes (AFS 111, AFS 113, AFS 211, and AFS 213). These cover two main themes—the development of air power and the contemporary Air Force in the context of the U.S. military organiza-

nization. The GMC academic classes are open to any student.

In the POC, there are four academic classes (AFS 311, AFS 313, AFS 411, and AFS 413). These cover Air Force management and leadership and American defense policy. Entry into the POC is competitive and is based on Air Force Officer Qualifying Test scores, grade-point averages, and evaluation by the Professor of Aerospace Studies. Only physically qualified students in good academic standing may compete for entry into the POC.

Students enrolled as cadets in the two-year or four-year program are involved once a week in a one-credit-hour course in the cadet corps training program designed to simulate a typical Air Force organization and its associated functions. During the GMC, the courses are called leadership seminars and include AFS 112, AFS 114, AFS 212, and AFS 214. The POC leadership laboratory classes are AFS 312, AFS 314, AFS 412, and AFS 414. 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 two hours of physical training each week, normally from 6:30 to 7:30 A.M. Leadership laboratory is open to students who are members of the Air Force Reserve Officer Training Corps or are eligible to pursue a commission as determined by the Professor of Aerospace Studies.

Field Training

Field training is offered at Air Force bases across the country. The student receives junior officer training and leadership development with other students, and the Air Force has an opportunity to evaluate each student as a potential member of its officer corps. Field training courses include cadet orientation, survival training, officer training, aircraft and aircrew orientation, physical training, organizational and functional aspects of an Air Force base, career orientation, small arms familiarization, first aid, and other supplemental training. Students are paid for their time at field 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 current as of February 2007 and is subject to change.

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.

Visit our Web site at: www.uky.edu/AS/Antropology.

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 pages 101-103.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language	0-8
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication* (<i>partially completed by Major Requirements</i>)	1
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a 300+ level Humanities course</i>)	3
X. Electives (<i>choose a Natural Science and a 300+ level Humanities course</i>)	6

USP hours: 31-49

Graduation Writing Requirement

ANT 582, required in the Major Core Requirements, satisfies the Graduation Writing Requirement.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>placement exam recommended</i>)	0-8
II. Disciplinary Requirements	
a. Natural Science (<i>completed by Premajor and USP Elective Requirements</i>)	
b. Social Science (<i>completed by Premajor Requirements</i>)	
c. Humanities (<i>completed by USP Cross-Cultural and Elective Requirements</i>)	
III. Laboratory or Field Work (<i>can be completed by Major Requirement</i>)	
IV. Electives	6

College Requirement Hours: 6-14

Premajor Requirements

>ANT 220 Introduction to Cultural Anthropology	3
>ANT 230 Introduction to Physical Anthropology	3
>ANT 240 Introduction to Archaeology	3

Subtotal: Premajor Hours: 9

Major Requirements

Course Work Required for the Major

From the Major Department:

Regional Focus	6
Choose two courses from the following: ANT 221, 241, 242, 320, 322, 323, 324, 327, 342, 431G, 534, 555.	

Subdisciplinary Breadth	9
Choose three courses from at least two of the following subdisciplines:	

- 1. Archaeology**
ANT 241, 242, 320, 322, 342, 541, 545, 555 and 585
- 2. Cultural Anthropology**
ANT 340, 401, 429, 433, 525, 526, 532, 538 and 550
- 3. Physical Anthropology**
ANT 332, 333

NOTE: ANT 350, 399, 580, 581 and other ANT courses not listed here may be used to fulfill the Regional Focus and/or Subdisciplinary Breadth requirements with the consent of the Director of Undergraduate Studies.

From Outside the Major Department

Choose 15 hours outside Anthropology at the 300+ level. 200+ level courses used to satisfy USP and College Requirements can also be counted here.

Subtotal: Other Major hours: 30

Major Core Requirements

ANT 301 History of Anthropological Theory	3
ANT course related to student's Focus of Concentration	3
ANT 490 Anthropological Research Methods or	
ANT 541 Archaeological Method and Theory or	
ANT 585 Field Laboratory in Archaeological Research	3
*ANT 582 Senior Integrative Seminar	3

Subtotal: Major Core Hours: 12

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 USP or College Requirement.

*Note: COM 199 + ANT 582 satisfy the Oral Communication 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language	0-8
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication* (<i>partially completed by Major Requirements</i>)	1
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a Humanities course</i>) ...	3
X. Electives (<i>choose six hours of Natural Science courses</i>)	6

USP hours: 31-49

Graduation Writing Requirement

ANT 582, required in the Major Core Requirements, satisfies the Graduation Writing Requirement.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>placement exam recommended</i>)	0-8
II. Disciplinary Requirements	
a. Natural Science (<i>completed by Premajor Requirement</i>)	
b. Social Science (<i>completed by Premajor Requirement</i>)	
c. Humanities (<i>completed by USP Cross-Cultural Requirement</i>)	
III. Laboratory or Field Work (<i>can be completed by Major Requirement</i>)	
IV. Electives	6

College Requirement Hours: 6-14

Premajor Requirements

>ANT 220 Introduction to Cultural Anthropology	3
>ANT 230 Introduction to Physical Anthropology	3
>ANT 240 Introduction to Archaeology	3

Premajor hours: 9

Major Requirements

Course Work Required for the Major

From the Major Department:

Regional Focus	6
Choose two courses from the following: ANT 221, 241, 242, 320, 322, 323, 324, 327, 342, 431G, 534, 555.	

Subdisciplinary Breadth	9
Choose three courses from at least two of the following subdisciplines:	

- 1. Archaeology**
ANT 241, 242, 320, 322, 342, 541, 545, 555 and 585
- 2. Cultural Anthropology**
ANT 340, 401, 429, 433, 525, 526, 532, 538 and 550
- 3. Physical Anthropology**
ANT 332, 333

NOTE: ANT 350, 399, 580, 581 and other ANT courses not listed here may be used to fulfill the Regional Focus and/or Subdisciplinary Breadth requirements with the consent of the Director of Undergraduate Studies.

From Outside the Major Department

Choose 15 hours outside Anthropology at the 300+ level. 200+ level courses used to satisfy USP and College Requirements can also be counted here.

Subtotal: Other Major hours: 30

Major Core Requirements

ANT 301 History of Anthropological Theory	3
ANT course related to student's Focus of Concentration	3
ANT 490 Anthropological Research Methods or ANT 541 Archaeological Method and Theory or ANT 585 Field Laboratory in Archaeological Research	3
*ANT 582 Senior Integrative Seminar	3
Subtotal: Major Core Hours:	12

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 USP or College Requirement.

*Note: COM 199 + ANT 582 satisfy the Oral Communication Requirement.

Minor in Anthropology

Students must complete a total of 21 hours of course work:

Premajor Courses (9 hours)

Students must take ANT 220, 230, 240.

Additional Courses (12 hours)*

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

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

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

BIOLOGY

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

Bachelor of Arts with a major in BIOLOGY**128 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 pages 101-103.

University Studies Program Requirements

I. Math (completed by Premajor Requirement)	
II. Foreign Language (placement exam recommended)	0-8
III. Inference-Logic (completed by Premajor Requirement)	
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences (completed by Premajor Requirements)	
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (choose a Humanities course) ...	3
X. Electives (choose two Social Science courses) ...	6

USP hours: **24-36**

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: ... 3

College Requirements

I. Foreign Language (placement exam recommended)	0-8
II. Disciplinary Requirements	
a. Natural Science (completed by Premajor Requirements)	
b. Social Science (completed by USP Elective Requirement)	
c. Humanities (partially completed by USP Cross-Cultural Requirement)	3
III. Laboratory or Field Work (completed by Premajor Requirement)	
IV. Electives	6

College Requirement Hours: **9-17**

Premajor Requirements

*MA 123 Elementary Calculus and its Applications or *MA 113 Calculus I	3-4
*CHE 105 General Chemistry I	3
*CHE 107 General Chemistry II	3
*CHE 111 Laboratory to Accompany General Chemistry I	1
*CHE 113 Laboratory to Accompany General Chemistry II	2
*BIO 150 Principles of Biology I	3
BIO 151 Principles of Biology Laboratory I	2
BIO 152 Principles of Biology II	3
BIO 153 Principles of Biology Laboratory II	2

Premajor hours: **22-23**

Major Requirements

Major Core Requirements	
BIO 304 Principles of Genetics	4
BIO 315 Introduction to Cell Biology	3
BIO 325 Introductory Ecology	4
^BIO 350 Animal Physiology	4
BIO 425 Biology Seminar or BIO 499 Biology Research Seminar	1
^Students with a strong interest in plants may substitute BIO 430G for BIO 350 with the approval of faculty advisor.	

Major Core hours: **16**

Other Course Work Required for the Major**From the Major Department:**

To be chosen from 200+ level BIO courses (excluding BIO 208) or the list below. Two courses **must** contain a laboratory component. Six hours of Independent Research (395) from biological sciences departments may be counted here; however, only BIO 395 is accepted for honors in biology. Note that ANA 209, BIO 208 and PGY 206 **cannot** be used for this requirement

A&S 300, 500 (when offered by the Department of Biology)

ABT 301, 395, 460, 461, 495
ANA 395, 511, 512
ANT 332
ASC 364, 378, 395
BCH 395, 401G, 503, 517
BIO – all 200+ level courses except BIO 208
CHE 226, 233, 395, 440G, 441G, 442G, 446G, 532, 533, 550, 552, 553, 558, 565
ENT 300, 310, 320, 395, 402, 460, 461, 561, 562, 564, 568
FOR 315, 340, 375, 402
FSC 530
GLY 401G
MI 494G, 595, 598
NRC 320, 395, 420G, 450G, 455G
PGY 412G, 502, 560, 590
PLS 220, 320, 330, 332, 366, 367, 450G, 502, 566, 567
PPA 395, 400G, 503
PSY 312, 456, 459, 552, 558, 565
STA 281, 291, 292, 503, 570, 580 (Generally only one statistics course is accepted. Other STA courses may be accepted at the discretion of your advisor, and this may depend upon the area of biology in which you choose to specialize.)
TOX 508, 509, 560
VS 395

From Outside the Major Department

Choose either CHE 230/231/232 or CHE 226/231 and BCH 401G	8
Choose either PHY 211/213 or PHY 231/232/241/242	10

Other Major hours: **34**

Total Minimum Hours Required for Degree

128

*Course used towards completion of a USP or College Requirement.

Bachelor of Science with a major in BIOLOGY**122 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 pages 103-104.

University Studies Program Requirements

I. Math (completed by Premajor Requirement)	
II. Foreign Language (placement exam recommended)	0-8
III. Inference-Logic (completed by Premajor Requirement)	
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences (completed by Premajor Requirements)	
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (choose a Humanities course) ...	3
X. Electives (choose a Social Science course)	3

USP hours: **21-33**

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-8
- II. Disciplinary Requirements
- Natural Science (*completed by Premajor Requirements*)
 - Social Science (*completed by USP Elective Requirement*)
 - Humanities (*completed by USP Cross-Cultural Requirement*)
- III. Laboratory or Field Work (*completed by Premajor Requirement*)
- IV. Electives 6

College Requirement hours: 6-14

Premajor Requirements

- *MA 123 Elementary Calculus and its Applications
or
*MA 113 Calculus I 3-4
- *CHE 105 General Chemistry I 3
- *CHE 107 General Chemistry II 3
- *CHE 111 Laboratory to Accompany
General Chemistry I 1
- *CHE 113 Laboratory to Accompany
General Chemistry II 2
- *BIO 150 Principles of Biology I 3
- BIO 151 Principles of Biology Laboratory I 2
- BIO 152 Principles of Biology II 3
- BIO 153 Principles of Biology Laboratory II 2

Premajor hours: 22-23

Major Requirements**Major Core Requirements**

- BIO 304 Principles of Genetics 4
- BIO 315 Introduction to Cell Biology 3
- BIO 325 Introductory Ecology 4
- ^BIO 350 Animal Physiology 4
- BIO 425 Biology Seminar or
BIO 499 Biology Research Seminar 1
- ^AStudents with a strong interest in plants may substitute BIO 430G for BIO 350 with the approval of faculty advisor.

Major Core hours: 16

Other Course Work Required for the Major**From the Major Department:**

To be chosen from 200+ level BIO courses (*excluding BIO 208*) or the list below. Two courses **must** contain a laboratory component. Six hours of Independent Research (395) from biological sciences departments may be counted here; however, only BIO 395 is accepted for honors in biology. Note that ANA 209, BIO 208, and PGY 206 **cannot** be used for this requirement 16

A&S 300, 500 (*when offered by the Department of Biology*)

ABT 301, 395, 460, 461, 495

ANA 395, 511, 512

ANT 332

ASC 364, 378, 395

BCH 395, 401G, 503, 517

BIO – all 200+ level courses *except BIO 208*

CHE 226, 233, 395, 440G, 441G, 442G, 446G, 532, 533, 550, 552, 553, 558, 565

ENT 300, 310, 320, 395, 402, 460, 461, 561, 562, 564, 568

FOR 315, 340, 375, 402

FSC 530

GLY 401G

MI 494G, 595, 598

NRC 320, 395, 420G, 450G, 455G

PGY 412G, 502, 560, 590

PLS 220, 320, 330, 332, 366, 367, 450G, 502, 566, 567

PPA 395, 400G, 503

PSY 312, 456, 459, 552, 558, 565

STA 281, 291, 292, 503, 570, 580 (*Generally only one statistics course is accepted. Other STA courses may be accepted at the discretion of your advisor, and this may depend upon the area of biology in which you choose to specialize.*)

TOX 508, 509, 560

VS 395

From Outside the Major Department

Choose either CHE 230/231/232

or

CHE 231/236 and BCH 401G 8

Choose either PHY 211/213

or

PHY 231/232/241/242 10

Other Major hours: 34

Total Minimum Hours

Required for Degree 122

*Course used towards completion of a USP or College Requirement.

Minor in Biological Sciences

A minimum of 21 semester hours is required for the minor in biological sciences, to be distributed as follows:

Premajor Requirements

- BIO 150 Principles of Biology I 3
- BIO 151 Principles of Biology Laboratory I 2
- BIO 152 Principles of Biology II 3
- BIO 153 Principles of Biology Laboratory II 2

Minor Requirements

Two courses from the following list:

- BIO 304 Principles of Genetics 4
- BIO 315 Introduction to Cell Biology 3
- BIO 325 Introductory Ecology 4
- *BIO 350 Animal Physiology 4
- or BIO 430G Plant Physiology 3
- or BIO 476G General Microbial Physiology 4
- *Biology minors with strong interests in plants may substitute BIO 430G for BIO 350 with advisor's approval.

Minor Electives

Approved BIO or other courses at the 200 level or higher. Up to three hours of BIO 395, Research in Biology, may 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 two options in the B.S. program: a traditional version covering all the major areas of chemistry, and an option that emphasizes biochemistry. Both degree options are certified by the American Chemical Society. A Bachelor of Arts degree program also is offered for students who want greater flexibility in the selection of courses in other fields of science. The B.A. is designed particularly for students planning to enter the professional health fields, to teach in secondary schools, or to work in such varied areas as ecology, criminal justice, materials science, patent law, or technical service and sales. The

Department also offers the Master of Science and the Doctor of Philosophy degrees.

Bachelor of Arts with a major in CHEMISTRY**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. 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 pages 101-103.

University Studies Program Requirements

- I. Math (*completed by Premajor Requirement*)
- II. Foreign Language^A (*placement exam recommended*) 0-8
- III. Inference-Logic (*completed by Premajor Requirement*)
- IV. Written Communication 0-4
- VI. Natural Sciences (*completed by Premajor Requirements*)
- VII. Social Sciences 6
- VIII. Humanities 6
- IX. Cross-Cultural (*choose a Humanities course*) ... 3
- X. Electives (*choose two Social Science courses*) ... 6

USP hours: 21-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-6
- II. Disciplinary Requirements
- Natural Science (*completed by Major Requirements*)
 - Social Science (*completed by USP Elective Requirement*)
 - Humanities (*partially completed by USP Cross-Cultural Requirement*) 3
- III. Laboratory or Field Work (*completed by Premajor Requirement*) 6
- IV. Electives 6

College Requirement hours: 9-15

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 3
- CHE 107 General College Chemistry II 3
- CHE 111 Laboratory to Accompany
General Chemistry I 1
- CHE 113 Laboratory to Accompany
General Chemistry II 2

Premajor hours: 16-17

Major Requirements**Major Core Requirements**

- CHE 226 Analytical Chemistry 3
- CHE 230 Organic Chemistry I 3

CHE 231 Organic Chemistry Laboratory I	2
CHE 232 Organic Chemistry II	3
CHE 233 Organic Chemistry Laboratory II	2
CHE 440G Introductory Physical Chemistry	4
CHE 441G Physical Chemistry Laboratory	2
CHE 572 Communication in Chemistry (two semesters)	2

Major Core hours: 21

Other Course Work Required for the Major

Chemistry Major Field Options

Choose 21 hours at the 300+ level with a prefix of ANA, BCH, BIO, CHE, CME, CS, GLY, MA, MI, MSE, PAT, PGY, PHA, PHR, PHY, PM, RM, or STA. 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 21

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 120

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

Curriculum for B.A. in Chemistry

Freshman Year

First Semester	Hours
CHE 105 General College Chemistry I	3
CHE 111 Laboratory to Accompany General Chemistry I	1
ENG 104 Writing: An Accelerated Foundational Course	4
MA 113 Calculus I	4
University Studies	3

Second Semester

CHE 107 General College Chemistry II	3
CHE 113 Laboratory to Accompany General Chemistry II	2
MA 114 Calculus II	4
University Studies	3
Elective	3

Sophomore Year

First Semester	Hours
CHE 230 Organic Chemistry I	3
CHE 231 Organic Chemistry Laboratory I	2
PHY 211 General Physics	5
University Studies	3
University Studies or Second-Tier Writing Requirement	3

Second Semester

CHE 226 Analytical Chemistry	3
CHE 232 Organic Chemistry II	3
CHE 233 Organic Chemistry Laboratory II	2
PHY 213 General Physics	5
University Studies	3

Junior Year

First Semester	Hours
CHE 440G Introductory Physical Chemistry	4
Foreign Language I†	4
University Studies	3
Major Field Option*	3

Second Semester

CHE 441G Physical Chemistry Laboratory	2
CHE 572 Seminar	1
Foreign Language II†	4
University Studies	3
Major Field Option*	6

Senior Year

First Semester	Hours
Free Elective (A&S)	3
Foreign Language III†	3
Major Field Option*	6
University Studies	3

Second Semester

CHE 572 Seminar	1
Major Field Options*	6
Foreign Language IV†	3
Electives	6

*Major field options (21 credits) must be chosen from courses at the 300- to 500-level with the prefixes CHE, ANA, BCH, BIO, CME, CS, GLY, 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. Other courses may be approved as Major Field Options by the Undergraduate Program Committee. At least 5 of these hours must be in CHE courses; at least 4 of the 21 credits must be taken in non-CHE courses. Students working towards teaching accreditation may count six credits in courses taken at or above the 300-level in the College of Education. Six credits of CHE 395 are recommended for students having a minimum 3.0 GPA in chemistry courses. Oral and written reports are required from CHE 395 students during their final semester of registration in CHE 395. A maximum of nine credits 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.

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

Bachelor of Science with a major in CHEMISTRY

Traditional Option

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 pages 103-104.

University Studies Program Requirements

I. Math (completed by Premajor Requirement)	
II. Foreign Language^ (placement exam recommended)	0-8
III. Inference-Logic (completed by Premajor Requirement)	
IV. Written Communication	0-4
VI. Natural Sciences (completed by Premajor Requirements)	
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (choose a Humanities course)	3
X. Electives (choose a Social Science course)	3

USP hours: 18-30

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (placement exam recommended)	0-6
II. Disciplinary Requirements	
a. Natural Science (completed by Major Requirements)	
b. Social Science (completed by USP Elective Requirement)	
c. Humanities (completed by USP Cross-Cultural Requirement)	
III. Laboratory or Field Work (completed by Premajor Requirement)	6
IV. Electives	6

College Requirement hours: 6-12

Premajor Requirements

MA 113 Calculus I	4
MA 114 Calculus II	4
CHE 105 General College Chemistry I	3
CHE 107 General College Chemistry II	3
CHE 111 Laboratory to Accompany General Chemistry I	1
CHE 113 Laboratory to Accompany General Chemistry II	2
Premajor hours:	17

Major Requirements

Major Core Requirements

CHE 226 Analytical Chemistry	3
CHE 230 Organic Chemistry I	3
CHE 231 Organic Chemistry Laboratory I	2
CHE 232 Organic Chemistry II	3
CHE 441G Physical Chemistry Laboratory	2
CHE 442G Thermodynamics and Kinetics	3
CHE 450G Practical Inorganic Chemistry	4
CHE 522 Instrumental Analysis	4
CHE 532 Spectrometric Identification of Organic Compounds	2
CHE 533 Qualitative Organic Analysis Laboratory	2
CHE 547 Principles of Physical Chemistry I	3
CHE 550 Biological Chemistry I or CHE 552 Biological Chemistry II	3
CHE 572 Communication in Chemistry (two semesters)	2

Major Core hours: 36

Other Course Work Required for the Major

From the Major Department:

Chemistry Major Field Options	6
Choose six hours from the following: up to six hours of CHE 395, any CHE 500-level course except for those required (CHE 522/532/533/(550 or 552)/572); BCH 401G or BCH 501; and BCH 502.	

