

# COLLEGE OF ARTS AND SCIENCES

*The College of Arts and Sciences is, from both historical and functional points of view, the core of the modern university. The College of Arts and Sciences views creativity, inquiry and understanding as among the greatest values in human experience. Thus, it is dedicated to the questioning, creation and transmission of knowledge; to the provision of undergraduate and graduate educational programs that are responsive to the need for an enlightened and productive citizenry; and to the provision of programs*

---

## AEROSPACE STUDIES MINOR (18 HOURS)

---

*Select two three-hour courses from upper-level political science (POL) courses, or substitute upper-level courses from history (HIS), geography (GEO), or social science (SOC) courses with the approval of the Department of Aerospace Studies chair.*

---

## ANTHROPOLOGY MINOR (18 HOURS)

---

*Select at least 12 hours of additional 3000/4000-level anthropology courses as approved by your faculty adviser.*

---

## ARCHIVAL STUDIES MINOR (18 HOURS)

---

---

## BIOLOGY MAJOR (43 HOURS)

---

### Specialized General Studies Requirements

#### Area III

#### Area V

*Select one sequence (physics sequence not required for medical technology concentration):*

*or*

### Major Requirements

## BIOLOGY EDUCATION

---

---

Select one botany course with its corresponding lab:

Select one zoology course with its corresponding lab:

Select one upper-level adviser-approved biology course and its corresponding lab.

---

**BIOLOGY MINOR (18-20 HOURS)**

---

Lectures and the corresponding labs must be taken together:

Select 2-4 additional semester hours of approved upper-level (3300 or above) biology courses with corresponding labs.

---

**BIOLOGY PROGRAM (55 HOURS)**

---

**Specialized General Studies Requirements**

**Area III**

Select one ecology/environmental course with its corresponding lab:

**Area V**

Select one physiology/cell/molecular course with its corresponding lab:

Select one sequence (physics sequence not required for medical technology concentration):

or

## **Requirements**

*Select one of the four concentrations shown below (cell and molecular biology, general biology, ecology and field biology, or medical technology):*

### **• Cell and Molecular Biology Concentration**

*Select 16 hours (four lectures with labs) from the courses listed below:*

### **• General Biology Concentration**

*Select one botany course with its corresponding lab:*

BIO 4480/4471 y80rresponding lab:

*Study (BIO 4493/4494) may be taken for up to six of these credits. BIO 4491 and 4493 may be mixed and taken in any sequence for up to six credits. However, the two course sequences of BIO 4491/4492 and BIO 4493/4494 may not be taken for more than six credits regardless of the mix. The 16 hours chosen should be based on the student's future plans (employment, graduate school, or professional school).*

*Select eight semester hours of upper-level general electives.*

**• Ecology and Field Biology Concentration**

*Select 12 hours (three courses with labs) from the three categories below. At least one course must be taken from each of the three categories.*

***Zoology***

***Botany***

***Ecology***

*Select an additional eight hours of adviser-approved BIO or MB courses.*

**• Medical Technology Concentration**

*Students must complete 29 semester hours on the Troy campus prior to applying for an internship.*



**Chemistry, Mathematics, and Physics Core Courses**

Select a minimum of 8 semester hours of coursework from the following:

- **Physics Concentration**

Select 8 hours of upper level physics or chemistry courses approved by the academic adviser.

---

**COMPUTER SCIENCE, APPLIED MAJOR  
(36 HOURS)**

---

**Specialized General Studies Requirements**

**Area III**

Select additional Area III requirements as shown in the General Studies section of this catalog.

**Area V**

**Major Requirements**

Select three of the following:

---

**COMPUTER SCIENCE A.S. DEGREE (60 HOURS)**

---

**Associate of Science Degree**

See the academic regulations section of this bulletin for additional information regarding associate degrees.

**Area I**

**Area II**

Select one:

Select one:

**Area III**

Select one:

**Area IV**

Select one science course and corresponding lab:

**Area V**

*(Montgomery campus only)*

**Area VI**

**Area VII**

*Select 7-10 hours of free electives.*

---

**COMPUTER SCIENCE MINOR (18 HOURS)**

---

*Select 12 semester hours of computer science courses with at least one course being at the 4000 level.*

---

**COMPUTER SCIENCE PROGRAM (49 HOURS)**

---

**General Studies Requirements**

**Area III**

*Select remaining Area III courses as shown in the General Studies section of this catalog.*

**Area V**

**Required Courses:**

*Select two of the following:*



· **Professional Writing Emphasis**

---

**ENGLISH—LANGUAGE ARTS PROGRAM  
(139 HOURS)**

*Select an additional four courses:*

---

**ENGLISH MINOR (18 HOURS)**

---

*Select one sequence:*

*Select an additional nine hours of upper division English courses.*

---

**ENGLISH MINOR, CREATIVE WRITING (18 HOURS)**

---

*Select an additional 15 hours from the following:*

---

**ENGLISH MINOR, PROFESSIONAL WRITING  
EMPHASIS (18 HOURS)**

---

*Select an additional six hours from the following:*



Select one science course and corresponding lab:

*\*repeat once for a total of 6 hours*

---

**FRENCH MINOR (18 HOURS)**

---

Select 18 hours of approved courses in French.

---

**GENERAL EDUCATION A.A. DEGREE (60 HOURS)**

---

*Associate of Arts Degree*

*See the academic regulations section of this bulletin for additional information regarding associate degrees.*

**Area I**

**Area II**

Select one:

Select one:

Select six hours of one foreign language.

**Area III**

Select one:

**Area IV**

Select one:

**Area V**

*(Montgomery campus only)*

**Area VI**

Select any minor or area of concentration.

**Area VII**

Select additional free electives to complete a total of 60 hours.

---

**GENERAL EDUCATION A.S. DEGREE (60 HOURS)**

---

*Associate of Science Degree*

*See the academic regulations section of this bulletin for additional information regarding associate degrees.*

**Area I**

**Area II**

Select one:

Select one:

**Area III**

Select one:

**Area IV**

Select one:

Select one science course and corresponding lab:

**Area V**

(Montgomery campus only)

**Area VI**

Select any minor or area of concentration.

**Area VII**

Select additional free electives to complete a total of 60 hours.

---

**GEOGRAPHIC INFORMATION SYSTEMS (GIS)  
MINOR (18 HOURS)**

---

With adviser approval, select a minimum of eight credit hours from one of the four bundles:

**Data Collection/Analysis**

**Image Processing**

**Customizing the ArcView GIS Interface**

**GIS Database Development**

---

**GEOGRAPHY MINOR (18 HOURS)**

---

Select an additional 12 hours of approved, upper-level geography courses. GEO 2210 may not be counted toward both general studies and the geography minor.

---

**GEOMATICS MAJOR (47 HOURS)**

---

**Specialized General Studies Requirements**

**Area II**

Select the following in lieu of ART 1133:

Select remaining Area II courses as specified in the General Studies section of this catalog.

**Area III**

**Area IV**

Select one history sequence as specified in the General Studies section of this catalog.

**Area V**

**Major Requirements**

**Select one emphasis:**

• **American/Latin American History Emphasis**

Select 15 hours of upper-level American/Latin American courses in addition to either HIS 3316 or 4406.

Select an additional 9 hours of upper-level European/Asian/African courses in addition to HIS 4451.

• **European/Asian/African History Emphasis**

Select 15 hours of upper-level European/Asian/African courses in addition to HIS 4451.

Select an additional 9 hours of upper-level American/Latin American courses in addition to either HIS 3316 or 4406.

---

**HISTORY MAJOR (36 HOURS)**

---

**Select one emphasis below.**

• **AMERICAN/LATIN AMERICAN EMPHASIS**

**Specialized General Studies Requirements**

**Area IV**

Select a six hour sequence in western civilization or world history.

Select additional Area IV courses as specified in the General Studies section of this catalog.

**Area V**

*NOTE: It is strongly recommended that each student gain work experience with a professional surveyor or geomatics firm after completion of the sophomore year.*

---

**HISTORY EDUCATION (36 HOURS)**

---

**Specialized General Studies Requirements**

**Area IV**

Select one six-hour sequence:

**Area V**

**Requirements for the Major**

Select 18 hours of approved upper-level American/Latin American courses.

Select 12 hours of approved upper-level European/Asian/African courses.

• **CIVIL RIGHTS EMPHASIS**

**Specialized General Studies Requirements**

**Area IV**

Select a six hour sequence in western civilization or world history.

Select six additional Area IV courses as specified in the General Studies section of this catalog.

**Area V**

**Requirements for the major**



Select three courses:

Select one of the following:

or  
or

Or both of the following:

Select four semester hours of marine biology elective(s).  
Select eight semester hours of upper-level general electives other than biology.

Students selecting MTH 4451 and MTH 4452: select 9 more hours of mathematics courses at the 3000 level and above (excluding MTH 4481).

Students selecting MTH 4425 or MTH 4442: select 12 hours of mathematics courses at the 3000 level and above (excluding MTH 4481).

---

**MATHEMATICS EDUCATION**

---

Students seeking Alabama teacher certification should select mathematics as a first major and education as a second major. Students should consult with their advisers concerning all certification requirements.

Students seeking Alabama teacher certification must select MTH 3325 and MTH 4451.

---

**MATHEMATICS MAJOR (38 HOURS)**

---

---

**MATHEMATICS MINOR (18 HOURS)**

---

**Specialized General Studies Requirements****Area III**

Select a four hour course/lab combination from the following:

Select an additional three hours of math courses at the 3000 level and above, other than those courses whose catalog description declares that they do not count toward the major or minor.

---

**MILITARY SCIENCE MINOR (16 HOURS)**

---

Select three or four hours from the following. Note that MTH 1125 is preferred.

---

**PHYSICAL SCIENCE MINOR (19-20 HOURS)**

---

**Area V**

(if not taken in Area III)

Select one series:

(if not taken in Area III)

**Requirements for the Major**

Select an upper-level course in chemistry or physics (3-4 SH).

---

**PHYSICS MINOR (19 HOURS)**

---

*Select six hours from the following:*

*Select one series:*

*Select an additional four hours of adviser-approved, upper-level physics courses.*

---

**POLITICAL SCIENCE MAJOR (36 HOURS)**

---

**Specialized General Studies Requirements****Area V**

*Select an additional 15 hours of upper-level (3000-4000) political science courses, as approved by your academic adviser.*

**• Public Administration Concentration**

*Select 15 hours from the following:*

**Major Requirements**

*Select an additional 15 hours of upper-level political science*

*Select one of the following concentrations:*

**• American Politics Concentration**

*Select 15 hours from the following:*

*Select an additional 15 hours of upper-level (3000-4000) political science courses, as approved by your academic adviser.*

**• International Politics Concentration**



---

**SOCIAL SCIENCE MAJOR (36 HOURS)**

---

**Specialized General Studies Requirements  
AREA IV (12 SH)****Requirements for the Major**

Select one concentration:

**• Concentration 1: Anthropology**

Select at least 18 hours of additional 3000/4000-level anthropology courses as approved by your faculty adviser.

**• Concentration 2: General Social Science**

Select at least 24 hours of additional 3000/4000-level courses from anthropology, economics, geography, history, political science, psychology or sociology (six hours may be used from ECO 2251, ECO 2252, GEO 2210, ANT 2200, POL 2260 [World Politics], or SOC 2230) in at least three disciplines.

**• Concentration 3: Geography**

Select at least 18 hours of additional 3000/4000-level courses as approved by your faculty adviser:

**• Concentration 4: Leadership**

Select an additional 18 hours from the following:

**• Concentration 5: Sociology**

Select at least 24 hours of additional 3000/4000-level sociology courses as approved by your faculty adviser.

---

**SOCIAL SCIENCE MINOR: GENERAL SOCIAL  
SCIENCE (18 HOURS)**

---

Select an additional 15 hours from at least three of the following: anthropology, economics, geography, history, political science, psychology or sociology. At least 12 hours must be 3000/4000 level.

---

**SOCIAL SCIENCE MINOR: LEADERSHIP (18 HOURS)**

---

Select an additional nine hours from the following:

