





CHM 1142 (3) General Chemistry I  
CHM L142 (1) General Chemistry I Lab  
MTH 1125 (4) Calculus I

BIO 1101 (3) Organismal Biology  
BIO L101 (1) Organismal Biology Lab  
CHM 1143 (2) General Chemistry II  
CHM L143 (1) General Chemistry II Lab  
IS 2241





PHY 2262 (3) Physics I with Calculus  
PHY L262 (1) Physics I with Calculus Lab  
PHY 2263 (3) Physics II with Calculus  
PHY L263 (1) Physics II with Calculus Lab

Requirements for the major

*Lectures and their corresponding labs must be taken together.*

BIO 2200 (3) Principles of Cell Biology  
BIO L200 (1) Principles of Cell Biology Lab  
BIO 2229 (3) General Ecology  
BIO L229 (1) General Ecology Lab  
BIO 3320 (3) Genetics  
BIO L320 (1) Genetics Lab  
CHM 3342 (3) Organic Chemistry I  
CHM L342

*Select four additional hours of advanced chemistry courses, such as*

CHM 2242 (3) Analytical Chemistry  
CHM L 242 (1) Analytical Chemistry Lab  
CHM 3352 (3) Biochemistry  
CHM L 352 (1) Biochemistry Lab

Note: The chemistry minor requires 20 hours in addition to the hours required for a major in another discipline. For example, the biology major requires Organic Chemistry II and lab, so a student majoring in biology would need to select eight, not four, additional hours of advanced chemistry courses.

#### COMPREHENSIVE GENERAL SCIENCE PROGRAM





CJ 4475	(3)	Seminar in Cyber Security
CS 3310	(3)	Foundations of Computer Science

*Select 15 hours from the following. See Course Descriptions for pre-requisites and restrictions:*

CJ 1101	(3)	Introduction to Criminal Justice
CJ 4473	(3)	Computer Forensics
CJ 4472	(3)	Cyber Crime
CS 3375	(3)	Foundations of Networking
		OR
CS 4445	(3)	Data Communication and Networking
CS 4449	(3)	Applied Networking
CS 3380	(3)	Cyber Security
		OR
CS 4451	(3)	Computer Security

Students may not receive academic credit for both CS 3375 and CS 4445, or CS 3380 and CS 4451.

A certificate in Cyber Security with the same requirements as the Cyber Security Minor is available. Computer Science majors should contact the Department of Computer Science for information about the certificate program. All other students interested



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GEOGRAPHIC INFORMATION SYSTEMS (GIS)  
MINOR (18 HOURS)

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GEM 3390	(3)	Introduction to GIS
GEM L 390	(1)	Introduction to GIS Lab
GEM 3391	(3)	Applications of GIS
GEM L 391	(1)	Applications of GIS Lab
GEM 4499	(2)	Geomatics/GIS Projects

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

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GEM 2200	(3)	Basics of Cartography & Surveying
GEM L 220	(1)	Basics of Cartography & Surveying Lab
GEM 3330	(3)	Advanced Measurement Analysis
GEM L 330	(1)	Advanced Measurement Analysis Lab
GEM L 371	(1)	Measurement for GIS Lab

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GEM 1100	(1)	Computer-Aided Drafting
GEM L 110	(2)	Computer-Aided Drafting Lab
GEM 3366	(3)	Photogrammetry and Remote Sensing
GEM L 366	(1)	Photogrammetry and Remote Sensing Lab
GEM L 367	(1)	Digital Images in GIS Lab

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CS 2255	(3)	Computer Science II
CS 3330	(3)	Data Structures and Algorithms
CS 3360	(3)	Concepts of Object Oriented Programming I

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CS 2255	(3)	Computer Science II
CS 3323	(3)	Data Structures
CS 4420	(3)	Introduction to Database Systems

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GEOGRAPHY MINOR (18 HOURS)

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GEO 3300	(3)	Principles of Physical Geography
GEO 3301	(3)	Principles of Cultural Geography

*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.*

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HISTORY EDUCATION (36 HOURS)

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

Specialized General Studies Requirements

POL 2241	(3)	American National Government
SOC 2275	(3)	Introduction to Sociology
<i>Select one six-hour sequence:</i>		
HIS 1101	(3)	Western Civilization I, or placement
HIS 1102	(3)	Western Civilization II, or placement
HIS 1122	(3)	World History to 1500
HIS 1123	(3)	World History from 1500
GEO 2210	(3)	World Regional Geography
HIS 1111	(3)	U.S. to 1877, or placement
HIS 1112	(3)	U.S. since 1877, or placement
IS 2241	(3)	Computer Concepts and Apps.