From the Mathematics Department

MA 213 Calculus III	4
MA 322 Matrix Algebra and its Applications	3

From the Physics Department

PHY 231/232 General University Physics	8
PHY 241/242 General University Physics Laboratory	2

Other Major hours: 23

Electives

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

**Total Minimum Hours
Required for Degree 120**

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

Curriculum for B.S. in Chemistry

Traditional Option

Freshman Year

First Semester	Hours
CHE 105 General College Chemistry I	3
CHE 111 Laboratory to Accompany General Chemistry I	1
ENG 104 Writing: An Accelerated Foundational Course	4
MA 113 Calculus I	4
University Studies	3
Second Semester	
CHE 107 General College Chemistry II	3
CHE 113 Laboratory to Accompany General Chemistry II	2
MA 114 Calculus II	4
University Studies	6

Sophomore Year

First Semester	Hours
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	2
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
ENG 2XX Writing Intensive Course	3

Junior Year

First Semester	Hours
CHE 547 Principles of Physical Chemistry I	3
CHE 532 Spectrometric Identification of Organic Compounds	2
Foreign Language I*	4
University Studies	6
Second Semester	
CHE 441G Physical Chemistry Laboratory	2
CHE 442G Thermodynamics and Kinetics	3
CHE 533 Qualitative Organic Analysis Laboratory	2
CHE 572 Seminar	1
Major Field Option	3
Foreign Language II*	4

Senior Year

First Semester	Hours
CHE 450G Practical Inorganic Chemistry	4
CHE 522 Instrumental Analysis	4
CHE 550 Biological Chemistry I or Major Field Option	3
Foreign Language III*	3
Second Semester	
CHE 572 Seminar	1
Foreign Language IV*	3
CHE 552 Biological Chemistry II or Major Field Option	3
Free Electives	6
University Studies	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

122 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 pages 103-104.

University Studies Program Requirements

- I. Math (completed by Premajor Requirement)
- II. Foreign Language^ (placement exam recommended) 0-8
- III. Inference-Logic (completed by Premajor Requirement)
- IV. Written Communication 0-4
- VI. Natural Sciences (completed by Premajor Requirements)
- VII. Social Sciences
- VIII. Humanities
- IX. Cross-Cultural (choose a Humanities course) ... 3
- X. Electives (choose a Social Science course) 3

USP hours: 18-30

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (placement exam recommended) 0-6
- II. Disciplinary Requirements
 - a. Natural Science (completed by Major Requirements)
 - b. Social Science (completed by USP Elective Requirement)
 - c. Humanities (completed by USP Cross-Cultural Requirement)
- III. Laboratory or Field Work (completed by Premajor Requirement)
- IV. Electives

College Requirement hours: 6-12

Premajor Requirements

- | | |
|---|---|
| MA 113 Calculus I | 4 |
| MA 114 Calculus II | 4 |
| CHE 105 General College Chemistry I | 3 |
| CHE 107 General College Chemistry II | 3 |
| CHE 111 Laboratory to Accompany
General Chemistry I | 1 |
| CHE 113 Laboratory to Accompany
General Chemistry II | 2 |
| BIO 150 Principles of Biology I | 3 |
| BIO 151 Principles of Biology Laboratory I | 2 |
| BIO 152 Principles of Biology II | 3 |
| BIO 153 Principles of Biology Laboratory II | 2 |

Premajor hours: 27

Major Requirements

Major Core Requirements

CHE 226 Analytical Chemistry	3
CHE 230 Organic Chemistry I	3
CHE 231 Organic Chemistry Laboratory I	2
CHE 232 Organic Chemistry II	3
BIO 308 General Microbiology or BIO 315 Introduction to Cell Biology	3
CHE 440G Introductory Physical Chemistry	4
CHE 441G Physical Chemistry Laboratory	2
CHE 450G Practical Inorganic Chemistry	4
CHE 522 Instrumental Analysis or CHE 532/533 Spectrometric Identification of Organic Compounds/Qualitative Organic Analysis Laboratory	4
CHE 550 Biological Chemistry I	3
CHE 552 Biological Chemistry II	3
CHE 554 Biological Chemistry Laboratory	2
CHE 572 Communication in Chemistry (two semesters)	2
Major Core hours:	38

Other Course Work Required for the Major

From the Major Department:

Chemistry Major Field Options 4
Major Field Options must be chosen from the following: CHE 395; or any CHE 500-level course except for those required. CHE 395 is strongly recommended for students having a minimum 3.0 GPA in chemistry courses.

From the Mathematics Department

MA 213 Calculus III 4

From the Physics Department

PHY 231/232 General University Physics 8
PHY 241/242 General University Physics
Laboratory 2

Other Major hours: **18**

Electives

Choose electives to lead to the minimum total of 122 hours required for graduation.

Total Minimum Hours

Required for Degree 122

Curriculum for B.S. in Chemistry

Biochemistry Option

Freshman Year

First Semester	Hours
CHE 105 General College Chemistry I	3
CHE 111 Laboratory to Accompany General Chemistry I	1
MA 113 Calculus I	4
ENG 104 Writing: An Accelerated Foundational Course	4
University Studies	3

Second Semester

CHE 107 General College Chemistry II	3
CHE 113 Laboratory to Accompany General Chemistry II	2
MA 114 Calculus II	4
BIO 150 Principles of Biology I	3
BIO 151 Principles of Biology Laboratory I	2

Sophomore Year

First Semester	Hours
CHE 230 Organic Chemistry I	3
BIO 152 Principles of Biology II	3
BIO 153 Principles of Biology Laboratory II	2
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	2
CHE 232 Organic Chemistry II	3
CHE 226 Analytical Chemistry	3
PHY 232 General University Physics	4
PHY 242 General University Physics Laboratory	1
ENG 2XX Writing Intensive Course	3

Junior Year

First Semester	Hours
*CHE 440G Introductory Physical Chemistry	4
CHE 522 Instrumental Analysis	4
or	
CHE 532 Spectrometric Identification of Organic Compounds	2
CHE 550 Biological Chemistry I	3
**BIO 308 General Microbiology or	
BIO 315 Introduction to Cell Biology	3
University Studies	3

Second Semester

CHE 533 Qualitative Organic Analysis Laboratory (if CHE 532 taken)	2
CHE 552 Biological Chemistry II	3
CHE 554 Biological Chemistry Laboratory	2
University Studies	6
Foreign Language***	4

Senior Year

First Semester	Hours
CHE 450G Practical Inorganic Chemistry	4
Major Field Option	2
CHE 572 Seminar	1
University Studies	3
Foreign Language***	4

Second Semester

CHE 441G Physical Chemistry Laboratory	2
Major Field Option	2
CHE 572 Seminar	1
Foreign Language***	3
Electives (A&S)	6

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

**BIO 304 may replace BIO 308 or BIO 315.

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

Certification Requirements

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

Minor in Chemistry

	Hours
MA 113 Calculus I or	4
MA 132 Calculus for the Life Sciences	3
MA 114 Calculus II	4
PHY 211/213 General Physics or	10
PHY 231/241 General University Physics and Laboratory and	5
PHY 232/242 General University Physics and Laboratory	5
CHE 105/107 General College Chemistry I and II	6
CHE 111/113 Laboratory to Accompany General Chemistry I and II	3
CHE 226 Analytical Chemistry	3

CHE 230/231 Organic Chemistry I and Laboratory I	5
CHE 232/233 Organic Chemistry II and Laboratory II	5
CHE 440G Introductory Physical Chemistry or	4
CHE 446G Physical Chemistry for Engineers	3

B.A. or B.S. with a major in CLASSICS

The requirements for the B.A. and B.S. with a major in Classics are listed in this A&S section under *Modern and Classical Languages, Literatures and Cultures*.

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, a Bachelor of Arts and a Bachelor of Science with a major in foreign language and international economics, and a Bachelor of Arts and a Bachelor of Science with a major in mathematical economics. The distinctions among these degrees lie primarily in the required supporting courses in the various programs. (Foreign language and international economics majors and mathematical economics majors should refer directly to that section of the Bulletin.)

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 pages 101-103.

University Studies Program Requirements

I. Math (completed by Premajor Requirements)	
II. Foreign Language (placement exam recommended)	0-8
III. Inference-Logic (completed by Premajor Requirements)	0-4
IV. Written Communication	0-4
V. Oral Communication*	1
VI. Natural Sciences	6
VII. Social Sciences (partially completed by Premajor Requirements)	3
VIII. Humanities	6

IX. Cross-Cultural (choose a 300+ level Humanities course)	3
X. Electives (choose six hours of Natural Sciences)	6

USP hours: 27-39

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (placement exam recommended)	0-8
II. Disciplinary Requirements	
a. Natural Science (completed by USP Elective Requirement)	
b. Social Science (completed by Premajor and Major Requirements)	
c. Humanities (partially completed by USP Cross-Cultural Requirement)	3
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 10-18

Premajor Requirements

^MA 113 Calculus I or	
MA 123 Elementary Calculus and its Applications and	
MA 162 Finite Mathematics and its Applications	4-6
^ECO 201 Principles of Economics I	3
ECO 202 Principles of Economics II	3
STA 291 Statistical Method	3

Premajor hours: 13-15

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	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

9-15

From Outside the Major Department

Choose 15-21 hours outside Economics at the 200+ level, with at least six 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 USP and College Requirements can also be counted here

Other Major hours: 30

Electives

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

4

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP or College Requirement.

*COM 199 + ECO 499 complete the Oral Communication 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 pages 103-104.

University Studies Program Requirements

- I. Math (completed by Premajor Requirements)
- II. Foreign Language (placement exam recommended) 0-8
- III. Inference–Logic (completed by Premajor Requirements)
- IV. Written Communication 0-4
- V. Oral Communication* 1
- VI. Natural Sciences 6
- VII. Social Sciences (partially completed by Premajor Requirements) 3
- VIII. Humanities 6
- IX. Cross-Cultural (choose a Humanities course) ... 3
- X. Electives (choose six hours of Natural Sciences) 6

USP hours: 27-39

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (placement exam recommended) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (completed by USP Elective Requirement)
 - b. Social Science (completed by Premajor Requirement)
 - c. Humanities (completed by USP Cross-Cultural Requirement)
- III. Laboratory or Field Work 1
- IV. Electives 6

College Requirement hours: 7-15

Premajor Requirements

- ^MA 113 Calculus I
or
MA 123 Elementary Calculus and its Applications and
MA 162 Finite Mathematics and its Applications .. 4-6
- ^ECO 201 Principles of Economics I 3
- ECO 202 Principles of Economics II 3
- STA 291 Statistical Method 3

Premajor hours: 13-15

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 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 9-15

From Outside the Major Department

Choose 15-21 hours outside Economics at the 200+ level, with at least six 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 USP and 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 USP or College Requirement.

*COM 199 + ECO 499 complete the Oral Communication Requirement.

Minor in Economics

Hours

The minor consists of eighteen hours to include:

- ECO 201 Principles of Economics I 3
- ECO 202 Principles of Economics II 3
- ECO 401 Intermediate Microeconomic Theory or
ECO 402 Intermediate Macroeconomic Theory 3
- Three additional economics courses at the 300-level or above 9

ENGLISH

The Department of English offers a wide variety of courses in English and American literature as well as in comparative literature, linguistics, folklore, film, creative writing, and composition. Undergraduate majors may also choose a curriculum that leads to a teaching certificate.

Both majors and nonmajors will find many courses that offer opportunities to deepen their acquaintance with their own culture and its heritage, to enlarge their understanding of the human condition, and to develop their capacity to use and appreciate their own language.

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 pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (placement exam recommended) 0-8

- III. Inference–Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6
- VIII. Humanities (completed by Premajor/Major Requirements) 0-6
- IX. Cross-Cultural (ENG 264 or a 300+ level Social Science course recommended for efficiency) 3
- X. Electives (two Natural Science courses recommended for efficiency) 6

USP hours: 27-52

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course (may be satisfied by Premajor/Major requirements). See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (placement exam recommended) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (may be completed by USP Elective Requirement) 0-6
 - b. Social Science (may be partially completed by USP Cross-Cultural Requirement) 3-6
 - c. Humanities (completed by Major Requirements) 0-6
- III. Laboratory or Field Work 1
- IV. Electives 6

College Requirement hours: 10-33

Premajor Requirements

*ENG 230 Introduction to Literature 3

plus one of the following

- *ENG 231 Literature and Genre
- *ENG 232 Literature and Place
- *ENG 233 Literature and Identities
- *ENG 234 Introduction to Women’s Literature
- ENG 264 Major Black Writers
- ENG 281 Introduction to Film 3

Premajor hours: 6

Major Requirements

Major Core Requirements

- ENG 330 Text and Context 3
- **ENG 395 Independent Work (Capstone) 1

Major Core hours: 4

Other Course Work Required for the Major

From the Major Department:

Language Module 3
Choose one of the following: ENG/LIN 210, 211, 310

Literature Module 12

Complete two of the following British literature courses: ENG 331, 332, 333, 340; and two of the following American literature courses: ENG 334, 335, 336. At least three of these must be chosen from the survey courses (ENG 331, 332, 334, 335).

Area Module 12

Complete four additional courses – at least two of which must be from the same area module. Note that some of the listed courses may be repeated under different subtitles.

Literature: ENG 340 (if not used in Literature Module), 481G, 482G, 483G, 484G, 485G, 570, 572

Imaginative Writing: ENG 207, 407, 507

Writing: ENG 301, 306, 401, 405, 509

Film and Media: ENG 283, 381, 382, 480G

Language Study: ENG/LIN 310, LIN/ANT 319, ENG/LIN 512, ENG/LIN/EDC 513, ENG/LIN/EDC 514, ENG/LIN/ANT 515, ENG/LIN/ANT 516, ENG 519

Theory: ENG 486G, 487G, 488G

English Education Emphasis: ENG 264 or 483G, 509, 572, and one additional writing module course

From Outside the Major Department

15 additional hours at the 200+ level outside English are required (courses 300+ recommended; note that 200+ - level courses used to satisfy USP and College Requirements may also be counted here.) 15

Major hours: 42

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 3

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

**Currently being waived.

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. Please note: 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. 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 pages 103-104.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*placement exam recommended*) 0-8
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6
- VIII. Humanities (*completed by Premajor/Major Requirements*) 0-6
- IX. Cross-Cultural (*ENG 264 or a 300+ level Social Science course recommended for efficiency*) 3
- X. Electives (*two Natural Science courses recommended for efficiency*) 6

USP hours: 27-52

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course (may be satisfied by Premajor/Major requirements). See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (*may be completed by USP Elective Requirement*) 0-6
 - b. Social Science (*may be partially completed by USP Cross-Cultural Requirement*) 3-6
 - c. Humanities (*completed by Major Requirements*) 0-6

- III. Laboratory or Field Work 1
- IV. Electives 6

College Requirement hours: 10-33

Premajor Requirements

*ENG 230 Introduction to Literature 3

plus one of the following:

- *ENG 231 Literature and Genre
- *ENG 232 Literature and Place
- *ENG 233 Literature and Identities
- *ENG 234 Introduction to Women's Literature
- ENG 264 Major Black Writers
- ENG 281 Introduction to Film 3

Premajor hours: 6

Major Requirements

Major Core Requirements

- ENG 330 Text and Context 3
- **ENG 395 Independent Work (Capstone) 1

Major Core hours: 4

Other Course Work Required for the Major

From the Major Department:

Language Module 3
Choose one of the following: ENG/LIN 210, 211, 310

Literature Module 12

Complete two of the following British literature courses: ENG 331, 332, 333, 340; and two of the following American literature courses: ENG 334, 335, 336. At least three of these must be chosen from the survey courses (ENG 331, 332, 334, 335).

Area Module 12

Complete four additional courses – at least two of which must be from the same area module. Note that some of the listed courses may be repeated under different subtitles.

Literature: ENG 340 (if not used in Literature Module), 481G, 482G, 483G, 484G, 485G, 570, 572

Imaginative Writing: ENG 207, 407, 507

Writing: ENG 301, 306, 401, 405, 509

Film and Media: ENG 283, 381, 382, 480G

Language Study: ENG/LIN 310, LIN/ANT 319, ENG/LIN 512, ENG/LIN/EDC 513, ENG/LIN/EDC 514, ENG/LIN/ANT 515, ENG/LIN/ANT 516, ENG 519

Theory: ENG 486G, 487G, 488G

English Education Emphasis: ENG 264 or 483G, 509, 572, and one additional writing module course

From Outside the Major Department

15 additional hours at the 200+ level outside English are required (courses 300+ recommended; note that 200+ - level courses used to satisfy USP and College Requirements may also be counted here.) 15

Major hours: 42

Electives

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

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

**Currently being waived.

Minor in English

The minor consists of a total of 18 hours, of which at least 12 hours must be at or above the 300 level. The hours are to be distributed as follows:

- I. Two of the following courses (six hours):
ENG 331 Survey of British Literature I
ENG 332 Survey of British Literature II

- ENG 334 Survey of American Literature I
- ENG 335 Survey of American Literature II

2. One course in Shakespeare (three hours)

3. Three more courses (nine hours) selected from the department's offerings (excluding all 100-level courses and ENG 203, 204, 205, 261, 262).

FOREIGN LANGUAGES AND INTERNATIONAL ECONOMICS

The University of Kentucky offers a joint major that combines foreign language proficiency with training in economics to prepare students for employment in enterprises doing business internationally. The program prepares students to succeed after graduation by combining high-quality classroom instruction with practical in-country learning opportunities. The program provides preparation for participation in internships and exchange programs and builds foundation for a future career in international business, or degrees in international law, an MBA in international business, or the Patterson School of International Diplomacy.

For further information and advising, contact the undergraduate advisor in the Department of Economics or in one of the language programs: Department of Hispanic Studies, 1115 Patterson Office Tower; or the Department of Modern and Classical Languages, Literatures and Cultures, 1015 Patterson Office Tower (Classics, French and Italian); 1055 Patterson Office Tower (German Studies and Russian and Eastern Studies); 1439 Patterson Office Tower or 971 Patterson Office Tower (Japan Studies). The University's address is:

**University of Kentucky
Lexington, KY 40506-0027**

Bachelor of Arts with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: FRENCH

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 pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*completed by Major Requirements*)
- III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
- IV. Written Communication 0-4
- V. Oral Communication* (*can be partially completed by Major Requirements*) 1
- VI. Natural Sciences 6

VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*choose a 300+ level Humanities course*) 3
 X. Electives (*choose two Natural Science courses*).. 6
USP hours: 28-36

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirements*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirements*)
 c. Humanities (*completed by USP Cross-Cultural and Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6
College Requirement hours: 7

Major Requirements

French Core Requirements

^FR 203 Elementary French Conversation and Composition 3
 FR 306 Intermediate French Composition 3
 FR 307 French for Business and Economics 3
French Core hours: 9

Economics Core Requirements

STA 291 Statistical Method 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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the French Component:

Choose at least 14 hours of French courses 14

For the Economics Component:

Choose a 3 hour Economics course 3

Other Major hours: 17

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 25

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.

Bachelor of Science with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: FRENCH

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 FR or ECO prefixes 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirement*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*can be partially completed by Major Requirements*) 1
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*choose a Humanities course*) ... 3
 X. Electives (*choose two Natural Science courses*) 6
USP hours: 28-36

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirements*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirement*)
 c. Humanities (*completed by USP Cross-Cultural and Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6
College Requirement hours: 7

Major Requirements

French Core Requirements

^FR 203 Elementary French Conversation and Composition 3
 FR 306 Intermediate French Composition 3
 FR 307 French for Business and Economics 3
French Core hours: 9

Economics Core Requirements

STA 291 Statistical Method 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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the French Component:

Choose at least 14 hours of French courses 14

For the Economics Component:

Choose a 3 hour Economics course 3

Other Major hours: 17

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 25

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.

Bachelor of Arts with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: GERMAN

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 pages 101-103.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirements*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*completed by Major Requirements*) 6
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*choose a 300+ level Humanities course*) 3
 X. Electives (*choose two Natural Science courses*) .. 6
USP hours: 27-35

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirements*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirements*)
 c. Humanities (*completed by USP Cross-Cultural and Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6
College Requirement hours: 7

Major Requirements

German Core Requirements

^GER 205 Reading and Writing Practice 2
 *GER 206 Oral Practice 2
 *GER 307 Intermediate German Composition and Conversation I 3
 GER 310 German for International Business and Professions 3
German Core hours: 10

Economics Core Requirements

STA 291 Statistical Method 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
plus two of the following:
 ECO 471 International Trade 3
 ECO 472 International Monetary Economics 3
 ECO 473G Economic Development 3
Economics Core hours: 24

Other Course Work Required for the Major

For the German Component:

Choose at least 12 hours of German courses 12

For the Economics Component:

Choose a 3 hour Economics course 3

Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 27

Total Minimum Hours

Required for Degree 120

^Course used towards completion of a USP Requirement.
 *GER 206 + GER 307 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: GERMAN

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 GER and ECO prefixes 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirement*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*completed by Major Requirements*)
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6

IX. Cross-Cultural (*choose a Humanities course*) 3
 X. Electives (*choose two Natural Science courses*) .. 6

USP hours: 27-35

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirement*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirement*)
 c. Humanities (*completed by USP Cross-Cultural and Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6

College Requirement hours: 7

Major Requirements

German Core Requirements

^GER 205 Reading and Writing Practice 2
 *GER 206 Oral Practice 2
 *GER 307 Intermediate German Composition and Conversation I 3
 GER 310 German for International Business and Professions 3
German Core hours: 10

Economics Core Requirements

STA 291 Statistical Method 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
plus two of the following:
 ECO 471 International Trade 3
 ECO 472 International Monetary Economics 3
 ECO 473G Economic Development 3

Economics Core hours: 24

Other Course Work Required for the Major

For the German Component:

Choose at least 12 hours of German courses 12

For the Economics Component:

Choose a 3 hour Economics course 3

Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 27

Total Minimum Hours

Required for Degree 120

^Course used towards completion of a USP Requirement.
 *GER 206 + GER 307 satisfy the Oral Communication Requirement.

Bachelor of Arts with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: JAPANESE

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 pages 101-103.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirements*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*can be partially completed by Major Requirement*) 1
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*completed by Major Requirement*)
 X. Electives (*choose two Natural Science courses*) .. 6

USP hours: 25-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirements*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirements*)
 c. Humanities (*completed by Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6

College Requirement hours: 7

Major Requirements

Japanese Core Requirements

^JPN 202 Intermediate Japanese II 3
 ^JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present 3
 JPN 334 Environment, Society and Economics of Japan 3

Japanese Core hours: 9

Economics Core Requirements

STA 291 Statistical Method 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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the Japanese Component:

^Choose at least 12 hours from the following: ANT 326, COM 525, GEO 333, HIS 295, HIS 296, HIS 597, JPN 283, JPN 320, JPN 395, JPN 405, PS 419G 12

For the Economics Component

*Choose a 3 hour Economics course 3

Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 30

Total Minimum Hours Required for Degree 120

[^]Course used towards completion of a USP Requirement.

*COM 199 + ECO 499 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: JAPANESE

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 JPN and ECO prefixes 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (completed by Major Requirement)	
III. Inference-Logic (choose MA 123 or 113 as a prerequisite to STA 291)	3-4
IV. Written Communication	0-4
V. Oral Communication* (can be partially completed by Major Requirement)	1
VI. Natural Sciences	6
VII. Social Sciences (partially completed by Major Requirement)	3
VIII. Humanities	6
IX. Cross-Cultural (completed by Major Requirement)	
X. Electives (choose two Natural Science courses)	6
USP hours:	25-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

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

College Requirement hours: 7

Major Requirements

Japanese Core Requirements

[^] JPN 202 Intermediate Japanese II	3
[^] JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present	3
JPN 334 Environment, Society and Economics of Japan	3

Japanese Core hours: 9

Economics Core Requirements

STA 291 Statistical Method	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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the Japanese Component:

Choose at least 12 hours from the following: ANT 326, COM 525, GEO 333, HIS 295, HIS 296, HIS 597, JPN 283, JPN 320, JPN 395, JPN 405, PS 419G	12
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For the Economics Component

*Choose a 3 hour Economics course	3
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Other Major hours: 15

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 USP Requirement.

*COM 199 + ECO 499 satisfy the Oral Communication Requirement.

Bachelor of Arts with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: RUSSIAN

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 pages 101-103.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (completed by Major Requirement)	
III. Inference-Logic (choose MA 123 or 113 as a prerequisite to STA 291)	3-4
IV. Written Communication	0-4
V. Oral Communication* (can be partially completed by Major Requirement)	1
VI. Natural Sciences	6
VII. Social Sciences (partially completed by Major Requirements)	3
VIII. Humanities	6
IX. Cross-Cultural (completed by Major Requirement)	
X. Electives (choose two Natural Science courses)	6
USP hours:	25-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

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

College Requirement hours: 7

Major Requirements

Russian Core Requirements

[^] RUS 271 Russian Culture 1900-Present	3
[^] RUS 301 Advanced Intermediate Russian I	3
[^] RUS 302 Advanced Intermediate Russian II	3
RUS 380 Nineteenth Century Russian Literature (in English)	
or	
RUS 381 Russian Literature 1900-Present (in English)	3

Russian Core hours: 12

Economics Core Requirements

STA 291 Statistical Method	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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the Russian Component:

*Choose at least nine hours from the following: HIS 385, HIS 386, HIS 534, HIS 535, HIS 538, PS 429G, RUS 499, RUS 501, RUS 502	9
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For the Economics Component

*Choose a 3 hour Economics course	3
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Other Major hours: 12

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 USP Requirement.

*COM 199 + either ECO 499 or RUS 499 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: RUSSIAN

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 RUS, ECO, and HIS prefixes 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirement*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*can be partially completed by Major Requirement*) 1
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*completed by Major Requirements*)
 X. Electives (*choose two Natural Science courses*) .. 6
USP hours: 25-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirement*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirement*)
 c. Humanities (*completed by Major Requirement*)
 III. Laboratory or Field Work 1
 IV. Electives 6

College Requirement hours: 7

Major Requirements

Russian Core Requirements

^RUS 271 Russian Culture 1900-Present 3
 ^RUS 301 Advanced Intermediate Russian I 3
 ^RUS 302 Advanced Intermediate Russian II 3
 RUS 380 Nineteenth Century Russian Literature (in English)
or
 RUS 381 Russian Literature 1900-Present (in English) 3

Russian Core hours: 12

Economics Core Requirements

STA 291 Statistical Method 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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the Russian Component:

*Choose at least nine hours from the following: HIS 385, HIS 386, HIS 534, HIS 535, HIS 538, PS 429G, RUS 499, RUS 501, RUS 502 9

For the Economics Component

*Choose a 3 hour Economics course 3

Other Major hours: 12

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 30

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.

*COM 199 + either ECO 499 or RUS 499 satisfy the Oral Communication Requirement.

Bachelor of Arts with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: 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 pages 101-103.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirement*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*can be partially completed by Major Requirement*) 1
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*completed by Major Requirement*)
 X. Electives (*choose two Natural Science courses*) .. 6

USP hours: 25-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirement*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirements*)
 c. Humanities (*completed by Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6

College Requirement hours: 7

Major Requirements

Spanish Core Requirements

^SPA 210 Spanish Grammar and Syntax 3
 SPA 211 Intermediate Spanish Conversation 3
 SPA 302 Commercial and Technical Spanish 3

Spanish Core hours: 9

Economics Core Requirements

STA 291 Statistical Method 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

plus two of the following:

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

Economics Core hours: 24

Other Course Work Required for the Major

For the Spanish Component:

^Choose at least 12 hours of SPA courses 12

For the Economics Component

*Choose a 3 hour Economics course 3

Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 29

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.

*COM 199 + ECO 499 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in FOREIGN LANGUAGE AND INTERNATIONAL ECONOMICS: SPANISH

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 SPA and ECO prefixes 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirement*)
 III. Inference-Logic (*choose MA 123 or 113 as a prerequisite to STA 291*) 3-4
 IV. Written Communication 0-4
 V. Oral Communication* (*can be partially completed by Major Requirement*) 1
 VI. Natural Sciences 6
 VII. Social Sciences (*partially completed by Major Requirement*) 3
 VIII. Humanities 6
 IX. Cross-Cultural (*completed by Major Requirement*)
 X. Electives (*choose two Natural Science courses*) .. 6

USP hours: 25-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirements*)

II. Disciplinary Requirements
 a. Natural Science (completed by USP Elective Requirement)
 b. Social Science (completed by Major Requirement)
 c. Humanities (completed by Major Requirement)
 III. Laboratory or Field Work 1
 IV. Electives 6
College Requirement hours: 7

Major Requirements

Spanish Core Requirements
 ^SPA 210 Spanish Grammar and Syntax 3
 SPA 211 Intermediate Spanish Conversation 3
 SPA 302 Commercial and Technical Spanish 3
Spanish Core hours: 9

Economics Core Requirements
 STA 291 Statistical Method 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

plus two of the following:
 ECO 471 International Trade 3
 ECO 472 International Monetary Economics 3
 ECO 473G Economic Development 3
Economics Core hours: 24

Other Course Work Required for the Major

For the Spanish Component:
 Choose at least 12 hours of SPA courses 12

For the Economics Component
 *Choose a 3 hour Economics course 3
Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 29

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.

*COM 199 + ECO 499 satisfy the Oral Communication Requirement.

B.A. or B.S. with a major in FRENCH

The requirements for the B.A. and B.S. with a major in French are listed in this A&S section under *Modern and Classical Languages, Literatures and Cultures*.

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 social and behavioral sciences, humanities, computer science and graphic communication, and the natural sciences. With developed analytical, critical thinking, and communication skills, geography is particularly useful for students wishing to enter such careers as economic development, environmental management, international trade, transportation analysis and planning, diplomacy, government administration from local to federal levels, 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 three areas: earth environmental systems (physical geography), human geography, and geographic information techniques. For more information, contact the Department of Geography at (859) 257-2931, or on the Web at: www.uky.edu/AS/Geography/.

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 pages 101-103.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (placement exam recommended) 0-8
 III. Inference-Logic 3-6
 IV. Written Communication 0-4
 V. Oral Communication 3
 VI. Natural Sciences (partially completed by Premajor Requirement) 3
 VII. Social Sciences (partially completed by Premajor Requirement) 3
 VIII. Humanities 6
 IX. Cross-Cultural 3
 X. Electives (choose 300+ level Humanities courses) 6
USP hours: 24-42

Graduation Writing Requirement

Students satisfy the Graduation Writing Requirement with GEO 300, required in the Major Requirements.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (placement exam recommended) 0-8
 II. Disciplinary Requirements
 a. Natural Science 6
 b. Social Science (completed by Major Requirements) 6
 c. Humanities (completed by USP Elective Requirement) 1
 III. Laboratory or Field Work 1
 IV. Electives 6
College Requirement hours: 13-21

Premajor Requirements

^GEO 130 Earth’s Physical Environment 3
 ^GEO 172 Human Geography 3
Premajor hours: 6

^Course may be used towards fulfilling the University Studies Program requirements.

Major Requirements

Major Core Requirements

GEO 200 Concepts and Methodology in Geography 3
 GEO 300 Geographic Research 3
 GEO 305 Elements of Cartography 3
 GEO 310 Quantitative Techniques in Geography 3
 GEO 499 Senior Research Seminar 3
Major Core hours: 15

Other Course Work Required for the Major

From the Major Department:

Breadth Requirements 6
 Choose one regional geography course and one thematic geography course at the 300+ level.

Geography Concentration Tracks 12

Choose at least 12 hours of geography courses to include no more than six hours of GEO 560 (Independent Work in Geography) and GEO 480 (Internship in Geography) from one of the following tracks.

NOTE: Courses listed are examples and additional courses can be substituted with permission of advisor.

Track 1: Earth Environmental Systems (Physical Geography)

This concentration emphasizes the earth’s physical environment, including soils and landscapes; fluvial and other hydrologic systems; weather and climate; and vegetation and animal life. Emphasis is on (a) the pattern of spatial variation these regimes exhibit; (b) the physical processes that underpin their historical and spatial development; and (c) the interactions between these regimes and human activity. Topical areas reflecting physical-human interactions include identification and analysis of pollution, mitigation of natural hazards, and the outcomes of environmental management strategies.

The Department strongly recommends that students in the Earth Environmental Systems Concentration pursue a Bachelor of Science degree.

^*GEO 210 Pollution, Hazards and Environmental Management 3
 GEO 251 Weather and Climate 3
 GEO 351 Physical Landscapes 3
 *GEO 441G Fluvial Forms and Processes 3

^Course may be used towards fulfilling the University Studies Program requirements.

*Or other Physical Geography, GIS, Remote Sensing, Computer Cartography courses.

Track 2: Human Geography (HG)

Human Geography focuses on the identification, description, and analysis of: (a) human spatial behavior and cognition; (b) social, economic, and political processes as they are manifest locally and globally; and (c) the cultural impress of human activity on the landscape. Within these areas, students can focus on the socio-psychological aspects of space and place, including cultural differences in ways of knowing the world. They will learn about the processes that produce local-to-global distinctiveness in key problem areas including: poverty, injustice, and hunger; illness, disability, and disease; patriarchy, racism, and homophobia; and unequal access to natural resources, education, health, and safety. Students will also find an opportunity to learn how human practices and broader processes affect both our natural and built environments. Finally, students will learn practical tools to contribute to better world through their

research, or professional participation in civil society, the private sector, or government agencies. The HG Track permits students to specialize in a particular region of interest, including East, South, Southwest (Middle East), and Southeast Asia, Europe, the Caribbean, and the United States, especially Appalachia and the South.

With the advice and consent of a faculty advisor, select from courses offered within the Department and other Departments, corresponding to a particular focus in HG.

^GEO 240 Geography and Gender	3
GEO 256 Behavior in Space and Time	3
GEO 260 Third World Development	3
GEO 285 Introduction to Planning	3
GEO 409G Geographic Information Systems and Science: Fundamentals	3
GEO 455 Economic Geography	3
GEO 460 Urban Geography	3
GEO 465 Special Topics in Human Geography	3
GEO 475G Medical Geography	3
GEO 490G American Landscapes	3
GEO 542 Political Geography	3
GEO 544 Human Population Dynamics	3
GEO 545 Transportation Geography	3
GEO 546 Tourism and Recreation Geography	3
GEO 547 Geography of Information and Communications	3
GEO 550 Sustainable Resource Development and Environmental Management	3
GEO 585 Aging and Environment	3

^Course may be used towards fulfilling the University Studies Program requirements.

Track 3: Geographic Information Techniques (GIT)

The Geographic Information Techniques Concentration is concerned with all aspects of geographical information/data, including identification of data sources, collection, storage/retrieval, manipulation, analysis, and visualization. The GIT Concentration encompasses geographical information science (GIS), cartography, remote sensing, and spatial analysis.

GEO 309 Digital Geographic Data: Sources, Characteristics, Problems, and Uses	3
GEO 409G Geographic Information Systems and Science: Fundamentals	3
GEO 415 Map Interpretation	3
GEO 480 Internship in Geography	3
GEO 505 Practicum in Cartography	3
GEO 506 Introduction to Computer Cartography	3
GEO 508 Geographic Interpretation of Aerial Photography	3

From Outside the Major Department

Choose 15 hours outside Geography at the 300+ level. 200+ level courses used to satisfy USP and College Requirements can also be counted here

Major hours: 48

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 USP Requirement.

**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 to-

wards 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>placement exam recommended</i>)	0-8
III. Inference–Logic	3-6
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences (<i>partially completed by Premajor Requirement</i>)	3
VII. Social Sciences (<i>partially completed by Premajor Requirement</i>)	3
VIII. Humanities	6
IX. Cross-Cultural	3
X. Electives (<i>choose a Natural Science and a Humanities course</i>)	6

USP hours: 24-42

Graduation Writing Requirement

Students satisfy the Graduation Writing Requirement with GEO 300, required in the Major Requirements.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>placement exam recommended</i>)	0-8
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>completed by Major Requirement</i>)	
c. Humanities (<i>completed by USP Elective Requirement</i>)	
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 7-15

Premajor Requirements

^GEO 130 Earth's Physical Environment	3
^GEO 172 Human Geography	3

Premajor hours: 6

^Course may be used towards fulfilling the University Studies Program requirements.

Major Requirements

Major Core Requirements	
GEO 200 Concepts and Methodology in Geography	3
GEO 300 Geographic Research	3
GEO 305 Elements of Cartography	3
GEO 310 Quantitative Techniques in Geography	3
GEO 499 Senior Research Seminar	3

Major Core hours: 15

Other Course Work Required for the Major

From the Major Department:	
Breadth Requirements	6
Choose one regional geography course and one thematic geography course at the 300+ level.	

Geography Concentration Tracks

Choose at least 12 hours of geography courses to include no more than six hours of GEO 560 (Independent Work in Geography) and GEO 480 (Internship in Geography) from one of the following tracks.

NOTE: Courses listed are examples and additional courses can be substituted with permission of advisor.

**Track 1: Earth Environmental Systems
(Physical Geography)**

This concentration emphasizes the earth's physical environment, including soils and landscapes; fluvial and other hydrologic systems; weather and climate; and vegetation and animal life. Emphasis is on (a) the pattern of spatial variation these regimes exhibit; (b) the physical processes that underpin their historical and spatial development; and (c) the interactions between these regimes and human activity. Topical areas reflecting physical-human interactions include identification and analysis of pollution, mitigation of natural hazards, and the outcomes of environmental management strategies.

*GEO 210 Pollution, Hazards and Environmental Management	3
GEO 251 Weather and Climate	3
GEO 351 Physical Landscapes	3
*GEO 441G Fluvial Forms and Processes	3
*Or other Physical Geography, GIS, Remote Sensing, Computer Cartography courses.	

Track 2: Human Geography (HG)

Human Geography focuses on the identification, description, and analysis of: (a) human spatial behavior and cognition; (b) social, economic, and political processes as they are manifest locally and globally; and (c) the cultural impress of human activity on the landscape. Within these areas, students can focus on the socio-psychological aspects of space and place, including cultural differences in ways of knowing the world. They will learn about the processes that produce local-to-global distinctiveness in key problem areas including: poverty, injustice, and hunger; illness, disability, and disease; patriarchy, racism, and homophobia; and unequal access to natural resources, education, health, and safety. Students will also find an opportunity to learn how human practices and broader processes affect both our natural and built environments. Finally, students will learn practical tools to contribute to better world through their research, or professional participation in civil society, the private sector, or government agencies. The HG Track permits students to specialize in a particular region of interest, including East, South, Southwest (Middle East), and Southeast Asia, Europe, the Caribbean, and the United States, especially Appalachia and the South.

With the advice and consent of a faculty advisor, select from courses offered within the Department and other Departments, corresponding to a particular focus in HG.

^GEO 240 Geography and Gender	3
GEO 256 Behavior in Space and Time	3
GEO 260 Third World Development	3
GEO 285 Introduction to Planning	3
GEO 409G Geographic Information Systems and Science: Fundamentals	3
GEO 455 Economic Geography	3
GEO 460 Urban Geography	3
GEO 465 Special Topics in Human Geography	3
GEO 475G Medical Geography	3
GEO 490G American Landscapes	3
GEO 542 Political Geography	3
GEO 544 Human Population Dynamics	3
GEO 545 Transportation Geography	3
GEO 546 Tourism and Recreation Geography	3
GEO 547 Geography of Information and Communications	3
GEO 550 Sustainable Resource Development and Environmental Management	3
GEO 585 Aging and Environment	3

^Course may be used towards fulfilling the University Studies Program requirements.

Track 3: Geographic Information Techniques (GIT)

The Geographic Information Techniques Concentration is concerned with all aspects of geographical information/data, including identification of data sources, collection, storage/retrieval, manipulation, analysis, and visualization. The GIT Concentration encompasses geo-

graphical information science (GIS), cartography, remote sensing, and spatial analysis.

GEO 309 Digital Geographic Data: Sources, Characteristics, Problems, and Uses	3
GEO 409G Geographic Information Systems and Science: Fundamentals	3
GEO 415 Map Interpretation	3
GEO 480 Internship in Geography	3
GEO 505 Practicum in Cartography	3
GEO 506 Introduction to Computer Cartography	3
GEO 508 Geographic Interpretation of Aerial Photography	3

From Outside the Major Department

Choose 15 hours outside Geography at the 200+ level. Courses used to satisfy USP and College Requirements can also be counted here

Major hours: 48

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 USP Requirement.

Minor in Geography

The minor in geography requires a minimum of 21 hours taken within the department. Students must complete courses as follows:

- GEO 130 Earth's Physical Environment 3
GEO 172 Human Geography 3
and
GEO 152 Regional Geography of the World
or
GEO 160 Lands and Peoples
of the Non-Western World 3
- GEO 300 Geographic Research
or
GEO 305 Elements of Cartography
or
GEO 310 Quantitative Techniques in
Geography 3
- Nine additional hours at the 200 level or above.

GEOLOGY

The earth and environmental sciences encompass a variety of types of studies of our planet, including considerations of composition, structure, prehistoric life, internal and surficial processes, and history. These studies have applications in the discovery and use of mineral resources, fuels, and water; in protection of the environment; and in planning for the impact of natural hazards (earthquakes, landslides, etc.) on 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 Geology. 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 government policy relating to earth science and environmental issues, earth-sci-

ence education, business (environmental consulting), environmental law, or environmental medicine.

Bachelor of Arts with a major in GEOLOGY

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 pages 101-103.

University Studies Program Requirements

- Math (*completed by Premajor Requirement*)
- Foreign Language (*placement exam recommended*) 0-8
- Inference-Logic (*completed by Premajor Requirement*)
- Written Communication 0-4
- Oral Communication 3
- Natural Sciences (*completed by Premajor Requirement*)
- Social Sciences 6
- Humanities 6
- Cross-Cultural (*with your advisor choose a 300+ level GEO course*) 3
- Electives (*choose two Humanities courses*) 6

USP hours: 24-36

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- Foreign Language (*placement exam recommended*) 0-8
- Disciplinary Requirements
 - Natural Science (*completed by Major Requirements*)
 - Social Science (*can be completed by USP Cross-Cultural and Major Requirements*)
 - Humanities (*completed by USP Elective Requirement*)
- Laboratory or Field Work (*completed by Premajor Requirement*)
- Electives 6

College Requirement hours: 6-14

Premajor Requirements

- *CHE 105 General College Chemistry I 3
GLY 220 Principles of Physical Geology
or
GLY 223 Introduction to Geology in the Rocky Mountains 4-6
GLY 295 Geoscience Orientation 1
*MA 123 Elementary Calculus and its Applications
or
MA 113 Calculus I 3-4
PHY 151 Introduction to Physics
or
PHY 211 General Physics
or
PHY 231/241 General University Physics/Lab 3-5

Premajor hours: 14-19

Major Requirements

Major Core Requirements

GLY 230 Fundamentals of Geology I	3
GLY 235 Fundamentals of Geology II	3
GLY 360 Mineralogy	4
GLY 420G Structural Geology	4
GLY 450G Sedimentary Geology	4
GLY 461 Igneous and Metamorphic Petrology	4

Major Core hours: 22

Other Course Work Required for the Major

From the Major Department:

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

Elective II 6
Choose six additional hours of 300+ GLY or related courses

NOTE: Fourteen hours at the 200 level or higher must be completed outside Geology. Partial fulfillment of this requirement can be completed by the PHY Sequence, the USP Cross-Cultural, and GLY Elective II Requirements 8-10

Other Major hours: 20-22

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

Bachelor of Science with a major in GEOLOGY

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 pages 103-104.

University Studies Program Requirements

- Math (*completed by Premajor Requirement*)
- Foreign Language (*placement exam recommended*) 0-8
- Inference-Logic (*completed by Premajor Requirement*)
- Written Communication 0-4
- Oral Communication 3
- Natural Sciences (*completed by Premajor Requirement*)
- Social Sciences 6
- Humanities 6
- Cross-Cultural (*choose a 200+ level Social Science course*) 3
- Electives (*choose a Humanities course*) 3

USP hours: 21-33

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- Foreign Language (*placement exam recommended*) 0-8
- Disciplinary Requirements
 - Natural Science (*completed by Major Requirements*)

b. Social Science (completed by USP Cross-Cultural Requirement)

c. Humanities (completed by USP Elective Requirement)

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

IV. Electives 6

College Requirement hours: 6-14

Premajor Requirements

MA 113 Calculus I 4

MA 114 Calculus II 4

*CHE 105 General College Chemistry I 3

CHE 111 Laboratory to Accompany General Chemistry I 1

*CHE 107 General College Chemistry II 3

CHE 113 Laboratory to Accompany General Chemistry II 2

GLY 220 Principles of Physical Geology or

GLY 223 Introduction to Geology in the Rocky Mountains 4-6

GLY 230 Fundamentals of Geology I 3

GLY 235 Fundamentals of Geology II 3

GLY 295 Geoscience Orientation 1

Premajor hours: 28-30

Major Requirements

Major Core Requirements

GLY 323 Field Work in

Regional Geology 6

GLY 360 Mineralogy 4

GLY 420G Structural Geology 4

GLY 450G Sedimentary Geology 4

GLY 461 Igneous and Metamorphic Petrology 4

GLY 490 Earth Dynamics 3

Major Core hours: 25

Other Course Work Required for the Major

From the Major Department:

Elective I 6

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

Elective II 6

Choose six additional hours of 300+ GLY or related courses

From the Physics Department

PHY 211/213 General Physics or

PHY 231/232/241/242 General University Physics 10

NOTE: Fourteen hours at the 200 level or higher must be completed outside Geology. Partial fulfillment of this requirement can be completed by the PHY Sequence, the USP Cross-Cultural, and GLY Elective II Requirements 0-4

Other Major hours: 22

Total Minimum Hours Required for Degree 123

*Course used towards completion of a USP Requirement.

Minor in Geology

Hours

The minor consists of nineteen hours to include:

GLY 220 Principles of Physical Geology 4

GLY 230 Fundamentals of Geology I 3

GLY 235 Fundamentals of Geology II 3

Plus nine hours in GLY courses at the 300 level or higher 9

B.A. or B.S. with a major in GERMAN

The requirements for the B.A. and B.S. with a major in German are listed in this A&S section under *Modern and Classical Languages, Literatures and Cultures*.

HISPANIC STUDIES

The Department of Hispanic Studies aims to develop the student's language skills, to provide an understanding of the cultures and literatures of the Spanish-speaking world, and to enhance the student's career opportunities in a multicultural society. The department offers a major and a minor in Spanish.

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 pages 101-103.

University Studies Program Requirements

I. Math 0-3

II. Foreign Language (completed by Premajor Requirement) 3-6

III. Inference-Logic 3-6

IV. Written Communication 0-4

V. Oral Communication 3

VI. Natural Sciences 6

VII. Social Sciences 6

VIII. Humanities 6

IX. Cross-Cultural (choose a 300+ level Social Science course) 3

X. Electives (choose two Natural Science courses) .. 6

USP hours: 33-43

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (completed by Premajor Requirement) 1

II. Disciplinary Requirements

a. Natural Science (completed by USP Elective Requirement) 3

b. Social Science (partially completed by USP Cross-Cultural Requirement) 3

c. Humanities (completed by Major Requirements) 1

III. Laboratory or Field Work 1

IV. Electives 6

College Requirement hours: 10

Premajor Requirements

SPA 201 Intermediate Spanish III 3

SPA 202 Intermediate Spanish IV 3

SPA 210 Spanish Grammar and Syntax 3

SPA 211 Intermediate Spanish Conversation 3

Premajor hours: 12

Major Requirements

Major Core Requirements

SPA 310 Spanish Composition through Textual Analysis 3

Major Core hours: 3

Other Course Work Required for the Major

From the Major Department:

Choose 18-27 hours of 300+ level Spanish courses to include at least six hours of literature, and at least nine hours at the 400+ level 18-27

From Outside the Major Department

Choose 15 hours outside Spanish at the 200+ level from the following areas: anthropology, Arabic, art history, classics, English, French, geography, German, history, honors, Islamic studies, Italian, Japanese, Judaic studies, Latin American studies, linguistics, music, philosophy, political science, Portuguese, Russian, sociology, theatre, women's studies. Courses from other areas may be used with the approval of the Director of Undergraduate Studies. 200+ level courses used to satisfy USP and College requirements can also be counted here ... 15-21

Other Major hours: 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 11

Total Minimum Hours Required for Degree 120

Bachelor of Science with a major in SPANISH

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 SPA 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3

II. Foreign Language (completed by Premajor Requirement) 3-6

III. Inference-Logic 3-6

IV. Written Communication 0-4

V. Oral Communication 3

VI. Natural Sciences 6

VII. Social Sciences 6

VIII. Humanities 6

IX. Cross-Cultural (choose a Social Science course) 3

X. Electives (choose two Natural Science courses) 6

USP hours: 33-43

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*completed by Premajor Requirement*)
- II. Disciplinary Requirements
- Natural Science (*completed by USP Elective Requirement*)
 - Social Science (*completed by USP Cross-Cultural Requirement*)
 - Humanities (*completed by Major Requirements*)
- III. Laboratory or Field Work 1
- IV. Electives 6
- College Requirement hours:** 7

Premajor Requirements

- SPA 201 Intermediate Spanish III 3
- SPA 202 Intermediate Spanish IV 3
- SPA 210 Spanish Grammar and Syntax 3
- SPA 211 Intermediate Spanish Conversation 3

Premajor hours: 12

Major Requirements**Major Core Requirements**

- SPA 310 Spanish Composition through
Textual Analysis 3

Major Core hours: 3

Other Course Work Required for the Major**From the Major Department:**

Choose 18-27 hours of 300+ level Spanish courses to include at least six hours of literature, and at least nine hours at the 400+ level 18-27

From Outside the Major Department

Choose 15 hours outside Spanish at the 200+ level from the following areas: anthropology, Arabic, art history, classics, English, French, geography, German, history, honors, Islamic studies, Italian, Japanese, Judaic studies, Latin American studies, linguistics, music, philosophy, political science, Portuguese, Russian, sociology, theatre, women's studies. Courses from other areas may be used with the approval of the Director of Undergraduate Studies. 200+ level courses used to satisfy USP and College requirements can also be counted here ... 15-21

Other Major hours: 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 14

**Total Minimum Hours
Required for Degree** 120

Teacher Certification Requirements

The requirements for teacher certification in secondary foreign languages are outlined in the *College of Education* section of this Bulletin.

Minor in Spanish

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

- SPA 202 or SPA 242 or equivalent
- SPA 210
- SPA 211
- Beyond the first six-semester sequence, twelve additional hours which must be taken at the 300 level or above. (At least one course, three hours, must be taken in Spanish or Spanish-American literature.)

Note: No courses taken in translation may be counted toward the minor in Spanish.

HISTORY

The Department of History's program seeks to expand understanding of human experience and enable students to learn about their world in light of its past. The department offers a wide range of courses. These courses, an essential part of a liberal arts education, are also designed to train students to be teachers of history and professional historians. Faculty and students in the department participate in many of the University's interdisciplinary programs such as African American studies, women's studies, Latin American studies, and Asian studies.

**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 pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language 0-8
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6
- VIII. Humanities (*completed by Premajor Requirements*)
- IX. Cross-Cultural (*choose a 300+ level Social Science course*) 3
- X. Electives (*choose two Natural Science courses*) 6

USP hours: 27-45

Graduation Writing Requirement

Students may satisfy the Graduation Writing Requirement with either HIS 499 or HIS 471, required in the Major Requirements.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-8
- II. Disciplinary Requirements
- Natural Science (*completed by USP Elective Requirement*)
 - Social Science (*partially completed by USP Cross-Cultural Requirement*) 3
 - Humanities (*completed by Major Requirements*)
- III. Laboratory or Field Work 1
- IV. Electives 6

College Requirement hours: 10-18

Premajor Requirements

- *HIS 104 A History of Europe through the Mid-17th Century
and
- *HIS 105 A History of Europe from the Mid-17th Century
to Present
OR
- *HIS 106 Western Culture: Science and Technology I
and

- *HIS 107 Western Culture: Science and Technology II
OR
- *HIS 108 History of the United States Through 1865
and
- *HIS 109 History of the United States Since 1865 6

Premajor hours: 6

Major Requirements**Major Core Requirements**

- HIS 301 History Workshop: Introduction to the Study of
History
and
- HIS 499 Senior Seminar for History Majors
OR
- HIS 470 Honors Seminar in Historical Methods
and
- HIS 471 Honors Seminar in Historical Research 6

Major Core hours: 6

Other Course Work Required for the Major**From the Major Department:**

Choose 24 hours to include at least six hours in pre-1789 work; at least six hours in post-1789 work; at least three hours in American history; at least three hours of European history; at least three 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 USP and 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 USP 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 pages 103-104.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language 0-8
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6

- VIII. Humanities (completed by Premajor Requirements)
- IX. Cross-Cultural (choose a level Social Science course) 3
- X. Electives (choose two Natural Science courses) .. 6

USP hours: 27-45

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (placement exam recommended) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (completed by USP Elective Requirement)
 - b. Social Science (completed by USP Cross-Cultural Requirement)
 - c. Humanities (completed by Major Requirements)
- III. Laboratory or Field Work 1
- IV. Electives 6

College Requirement hours: 7-15

Premajor Requirements

- *HIS 104 A History of Europe through the Mid-17th Century and
- *HIS 105 A History of Europe from the Mid-17th Century to Present
- OR**
- *HIS 106 Western Culture: Science and Technology I and
- *HIS 107 Western Culture: Science and Technology II
- OR**
- *HIS 108 History of the United States Through 1865 and
- *HIS 109 History of the United States Since 1865 6

Premajor hours: 6

Major Requirements

Major Core Requirements

- HIS 301 History Workshop: Introduction to the Study of History and
- HIS 499 Senior Seminar for History Majors
- OR**
- HIS 470 Honors Seminar in Historical Methods and
- HIS 471 Honors Seminar in Historical Research 6

Major Core hours: 6

Other Course Work Required for the Major

From the Major Department:

Choose 24 hours to include at least six hours in pre-1789 work; at least six hours in post-1789 work; at least three hours in American history; at least three hours of European history; at least three 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 200+ level, or 200+ level courses used to satisfy USP and College requirements can also be counted here 15

Other Major hours: 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 7

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP 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. The minor requires a minimum of 18 hours, to be distributed as follows:

1. A six-hour sequential introduction to the history of a civilization or a nation. This may be selected from:
 - HIS 104/105 History of Europe
 - HIS 106/107 Western Culture: Science and Technology I and II
 - HIS 108/109 History of the United States
 - HIS 202/203 History of the British People
 - HIS 229/230 The Ancient World
 - HIS 247/248 History of Islam and Middle East Peoples
 - HIS 295/296 East Asia
 - HIS 370/371 Middle Ages
 - HIS 385/386 History of Russia
2. Twelve hours of course work at or above the 300 level, at least six 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.

LATIN AMERICAN STUDIES

The Latin American Studies program provides an integrated, interdisciplinary approach to the study of a geographic and cultural region. The core course (LAS 201), the senior course in directed research, and careful faculty supervision are essential components of the degree program. Students choose, however, from a variety of courses in anthropology, economics, geography, history, political science, the Spanish language and Spanish American literature.

Bachelor of Arts with a major in LATIN AMERICAN 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 pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (completed by Major Requirement) 3-6
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6
- VIII. Humanities 6
- IX. Cross-Cultural (completed by Premajor Requirement)
- X. Electives (choose two Natural Science courses) .. 6

USP hours: 30-40

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

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

College Requirement hours: 7

Premajor Requirements

- *LAS 201 Introduction to Latin America 3
- HIS 206 History of Colonial Latin America, 1492-1810 or
- HIS 207 History of Modern Latin America, 1810-Present 3

Premajor hours: 6

Major Requirements

Major Core Requirements

- LAS 401 Directed Research in Latin American Studies 3

Major Core hours: 3

Other Course Work Required for the Major

For the Latin American Component:

- Language Skills** 6
 - Choose from: SPA 210, 211, 302, 310, 311, 411G, 501, 503
- Prehistory and History** 3
 - Choose from: ANT 320, 322, HIS 206, 207, 561, 562, 563, LAS 395
- Contemporary Latin American Societies** 6
 - Choose from: ANT 324, 470G, ECO 475G, GEO 324, LAS 395, PS 428G, 538, SPA 215, 314, 514
- Literature and the Arts of the Americas** 3
 - Choose from: LAS 395, SPA 322, 438G, 468G
- Elective** 3
 - Choose from any of the areas above

For the Related Component

Choose 18 hours at the 300+ level from the following areas: agriculture, allied health, anthropology, architecture, art, communications, economics, education, geography, geology, history, journalism, languages, linguistics, literature, philosophy, political science, psychology, sociology, statistics. At least six hours must come from two different areas unless a minor or second major is declared. 200+ level courses used to satisfy USP and College requirements can also be counted here 18

Other Major hours: 39

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 23

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

Bachelor of Science with a major in LATIN AMERICAN 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. Please note: courses with LAS and SPA prefixes are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this require-

ment 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Major Requirement*)
 III. Inference-Logic 3-6
 IV. Written Communication 0-4
 V. Oral Communication 3
 VI. Natural Sciences 6
 VII. Social Sciences 6
 VIII. Humanities 6
 IX. Cross-Cultural (*completed by Premajor Requirement*)
 X. Electives (*choose two Natural Science courses*) 6

USP hours: **30-40**

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Major Requirement*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*completed by Major Requirement*)
 c. Humanities (*completed by Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6

College Requirement hours: **7**

Premajor Requirements

*LAS 201 Introduction to Latin America 3
 HIS 206 History of Colonial Latin America, 1492-1810 or
 HIS 207 History of Modern Latin America, 1810-Present 3
Premajor hours: **6**

Major Requirements

Major Core Requirements

LAS 401 Directed Research in Latin American Studies 3
Major Core hours: **3**

Other Course Work Required for the Major

For the Latin American Component:

Language Skills 6
 Choose from: SPA 210, 211, 302, 310, 311, 411G, 501, 503
Prehistory and History 3
 Choose from: ANT 320, 322, HIS 206, 207, 561, 562, 563, LAS 395
Contemporary Latin American Societies 6
 Choose from: ANT 324, 470G, ECO 475G, GEO 324, LAS 395, PS 428G, 538, SPA 215, 314
Literature and the Arts of the Americas 3
 Choose from: LAS 395, SPA 322, 438G, 468G
Elective 3
 Choose from any of the areas above

For the Related Component

Choose 18 hours at the 200+ level from the following areas: agriculture, allied health, anthropology, architec-

ture, art, communications, economics, education, geography, geology, history, journalism, languages, linguistics, literature, philosophy, political science, psychology, sociology, statistics. At least six hours must come from two different areas unless a minor or second major is declared. 200+ level courses used to satisfy USP and College requirements can also be counted here 18

Other Major hours: **39**

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 23

Total Minimum Hours Required for Degree **120**

*Course used towards completion of a USP or College Requirement.

Minor in Latin American Studies

The minor in Latin American 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:

Premior Requirements

1. LAS 201 Introduction to Latin America 3
 2. plus one of the following courses:
 HIS 206 History of Colonial Latin America, 1492 to 1810 3
 HIS 207 History of Modern Latin America, 1810 to Present 3

Minor Requirements

A minimum of 12 credit hours distributed evenly over the following four subject areas:

1. Language Skills (three hours beyond second-year Spanish)
 2. Prehistory and History (three hours)
 3. Contemporary Latin American Societies (three hours)
 4. Literature and the Arts of the Americas (three hours)

LINGUISTICS

Linguistics is an interdisciplinary program combining resources from English, anthropology, psychology, philosophy, computer science, and the foreign languages, to develop an understanding of the nature and implications of human language. The Linguistics program 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 pages 101-103.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*completed by Premajor Requirements*)
 III. Inference-Logic 3-6
 IV. Written Communication 0-4
 V. Oral Communication 3
 VI. Natural Sciences 6
 VII. Social Sciences 6
 VIII. Humanities 6
 IX. Cross-Cultural (*choose a 300+ level Social Science course*) 3
 X. Electives (*choose two Natural Science courses*) 6

USP hours: **33-43**

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*completed by Premajor Requirements*)
 II. Disciplinary Requirements
 a. Natural Science (*completed by USP Elective Requirement*)
 b. Social Science (*partially completed by USP Cross-Cultural Requirement*) 3
 c. Humanities (*completed by Major Requirements*)
 III. Laboratory or Field Work 1
 IV. Electives 6

College Requirement hours: **10**

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 211 Introduction to Linguistics I 3
 LIN 212 Introduction to Linguistics II 3
plus three of the following:
 LIN 318 Semantics and Pragmatics
 LIN 512 Modern English Grammar
 LIN 513 Teaching English as a Second Language
 LIN 515 Phonological Analysis
 LIN 516 Grammatical Analysis 9
Major Core hours: **15**

Other Course Work Required for the Major

For the Linguistics Component:

Choose 12 hours of linguistics courses 12

For the Related Component:

Choose 21 hours outside Linguistics at the 300+ level. Courses are generally chosen from such disciplines as anthropology, communications, computer science, languages, mathematics, philosophy, and psychology. 200+ level courses used to satisfy USP and College requirements can also be counted here 21

Other Major hours: **33**

Electives

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

Total Minimum Hours Required for Degree **120**

Note: Course used towards completion of a USP Requirement.

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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>completed by Premajor Requirements</i>)	
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a Social Science course</i>)	3
X. Electives (<i>choose two Natural Science courses</i>)	6

USP hours: 33-43

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>completed by Premajor Requirements</i>)	
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>completed by USP Cross-Cultural Requirement</i>)	
c. Humanities (<i>completed by Major Requirements</i>)	
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 7

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 211 Introduction to Linguistics I	3
LIN 212 Interdiction to Linguistics II	3

plus three of the following:
 LIN 318 Semantics and Pragmatics
 LIN 512 Modern English Grammar
 LIN 513 Teaching English as a Second Language
 LIN 515 Phonological Analysis
 LIN 516 Grammatical Analysis 9

Major Core hours: 15

Other Course Work Required for the Major

For the Linguistics Component:
 Choose 12 hours of linguistics courses 12

For the Related Component:

Choose 21 hours outside Linguistics at the 300+ level. Courses are generally chosen from such disciplines as anthropology, communications, computer science, languages, mathematics, philosophy, and psychology. 200+ level courses used to satisfy USP and College requirements can also be counted here 21

Other Major hours: 33

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 12

Total Minimum Hours Required for Degree 120

Note: Course used towards completion of a USP Requirement.

Minor in Linguistics

The minor in linguistics requires 18 hours of course work to be selected as follows:

1. ENG/LIN 211
2. ENG/LIN 212

Major Area Courses (6 hours):

Choose from: LIN 318, ENG/LIN 515, ENG/LIN 516, ENG/LIN 512, EDC/ENG/LIN 513.

To make up the total of 18 hours, choose two courses from among the remaining LIN courses, including any of those listed above.

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. Compa-

nies 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 pages 101-103.

University Studies Program Requirements

I. Math (<i>completed by Premajor Requirement</i>)	
II. Foreign Language (<i>placement exam recommended</i>)	0-8
III. Inference-Logic (<i>completed by Premajor Requirement</i>)	
IV. Written Communication	0-4
V. Oral Communication* (<i>can be partially completed by Major Requirement</i>)	1
VI. Natural Sciences	6
VII. Social Sciences (<i>partially completed by Major Requirement</i>)	3
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a 300+ level Humanities course</i>)	3
X. Electives (<i>choose two Natural Science courses</i>)	6

USP hours: 25-37

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>placement exam recommended</i>)	0-8
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>completed by Major Requirements</i>)	
c. Humanities (<i>partially completed by USP Cross-Cultural Requirement</i>)	3
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 10-18

Premajor Requirements

^MA 113 Calculus I	4
MA 114 Calculus II	4

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 sequences: MA 416G and MA 417G, MA 471G and MA 472G, or STA 524 and STA 525 6

For the Economics Component

*Choose nine hours of 300+ level economics courses 9

For the Statistics Component

Choose STA 291 or a higher level statistics course ... 3

Other Major hours: 18

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 USP Requirement.

*COM 199 + ECO 499 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in MATHEMATICAL ECONOMICS**120 hours (minimum)**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with an ECO prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on pages 103-104.

University Studies Program Requirements

I. Math (completed by Premajor Requirement)	
II. Foreign Language (placement exam recommended)	0-8
III. Inference-Logic (completed by Premajor Requirement)	
IV. Written Communication	0-4
V. Oral Communication* (can be partially completed by Major Requirement)	1
VI. Natural Sciences	6
VII. Social Sciences (partially completed by Major Requirement)	3
VIII. Humanities	6
IX. Cross-Cultural (choose a Humanities course) ...	3
X. Electives (choose two Natural Science courses)	6

USP hours: 25-37

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (placement exam recommended)	0-8
II. Disciplinary Requirements	
a. Natural Science (completed by USP Elective Requirement)	
b. Social Science (completed by Major Requirements)	
c. Humanities (completed by USP Cross-Cultural Requirement)	
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 7-15

Premajor Requirements

^MA 113 Calculus I	4
MA 114 Calculus II	4

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 sequences: MA 416G and MA 417G, MA 471G and MA 472G, or STA 524 and STA 525 6

For the Economics Component

*Choose nine hours of 300+ level economics courses 9

For the Statistics Component

Choose STA 291 or a higher level statistics course ... 3

Other Major hours: 18

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 12

Total Minimum Hours

Required for Degree 120

^Course used towards completion of a USP Requirement.

*COM 199 + ECO 499 satisfy the Oral Communication Requirement.

MATHEMATICS

The department offers two programs leading to the B.A. or B.S. degree. Students may major in mathematics by completing the requirements for either: Option A, Mathematics or Option B, Mathematical Sciences.

The mathematics option consists of courses offered solely by the department of math-

ematics 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**121 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 pages 101-103.

University Studies Program Requirements

I. Math (completed by Premajor Requirement)	
II. Foreign Language (placement exam recommended)	0-8
III. Inference-Logic (completed by Premajor Requirement)	
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (choose a 300+ level Humanities course)	3
X. Electives (choose two Natural Science courses)	6

USP hours: 30-42

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (placement exam recommended)	0-8
II. Disciplinary Requirements	
a. Natural Science (completed by USP Elective Requirement)	
b. Social Science	6
c. Humanities (partially completed by USP Cross-Cultural Requirement)	3
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 16-24

OPTION A - Mathematics**Premajor Requirements**

^MA 113 Calculus I	4
MA 114 Calculus II	4
CS 115 Introduction to Computer Programming	3

Premajor hours: 11

Major Requirements**Major Core Requirements**

MA 213 Calculus III	4
MA 214 Calculus IV	3
MA 322 Matrix Algebra and its Applications	3

Major Core hours: 10

Other Course Work Required for the Major**From the Major Department:**

Choose 18 hours of 300+ level mathematics courses. One of the following sequences, or a substitute approved by the Director of Undergraduate Studies, must be included: MA 351/352, MA 361/362, MA 471G/472G, MA 481G/483G, CS/MA 321/422, CS/MA 416G and MA/STA 417G, MA 433G/485G; 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 USP and 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
CS 215 Introduction to Program Design, Abstraction and Problem Solving 4

Premajor hours: 15

Major Requirements**Major Core Requirements**

MA 213 Calculus III 4
MA 214 Calculus IV 3
CS 216 Introduction to Software Engineering 3
STA 281 Probability and Statistics Using Interactive Computer Techniques 3
MA/STA 320 Introductory Probability 3
CS/MA 321 Introduction to Numerical Methods 3
STA 321 Basic Statistical Theory I 3
MA 322 Matrix Algebra and its Applications 3
CS/MA 416G Principles of Operations Research I 3
STA 422G Basic Statistical Theory II 3

Major Core hours: 31

Other Course Work Required for the Major**From the Major Department:**

Choose one of the following: MA 361, MA 433G, MA 471G 3

Choose nine 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 481G/483G, CS/MA 321/422, CS/MA 416G and MA/STA 417G, CS 315/450G. A substitute sequence may be approved upon petition by the student to the Director of Undergraduate Studies. Approved courses in the mathematical sciences include those courses in computer science, engineering mechanics, mathematics, and statistics which are not of a service nature 9

From Outside the Major Department

Choose nine hours outside Mathematics at the 300+ level. 200+ level courses used to satisfy USP and College requirements can also be counted here 9

Other Major hours: 21

Total Minimum Hours Required for Degree 121

^Course used towards completion of a USP or College 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 pages 103-104.

University Studies Program Requirements

I. Math (*completed by Premajor Requirement*)
II. Foreign Language (*placement exam recommended*) 0-8
III. Inference-Logic (*completed by Premajor Requirement*)
IV. Written Communication 0-4
V. Oral Communication 3
VI. Natural Sciences 6
VII. Social Sciences 6
VIII. Humanities 6
IX. Cross-Cultural (*choose a Humanities course*) 3
X. Electives (*choose one Social Science and one Natural Science course*) 6

USP hours: 30-42

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*placement exam recommended*) 0-8
II. Disciplinary Requirements
a. Natural Science (*completed by USP Elective Requirement*)
b. Social Science (*completed by USP Elective Requirement*)
c. Humanities (*completed by USP Cross-Cultural Requirement*)
III. Laboratory or Field Work 1
IV. Electives 6

College Requirement hours: 6-14

OPTION A - Mathematics**Premajor Requirements**

^MA 113 Calculus I 4
MA 114 Calculus II 4
CS 115 Introduction to Computer Programming 3

Premajor hours: 11

Major Requirements**Major Core Requirements**

MA 213 Calculus III 4
MA 214 Calculus IV 3
MA 322 Matrix Algebra and its Applications 3

Major Core hours: 10

Other Course Work Required for the Major**From the Major Department:**

Choose 18 hours of 300+ level mathematics courses. One of the following sequences, or a substitute approved by the Director of Undergraduate Studies, must be included: MA 351/352, MA 361/362, MA 471G/472G, MA 481G/483G, CS/MA 321/422, CS/MA 416G and MA/STA 417G, MA 433G/485G; 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 USP and 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
CS 215 Introduction to Program Design, Abstraction and Problem Solving 4

Premajor hours: 15

Major Requirements**Major Core Requirements**

MA 213 Calculus III 4
MA 214 Calculus IV 3
CS 216 Introduction to Software Engineering 3
STA 281 Probability and Statistics Using Interactive Computer Techniques 3
MA/STA 320 Introductory Probability 3
CS/MA 321 Introduction to Numerical Methods 3
STA 321 Basic Statistical Theory I 3
MA 322 Matrix Algebra and its Applications 3
CS/MA 416G Principles of Operations Research I 3
STA 422G Basic Statistical Theory II 3

Major Core hours: 31

Other Course Work Required for the Major**From the Major Department:**

Choose one of the following: MA 361, MA 433G, MA 471G 3

Choose nine 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 481G/483G, CS/MA 321/422, CS/MA 416G and MA/STA 417G, CS 315/450G. A substitute sequence may be approved upon petition by the student to the Director of Undergraduate Studies. Approved courses in the mathematical sciences include those courses in computer science, engineering mechanics, mathematics, and statistics which are not of a service nature 9

From Outside the Major Department

Choose nine hours outside Mathematics at the 300+ level. 200+ level courses used to satisfy USP and College requirements can also be counted here 9

Other Major hours: 21

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 USP or College Requirement.

Mathematics Cooperative Education

Qualified students who major in mathematics may participate in the Mathematical Sciences Cooperative Education Program which provides the opportunity for alternate semesters of academic study and full-time employment in business or industry. Guidelines and application forms are available in the Engineering/Math Sciences Co-op Program Office, 320 Robotics Building.

Minor in Mathematics

Students who minor in mathematics must complete the following:

1. MA 113/114 Calculus I and II and 8
MA 213 Calculus III 4
or equivalent
2. MA 322 Matrix Algebra and Its Applications . 3
or equivalent
3. Six additional hours of mathematics courses numbered greater than 213. Possible courses include: MA 214, MA 261, MA 320, MA 321, MA 330, MA 341, MA 351, MA 361, or any 400 level math course.

MILITARY SCIENCE AND LEADERSHIP (Army Officer Commissioning)

The Army Reserve Officers' Training program at the University of Kentucky is open to both men and women and follows a general military science curriculum that is normally completed in four years but which may be completed in two years. An academic major in military science is not offered. The program's primary objective is to commission the future leadership of the line branches 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 Officer at (859) 257-6865; or visit 101 Barker Hall on campus. Additionally, students should refer to the *Student Financial Aid, Awards, and Benefits* section of this Bulletin.

Academic Program

Successful completion of 20 credit hours of military science courses while simultaneously completing undergraduate or graduate degree requirements qualifies a student to be commissioned as a Second Lieutenant in the U.S. Army. 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, a computer science course, and continuous enrollment (or participation) in KHP 107 once contracted in the ROTC program. Also, cadets attend a five-week Leadership Development Assessment Course, usually in the summer between the junior and senior years.

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. This program is particularly suited to community college students transferring to the University, or students who did not participate in the Basic Program during their freshman and sophomore years. Students should contact the Professor of Military Science about the five-week summer Leadership Training Course conducted each summer at Fort Knox, Kentucky. Successful completion of the camp enables students to take AMS 300-level courses and complete the precommission 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 also directly enroll in the Leadership Development Assessment Course and participate in the Simultaneous Membership Program (SMP).

The Basic Course: (100 and 200 level) are orientational and deal with the Army's role in the U.S. government. American military history, small unit organizations/operations, military geography/map reading and some adventure training are also addressed. **No military obligation** is incurred by completion of the courses.

The Advanced Course: (300 level) focus on leadership, management, and command/staff responsibilities within military organizations. All upper division Army ROTC students receive \$450+ per month tax-free subsistence pay during the academic year. During the summer, students receive about \$700 while attending Camp.

Leadership Lab periods, held weekly during the academic year, and on one Saturday 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.

Professional development and enrichment opportunities are also available through ROTC-sponsored university organizations – the Pershing Rifles and Kentucky Rangers.

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) 257-6864. Visit the Web site at: www.uky.edu/armyrotc/.

MODERN AND CLASSICAL LANGUAGES, LITERATURES AND CULTURES

The Department of Modern and Classical Languages, Literatures and Cultures is comprised of the Divisions of Classics, French and Italian, German Studies, and Russian and Eastern Studies.

CLASSICS

The Division of Classics offers a Bachelor of Arts and a Bachelor of Science degree in Classics. The division teaches a broad range of courses in the languages, literature, history, art, and thought of the Greco-Roman world. The minimum requirements for graduation

with departmental honors in Classics are an overall grade-point average of 3.55 and the completion of a 300 level course in Greek or Latin with a grade of **B**. Access the division's Web site at: www.uky.edu/AS/Classics/ for more information.

Bachelor of Arts with a major in CLASSICS

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 pages 101-103.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>completed by Premajor Requirements</i>)	
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities (<i>completed by Major Requirements</i>)	6
IX. Cross-Cultural	3
X. Electives (<i>choose two Natural Science courses</i>)	6

USP hours: 27-37

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>completed by Major Requirements</i>)	
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>partially completed by USP Cross-Cultural Requirement</i>)	3
c. Humanities (<i>completed by Major Requirements</i>)	
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 10

Premajor Requirements

*CLA 101 and 102 Elementary Latin
or equivalent
OR

*CLA 151 and 152 Elementary Greek
or equivalent 8

Premajor hours: 8

Major Requirements

Courses Within Classics

Complete study of Latin to at least the level of CLA 202 **or** Greek to at least the level of CLA 252 **or** the equivalent. Complete 18 hours in courses at the 200 level or above with a CLA prefix or cross-listed CLA. (CLA 201/202 and CLA 251/252 contribute to this total.)

Classics Courses hours: 18

Courses Outside of Classics

Complete 15 hours in courses appropriate to the field of study at the 200 level or above **not** prefixed CLA (courses cross-listed CLA also fulfill this requirement). A wide

variety of courses are accepted; these are determined for each student in consultation with the Director of Undergraduate Studies.

Non-Classics Courses hours: 15

Additional Courses (Elective)

Complete an additional 9 hours in courses at the 200 level or above either inside or outside Classics.

Additional Courses hours: 9

Upper Level Requirement

At least 15 hours in the major must be in courses at the 300 level or above with either a CLA prefix, or with specific Classics content as determined by the Director of Undergraduate Studies. Of the 42 required major hours, at least 24 hours must be in courses at the 300 level or above.

Major hours: 42

Explanation of Major Requirements

At the discretion of the student's advisor, other courses may be substituted for the courses listed as courses within Classics. These courses must be either CLA courses or non-CLA courses that deal with the classical world. The acceptable non-CLA courses are normally in the areas of history, philosophy and art history.

The Major requirements in Classics are fully satisfied if a student has:

1. Completed the Premajor Requirement.
2. Completed either CLA 202 (Intermediate Latin) or CLA 252 (Intermediate Greek).
3. Completed 15 hours in 300+ CLA and acceptable non-CLA courses.
4. Completed 15 hours in 200+ courses outside the field of Classics that appropriately complement the Classics courses.
5. Completed 9 additional hours in 200+ courses in the area of either Classics or complementary disciplines.
6. Accumulated 24 hours in 300+ courses among the courses used to satisfy items 3, 4, and 5 above.

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 15

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP or College Requirement.

Bachelor of Science with a major in CLASSICS

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 CLA 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 pages 103-104.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*completed by Premajor Requirements*)
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6

- VIII. Humanities (*completed by Major Requirements*)
- IX. Cross-Cultural 3
- X. Electives (*choose two Natural Science courses*) 6

USP hours: 27-37

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*completed by Major Requirements*)
- II. Disciplinary Requirements
 - a. Natural Science (*completed by USP Elective Requirement*)
 - b. Social Science (*completed by USP Cross-Cultural Requirement*)
 - c. Humanities (*completed by Major Requirements*)
- III. Laboratory or Field Work 1
- IV. Electives 6

College Requirement hours: 7

Premajor Requirements

- *CLA 101 and 102 Elementary Latin or equivalent
- OR**
- *CLA 151 and 152 Elementary Greek or equivalent 8

Premajor hours: 8

Major Requirements

Courses Within Classics

Complete study of Latin to at least the level of CLA 202 or Greek to at least the level of CLA 252 or the equivalent. Complete 18 hours in courses at the 200 level or above with a CLA prefix or cross-listed CLA. (CLA 201/202 and CLA 251/252 contribute to this total.)

Classics Courses hours: 18

Courses Outside of Classics

Complete 15 hours in courses appropriate to the field of study at the 200 level or above **not** prefixed CLA (courses cross-listed CLA also fulfill this requirement). A wide variety of courses are accepted; these are determined for each student in consultation with the Director of Undergraduate Studies.

Non-Classics Courses hours: 15

Additional Courses (Elective)

Complete an additional 9 hours in courses at the 200 level or above either inside or outside Classics.

Additional Courses hours: 9

Upper Level Requirement

At least 15 hours in the major must be in courses at the 300 level or above with either a CLA prefix, or with specific Classics content as determined by the Director of Undergraduate Studies. Of the 42 required major hours, at least 24 hours must be in courses at the 300 level or above.

Major hours: 42

Explanation of Major Requirements

At the discretion of the student's advisor, other courses may be substituted for the courses listed as courses within Classics. These courses must be either CLA courses or non-CLA courses that deal with the classical world. The acceptable non-CLA courses are normally in the areas of history, philosophy and art history.

The Major requirements in Classics are fully satisfied if a student has:

1. Completed the Premajor Requirement.
2. Completed either CLA 202 (Intermediate Latin) or CLA 252 (Intermediate Greek).
3. Completed 15 hours in 300+ CLA and acceptable non-CLA courses.

4. Completed 15 hours in 200+ courses outside the field of Classics that appropriately complement the Classics courses.

5. Completed 9 additional hours in 200+ courses in the area of either Classics or complementary disciplines.

6. Accumulated 24 hours in 300+ courses among the courses used to satisfy items 3, 4, and 5 above.

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 18

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP or College Requirement.

Teacher Certification Requirements

Students who wish to teach Latin in secondary school must also meet the certification requirements outlined in the *College of Education* section of this Bulletin.

Minor Requirements

The requirements for a classics minor are 18 credit hours, at least six 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 courses taught by the division that are numbered 200 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.

FRENCH AND ITALIAN

As a branch of the liberal arts curriculum, the Division of French and Italian has as one of its fundamental aims to broaden and deepen the student's acquaintance with the French- and Italian-speaking worlds through the medium of their language and literature.

Bachelor of Arts with a major in FRENCH

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 pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*completed by Premajor Requirement*)
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences 6
- VIII. Humanities 6
- IX. Cross-Cultural (*choose a 300+ level Social Science course*) 3
- X. Electives (*choose two Natural Science courses*) 6

USP hours: 33-43

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>completed by Premajor Requirement</i>)	
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>partially completed by USP Cross-Cultural Requirement</i>)	3
c. Humanities (<i>completed by Major Requirements</i>)	
III. Laboratory or Field Work	1
IV. Electives	6
College Requirement hours:	10

Premajor Requirements

^FR 204 French Culture: Readings and Conversation	3
FR 304 Intermediate French Literature I	3
FR 305 Intermediate French Literature II	3
Premajor hours:	9

Major Requirements**Major Core Requirements**

FR 306 Intermediate French Composition	3
FR 312 French Conversation I	3
FR 350 Cultural Profiles of France	3
FR 470G Studies in French Literature	3
FR 495 Senior Paper	1
Major Core hours:	13

Other Course Work Required for the Major**From the Major Department:**

French Options	9
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Option 1 – Language/Culture: FR 310, FR 406, and one additional FR course at the 300+ level (excluding FR 300, FR 553, and courses in translation)

Option 2 – Literature/Culture: choose three French literature courses at the 400+ level

Option 3 – French Topical Studies: choose nine hours with the Director of Undergraduate Studies to create an individual program for special needs or interests

French Electives 0-6

From Outside the Major Department

Choose 14-20 hours outside French at the 300+ level. Courses are generally selected from the following areas: anthropology, architecture, art history, economics, English, German, Greek, geography, history, Italian, Japanese, Latin, linguistics, music history, philosophy, political science, religious studies, Russian, sociology, Spanish, theatre, or other disciplines approved by the Director of Undergraduate Studies 14-20

Other Major hours: **29**

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 14

Total Minimum Hours

Required for Degree **120**

^Course used towards completion of a USP Requirement.

Bachelor of Science with a major in FRENCH**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 FR 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>completed by Premajor Requirement</i>)	
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a Social Science course</i>)	3
X. Electives (<i>choose two Natural Science courses</i>)	6
USP hours:	33-43

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>completed by Premajor Requirement</i>)	
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>completed by USP Cross-Cultural Requirement</i>)	
c. Humanities (<i>completed by Major Requirements</i>)	
III. Laboratory or Field Work	1
IV. Electives	6
College Requirement hours:	7

Premajor Requirements

^FR 204 French Culture: Readings and Conversation	3
FR 304 Intermediate French Literature I	3
FR 305 Intermediate French Literature II	3
Premajor hours:	9

Major Requirements**Major Core Requirements**

FR 306 Intermediate French Composition	3
FR 312 French Conversation I	3
FR 350 Cultural Profiles of France	3
FR 470G Studies in French Literature	3
FR 495 Senior Paper	1
Major Core hours:	13

Other Course Work Required for the Major**From the Major Department:**

French Options	9
-----------------------	----------

Option 1 – Language/Culture: FR 310, FR 406, and one additional FR course at the 300+ level (excluding FR 300, FR 553, and courses in translation)

Option 2 – Literature/Culture: choose three French literature courses at the 400+ level

Option 3 – French Topical Studies: choose nine hours with the Director of Undergraduate Studies to create an individual program for special needs or interests

French Electives 0-6

From Outside the Major Department

Choose 14-20 hours outside French at the 200+ level. Courses are generally selected from the following areas: anthropology, architecture, art history, economics, English, German, Greek, geography, history, Italian, Japanese, Latin, linguistics, music history, philosophy, political science, religious studies, Russian, sociology, Spanish, theatre, or other disciplines approved by the Director of Undergraduate Studies 14-20

Other Major hours: **29**

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 17

Total Minimum Hours

Required for Degree **120**

^Course used towards completion of a USP Requirement.

Teacher Certification Requirements

The requirements for teacher certification in secondary foreign languages are outlined in the *College of Education* section of this Bulletin.

Minor in French

The minor in French consists of a minimum of 18 hours in French language and literature courses beyond FR 202 and excluding FR 553 and literature courses in translation.

FR 203 Elementary French Conversation and Composition	3
FR 204 French Culture: Readings and Conversation	3
FR 306 Intermediate French Composition	3

Three courses at the 300, 400, or 500 level (excluding FR 553 and courses in translation).

GERMAN STUDIES

The primary aims of the Division of German Studies are to help students develop their German language skills and gain an understanding of the literature and culture of the German-speaking countries. Students majoring in German earn the Bachelor of Arts or Bachelor of Science degree. For more information, visit the Division of German Studies on the Web at: www.uky.edu/AS/German/.

Bachelor of Arts with a major in GERMAN**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 pages 101-103.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (completed by Premajor Requirement)	
III. Inference–Logic	3-6
IV. Written Communication	0-4
V. Oral Communication (completed by Premajor and Major Requirements)	
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (choose a 300+ Level Social Sciences course)	3
X. Electives (choose two Natural Science courses)	6
USP hours:	30-40

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (completed by Premajor Requirement)	
II. Disciplinary Requirements	
a. Natural Science (completed by USP Elective Requirement)	
b. Social Science (partially completed by USP Cross-Cultural Requirement)	3
c. Humanities (completed by Major Requirements)	
III. Laboratory or Field Work	1
IV. Electives	6
College Requirement hours:	10

Premajor Requirements

^GER 202 Intermediate German	3
GER 205 Reading and Writing Practice	2
*GER 206 Oral Practice	2
Premajor hours:	7

Major Requirements

Major Core 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	3
GER 312 Introduction to German Literature: Popular Forms	3
Major Core hours:	12

Other Course Work Required for the Major

From the Major Department: **12-15**
Choose 12-15 hours of German courses to be selected from GER 310, 315, 317, 319, 352, 361, 415G, 416G, 420G and 507; upon consultation with the advisor, certain 500-level courses may be substituted for two of these; GER 415G, 416G and 420G may be repeated once.

From Outside the Major Department

Choose 15-18 hours outside German at the 300+ level from the following areas: anthropology, art history, comparative literature, economics, English, French, Greek, geography, history, Italian, Japanese, Latin, linguistics, music, philosophy, political science, religious studies, Russian, sociology, Spanish, theatre, and women’s studies. 200+ level courses used to satisfy USP and College requirements can also be counted here 15-18

Other Major hours: **30**

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 19

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.
*GER 206 + GER 307 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in GERMAN

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 GER 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (completed by Premajor Requirement)	
III. Inference–Logic	3-6
IV. Written Communication	0-4
V. Oral Communication (completed by Premajor and Major Requirements)	
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (choose a Social Science course)	3
X. Electives (choose two Natural Science courses)	6
USP hours:	30-40

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (completed by Premajor Requirement)	
II. Disciplinary Requirements	
a. Natural Science (completed by USP Elective Requirement)	
b. Social Science (completed by USP Cross-Cultural Requirement)	
c. Humanities (completed by Major Requirements)	
III. Laboratory or Field Work	1
IV. Electives	6
College Requirement hours:	7

Premajor Requirements

^GER 202 Intermediate German	3
GER 205 Reading and Writing Practice	2
*GER 206 Oral Practice	2
Premajor hours:	7

Major Requirements

Major Core 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	3
GER 312 Introduction to German Literature: Popular Forms	3

Major Core hours: **12**

Other Course Work Required for the Major

From the Major Department: **12-15**
Choose 12-15 hours of German courses to be selected from GER 310, 315, 317, 319, 352, 361, 415G, 416G, 420G and 507; upon consultation with the advisor, certain 500-level courses may be substituted for two of these; GER 415G, 416G and 420G may be repeated once.

From Outside the Major Department

Choose 15-18 hours outside German at the 200+ level from the following areas: anthropology, art history, comparative literature, economics, English, French, Greek, geography, history, Italian, Japanese, Latin, linguistics, music, philosophy, political science, religious studies, Russian, sociology, Spanish, theatre, and women’s studies. 200+ level courses used to satisfy USP and College requirements can also be counted here 15-18

Other Major hours: **30**

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 22

Total Minimum Hours Required for Degree 120

^Course used towards completion of a USP Requirement.
*GER 206 + GER 307 satisfy the Oral Communication Requirement.

Teacher Certification Requirements

The requirements for teacher certification in secondary foreign language teaching are outlined in the *College of Education* section of this Bulletin.

Minor in German

The minor in German Studies consists of a minimum of 19 hours in German language, culture, and literature courses in addition to the proficiency level gained by completion of GER 202. This level may be documented either by completing the relevant sequence of courses or by placement exam.

Required courses include:

GER 205 Reading and Writing Practice	2
GER 206 Oral Practice	2
and	
Course work at the 300 level or above, including GER 307/308	15

RUSSIAN AND EASTERN STUDIES

The Division of Russian and Eastern Studies offers language courses in Arabic, Chinese, Hebrew, Japanese and Russian, as well as related literature and culture courses.

Russian and Eastern Studies

The Division of Russian and Eastern Studies offers an undergraduate major in Russian Studies. The program is designed to produce an integrated knowledge of Russian language, literature, culture, history, politics, and society. This interdisciplinary major provides the

broadest possible base for further study of the former Soviet Union.

Bachelor of Arts with a major in RUSSIAN 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 pages 101-103.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>completed by Premajor Requirement</i>)	
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication [^] (<i>partially completed by Major Requirement</i>)	1
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities (<i>completed by Major Requirements</i>)	
IX. Cross-Cultural (<i>completed by Premajor Requirement</i>)	
X. Electives (<i>choose two Natural Science courses</i>) ...	6

USP hours: 25-35

Graduation Writing Requirement

RUS 499, required in the Major Core Requirements, satisfies the Graduation Writing Requirement.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>completed by Premajor Requirement</i>)	
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>partially completed by Major Requirement</i>)	3
c. Humanities (<i>completed by Major Requirements</i>)	
III. Laboratory or Field Work	1
IV. Electives	6

College Requirement hours: 10

Premajor Requirements

*RUS 202 Intermediate Russian	4
*RUS 270 Russian Culture 900-1900	
or	
*RUS 271 Russian Culture 1900-Present	3
Premajor hours:	7

Major Requirements

Major Core Requirements

*HIS 385 History of Russia to 1825	3
*HIS 386 History of Russia Since 1825	3
RUS 380 Nineteenth Century Russian Literature (in English)	3
RUS 381 Russian Literature 1900-Present (in English)	3
RUS 301 Advanced Intermediate Russian I	3
RUS 302 Advanced Intermediate Russian II	3
RUS 403 Advanced Russian I	3
RUS 404 Advanced Russian II	3
[^] RUS 499 Russian Studies Capstone Seminar (Subtitle required)	3
Major Core hours:	27

Other Course Work Required for the Major

From the Major Department:

Language Elective	3
Choose from RUS 501, RUS 502, RUS 520, or RUS 530	
Related Elective	3
Choose from RUS 370, RUS 375, RUS 395, RUS 400G, RUS 460G, RUS 463, or RUS 495G	

From Outside the Major Department

Choose 9 hours at the 300+ level related to Russian Area Studies, but not from the major department. Three of these hours must be chosen from one of the following courses: ECO 465G, GEO 329, PS 391, or PS 429G

Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 23

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

[^]COM 199 + RUS 499 satisfy the Oral Communication Requirement.

Bachelor of Science with a major in RUSSIAN 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. Please note: courses with RUS and HIS prefixes 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>completed by Premajor Requirement</i>)	
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication [^] (<i>partially completed by Major Requirement</i>)	1
VI. Natural Sciences	6
VII. Social Sciences	6
VIII. Humanities (<i>completed by Major Requirements</i>)	
IX. Cross-Cultural (<i>completed by Premajor Requirement</i>)	
X. Electives (<i>choose two Natural Science courses</i>) ..	6

USP hours: 25-35

Graduation Writing Requirement

RUS 499, required in the Major Core Requirements, satisfies the Graduation Writing Requirement.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>completed by Premajor Requirement</i>)	
II. Disciplinary Requirements	
a. Natural Science (<i>completed by USP Elective Requirement</i>)	
b. Social Science (<i>completed by Major Requirement</i>)	
c. Humanities (<i>completed by Major Requirement</i>)	
III. Laboratory or Field Work	1

IV. Electives	6
College Requirement hours:	7

Premajor Requirements

*RUS 202 Intermediate Russian	4
*RUS 270 Russian Culture 900-1900	
or	
*RUS 271 Russian Culture 1900-Present	3
Premajor hours:	7

Major Core Requirements

*HIS 385 History of Russia to 1825	3
*HIS 386 History of Russia Since 1825	3
RUS 380 Nineteenth Century Russian Literature (in English)	3
RUS 381 Russian Literature 1900-Present (in English)	3
RUS 301 Advanced Intermediate Russian I	3
RUS 302 Advanced Intermediate Russian II	3
RUS 403 Advanced Russian I	3
RUS 404 Advanced Russian II	3
[^] RUS 499 Russian Studies Capstone Seminar (Subtitle required)	3
Major Core hours:	27

Other Course Work Required for the Major

From the Major Department:

Language Elective	3
Choose from RUS 501, RUS 502, RUS 520, or RUS 530	
Related Elective	3
Choose from RUS 370, RUS 375, RUS 395, RUS 400G, RUS 460G, RUS 463, or RUS 495G	

From Outside the Major Department

Choose 9 hours at the 300+ level related to Russian Area Studies, but not from the major department. Three of these hours must be chosen from one of the following courses: ECO 465G, GEO 329, PS 391, or PS 429G

Other Major hours: 15

Electives

Choose electives to lead to the minimum total of 120 hours required for graduation 26

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

[^]COM 199 + RUS 499 satisfy the Oral Communication Requirement.

Minor in Russian

The minor in Russian consists of a minimum of 18 hours beyond second-year proficiency in Russian language (RUS 202) distributed as follows:

1. 6 hours of Russian language courses at the 300 level or above

and

2. 12 hours of additional course work in designated Russian area studies courses, of which at least 9 hours must be in RUS courses.

Note: RUS 395, Independent Work in Russian, may not be used for the minor.

Minor in Folklore and Mythology

The minor in folklore and mythology requires a minimum of 18 hours (plus 6 preminor) to include the following:

1. Minor Prerequisites

CLA 100 Ancient Stories in Modern Films	
or	
CLA 135 Greek and Roman Mythology	3
GER 103 Fairy Tales in European Context	3

2. **Minor Requirements**

CLA 331 Gender and Sexuality in Antiquity
or
CLA 382 Greek and Roman Religion 3

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

GER 363 Germanic Mythology 3

MCL 270 Introduction to Folklore and Mythology 3

RUS 370 Russian Folklore (in English) 3

3. **Minor Electives**

Three hours in elective courses in a variety of disciplines taken from a list provided by the advisor.

Students in this minor must satisfy the current A&S Language Requirement, regardless of their college. The minor is not restricted to A&S majors.

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 reason and argumentation, a philosophy major is an excellent preparation for a career in law or business.

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 pages 101-103.

University Studies Program Requirements

I. Math 0-3

II. Foreign Language (*placement exam recommended*)[^] 0-8

III. Inference-Logic (*partially completed by Major Requirement*) 3

IV. Written Communication 0-4

V. Oral Communication 3

VI. Natural Sciences 6

VII. Social Sciences 6

VIII. Humanities (*completed by Premajor Requirements*)

IX. Cross-Cultural (*choose a 300+ level Social Science course*) 3

X. Electives (*choose two Natural Science courses*) 6

USP hours: 27-42

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*placement exam recommended*)[^] 0-6

II. Disciplinary Requirements

a. Natural Science (*completed by USP Elective Requirement*)

b. Social Science (*partially completed by USP Cross-Cultural Requirement*) 3

c. Humanities (*completed by Major Requirements*)

III. Laboratory or Field Work 1

IV. Electives 6

College Requirement hours: 10-16

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 331 Ethics
or
PHI 335 The Individual and Society 3

PHI 351 Metaphysics and Epistemology 3

Major Core hours: 9

Other Course Work Required for the Major

From the Major Department:

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

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

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

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

Choose 3 hours from any of the group courses listed above or the following: PHI 305, 310, 317, 330, 331, 332, 335, 337, 340, 343, 361, 380, 395 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

[^]Course used towards completion of a USP Requirement.

[^]French or German is highly recommended to complete the USP and College foreign language requirements. Greek is recommended if the student plans to concentrate on ancient philosophy. Latin is recommended if the student plans to concentrate on medieval philosophy.

Bachelor of Science with a major in PHILOSOPHY

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 PHI 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 pages 103-104.

University Studies Program Requirements

I. Math 0-3

II. Foreign Language (*placement exam recommended*)[^] 0-8

III. Inference-Logic (*partially completed by Major Requirement*) 3

IV. Written Communication 0-4

V. Oral Communication 3

VI. Natural Sciences 6

VII. Social Sciences 6

VIII. Humanities (*completed by Premajor Requirements*)

IX. Cross-Cultural (*choose a Social Science course*) 3

X. Electives (*choose two Natural Science courses*) 6

USP hours: 27-42

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*placement exam recommended*)[^] 0-6

II. Disciplinary Requirements

a. Natural Science (*completed by USP Elective Requirement*)

b. Social Science (*completed by USP Cross-Cultural Requirement*)

c. Humanities (*completed by Major Requirements*)

III. Laboratory or Field Work 1

IV. Electives 6

College Requirement hours: 7-13

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 331 Ethics
or
PHI 335 The Individual and Society 3

PHI 351 Metaphysics and Epistemology 3

Major Core hours: 9

Other Course Work Required for the Major

From the Major Department:

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

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

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

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

Choose 3 hours from any of the group courses listed above or the following: PHI 305, 310, 317, 330, 331, 332, 335, 337, 340, 343, 361, 380, 395 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

*Course used towards completion of a USP Requirement.

^French or German is highly recommended to complete the USP and College foreign language requirements. 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 the following:

- No more than two 100-level courses
- At least one course in logic (PHI 120, PHI 320, or PHI 520)
- At least one course in the history of philosophy (PHI 260, PHI 270, or any course from Group A of the undergraduate curriculum)
- At least three courses (nine hours) at the 300 level or above, excluding PHI 320 and PHI 399.

PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy helps many students acquire a general understanding and appreciation of physics and astronomy. In the liberal arts tradition, the undergraduate curriculum is complete and flexible enough to allow a graduate with a major in physics to pursue a variety of careers. Many of our graduates continue their studies with graduate work in physics or other areas.

For the student interested in combining the study of physics with studies in other areas, the department can assist in the planning of an individual curriculum which meets **both** the minimum requirements of the Physics program and the student's needs and interests. Such planning is of particular value to students intending to pursue careers in engineering, computer science, applied physics, medicine, radiation medicine, biophysics, law, meteorology, oceanography, geophysics, environmental sciences, management, or the teaching of physics and/or physical science at the junior and senior high school levels. By working closely with an advisor, the student with special interests can take advantage of opportunities to take several other courses from one or more departments outside physics, or double major in physics and another area. For a description of suggested curricula, visit our Web site at: www.pa.uky.edu/undergrad/curricula.html.

Bachelor of Arts with a major in PHYSICS

121 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 pages 101-103.

University Studies Program Requirements

I. Math (<i>completed by Premajor Requirement</i>)	
II. Foreign Language (<i>placement exam recommended</i>)	0-8
III. Inference-Logic (<i>completed by Premajor Requirement</i>)	
IV. Written Communication	0-4
VI. Natural Sciences (<i>completed by Premajor Requirement</i>)	
VII. Social Sciences	6
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a 300+ level PHI course</i>)	3
X. Electives (<i>choose 300+ level Social Science courses</i>)	6
USP hours:	24-36

Graduation Writing Requirement

Students may satisfy the Graduation Writing Requirement by completing PHY 435.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (<i>placement exam recommended</i>)	0-8
II. Disciplinary Requirements	
a. Natural Science (<i>completed by Premajor Requirements</i>)	
b. Social Science (<i>completed by USP Elective Requirement</i>)	
c. Humanities (<i>partially completed by USP Cross-Cultural Requirement</i>)	3
III. Laboratory or Field Work (<i>completed by Premajor Requirement</i>)	
IV. Electives	6
College Requirement hours:	9-17

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	3
CHE 107 General College Chemistry II	3
*MA 113 Calculus I	4
MA 114 Calculus II	4
Premajor hours:	27

Major Requirements

Major Core Requirements

PHY 306 Theoretical Methods of Physics	3
PHY 361 Principles of Modern Physics	3
PHY 404G Mechanics	3
PHY 416G Electricity and Magnetism	3
PHY 520 Introduction to Quantum Mechanics	3
MA 213 Calculus III	4
MA 214 Calculus IV	3
Major Core hours:	22

Other Course Work Required for the Major

From the Major Department:

Choose 3-6 hours at the 400+ level to include at least one of the following laboratory courses: PHY 402G, 422, 435, 535, 545 3-6

From Outside the Major Department

Choose 14-17 hours outside Physics at the 300+ level. Courses are generally chosen from computer science, engineering, mathematics, philosophy, or statistics. 200+ level courses used to satisfy USP and College requirements can also be counted here 14-17

Other Major hours: **20**

Total Minimum Hours Required for Degree 121

*Course used towards completion of a USP Requirement.

Suggested Curriculum for B.A. in Physics

As you plan your physics studies, please note that upper division physics courses, PHY 3XX and all higher numbered courses, are offered once per year in the semester indicated on the suggested curricula. For example, PHY 306 and PHY 361 are offered in the spring semester only. This suggested curriculum minimally meets the requirements for the B.A. in Physics.

Freshman Year

First Semester	Hours
PHY 231 General University Physics	4
PHY 241 General University Physics Laboratory	1
MA 113 Calculus I	4
ENG 104 Writing: An Accelerated Foundational Course	4
University Studies	3

Second Semester

PHY 228 Optics, Relativity and Thermal Physics	3
MA 114 Calculus II	4
CHE 105 General College Chemistry I	3
University Studies	6

Sophomore Year

First Semester	Hours
PHY 232 General University Physics	4
PHY 242 General University Physics Laboratory	1
*MA 213 Calculus III	4
PHY 335 Data Analysis for Physicists	1
CHE 107 General College Chemistry II	3
Foreign Language	4
Second Semester	Hours
PHY 306 Theoretical Methods of Physics	3
PHY 361 Principles of Modern Physics	3
*MA 214 Calculus IV	3
Foreign Language	4

Junior Year

First Semester	Hours
*CS 115 Introduction to Computer Programming	3
PHY 404G Mechanics	3
*MA 322 Matrix Algebra and Its Applications	3
**Humanities	3
Foreign Language	3
Second Semester	Hours
MA 432G Methods of Applied Mathematics I	3
PHY 520 Introduction to Quantum Mechanics	3
Foreign Language	3
**Social Science	3
**Humanities	3

Senior Year

First Semester	Hours
PHY 416G Electricity and Magnetism	3
PHY 554 Fundamentals of Atomic Physics	3
**Social Science	3
University Studies	6
*Elective	3

Second Semester

PHY 435 Intermediate Physics Laboratory	3
Foreign Language (if needed)	3
University Studies (if needed)	6
Elective	3

*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

additional hours in humanities and social sciences beyond those required for University Studies. 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 pages 103-104.

University Studies Program Requirements

- I. Math (completed by Premajor Requirement)
- II. Foreign Language (placement exam recommended) 0-8
- III. Inference-Logic (completed by Premajor Requirement) 0-4
- IV. Written Communication 0-4
- VI. Natural Sciences (completed by Premajor Requirement) 6
- VII. Social Sciences 6
- VIII. Humanities 6
- IX. Cross-Cultural (choose a Social Science course) 3
- X. Electives (choose a Humanities course) 3

USP hours: 21-33

Graduation Writing Requirement

Students may satisfy the Graduation Writing Requirement by completing PHY 435.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (placement exam recommended) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (completed by Premajor Requirements)
 - b. Social Science (completed by USP Cross-Cultural Requirement)
 - c. Humanities (completed by USP Elective Requirement)
- III. Laboratory or Field Work (completed by Premajor Requirement)
- IV. Electives 6

College Requirement hours: 6-14

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 3
- CHE 107 General College Chemistry II 3
- *MA 113 Calculus I 4
- MA 114 Calculus II 4

Premajor hours: 27

Major Requirements

Major Core Requirements

- PHY 306 Theoretical Methods of Physics 3
- PHY 335 Data Analysis for Physicists 1
- PHY 361 Principles of Modern Physics 3
- PHY 404G Mechanics 3
- PHY 416G/417G Electricity and Magnetism 6

- PHY 520 Introduction to Quantum Mechanics 3
 - PHY 535(2) Experimental Physics:
 - Advanced Physics Laboratory 2
 - MA 213 Calculus III 4
 - MA 214 Calculus IV 3
- Major Core hours: 28**

Other Course Work Required for the Major

From the Major Department:

- Choose one of the following: PHY 522, 524, 554, 555, 556, 591, 592 3
- Choose two lab courses from the following: AST/PHY 395, PHY 402G, 422, 535(1) 3-6

From Outside the Major Department

Choose seven hours outside Physics at the 200+ level. Courses are generally chosen from computer science, engineering, mathematics, or statistics. 200+ level courses used to satisfy USP and College requirements can also be counted here 7

Other Major hours: 13-16

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

Suggested Curriculum for B.S. in Physics

(NOTE: Students who have completed calculus or chemistry should visit our Web site at: www.pa.uky.edu/undergrad/curricula.html for suggested curriculum.)

As you plan your physics studies, please note that upper division physics courses, PHY 3XX and all higher numbered courses, are offered once per year in the semester indicated on the suggested curricula. For example, PHY 306 and PHY 361 are offered in the spring semester only. This suggested curriculum minimally meets the requirements for the B.S. in Physics.

Freshman Year

First Semester	Hours
PHY 231 General University Physics	4
PHY 241 General University Physics Laboratory	1
MA 113 Calculus I	4
ENG 104 Writing: An Accelerated Foundational Course	4
University Studies	3
Second Semester	
PHY 228 Optics, Relativity and Thermal Physics	3
MA 114 Calculus II	4
CHE 105 General College Chemistry I	3
University Studies	6

Sophomore Year

First Semester	Hours
PHY 232 General University Physics	4
PHY 242 General University Physics Laboratory	1
MA 213 Calculus III	4
PHY 335 Data Analysis for Physicists	1
CHE 107 General College Chemistry II	3
Foreign Language	4
Second Semester	
PHY 306 Theoretical Methods of Physics	3
PHY 361 Principles of Modern Physics	3
MA 214 Calculus IV	3
Foreign Language	4

Junior Year

First Semester	Hours
PHY 404G Mechanics	3
PHY 416G Electricity and Magnetism	3
PHY 402G Electronic Instrumentation and Measurements	3
*MA 322 Matrix Algebra and Its Applications	3
Foreign Language	3

Second Semester

- PHY 417G Electricity and Magnetism 3
- PHY 520 Introduction to Quantum Mechanics 3
- PHY 435 Intermediate Physics Laboratory 3
- Foreign Language 3
- Elective 3

Senior Year

First Semester	Hours
PHY 554 Fundamentals of Atomic Physics	3
Elective	3
University Studies	3

Second Semester

- PHY 535 Experimental Physics:
 - Advanced Physics Laboratory 2
 - Humanities and Social Sciences 6
 - Elective 3
 - University Studies (if needed) 3

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

Minor in Physics

- MA 113, 114, and 213; or equivalent 12
- PHY 211/213 or PHY 231/232/241/242 10
- PHY 361 3

At least eight credits chosen from the following:

- PHY 402G, 404G, 416G, 417G, 472G, 504, 520, 522, 524, 525, 535, 545, 546, 554, 555, 556, 567 and 591.

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 – study of the institutions, behavioral patterns, and public policies that define the American political system;
- Comparative Politics – study of the institutions, policies, and mass behaviors observed in political systems outside the United States, usually explored through comparison within or across regions of the world;
- International Relations – study of the international system as a whole, as well as of the actors (such as nation-states, corporations, and international organizations) who participate in shaping diplomatic, military, and economic outcomes within that system; and

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

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

In addition to conveying information about politics and government – necessary background for pursuing graduate work in political science and related fields – Political Science courses at UK are designed to provide students with a broad liberal arts education. Graduates leave the program having cultivated their analytical abilities and having exercised their written and spoken communication skills. Such disciplinary training 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 degrees: a Bachelor of Arts and a Bachelor of Science. Most majors choose to pursue the B.A. The primary difference is that B.A. students must complete a minimum of 39 hours at the 300+ level, a requirement that students can fulfill using courses already needed for the major. Earning the B.S. degree, on the other hand, requires completing a minimum of 60 hours in natural, physical, mathematical, and computer sciences. Little of that course work fulfills other degree requirements.

Bachelor of Arts with a major in POLITICAL SCIENCE

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the major requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*placement exam recommended*) 0-8
- III. Inference–Logic 3-6
- IV. Written Communication 0-4
- VI. Natural Sciences 6
- VII. Social Sciences (*partially completed by Premajor Requirement*) 3
- VIII. Humanities 6
- IX. Cross-Cultural (*may be completed by Major Requirements*)
- X. Electives (*choose two Natural Science courses*) 6

USP hours: 27-45

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See “University Writing Requirement” on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-8
 - II. Disciplinary Requirements
 - a. Natural Science (*completed by USP Elective requirement*)
 - 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 6
- College Requirement hours: 12-20**

Premajor/Introductory Requirements

- Field One – American Politics**
PS 101 American Government 3
- Field Two – Comparative Politics**
PS 210 Introduction to Comparative Politics
or
PS 212 Culture and Politics in the Third World 3
- Field Three – International Relations**
PS 235 World Politics 3
- Field Four – Theory/Methodology**
PS 240 Introduction to Political Theory
or
PS 372 Introduction to Political Analysis 3
- Premajor/Intro hours: 12**

Major/Core Requirements

After being introduced to each undergraduate field, Political Science majors must take an additional 39 hours of course work that combines both (1) courses within the discipline and (2) courses covering topics related to the discipline but offered by other programs. These 39 hours, of which 24 must be at the 300+ level, are divided as follows.

Disciplinary Courses

Students must take 18 additional credit hours of political science course work, of which at least 15 hours must be at the 300+ level. Note that PS 399 may **not** be counted toward this requirement. Eligible courses span all four undergraduate fields:

- Field One – American Politics**
General American Politics Courses
PS 456G, 458, 470G, 471, 472G, 473G, 474G, 475G, 476G, 479, 480G, 484G, 489G, 557, 580
Courses on American Law and Courts
PS 360, 461G, 463G, 465G, 566

- Field Two – Comparative Politics**
PS 210 or 212, 410, 415G, 417G, 419G, 420G, 427G, 428G, 429G, 538

- Field Three – International Relations**
PS 430G, 431G, 433G, 436G, 437G, 439G, 538

- 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 six 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 328, 330
- ANT – 220, 221, 323, 324, 327, 340, 375, 401, 431G, 433, 435, 532, 534
- APP 200
- BSC – *all 200+ level courses*
- COM 249, 449, 453
- DIS 300
- ECO – *all 200+ level courses*
- EDC 326, 346
- EDL 401
- ENG 204
- 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, 416
- HIS – *all 200+ level courses*
- HJS 324, 325
- HON – *all 200+ level courses (except independent work)*
- HSM 354
- JOU 204, 531, 535
- JPN 320, 321, 334, 451G, 461G
- LAS 201
- MGT 340, 341
- MKT 310, 340, 450
- NRC – *all 300+ level courses*
- PHI – *all 200+ level courses*
- PSY – *all 200+ level courses*
- RUS 270, 271
- SOC – *all 200+ level courses*
- SPA 312, 314
- ST 500
- STA – *all 200+ level courses*
- SW 222, 320, 420, 430, 505, 523, 571
- TEL 310, 319, 453, 510, 520

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

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 pages 103-104.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*placement exam recommended*) 0-8
- III. Inference–Logic 3-6
- IV. Written Communication 0-4
- VI. Natural Sciences 6
- VII. Social Sciences (*partially completed by Premajor Requirement*) 3
- VIII. Humanities 6

- IX. Cross-Cultural (*may be completed by Major Requirements*)
- X. Electives (*choose one Natural Science course and one Humanities course*) 6

USP hours: 27-45

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (*completed by USP Elective requirement*)
 - b. Social Science (*completed by Premajor Requirements*)
 - c. Humanities (*completed by USP Elective requirement*) 3
- III. Laboratory or Field Work (*completed by PS 372*)
- IV. Electives 6

College Requirement hours: 6-14

Premajor/Introductory Requirements

- Field One – American Politics**
 - PS 101 American Government 3
- Field Two – Comparative Politics**
 - PS 210 Introduction to Comparative Politics
 - or
 - PS 212 Culture and Politics in the Third World 3
- Field Three – International Relations**
 - PS 235 World Politics 3
- Field Four – Theory/Methodology**
 - PS 240 Introduction to Political Theory
 - or
 - PS 372 Introduction to Political Analysis 3

Premajor/Intro hours: 12

Major/Core Requirements

After being introduced to each undergraduate field, Political Science majors must take an additional 39 hours of course work that combines both (1) courses within the discipline and (2) courses covering topics related to the discipline but offered by other programs. These 39 hours, of which 24 must be at the 300+ level, are divided as follows.

Disciplinary Courses

Students must take 18 additional credit hours of political science course work, of which at least 15 hours must be at the 300+ level. Note that PS 399 may **not** be counted toward this requirement. Eligible courses span all four undergraduate fields:

Field One – American Politics

General American Politics Courses
 PS 456G, 458, 470G, 471, 472G, 473G, 474G, 475G, 476G, 479, 480G, 484G, 489G, 557, 580

Courses on American Law and Courts

PS 360, 461G, 463G, 465G, 566

Field Two – Comparative Politics

PS 210 or 212, 410, 415G, 417G, 419G, 420G, 427G, 428G, 429G, 538

Field Three – International Relations

PS 430G, 431G, 433G, 436G, 437G, 439G, 538

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 six 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
- AI5 328, 330
- ANT – 220, 221, 323, 324, 327, 340, 375, 401, 431G, 433, 435, 532, 534
- APP 200
- BSC – *all 200+ level courses*
- COM 249, 449, 453
- DIS 300
- ECO – *all 200+ level courses*
- EDC 326, 346
- EDL 401
- ENG 204
- 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, 416
- HIS – *all 200+ level courses*
- HJS 324, 325
- HON – *all 200+ level courses (except independent work)*
- HSM 354
- JOU 204, 531, 535
- JPN 320, 321, 334, 451G, 461G
- LAS 201
- MGT 340, 341
- MKT 310, 340, 450
- NRC – *all 300+ level courses*
- PHI – *all 200+ level courses*
- PSY – *all 200+ level courses*
- RUS 270, 271
- SOC – *all 200+ level courses*
- SPA 312, 314
- ST 500
- STA – *all 200+ level courses*
- SW 222, 320, 420, 430, 505, 523, 571
- TEL 310, 319, 453, 510, 520

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

Minor in Political Science

The minor in political science requires a prerequisite course (PS 101) and 18 hours of course work at the 200 level or above to be distributed as follows:

- 1. Six hours of 200 level courses, three hours of which must be either PS 210, PS 212, or PS 235.
- 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 pages 101-103.

University Studies Program Requirements

- I. Math 0-3
- II. Foreign Language (*placement exam recommended*) 0-8
- III. Inference-Logic 3-6
- IV. Written Communication 0-4
- V. Oral Communication 3
- VI. Natural Sciences 6
- VII. Social Sciences (*partially completed by Premajor Requirement*) 3
- VIII. Humanities 6
- IX. Cross-Cultural (*choose a 300+ level Humanities course*) 3
- X. Electives (*choose a 300+ level Humanities course*) 3

USP hours: 27-45

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

- I. Foreign Language (*placement exam recommended*) 0-8
- II. Disciplinary Requirements
 - a. Natural Science (*partially completed by PSY 312; and to complete this requirement, consider either PSY 456 as the Advanced Lecture/Lab or PSY 565 as the Capstone Requirement*) 3
 - b. Social Science (*completed by Premajor and Major Requirements*)
 - c. Humanities (*completed by USP Cross-Cultural and Elective Requirements*)
- III. Laboratory or Field Work (*completed by Premajor Requirement*)
- IV. Electives 6

College Requirement hours: 9-17

Premajor Requirements

- *PSY 100 Introduction to Psychology
- or
- ^PSY 11-- 3
- PSY 195 Orientation to Psychology 1
- *PSY 215 Experimental Psychology 4

Premajor hours: 8-9

Major Requirements**Major Core Requirements**

PSY 216 Applications of Statistics in Psychology ...	4
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 223, 302, 331, 395, 399, 459, 533, 558	

From Outside the Major Department

Choose 14 hours outside Psychology at the 300+ level. 200+ level courses used to satisfy USP and College requirements can also be counted here

Other Major hours:

Electives

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

Total Minimum Hours**Required for Degree**

*Course used towards completion of a USP or College Requirement

^This requirement is fulfilled for students who have completed a 3-credit introductory psychology course at an accredited college or university, or who have scored a 3 on the Advance Placement Psychology Test.

Bachelor of Science with a major in PSYCHOLOGY**120 hours (minimum)**

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: with the exception of PSY 215, PSY 216, PSY 312, PSY 456, 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 pages 103-104.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>placement exam recommended</i>)	0-8
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences	6
VII. Social Sciences (<i>partially completed by Premajor Requirement</i>)	3
VIII. Humanities	6
IX. Cross-Cultural (<i>choose a Humanities course</i>) ...	3
X. Electives (<i>choose two Natural Science courses</i>)	6
USP hours:	30-48

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3**College Requirements**

I. Foreign Language (<i>placement exam recommended</i>)	0-8
II. Disciplinary Requirements	
a. Natural Science (<i>completed by Major Requirement</i>)	
b. Social Science (<i>completed by Premajor Requirement</i>)	
c. Humanities (<i>completed by USP Cross-Cultural Requirement</i>)	
III. Laboratory or Field Work (<i>completed by Premajor Requirement</i>)	
IV. Electives	6
College Requirement hours:	6-14

Premajor Requirements

*PSY 100 Introduction to Psychology	
or	
^PSY 11-	3
PSY 195 Orientation to Psychology	1
*PSY 215 Experimental Psychology	4
Premajor hours:	8-9

Major Requirements**Major Core Requirements**

*PSY 216 Applications of Statistics in Psychology .	4
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 223, 302, 331, 395, 399, 459, 533, 558	

From Outside the Major Department

Choose 14 hours outside Psychology at the 300+ level. 200+ level courses used to satisfy USP and College requirements can also be counted here

Other Major hours:

Electives

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

Total Minimum Hours**Required for Degree**

*Course used towards completion of a USP or College Requirement.

^This requirement is fulfilled for students who have completed a 3-credit introductory psychology course at an accredited college or university, or who have scored a 3 on the Advance Placement Psychology Test.

Minor in Psychology

The minor in psychology requires a minimum of 20 hours to include the following:

1. Prerequisite courses	
PSY 100 Introduction to Psychology	4
PSY 215 Experimental Psychology	4

2. All of the following courses:

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

B.A. or B.S. with a major in RUSSIAN STUDIES

The requirements for the B.A. and B.S. with a major in Russian Studies are listed under in this A&S section under *Modern and Classical Languages, Literatures and Cultures*.

SOCIOLOGY

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

Students may major or minor in sociology. The department offers a Bachelor of Arts and a Bachelor of Science through the College of Arts and Sciences. Students may also complete a second major or minor in sociology even though they are enrolled in other colleges. In addition, students seeking certification in social studies education at the secondary level through the College of Education may also emphasize sociology in their programs.

Courses offered by the department cover a wide range of topics and issues. Areas such as social inequalities, work, organizations, economy, globalization, family, community, environment, crime, law and deviance comprise a large part of the curriculum. Students may also pursue special readings courses and experiential education placements or internships through the department.

Bachelor of Arts with a major in SOCIOLOGY**120 hours (minimum)**

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the major requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Arts degree on pages 101-103.

University Studies Program Requirements

I. Math	0-3
II. Foreign Language (<i>placement exam recommended</i>)	0-8
III. Inference-Logic	3-6
IV. Written Communication	0-4
V. Oral Communication	3
VI. Natural Sciences	6

VII. Social Sciences (partially completed by
Premajor Requirement) 3
 VIII. Humanities 6
 IX. Cross-Cultural (choose a 300+ level
Humanities course) 3
 X. Electives (choose two Natural Science courses) 6
USP hours: 30-48

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*placement exam recommended*) 0-8
 II. Disciplinary Requirements
 a. Natural Science (completed by *USP Elective Requirement*)
 b. Social Science (completed by *Premajor and Major Requirements*)
 c. Humanities (partially completed by *USP Cross-Cultural Requirement*) 3
 III. Laboratory or Field Work (completed by *Major Requirement*) 6
 IV. Electives 6
College Requirement hours: 9-17

Premajor Requirements

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

plus one of the following:

SOC 235 Inequalities in Society
 SOC 299 Introductory Topics in Sociology
 (Subtitle required) 3

Premajor hours: 6

Major Core Requirements

SOC 302 Sociological Research Methods 3
 or
 PSY 215 Experimental Psychology 4
 SOC 303 Quantitative Sociological Analysis 3
 or
 PSY 216 Applications of Statistics
 in Psychology 4
 SOC 304 Classical Sociological Theory 3
 SOC 305 Contemporary Sociological Theory 3
Major Core hours: 12-14

Other Course Work Required for the Major

From the Major Department:

Choose 15 hours of 300+ level Sociology courses, at least 6 of which must be at the 400+ level 15

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 USP and College requirements can also be counted here. These courses must be chosen from the list that follows, or approved by a Sociology Undergraduate Advisor 15

A-H – all 200+ courses
 AAD 310, 340, 350, 399, 402, 499
 AAS – all 200+ courses
 AC – all 200+ courses
 AEC 201, 302, 303, 304, 305, 309, 316, 320, 324, 341, 410, 445G, 471, 479, 483, 532
 AED – all 200+ courses
 AEN 463G
 AIS 328, 330, 331, 435
 ANT – all 200+ courses
 APP – all 200+ courses
 ARC 222, 223, 314, 315, 324, 325, 332, 333, 461, 511, 512, 513, 514, 515, 589

BIO 325, 375
 BSC 331, 527, 529, 546
 CLA 210, 229, 230, 301, 302, 312, 313, 390, 426G, 450G, 509, 522, 523, 526, 527, 552, 553, 557
 CLD – all 200+ courses
 COM 249, 252, 281, 319, 325, 350, 351, 365, 381, 419, 449, 452, 453, 454, 462, 525, 555, 571, 581
 CPC 501
 ECO – all 200+ courses
 EDL 401
 EDP 202, 518, 522, 548, 557, 580
 EDS 516, 547
 EDU 305
 ENG 211, 212, 230, 231, 232, 233, 234, 261, 262, 264, 270, 271, 281, 283, 310, 330, 331, 332, 333, 334, 335, 336, 381, 382, 480G, 481G, 482G, 483G, 485G, 486G, 487G, 488G, 519, 570, 572
 ENS – all 200+ courses
 EPE 301, 317, 554, 555, 557, 570
 FAM 250, 252, 253, 254, 255, 258, 357, 360, 390, 401, 402, 475, 502, 509, 544, 553, 554, 563, 585
 FCS – all 200+ courses
 FR 350, 375, 450G, 465G, 470G, 504, 550, 553, 570
 GEN 200, 300, 301, 501
 GEO – all 200+ courses
 GER 263, 264, 311, 312, 317, 319, 361, 415G, 416G, 420G
 GRN 585
 GWS – all 200+ courses
 HES – all 300+ courses
 HIS – all 200+ courses
 HJS 324, 325, 425
 HMT 210, 270, 320, 330, 460, 470, 480, 488
 HON – all 200+ courses
 HP 501
 HSE 510
 HSM 260, 351, 353, 354, 450, 451, 452, 510, 511
 HUM – all 300+ courses
 IEC 508, 509, 552
 ISC 311, 321, 331, 341, 351, 361, 371, 431, 441, 451, 461, 491, 497, 541, 543
 ITA 443G, 563, 566, 569
 JAT 464, 508
 JOU 304, 319, 430, 455, 460, 485, 531, 532, 535
 JPN 320, 321, 334, all 400+ courses
 KHP 300, 330, 430, 485, 547, 573, 580, 585
 LA 205, 206
 LAS – all 200+ courses
 LIN 210, 211, 212, 310, 317, 319
 MAT 247, 315, 414, 425, 470, 480, 522, 533, 547
 MGT 301, 309, 320, 340, 341, 390, 410, 422, 423, 430, 491, 492, 499
 MKT 300, 310, 320, 330, 340, 390, 410, 430, 435, 445, 450
 MUS 201, 202, 203, 206, 222, 300, 301, 302, 303, 325, 330, 390, 400G, 500, 501, 502, 503, 504, 505, 506
 NFS 516
 NRC 301, 320, 330, 381, 555
 NUR 510, 512, 514
 OR 524, 525
 PHI – all 200+ courses
 PHR 222, 520
 PS – all 200+ courses
 PSY – all 200+ courses
 RC 510, 515, 516, 520, 530, 540, 547
 RUS 270, 271, 370, 380, 390, 400G, 499
 SPA 312, 314, 320, 322, 324, 361, 424, 432, 434, 438G, 444, 454, 464, 474, 512, 553
 ST 500
 STA – all 200+ courses
 SW 222, 300, 320, 322, 354, 400, 401, 420, 421, 430, 444, 445, 450, 470, 505, 510, 514, 515, 516, 523, 571, 580, 595
 TEL 201, 300, 310, 319, 320, 355, 453, 482, 510, 520, 525, 555
 UK 301

Other Major hours: 30

Electives

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

Total Minimum Hours Required for Degree 120

*Course used towards completion of a USP Requirement.

Bachelor of Science with a major in SOCIOLOGY

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. Please note: courses with a SOC prefix are generally not accepted towards fulfilling this 60-hour requirement. Therefore, be sure to keep this requirement in mind as you choose your course work for the requirements in the major. See the complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, on pages 103-104.

University Studies Program Requirements

I. Math 0-3
 II. Foreign Language (*placement exam recommended*) 0-8
 III. Inference–Logic 3-6
 IV. Written Communication 0-4
 V. Oral Communication 3
 VI. Natural Sciences 6
 VII. Social Sciences (partially completed by
Premajor Requirement) 3
 VIII. Humanities 6
 IX. Cross-Cultural (choose a *Humanities course*) 3
 X. Electives (choose two *Natural Science courses*) 6
USP hours: 30-48

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 72 of this Bulletin.

Graduation Writing Requirement Hours: .. 3

College Requirements

I. Foreign Language (*placement exam recommended*) 0-8
 II. Disciplinary Requirements
 a. Natural Science (completed by *USP Elective Requirement*)
 b. Social Science (completed by *Premajor and Major Requirements*)
 c. Humanities (completed by *USP Cross-Cultural Requirement*)
 III. Laboratory or Field Work (completed by *Major Requirement*)
 IV. Electives 6
College Requirement hours: 6-14

Premajor Requirements

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

plus one of the following:

SOC 235 Inequalities in Society
 SOC 299 Introductory Topics in Sociology
 (Subtitle required) 3

Premajor hours: 6

Major Core Requirements

SOC 302 Sociological Research Methods	3
or	
PSY 215 Experimental Psychology	4
SOC 303 Quantitative Sociological Analysis	3
or	
PSY 216 Applications of Statistics in Psychology	4
SOC 304 Classical Sociological Theory	3
SOC 305 Contemporary Sociological Theory	3
Major Core hours:	12-14

Other Course Work Required for the Major**From the Major Department:**

Choose 15 hours of 300+ level Sociology courses, at least 6 of which must be at the 400+ level

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 USP and College requirements can also be counted here. These courses must be chosen from the list that follows, or approved by a Sociology Undergraduate

Advisor	15
A-H – all 200+ courses	
AAD 310, 340, 350, 399, 402, 499	
AAS – all 200+ courses	
AC – all 200+ courses	
AEC 201, 302, 303, 304, 305, 309, 316, 320, 324, 341, 410, 445G, 471, 479, 483, 532	
AED – all 200+ courses	
AEN 463G	
AIS 328, 330, 331, 435	
ANT – all 200+ courses	
APP – all 200+ courses	
ARC 222, 223, 314, 315, 324, 325, 332, 333, 461, 511, 512, 513, 514, 515, 589	
BIO 325, 375	
BSC 331, 527, 529, 546	
CLA 210, 229, 230, 301, 302, 312, 313, 390, 426G, 450G, 509, 522, 523, 526, 527, 552, 553, 557	
CLD – all 200+ courses	
COM 249, 252, 281, 319, 325, 350, 351, 365, 381, 419, 449, 452, 453, 454, 462, 525, 555, 571, 581	
CPC 501	
ECO – all 200+ courses	
EDL 401	
EDP 202, 518, 522, 548, 557, 580	
EDS 516, 547	
EDU 305	
ENG 211, 212, 230, 231, 232, 233, 234, 261, 262, 264, 270, 271, 281, 283, 310, 330, 331, 332, 333, 334, 335, 336, 381, 382, 480G, 481G, 482G, 483G, 485G, 486G, 487G, 488G, 519, 570, 572	
ENS – all 200+ courses	
EPE 301, 317, 554, 555, 557, 570	
FAM 250, 252, 253, 254, 255, 258, 357, 360, 390, 401, 402, 475, 502, 509, 544, 553, 554, 563, 585	
FCS – all 200+ courses	
FR 350, 375, 450G, 465G, 470G, 504, 550, 553, 570	
GEN 200, 300, 301, 501	
GEO – all 200+ courses	
GER 263, 264, 311, 312, 317, 319, 361, 415G, 416G, 420G	
GRN 585	
GWS – all 200+ courses	
HES – all 300+ courses	
HIS – all 200+ courses	
HJS 324, 325, 425	
HMT 210, 270, 320, 330, 460, 470, 480, 488	
HON – all 200+ courses	
HP 501	
HSE 510	
HSM 260, 351, 353, 354, 450, 451, 452, 510, 511	
HUM – all 300+ courses	
IEC 508, 509, 552	

ISC 311, 321, 331, 341, 351, 361, 371 431, 441, 451, 461, 491, 497, 541, 543	
ITA 443G, 563, 566, 569	
JAT 464, 508	
JOU 304, 319, 430, 455, 460, 485, 531, 532, 535	
JPN 320, 321, 334, all 400+ courses	
KHP 300, 330, 430, 485, 547, 573, 580, 585	
LA 205, 206	
LAS – all 200+ courses	
LIN 210, 211, 212, 310, 317, 319	
MAT 247, 315, 414, 425, 470, 480, 522, 533, 547	
MGT 301, 309, 320, 340, 341, 390, 410, 422, 423, 430, 491, 492, 499	
MKT 300, 310, 320, 330, 340, 390, 410, 430, 435, 445, 450	
MUS 201, 202, 203, 206, 222, 300, 301, 302, 303, 325, 330, 390, 400G, 500, 501, 502, 503, 504, 505, 506	
NFS 516	
NRC 301, 320, 330, 381, 555	
NUR 510, 512, 514	
OR 524, 525	
PHI – all 200+ courses	
PHR 222, 520	
PS – all 200+ courses	
PSY – all 200+ courses	
RC 510, 515, 516, 520, 530, 540, 547	
RUS 270, 271, 370, 380, 390, 400G, 499	
SPA 312, 314, 320, 322, 324, 361, 424, 432, 434, 438G, 444, 454, 464, 474, 512, 553	
ST 500	
STA – all 200+ courses	
SW 222, 300, 320, 322, 354, 400, 401, 420, 421, 430, 444, 445, 450, 470, 505, 510, 514, 515, 516, 523, 571, 580, 595	
TEL 201, 300, 310, 319, 320, 355, 453, 482, 510, 520, 525, 555	
UK 301	
Other Major hours:	30

Electives

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

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

Minor in Sociology**Hours****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
Premior 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 (or PSY 215) and SOC 303 (or PSY 216)	
or	
SOC 304 and SOC 305	
or	
SOC 302 (or PSY 215) and SOC 304	

Any student wishing to minor in sociology should file an application with the Director of Undergraduate Studies in Sociology prior to entering the program.

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 degrees are offered.

Research is being actively pursued in statistical theory and methods, both parametric and nonparametric, linear models, inference, stochastic processes, applied probability, and biostatistics.

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

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 17 hours of course work is required to complete the minor, as follows:

Track 1

STA 291 Statistical Method	3
STA 295 The Art and Practice of Probability	3
STA 322 Statistical Methods in Nonparametric Inference and Survey Sampling	4
STA 422 Basic Statistical Theory II	4

Track 2

STA 320 Introductory Probability	3
STA 321 Basic Statistical Theory I	3
STA 322 Statistical Methods in Nonparametric Inference and Survey Sampling	4
STA 422 Basic Statistical Theory II	4

plus one relevant course from the student's area (3 credit hours) to be approved by the Department of Statistics.

INTERDISCIPLINARY MINORS**African American Studies**

The minor in African American 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:

- AAS 200 Introduction to African-American Studies
- AAS 400 Special Topics in African-American Studies
- AAS 401 Independent Reading and Research in African-American Studies
- a. At least **six** hours of course work in the humanities (as approved by the African American Studies Committee). Among these are:

ENG 264 Major Black Writers	
FR 504 Topics in French Literature and Culture (if appropriate)	

HIS 254 History of Sub-Saharan Africa
 HIS 260 African American History to 1865
 HIS 261 African American History 1865-Present
 HIS 360 Race and Sports in America
 HIS 585 The Age of Jim Crow, 1880-1930
 MUS 300 History of Jazz
 PHI 300 Undergraduate Seminar (if appropriate)
 SPA 468G Twentieth Century Spanish American Literature in Translation (if appropriate)

4. b. At least six hours in the social sciences (as approved by the African American Studies Committee). Among these are:

AAS 432 Race and Ethnic Relations
 ANT 431G Cultures and Societies of Sub-Saharan Africa
 EDC 550 Education in a Culturally Diverse Society
 GEO 336 Geography of Sub-Saharan Africa
 PS 417G Survey of Sub-Saharan Politics
 PS 461G Civil Liberties
 PS 471 Race, Ethnicity and Politics
 SOC 235 Inequalities in Society

NOTE: Courses in English and history are strongly recommended.

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. AC 301 Topics in American Culture
2. AC 401 Perspectives in American Culture
3. Four additional courses (12 hours) from the following list of approved courses. No more than two courses (or six hours) may be taken in any one discipline:

Art History: A-H 342

Anthropology: ANT 221, ANT 342, ANT 470G, ANT 527, ANT 534

English: ENG 310, ENG 480G

Geography: GEO 320, GEO 321, GEO 322, GEO 490G

History: HIS 260, HIS 261, HIS 265, HIS 350, HIS 351, HIS 460, HIS 461, HIS 463, HIS 464, HIS 465, HIS 466, HIS 467, HIS 572, HIS 573, HIS 574, HIS 575, HIS 576, HIS 577, HIS 578, HIS 579, HIS 580, HIS 581, HIS 582, HIS 584, HIS 585, HIS 586, HIS 596

Music: MUS 206, MUS 222, MUS 300, MUS 301, MUS 506

Philosophy: PHI 514

Political Science: PS 430G, PS 456G, PS 458, PS 461G, PS 463G, PS 465G, PS 470G, PS 475G, PS 479, PS 484G, PS 545

Sociology: SOC 340, SOC 534

For further information, contact Associate Professor Joanne Melish, 1727 Patterson Office Tower, (859) 257-1014.

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, social structure, and culture of the region—its people, its problems, 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 fifteen hours of Appalachian Studies courses. These courses must be chosen from the list below, or approved by the Director of Appalachian Studies:

APP 300 Topics in Appalachian Studies (Subtitle required)
 APP 395 Independent Study
 APP 399 Practicum
 ENG 232 Literature and Place (if appropriate)
 GEO 365 Special Topics in Regional Geography (Subtitle required) (if appropriate)
 HIS 579 History of the New South
 HIS 580 History of Appalachia
 MUS 301 Appalachian Music
 PS 456G Appalachian Politics
 SOC 343 Political Sociology (if appropriate)
 SOC 534 Sociology of Appalachia
 SOC 735 Topics in Social Inequalities (if appropriate)

Note: Introduction to Appalachian Studies (APP 200) is strongly recommended. Individually arranged courses in independent study and experiential education may be counted toward the minor if approved by an Appalachian Studies advisor. Special Topics courses offered by the various departments may also be counted, if appropriate.

For more information about a minor in Appalachian Studies, contact the Director of Appalachian Studies, Dr. Ron Pen, (859) 257-8183 or e-mail at: rapen01@uky.edu. For general information about service and research in the region, contact the Appalachian Center, 624 Maxwellton Ct., Lexington, KY 40506-0347, (859) 257-4852.

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 in mind of getting students to satisfy (a); and distribution requirements aim to put students in a position to satisfy (b) and (c).

To receive an undergraduate minor in Cognitive Science, the student must successfully complete 18 credit hours to be distributed as follows:

1. CGS 500 Cognitive Science in Theory and Practice 3
2. **Fifteen credits** from among the following:
 *ANT 332 Human Evolution
 BIO 375 Behavioral Ecology and Sociobiology
 BIO 535 Comparative Neurobiology and Behavior
 BIO 550 Comparative Physiology
 BIO 556 Communication Biology
 COM 350 Language and Communication
 CS 375 Logic and the Theory of Computing (may not be combined with PHI 520)
 CS 463G Introduction to Artificial Intelligence
 *CS 521 Computational Sciences
 CS 536 Situated Computing
 CS 575 Models of Computation (may not be combined with PHI 520)
 LIN 210 History of the English Language
 LIN 211 Introduction to Linguistics I
 LIN 212 Introduction to Linguistics II
 LIN 318 Semantics and Pragmatics
 LIN 319 Historical Linguistics
 LIN 512 Modern English Grammar
 *LIN 513 Teaching English as a Second Language
 LIN 515 Phonological Analysis
 LIN 516 Grammatical Analysis
 LIN 517 Special Topics in Linguistics (Subtitle required)
 PHI 320 Symbolic Logic I
 PHI 361 Biology and Society
 PHI 520 Symbolic Logic II (may not be combined with CS 375, 575, or 675)
 PHI 560 Philosophy of Scientific Method
 PHI 565 Philosophy of Language
 PHI 575 Philosophy of Mind
 *PSY 223 Developmental Psychology
 PSY 311 Learning and Cognition
 PSY 312 Brain and Behavior
 PSY 427 Cognitive Processes
 PSY 456 Behavioral Neuroscience
 PSY 552 Animal Behavior
 PSY 562 Advanced Topics in Cognitive Psychology (Subtitle required)
 PSY 564 Advanced Topics in Learning (Subtitle required)
 PSY 565 Advanced Topics in Neuroscience (Subtitle required)
 *PSY 566 Advanced Topics in Social Psychology (Subtitle required)

Of the fifteen credit hours of courses from this list, (1) at least six credit hours must be in the same core discipline, where core disciplines are biology, computer science, linguistics, philosophy, and psychology; and (2) no more than six credit hours from any single discipline will count towards satisfaction of the requirement.

*Only by approval of the Director of Cognitive Science. The main criterion for approval will be the extent to which the course, as taught during the semester for which the student seeks cognitive science credit, contains a sufficient amount of materials relevant to cognitive science. The Director will make this determination by consultation with relevant faculty from the department teaching the course (including the instructor of the course), in conjunction with the criteria for course inclusion outlined on the Cognitive Science Web page.

For more information, visit the Cognitive Science Web site at: www.as.uky.edu/interProg/CogSci/; or contact Professor S. Goldberg, 1427 Patterson Office Tower, Department of Philosophy, (859) 257-6540, scgold@uky.edu.

Environmental 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 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 Studies requires 18 hours of course work including the following:

1. ENS 200 Introduction to Environmental Studies* 3
 2. Six hours chosen from the following list of **socio-cultural** perspectives:
 - ANT 375 Ecology and Social Practice 3
 - GEO 210 Pollution, Hazards, and Environmental Management 3
 - GEO 550 Sustainable Resource Development and Environmental Management 3
 - PS 391 Special Topics in Political Science (Subtitle required) 3
 - PS 456G Appalachian Politics 3
 - ENS 300 Special Topics (Subtitle required) 3
 - ENS 395 Independent Work 3
 3. Six hours chosen from the following list of **science and technology** perspectives:
 - FOR 205 Forest and Wildland Soils and Landscapes 4
 - FOR 340 Forest Ecology 3
 - FOR 350 Silviculture 4
 - GEO 251 Weather and Climate 3
 - GLY 341 Landforms 3
 - GLY 585 Hydrogeology 3
 - BIO 325 Introductory Ecology 4
 - ENS 300 Special Topics (Subtitle required) 3
 - ENS 395 Independent Work 3
 4. ENS 400 Senior Seminar (Subtitle required)* 3
- *ENS 200 and ENS 400 satisfy the University Studies cross-disciplinary requirement.

At least six of the twelve elective hours must be at the 300-level or above.

Elective courses must be drawn from outside the student's major.

Alternative elective courses may be approved by the Environmental Studies Program Director.

For further information, contact Professor Ernest J. Yanarella, 1659 Patterson Office Tower, (859) 257-2989, e-mail: ejyana@email.uky.edu.

Gender and Women's Studies

The Gender and Women's Studies program assists students who wish to develop undergraduate majors in Gender and Women's Studies under the Topical Studies major program. For more information, see “Topical Studies Majors” in the *College of Arts and Sciences* section of this Bulletin. Students undertaking a Topical Major in Gender and Women's Studies will need to develop their curriculum with a GWS faculty member.

The minor in Gender and Women's Studies provides students an opportunity to examine and integrate the contributions of established academic disciplines in understanding the historical and contemporary roles and status of women. Also, the program provides a framework for research and analyses which focus upon women's issues. The minor requires 21 hours of course work, as outlined below:

- GWS 200 Introduction to Gender and Women's Studies in the Social Sciences
 - or
 - GWS 201 Introduction to Gender and Women's Studies in the Arts and Humanities 3
 - GWS 350 Introduction to Feminist Theorizing 3
 - GWS 399 Internship in Gender and Women's Studies 3
 - *GWS 416 Cross-Cultural Perspectives in Gender and Women's Studies 3
- Plus an additional nine hours of electives to be selected with the approval of the Director of the Gender and Women's Studies Program.
- *GWS 416 is offered every other year; please check with the Gender and Women's Studies Program for more information.

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.

For further information, contact Professor Deborah Crooks, Director of Gender and Women's Studies, 112 Breckinridge Hall, (859) 257-1388.

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) an ability to read Sanskrit (vital for comprehending Indian culture); (2) a well-rounded, multidisciplinary understanding of the culture and geography of India and of contemporary Indian society and politics; and (3) 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:

1. **Sanskrit Language Courses** (6 hours)
 - LIN 520 Sanskrit I 3
 - LIN 521 Sanskrit II 3

2. Twelve hours of courses on India from anthropology, English, geography, linguistics, mathematics, philosophy, political science, sociology, and independent studies in India. Students choose from the following courses:

- *ANT 327 Culture and Societies of India 3
- *GEO 330 Geography of South Asia 3
- GEO 365 Special Topics in Regional Geography (Subtitle required) 3
- GEO 565 Topics in Geography 3
- LIN 395 Independent Work 3
- MA 330 History of Mathematics 3
- *PHI 343 Asian Philosophy 3
- *PS 420G Governments and Politics of South Asia .. 3
- *SOC 380 Globalization: A Cross-Cultural Perspective 3

*Also satisfies the USP cross-cultural requirement.

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 further information, contact Professor Gregory Stump (English and linguistics), 1253 Patterson Office Tower, (859) 257-1184; Professor Paul Karan (geography), 1439 Patterson Office Tower, (859) 257-6953; or Professor Avinash Sathaye (mathematics), 703 Patterson Office Tower, (859) 257-8832.

Islamic Studies

The interdisciplinary minor in Islamic Studies provides the opportunity to study the culture, language, literature, religion, history and philosophy of Muslim peoples throughout the world from antiquity to the present. Students will acquire a rounded understanding of Islamic culture, the ability to interpret information and news from the Middle East and elsewhere in an independent way, with understanding of the issues from the perspective of the Muslim countries, and will be prepared to pursue careers that require a knowledge of Islamic civilization.

1. Minor Requirements (6 hours)

- AIS 328 Islamic Civilization I 3
- AIS 330 Islamic Civilization II 3

2. Minor Electives (12 hours)

- AIS 101 Elementary Modern Standard Arabic 4
- AIS 102 Elementary Modern Standard Arabic 4
- AIS 201 Intermediate Modern Standard Arabic 3
- AIS 202 Intermediate Modern Standard Arabic 3
- HIS 247 History of Islam and Middle East Peoples, 500-1250, A.D. 3
- HIS 248 History of Islam and Middle East Peoples, 1250 to the Present 3
- AIS 301 Colloquial Arabic I 3
- AIS 302 Colloquial Arabic II 3
- AIS 331 Classical Arabic Literature (in English) 3
- AIS 338 Women and Islam 3
- AIS 340 Fundamentalism and Reform in Islam 3
- AIS 395 Independent Work in Arabic/Islamic Studies 1-3
- AIS 440 Introduction to the Quran 3
- AIS 442 Arabic Reading I 3
- AIS 443 Arabic Reading II 3
- AIS 435 Topics in Islamic Studies: (Subtitle required) 3
- AIS 495G Advanced Independent Work in Arabic/Islamic Studies 1-3
- PHI 504 Islamic and Jewish Philosophy and the Classical Tradition 3
- HIS 548 History of the Middle East: 1453-1920 3

HIS 549 History of the Middle East: 1952 to the Present	3
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Note: Other courses in the area may be elected with the approval of the chair of the department.

For further information, contact Professor Suleiman Darrat, 1073 Patterson Office Tower, (859) 257-7037; e-mail: sdarrat@uky.edu.

Japan Studies

The Japan Studies minor complements existing majors and prepares students with the skills that are required to work with Japan given its integral place in international business. Students will also become well-versed in the culture and geography of Japan, its history, arts, and environment. This background will prepare students for Japan-related careers in the United States and abroad.

This 23-hour program consists of (1) 14 hours of Japanese language courses, (2) 6 hours of Japanese cultural studies, and (3) 3 hours of elective courses on contemporary East Asian history, politics, and society.

The Japan Studies Program maintains a University of Kentucky Summer Field Station at Yatsushiro (Kyushu) on the campus of the IEC Kyushu International College for summer field research and instruction. Summer field seminars are offered at this site each year. Details at: www.uwplatt.edu/geography/japan.

1. Japanese Language Courses (14 hours)	
JPN 101 Beginning Japanese I	4
JPN 102 Beginning Japanese II	4
JPN 201 Intermediate Japanese I	3
JPN 202 Intermediate Japanese II	3
2. Japanese Cultural Studies (6 hours)	
GEO/JPN 334 Environment, Society and Economy of Japan	3
ENG 283 Japanese Film	3
JPN 320 Introduction to Japanese Culture, Pre-Modern to 1868	3
JPN 321 Introduction to Japanese Culture, Meiji (1868) to Present	3
3. Contemporary East Asian History, Politics, and Society (3 hours)	
HIS 295 East Asia to 1800	3
HIS 296 East Asia Since 1800	3
HIS 597 Westerners in East Asia, 1839 to the Present	3
ANT 326 Peoples of East Asia	3
PS 419G The Governments and Politics of Eastern Asia	3
GEO 333 Geography of East Asia	3
COM 525 Organizational Communication	3
JPN 395 Independent Work in Japanese	1-6
JPN 405 Seminar in Japanese and Asian Studies (Subtitle required)	3
GEO/JPN 491G Japanese Landscapes	3
GEO/JPN 551 Japanese Multinational Corporations	3

For further information, contact Professor Doug Slaymaker, Director, Japan Studies Program, (859) 257-7557 or (859) 257-3761; e-mail: nihongo.web@spamex.com.

Judaic Studies

The interdisciplinary minor in Judaic 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.

The minor in Judaic 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
PHI 504 Islamic and Jewish Philosophy and the Classical Tradition	3
CLA 390 Roman, Jew and Greek: Backgrounds to Christianity	3
HIS 330 A History of Western Religious Thought (I)	3
HIS 323 The Holocaust	3
ENG 270 The Old Testament as Literature	3
HJS 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 six credit hours.

*HJS 324 and HJS 325 satisfy the University Studies humanities requirement.

For further information, contact Professor Oliver Leaman, Director of Judaic Studies Program, 1415 Patterson Office Tower, (859) 323-2272.