TROY 1101 (1) University Orientation

Requirements for the Major

HIS 3375	(3)	Research and Methodology
HIS 4490	(3)	Senior Seminar

*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 nine hours of upper*

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Requirements for the Major

HIS 3375 (3) Research and Methodology

HIS 4490 (3) Senior Seminar

*Select 18 hours of approved, upper-level European/Asian/African courses.*

*Select 12 hours of approved, upper-level American/Latin American courses.*

Public History Emphasis

Specialized General studies Requirements

Area IV

*Select a six hour sequence i*

## Elective Courses (9 hours)

*Select any two (2) courses from the following:*

- CJ 2241 (3) Survey of Law and Criminal Procedure  
 CJ 4447 (3) Current Issues in Legal Systems  
 Operation and Administration  
 LA W 2221 (3) Legal Environment of Business  
 POL 3342 (3) Judicial Branch  
 POL 4472 (3) Administrative Law  
 OR  
 LA W 4420 (3) Administrative Law

*Select one (1) course from the following:*

- CJ 2241 (3) Survey of Law and Criminal Procedure  
 CJ 3352 (3) Constitutional Law in Criminal Justice  
 OR  
 POL 4420 (3) Constitutional Law  
 CJ 4442 (3) Criminal Investigation and Evidence  
 CJ 4447 (3) Current Issues in Legal Systems  
 Operation and Administration  
 LA W 2221 (3) Legal Environment of Business  
 POL 3342 (3) Judicial Branch  
 POL 4472 (3) Administrative Law  
 OR  
 LA W 4420 (3) Administrative Law

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 LIBERAL STUDIES PROGRAM (60 HOURS)
 

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- POL 2241 (3) American National Government  
 POL 2260 (3) World Politics  
 SOC 2275 (3) Introduction to Sociology

ANT 2200



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 PHYSICS MAJOR (36 HOURS)
 

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TROY 1101	(1)	University Orientation
IS 2241	(3)	Computer Concepts & Applications OR
CS 2250	(3)	Computer Science I
MTH 1126	(4)	Calculus II
PHY 2262	(3)	Physics I w/Calculus
PHY L262	(1)	Physics I w/Calculus Lab

*Select 11 hours of additional electives to complete Area V.*

PHY 2263	(3)	Physics II w/Calculus
PHY L263	(1)	Physics II w/Calculus Lab
PHY 3310	(3)	Modern Physics
PHY L310	(1)	Modern Physics Lab
PHY 3320	(3)	Mathematical Methods for Physicists
PHY 3321	(3)	Equations of Mathematical Physics
PHY 3325	(3)	Thermodynamics
PHY 4420	(3)	Mechanics
PHY 4435	(3)	Electricity & Ma

tion and select education as a second major. Students should consult their education advisers concerning all certification requirements and with their academic discipline adviser for requirements in the major.

#### SOCIAL SCIENCE MAJOR (36 HMM)



GEM 3330	(3)	Advanced Measurement Analysis
GEM L330	(1)	Advanced Measurement Analysis Lab
GEM 3366	(3)	Photogrammetry and Remote Sensing
GEM L366	(1)	Photogrammetry and Remote Sensing Lab
GEM 3370	(3)	Geodesy & Geodetics
GEM L370	(1)	Geodesy & Geodetics Lab
GEM 3379	(3)	Introduction to Least Squares Adjustment
GEM L379	(1)	Introduction to Least Squares Adjustment Lab
GEM 3390	(3)	Introduction to GIS
GEM L390	(1)	Introduction to GIS Lab
GEM 3391	(3)	Applications of GIS
GEM L391	(1)	Applications of GIS Lab
GEM 4405	(3)	Route & Construction Surveying
GEM L405	(1)	Route & Construction Surveying Lab
GEM 4407	(3)	Land Development
GEM L407	(1)	Land Development Lab
GEM 4409	(3)	Hydrology
GEM L409	(1)	Hydrology Lab
GEM 4410	(3)	Introduction to Global Positions
GEM L410	(1)	Introduction to Global Positions Lab
GEM 4490	(1)	Geomatics Capstone

Select two hours below: