

# COLLEGE OF ARTS AND SCIENCES

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*Dean*

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Major or Minor	Department	B.A.	B.S.	Minor	Licensure/ Certification	Certificate
Art	Art	*		*		
Behavioral Science	Interdisciplinary		*	*		
Gender & Multicultural Stu.	Behavioral Science			*		
Gerontology	Behavioral Science			*		
Biology	Biology		*	*	*	
Chemistry	Chemistry		*	*	*	
Computer Information	Computer Science					
Systems Option			*	*		
Computer Networking	Computer Science		*	*		*
Computer Science	Computer Science		*	*		
English	English	*		*	*	
General Science	Biology/Chemistry/Physics		*		*	
Health Science	Interdisciplinary		*			
Health and Wellness Mgm.	Interdisciplinary		*			
History	History	*		*	*	
Instrumentation	Physics		*	*		
Justice Studies	Gov't. & Public Affairs		*	*		
Liberal Studies	Interdisciplinary		*			
Marine Science	Biology			*		
Mathematics	Mathematics		*	*	*	
Physics	Physics (5 options)		*	*		
Political Science	Gov't. & Public Affairs	*	*	*		
Psychology	Psychology	*	*	*		
Public Safety & Health Admin.	Gov't. & Public Affairs		*			
Religion	Religious Studies	*		*		
Behavioral Science	Religious Studies			*		
Church Finance	Religious Studies			*		
Philosophy	Religious Studies			*		
Religious Education	Religious Studies			*		
Social Science	Social Science		*		*	
Sociology	Sociology	*	*	*		

## **INTERDISCIPLINARY PROGRAMS**

### **Pre-Law Program**

Many Athens State University students express an interest in attending law school after graduation. Many ASU students have attended law school at The University of Alabama, Cumberland School of Law at Samford University, The University of Tennessee, The University of Florida, George Washington University, Memphis State University, and Southern Illinois University.

To be admitted to an accredited law school, a student must have a bachelor's degree, an acceptable score on the Law School Admission Test (LSAT), and at least a 3.0 GPA. Although no law school requires a specific major, political science and justice studies have been popular undergraduate majors for many students because of the opportunity to take courses in American government, constitutional law, civil liberties, criminal law, criminal justice process, public administration, and the American legal system. Methods of Behavioral Science Research and the Senior Research Project courses are designed to improve the student's research and writing skills.

Students should consider electives that will enhance skills needed in law school. Courses in the English department can improve oral and written communication, which are essential skills for success in law school. In the College of Business, courses in accounting, business law, and real estate are helpful. A student entering law school should also know how to operate basic computer programs. Admission to law school is very competitive and no specific program can guarantee admission.

Students interested in choosing political science and/or justice studies as a prelaw major should contact the secretary in the Department of Government and Public Affairs in the College of Arts and Sciences - 233-8273. For further information call 1-800-522-0272 or (256) 233-8100 or refer to the Athens State University website: [www.athens.edu](http://www.athens.edu).

### **Foreign Study Abroad ASU in LONDON, ENGLAND**

Athens State University and its International Program offers an opportunity for all ASU majors and minors to study abroad for the first Summer Term at our Partner Institution, Huron University USA London in London, England from around May 15 until around June 25. Students attend Huron university as Athens State students and may take up to two courses in areas such as business, math, social science, natural science, behavioral science, drama, art, computer science and others that will transfer to ASU.

Huron University provides housing and in city transportation. Students receiving financial aid are generally eligible to apply it to this enterprise. The Director of ASU in London will accompany attending students for the first part of the term.

For more information, check the "International Programs" link at the ASU website, [www.athens.edu](http://www.athens.edu) or contact: Mark Anderson, B.A., J.D., University Director of ASU in London, Professor of International Business and Legal Studies, 233-8148.

Sarah McAbee, B.S., M.B.A., Director of Student Financial Services, 233-8212. Financial Aid.

Lisa Carter Payne, B.S., M.A., Veterans Affairs Coordinator, 233-8124. Veterans.

### **Pre-Health Programs**

Students interested in the pre-health professions, listed below, should contact Chief Pre-Health Professions Advisor, Dr. Bruce Thomas at 1-800-522-0272 (Ext. 142) or (256) 233-8142; or by e-mail at [thomabr@athens.edu](mailto:thomabr@athens.edu).

Pre-medicine (osteopathic and allopathic)

Pre-dentistry

Pre-optometry

Pre-veterinary  
Pre-pharmacy  
Pre-chiropractic  
Pre-podiatry  
Pre-naturopathic  
Pre-physician assistant  
Pre-physical therapy  
Pre-occupational therapy

Athens State University offers a variety of undergraduate academic programs designed to satisfy admission requirements for schools of medicine, dentistry, optometry, veterinary medicine, pharmacy, chiropractic medicine, physical therapy, and many other related disciplines. Students receive guidance in planning individual academic programs according to university and major requirements. Though many students pursue biology or chemistry degrees, medical schools do not require or recommend any particular field of study as long as the following courses are satisfied:

English composition and literature (12 semester hours)  
General chemistry with laboratory (8 semester hours)  
Organic chemistry with laboratory (8 semester hours)  
Biochemistry (recommended) (3 semester hours)  
General biology with laboratory (8 semester hours) (additional biology electives recommended are:  
genetics, embryology, cell biology, and physiology)  
General physics with laboratory (8 semester hours)  
Mathematics (calculus recommended) (6 semester hours)

## COLLEGE OF ARTS AND SCIENCES

Both the organization of the College of Arts and Sciences and information relative to degree options, majors, minors, and a certification program are summarized in the preceding chart. An asterisk is used to designate the degree option(s) for a particular major, and to indicate that a department offers a minor or a certificate.

Certain College of Arts and Sciences curricula require courses to be completed in a particular sequence. Therefore, it is important that Arts and Sciences students meet with their Faculty Advisor, to be assigned by the Counselor for the College of Arts and Sciences, as soon as possible. It must be noted, however, that the student bears individual responsibility to schedule and complete all requirements for the degree and a particular program of study. To fit specific student need, a special program of study may be devised which varies from published requirements. However, under no circumstances are alterations to a particular curriculum permitted without prior approval of the student's Faculty Advisor and completion of a Petition for Adjustment of Curriculum form.

College of Arts and Sciences curricula are designed to prepare students for entry into the job market, or for continuing education in graduate or professional school. Through its course offerings, the College seeks to engage the intelligence, excite the imagination, and improve the scholarship of its students, and to assist its students to develop:

- competencies in written and oral communications;
- appreciation of our cultural heritage and understanding of our world;
- a knowledge base conducive to self growth and enriched life experiences; and,
- fundamental knowledge and research skills essential to lifelong learning.

Majors leading to a Bachelor of Arts degree are sponsored by departments of Art, English, Government and Public Affairs, History, Psychology, Religious Studies, and Sociology. Majors leading to a Bachelor of Science degree are sponsored by departments of Biology, Chemistry, Computer Science, Government and Public Affairs, Instrumentation, Mathematics, Physics, Psychology, and Sociology. The departments of Psychology and Sociology sponsor an interdisciplinary major in Behavioral Science leading to a Bachelor of Science degree. The Department of Computer Science sponsors a computer networking certificate program. The College of Arts and Sciences in cooperation with the College of Education offers Licensure and Certification Track majors in Biology, Chemistry, English, History, General Science, Mathematics, and Social Science for those students who are interested in teaching in Middle School or High School. Completion of these track requirements will lead to Class B Certification in High School Education. In cooperation with the College of Business or the College of Education, the College sponsors an interdisciplinary major in Health Science leading to the Bachelor of Science degree. Pre-medical, pre-dental, and para-medical students are advised to major in either Biology or Chemistry; a program of study tailored to meet specific recommendations of a particular professional school, and leading to a Bachelor of Science degree, will be worked out for the student in consultation with his or her Faculty Advisor.

To qualify for graduation, science or mathematics students must achieve a 2.5 grade point average in their major field.

## ART (AR)

The Bachelor of Arts degree in Art at Athens State University certifies the completion of major study in the visual arts, which has been taken as an integral part of a general liberal arts degree program. The degree implies study in-depth of a number of studio and art history courses.

The self-growth of artists is a primary goal of this program. Preparation for graduate studies in visual arts for majors is another important aspect of this study. Each student will receive careful consideration of individual needs and conscientious direction in planning an appropriate avenue of study within the program. The senior majors exhibition culminates the study.

Additionally, the department offers enrichment courses for non-art majors, electives for the continued growth of artists, required art education courses and required humanities electives.

### **Bachelor of Arts - Art Major** **MAJOR CODE: 50.0701**

Program components for the Bachelor of Arts degree with a major in Art include:

#### 1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

##### **To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### 2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_

##### **Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_

##### **Area III. Mathematics and Natural Sciences (11 semester hours)**

Finite Math or its equivalent required ..... 3 semester hours \_\_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_\_ \_\_

##### **Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Additional history/behavioral/social science courses ..... 9 semester hours \_\_\_ \_\_ \_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

<b>3. MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):</b>	
Drawing (first course) .....	3 semester hours ___
Drawing (second course) .....	3 semester hours ___
Two-Dimensional Design (first course) .....	3 semester hours ___
Three-Dimensional Design (first course) .....	3 semester hours ___
Ancient and Medieval Art .....	3 semester hours ___
Survey of Post-Medieval Art .....	3 semester hours ___
CIS 146 Microcomputer Applications or CIS 301 Problem Solving with Computers .....	3 semester hours ___
General electives .....	2 semester hours ___
<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>19-23 SEMESTER HOURS</b>
<b>TOTAL GEN. ED. REQUIREMENTS &amp; MAJOR PREREQUISITE HOURS:</b>	<b>60-64 SEMESTER HOURS</b>

<b>4. PROFESSIONAL COURSES:</b>	
AR 312 Figure Drawing .....	3 semester hours ___
+ AR 330 Topics in Photography or AR 331 Photography II .....	3 semester hours ___
AR 418 Art Studio .....	3 semester hours ___
AR 420 Art Studio <b>or</b> AR 404 Art Studio in Photography <b>or</b> AR 406 Art Studio in Graphics .....	3 semester hours ___
AR 423 History of Modern Art .....	3 semester hours ___
AR 424 Late Modern Art History .....	3 semester hours ___
AR 430 Advanced Drawing and Design <b>or</b> AR 410 Layout and Design .....	3 semester hours ___
AR 402 Portfolio, Exhibition and Art Research .....	3 semester hours ___
<b>TOTAL PROFESSIONAL HOURS: .....</b>	<b>24 SEMESTER HOURS</b>

**+Students with emphasis in photography must take AR 330 and AR 331. Students with the A.A. or A.S. degree and photography experience, with the permission of the instructor, may elect to skip AR 330.**

- 5. The Art major must complete a minimum of forty-five semester hours of art coursework, at least fifteen semester hours of which must be taken at Athens State University. At least 18 hours of coursework in the major must be upper-division coursework (300-400 level). All students will be required to exhibit their work on campus during their final term before graduation.
- 6. A minor is required. Students with emphasis in photography or graphic design are encouraged to consider a business minor. Electives in marketing or advertising are recommended as well. .... 18 semester hours

<b>GENERAL ELECTIVES (May include art classes)</b>	<b>22 Semester Hours</b> ___ ___ ___ ___
<b>TOTAL HOURS FOR GRADUATION .....</b>	<b>124-128 SEMESTER HOURS</b>

**Art Minor**

Art minors should notify a member of the art faculty of their intentions as soon as the art minor is declared. A minor in art consists of 18 semester hours of art coursework, including the following courses or their equivalent:

AR 312 Figure Drawing .....	3 semester hours ___
AR 423 History of Modern Art .....	3 semester hours ___
AR 424 Late Modern Art History .....	3 semester hours ___
AR 430 Advanced Drawing and Design <b>or</b> AR 410 Layout and Design .....	3 semester hours ___
Art electives .....	6 semester hours ___
<b>TOTAL HOURS FOR MINOR .....</b>	<b>18 SEMESTER HOURS</b>

**Art Minor for Art Majors**

AR 314 Watercolor III .....	3 semester hours ___
AR 317 Ceramic Sculpture .....	3 semester hours ___
AR 331 Photography II .....	3 semester hours ___
AR 343 Renaissance Art History .....	3 semester hours ___
*AR 401 Advanced Figure Drawing , *AR 313 Portrait Drawing <b>or</b> *6 hours of art electives in concentration areas .....	6 semester hours ___
<b>TOTAL HOURS FOR MINOR .....</b>	<b>18 SEMESTER HOURS</b>

## BEHAVIORAL SCIENCE

This program is designed for the student who ultimately aspires to work in the area of mental health, social work, counseling, or substance abuse. It provides students the flexibility of being able to enter the work force immediately upon graduation or to enter a master's degree program in counseling or social work. The program provides a solid foundation of the basic knowledge in psychology and sociology, and provides for a concentration of courses dealing with applied and clinical aspects of human services professions. The specific objectives of this degree are to:

- Provide a knowledge base of the disciplines of psychology and sociology.
- Teach a variety of clinical concepts and skills which will be useful in applied human services settings.
- Instill an appreciation for the ethical principles governing the fields of psychology, social work, and counseling.
- Assist the student either to locate degree related employment or to be admitted to an appropriate graduate program.

A departmental exit exam is required of all students completing a degree in behavioral science.

### Bachelor of Science - Behavioral Science Major MAJOR CODE: 30.9999

Program components for the Bachelor of Science degree with a major in Behavioral Science include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	At least one fine arts course .....	3 semester hours	__	
	At least one literature course .....	3 semester hours	__	
	Other Humanities/Fine Arts courses .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Finite Math or its equivalent required .....	3 semester hours	__	
	Natural Sciences (lab based) required .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	At least one history course .....	3 semester hours	__	
	Other History/Behavioral or Social Science courses .....	9 semester hours	__	__

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):**  
 CIS 146 Microcomputer Applications or  
 CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_  
 General Electives ..... 20 semester hours \_\_\_ \_\_\_ \_\_\_  
 \_\_\_ \_\_\_ \_\_\_

**TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

The following courses must be completed at the 300/400 level:

- PS 304 Drugs and Behavior ..... 3 semester hours \_\_\_  
 PS 331 Social Psychology ..... 3 semester hours \_\_\_  
 PS 332 Child Psychology or  
 PS 334 Adolescent Psychology or  
 PS 335 Adult Psychology ..... 3 semester hours \_\_\_  
 PS 341 Statistics with Advanced Topics in Behavioral Science ..... 3 semester hours \_\_\_  
 PS 352 Abnormal Psychology ..... 3 semester hours \_\_\_  
 Psychology Elective ..... 3 semester hour \_\_\_  
 SO 312 Majority/Minority Group Relations ..... 3 semester hours \_\_\_  
 SO 342 Methods of Behavioral Science Research ..... 3 semester hours \_\_\_  
 SO 360 The Contemporary American Family ..... 3 semester hours \_\_\_  
 SO 361 Social Analysis ..... 3 semester hours \_\_\_  
 SO 362 Deviant Social Behavior ..... 3 semester hours \_\_\_  
 Sociology Elective ..... 3 semester hours \_\_\_

**TOTAL PROFESSIONAL HOURS: ..... 36 SEMESTER HOURS**

5. A minor is **not** required.

6. **GENERAL ELECTIVES ..... 28 Semester Hours** \_\_\_ \_\_\_ \_\_\_  
 The behavioral science major is encouraged to select electives related to work in the human services  
 field. Such electives would include additional psychology and sociology courses, but no more than  
 12 semester hours in these areas, and Human Anatomy and Physiology, Human Sexuality, and  
 Criminal Justice. \_\_\_

7. **TOTAL HOURS FOR GRADUATION ..... 128 SEMESTER HOURS**

**Behavioral Science Minor**

**Choose one from the following group:**

- PS 352 Abnormal Behavioral ..... 3 semester hours \_\_\_  
 PS 304 Drugs and Behavior ..... 3 semester hours \_\_\_  
 PS 406 Physiological Psychology ..... 3 semester hours \_\_\_

**Choose one from the following group:**

- PS 331 Social Psychology ..... 3 semester hours \_\_\_  
 PS 332 Child Psychology ..... 3 semester hours \_\_\_  
 PS 402 Introduction to Clinical Psychology ..... 3 semester hours \_\_\_  
 SO 360 The Contemporary American Family ..... 3 semester hours \_\_\_  
 SO 471 Aging in a Mass Society ..... 3 semester hours \_\_\_

**Required:**

- PS 334 Adolescent Psychology ..... 3 semester hours \_\_\_  
 PS 335 Adult Psychology ..... 3 semester hours \_\_\_  
 SO 362 Deviant Social Behavior ..... 3 semester hours \_\_\_  
 SO 312 Majority/Minority Relations ..... 3 semester hours \_\_\_

**TOTAL HOURS IN MINOR ..... 18 semester hours**

## Gerontology Minor

GE 320 Nutrition .....	3 semester hours	___
GE 320L Nutrition Lab .....	1 semester hour	___
GE 335 Adult Psychology .....	3 semester hours	___
GE 410 Physiology of Aging .....	3 semester hours	___
GE 412 Aging Policy and Programs .....	3 semester hours	___
GE 471 Aging in a Mass Society .....	3 semester hours	___
GE 464 Practicum in Psychology/Sociology/Gerontology .....	3 semester hours	___
<b>TOTAL HOURS IN MINOR .....</b>	<b>19 semester hours</b>	

## Gender and Multicultural Studies Minor

PS/SO 301 Introduction to Gender and Multicultural Studies .....	3 semester hours	___
Choose one course from the Humanities section listed below .....	3 semester hours	___
Choose one course from the Social & Behavioral Sciences section listed below .....	3 semester hours	___
Choose one course from the Business section listed below .....	3 semester hours	___
Choose three additional courses from the Humanities; Social & Behavioral Sciences; or Business courses listed below .....	9 semester hours	___ ___ ___

### Humanities

- AR 423 History of Modern Art (3 semester hours)
- AR 424 Late Modern Art History (3 semester hours)
- EH 325 Myth: Ritual and Culture (3 semester hours)
- EH 401 Conflict Management (3 semester hours)
- EH/RE 416 Interpreting the Text (3 semester hours)
- EH 440 African-American Studies (3 semester hours)
- EL 320 Children's Literature (3 semester hours)
- HU 330 Landmarks of Civilization (3 semester hours)
- RE 301 Religions that Shaped the World (3 semester hours)
- RE 312 History of Judaism (3 semester hours)
- RE 314 History of Islam (3 semester hours)

### Social and Behavioral Sciences

- ED 312 Educating Teachers for Diversity (3 semester hours)
- GO 309 North America and Europe (3 semester hours)
- GO 310 South America, Africa and Asia (3 semester hours)
- JS/SO 452 Advanced Criminology (3 semester hours)
- PH/SO 300 Moral Values in Today's Society (3 semester hours)
- PO/SO 351 American Public Policy/Political Sociology (3 semester hours)
- PS 331 Social Psychology (3 semester hours)
- SE 301 Introduction to Exceptional Learners (3 semester hours)
- SO 312 Majority/Minority Group Relations (3 semester hours)
- SO 360 Contemporary American Family (3 semester hours)

### Business

- EC/GO 311 Economic Geography (3 semester hours)
- EC/PO 320 Introduction to International Commerce (3 semester hours)
- EC 348 Labor Economics (3 semester hours)
- MG 352 International Business (formerly Global Dimensions of Business) (3 semester hours)
- GBA/PS 368 Industrial and Personnel Psychology (3 semester hours)

**TOTAL HOURS IN MINOR ..... 21 SEMESTER HOURS**

**NOTE:** To fulfill the requirements for Gender and Multicultural Studies minor, students must take at least 15 semester hours that do not overlap with their major or another program of study.

## BIOLOGY (BI)

The Department of Biology sponsors majors leading to the Bachelor of Science degree and to the Bachelor of Science degree with teacher licensure (6-12). Biology and Marine Science minors also are offered. Structured to prepare students for research and technical areas requiring a baccalaureate degree, the biology major also is designed to satisfy most graduate and/or professional school admission requirements. The objective of the major is to provide the graduate with a comprehensive science education, encompassing standard academic courses in biology, chemistry, mathematics, and computer science. Courses and programs are structured to provide basic coursework applicable to (1) fields requiring a general preparation in biology, (2) graduate and professional programs, (3) medical and related health fields, and (4) secondary school teaching.

### **Bachelor of Science - Biology Major** **MAJOR CODE: 26.0101**

Program components for the Bachelor of Science degree with a major in Biology include:

#### 1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

##### **To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### 2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_

##### **Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_

##### **Area III. Mathematics and Natural Sciences (11 semester hours)**

Precalculus Algebra or higher ..... 3 semester hours \_\_\_

Principles of Biology I and II ..... 8 semester hours \_\_\_ \_\_

##### **Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_ \_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):**  
**The biology major must complete:**  
 College Chemistry I ..... 4 semester hours \_\_\_  
 College Chemistry II ..... 4 semester hours \_\_\_  
 Biology or Chemistry Elective ..... 4 semester hours \_\_\_  
 Elementary Statistics or Calculus I ..... 3-4 semester hours \_\_\_  
 Fundamentals of Organic Chemistry or Organic Chemistry I ..... 3-4 semester hours \_\_\_  
 CIS 146 Microcomputer Applications or  
     CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_  
**TOTAL MAJOR PREREQUISITE HOURS: ..... 21-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**  
 BI 301/BI 301L Cell Structure and Function ..... 4 semester hours \_\_\_  
 BI 302/BI 302L Genetics ..... 4 semester hours \_\_\_

A minimum of 22 semester credit hours from among the following biology courses:

- BI 300/BI 300L Microbes and You ..... 4 semester hours \_\_\_  
 BI 303/BI 303L General Ecology ..... 4 semester hours \_\_\_  
 BI 311/BI 311L Biodiversity of North Alabama ..... 4 semester hours \_\_\_  
 BI 321 Conservation Biology ..... 3 semester hours \_\_\_  
 BI 323 Human Reproduction ..... 3 semester hours \_\_\_  
 BI 342/BI 342L Economic Botany ..... 4 semester hours \_\_\_  
 BI 361/BI 361L Human Structure and Function ..... 4 semester hours \_\_\_  
 BI 409 Biochemistry ..... 3 semester hours \_\_\_  
 BI 411/BI 411L Invertebrate Systematics and Morphology or  
     BI 412/BI 412L Invertebrate Development and Function ..... 4 semester hours \_\_\_  
 BI 413/BI 413L Vertebrate Biology or  
     BI 414/BI 414L Comparative Vertebrate Anatomy ..... 4 semester hours \_\_\_  
 BI 415 Microbial Toxins and Human Health ..... 3 semester hours \_\_\_  
 BI 420 Field Vertebrate Zoology I: Ichthyology and Herpetology ..... 4 semester hours \_\_\_  
 BI 422 Field Vertebrate Zoology II: Ornithology and Mammalogy ..... 4 semester hours \_\_\_  
 BI 423/BI 423L Histology ..... 4 semester hours \_\_\_  
 BI 424/BI 424L Animal Physiology ..... 4 semester hours \_\_\_  
 BI 425/BI 425L Developmental Biology ..... 4 semester hours \_\_\_  
 BI 427/BI 427L Parasitology ..... 4 semester hours \_\_\_  
 BI 429/BI 429L Immunology ..... 4 semester hours \_\_\_  
 BI 431/BI 431L Plant Systematics and Morphology or  
     BI 453/453L Plant Ecology ..... 4 semester hours \_\_\_  
 BI 440 Biotechnology ..... 3 semester hours \_\_\_  
 BI 451/451L Marine Biology or BI 452/BI 452L Marine Ecology ..... 4 semester hours \_\_\_

**TOTAL PROFESSIONAL HOURS: ..... 30 SEMESTER HOURS**

5. The Biology major must complete a minimum of 18 semester hours of upper division biology coursework, at least 12 semester hours of which must be taken at Athens State University. Courses taken under the S.I.R. agreement do not constitute upper division coursework. The major who plans to attend graduate, medical, or other professional (e.g., veterinary, chiropractic, optometry, pharmacy) school, or who seeks special licensure or certification (e.g., physical therapist, wildlife biologist) should determine the specific recommendations or requirements of the particular school, licensing or certifying agency for science and mathematics coursework and complete the recommended or required coursework. A program of study tailored to meet specific recommendations and/or requirements for science and mathematics coursework then will be developed for the major in consultation with his or her Faculty Advisor. In general, the following courses or their equivalents frequently are recommended or required:

    Calculus I, II (MA 303, 304) ..... Physics (PY 301, 302)  
     Organic Chemistry (CH 311, 312) ..... Biochemistry (BI 409 or CH 409)

6. A minor is required. .... 18 semester hours  
 7. **GENERAL ELECTIVES** ..... **16 semester hours** \_\_\_ \_\_\_ \_\_\_  
 8. **TOTAL HOURS FOR GRADUATION** ..... **126-128 SEMESTER HOURS**

9. **Pre-assessment and exit examinations:** To comply with Southern Association of Colleges and Schools (SACS) accreditation standards, the Department of Biology administers both pre-assessment and exit examinations to its majors. The examinations serve a four-fold purpose:

- (1) to assess preparedness for taking certain junior or senior level biology courses;
- (2) to establish a benchmark for assessing knowledge gained as a result of completing the biology major at Athens State University;
- (3) to assess preparedness for graduate study in biology or for admission to professional school; and
- (4) to assess preparedness for a career as a biologist.

There is no cost for taking the examinations, nor is it necessary to undertake any special preparation for the examinations. The pre-assessment examination is designed to cover topics that usually are presented in an introductory biology sequence (e.g., a two semester sequence - Principles of Biology I, II) Exit examination questions are drawn from the following areas: Cellular Biology, Ecology (including Field Ecology), Genetics, Vascular and Non-vascular Botany, and Invertebrate and Vertebrate Zoology. The examinations are designed to be completed in 60 minutes. The pre-assessment examination is administered during the first term of attendance at Athens State University; the exit examination is administered during the term at the end of which the major expects to graduate.

### **BIOLOGY MINOR**

A minor requires completion of a minimum of 18 semester hours of biology coursework, including a minimum of 6 semester hours of upper division coursework which must be taken at Athens State University.

The minor must include the following courses or their approved equivalents:

Principles of Biology I, II .....	8 semester hours
<b>TOTAL HOURS FOR MINOR .....</b>	<b>18 semester hours</b>

### **MARINE SCIENCE MINOR**

A Marine Science minor requires completion of 18 semester hours of marine science and/or biology coursework, at least 12 semester hours of which must be taken at Dauphin Island Sea Lab.

The minor must include the following courses or their approved equivalents:

Principles of Biology I, II .....	8 semester hours
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### **MARINE ENVIRONMENTAL SCIENCES CONSORTIUM**

Athens State University is a member of the Marine Environmental Sciences Consortium, based at Dauphin Island, Alabama. This affiliation offers Athens State University students an opportunity to take courses and conduct research in estuarine and marine environments. Courses offered during the summer at Dauphin Island Sea Lab may be taken for credit at Athens State University toward a major or minor in biology or a minor in marine science. Some of the course offerings cannot be taken for biology major or minor credit. All programs of study that involve marine science courses must be approved by the MESC liaison. A Dauphin Island Sea Lab Information Bulletin listing summer school course offerings can be obtained early in the spring semester from a member of the Athens State University Department of Biology. Active courses of undergraduate instruction sponsored by the Consortium include the following:

Coastal Birds of Alabama	Coral Reef Ecology	Marine Technical Methods
Marine Biology	Oceanology of the Gulf of Mexico	Coastal Geomorphology
Marine Invertebrate Zoology	Advanced Anatomy and Evolution of Marine Fishes	Coastal Climatology
Marine Botany	Introduction to Neurobiology	Marine Aquaculture
Marine Geology	Marine Fish Diseases	Coastal Zone Management
Marine Ecology	Introduction to Oceanography	Dolphins and Whales
Marine Vertebrate Zoology		Marine Behavioral Ecology

**Bachelor of Science - Biology Major**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 26.0101**

(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made. Education courses with the prefixes ED, EL, ER, SC, SE, CE, and HPE may be repeated one time only; and
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP).

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the gen. ed. requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

**2. GENERAL EDUCATION REQUIREMENTS:**

**Area I.** Written Composition ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities and Fine Arts (12 semester hours)**

Fine Arts ..... 3 semester hours \_\_\_  
 Speech (SPH 106 or SPH 107) ..... 3 semester hours \_\_\_  
 Other Humanities/Fine Arts course ..... 3 semester hours \_\_\_  
 Literature\* ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Precalculus Algebra or higher ..... 3 semester hours \_\_\_  
 Principles of Biology I and II ..... 8 semester hours \_\_\_ \_\_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

History\* ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_  
 General Psychology ..... 3 semester hours \_\_\_  
 Other History/Behavioral or Social Science elective ..... 3 semester hours \_\_\_

**\*Students must complete a 6 semester hour sequence either in Area II Literature or Area IV History.**

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**

**The biology major must complete:**

College Chemistry I .....	4 semester hours	___
College Chemistry II .....	4 semester hours	___
Biology or Chemistry Elective .....	4 semester hours	___
Elementary Statistics <u>or</u> Calculus I .....	3-4 semester hours	___
Fundamentals of Organic Chemistry <u>or</u> Organic Chemistry I .....	3-4 semester hours	___
Electives .....	3-5 semester hours	___

**TOTAL MAJOR PREREQUISITE HOURS: ..... 21-25 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: ..... 62-66 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

BI 301/BI 301L Cell Structure and Function .....	4 semester hours	___
BI 302/BI 302L Genetics .....	4 semester hours	___
BI 303/BI 303L General Ecology .....	4 semester hours	___

**A minimum of 18 semester credit hours from among the following biology courses:**

BI 300/BI 300L Microbes and You .....	4 semester hours	___
BI 311/BI 311L Biodiversity of North Alabama .....	4 semester hours	___
BI 321 Conservation Biology .....	3 semester hours	___
BI 323 Human Reproduction .....	3 semester hours	___
BI 342/BI 342L Economic Botany .....	4 semester hours	___
BI 409 Biochemistry .....	3 semester hours	___
BI 411/BI 411L Invertebrate Systematics and Morphology <b>or</b>		
BI 412/BI 412L Invertebrate Development and Function .....	4 semester hours	___
BI 413/BI 413L Vertebrate Biology <b>or</b>		
BI 414/BI 414L Comparative Vertebrate Anatomy .....	4 semester hours	___
BI 415 Microbial Toxins and Human Health .....	3 semester hours	___
BI 420 Field Vertebrate Zoology I: Ichthyology and Herpetology .....	4 semester hours	___
BI 422 Field Vertebrate Zoology II: Ornithology and Mammalogy .....	4 semester hours	___
BI 423/BI 423L Histology .....	4 semester hours	___
BI 424/ BI 424L Animal Physiology .....	4 semester hours	___
BI 425/BI 425L Developmental Biology .....	4 semester hours	___
BI 427/BI 427L Parasitology .....	4 semester hours	___
BI 429/BI 429L Immunology .....	4 semester hours	___
BI 431//BI 431L Plant Systematics and Morphology .....	4 semester hours	___
BI 440 Biotechnology .....	3 semester hours	___

**TOTAL PROFESSIONAL HOURS: ..... 30 SEMESTER HOURS**

5. The Biology major must complete a minimum of 18 semester hours of upper division biology coursework, at least 12 semester hours of which must be taken at Athens State University. Courses taken under the S.I.R. agreement do not constitute upper division coursework.

6. **Pre-assessment and Exit examinations:** To comply with Southern Association of Colleges and Schools (SACS) accreditation standards, the Department of Biology administers both pre-assessment and exit examinations to its majors. The examinations serve a four-fold purpose:

- (1) to assess preparedness for taking certain junior or senior level biology courses;
- (2) to establish a benchmark for assessing knowledge gained as a result of completing the biology major at Athens State University;
- (3) to assess preparedness for graduate study in biology or for admission to professional school; and
- (4) to assess preparedness for a career as a biologist.

There is no cost for taking the examinations, nor is it necessary to undertake any special preparation for the examinations. The pre-assessment examination is designed to cover topics that usually are presented in an introductory biology sequence (e.g., a two semester sequence - Principles of Biology I, II). Exit examination questions are drawn from the following areas: Cellular Biology, Ecology (including Field Ecology), Genetics, Vascular and Non-vascular Botany, and Invertebrate and Vertebrate Zoology. The examinations are designed to be completed in 60 minutes. The pre-assessment examination is administered during the first term of attendance at Athens State University; the exit examination is administered during the term at the end of which the major expects to graduate.

**7. MINOR COURSES FOR CERTIFICATION:**

ED 301 Foundations of Education I .....	1 semester hour	___
ED 302 Foundations of Education II .....	2 semester hours	___
ED 305 Technology & Media in Education .....	3 semester hours	___
SC 331 Issues and Management in Secondary Education .....	3 semester hours	___
SC 333 <u>Teaching Reading/Writing in the Content Areas</u> .....	3 semester hours	___
SC 362 <u>Assessment and Evaluation in Secondary Education</u> .....	3 semester hours	___
PS 334 Adolescent Psychology .....	3 semester hours	___
SE 301 <u>Introduction to Exceptional Learners</u> .....	3 semester hours	___
BI 456 <u>Materials/Methods of Teaching Biology in the Middle School/ High School</u> .....	3 semester hours	___
SC 486 <u>Internship in High School Education</u> .....	9 semester hours	___ ___ ___

**TOTAL MINOR REQ. FOR LICENSURE/CERTIFICATION: .. 33 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION ..... 125-129 SEMESTER HOURS**

## CHEMISTRY (CH)

The Bachelor of Science degree in chemistry prepares the student for a career in industrial or governmental chemistry laboratories, graduate study, or secondary teaching. With proper electives, the chemistry major also may enter graduate degree programs in law, medical or dental school, environmental sciences, and related fields.

### Bachelor of Science - Chemistry Major

**MAJOR CODE: 40.0501**

Program components for the Bachelor of Science degree with a major in Chemistry include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total degree requirements as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_

**Area III. Mathematics and Natural Sciences (12 semester hours)**

Calculus I\* ..... 4 semester hours \_\_\_

College Chemistry I and II ..... 8 semester hours \_\_\_ \_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_ \_\_

**\*Prerequisites: Precalculus Algebra and Precalculus Trigonometry**

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 42 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL COURSES):**  
 Calculus II ..... 4 semester hours \_\_\_  
 Calculus III ..... 4 semester hours \_\_\_  
 General Physics I (Calculus based) ..... 4 semester hours \_\_\_  
 General Physics II (Calculus based) ..... 4 semester hours \_\_\_  
 Microcomputer Applications ..... 3 semester hours \_\_\_  
 Electives ..... 3 semester hours \_\_\_  
**TOTAL MAJOR PREREQUISITE HOURS: ..... 22 SEMESTER HOURS**  
**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**  
 CH 311/CH 311L Organic Chemistry I ..... 5 semester hours \_\_\_  
 CH 312/CH 312L Organic Chemistry II ..... 5 semester hours \_\_\_  
 CH 314 /CH 314L Polymer Science ..... 4 semester hours \_\_\_  
 CH 324/CH 324L Analytical Chemistry ..... 4 semester hours \_\_\_  
 CH 330 Environmental Chemistry\*\* ..... 3 semester hours \_\_\_  
 CH 410/CH 410L Instrumental Analysis ..... 4 semester hours \_\_\_  
 CH 420 Intermediate Inorganic Chemistry ..... 3 semester hours \_\_\_  
 CH 430/CH 430L Physical Chemistry I ..... 5 semester hours \_\_\_  
 CH 431/CH 431L Physical Chemistry II ..... 4 semester hours \_\_\_  
 \*\*The major who plans to attend medical school or health related professional (e.g., veterinary, chiropractic, osteopathic, pharmacy) schools may substitute CH 409 Biochemistry for either CH 314 or CH 330.  
**TOTAL PROFESSIONAL HOURS: ..... 37 SEMESTER HOURS**
5. The chemistry major must complete a minimum of 24 semester hours of upper division 300/400 level chemistry coursework at Athens State University. For those majors who plan to attend graduate, medical, or other professional school, the following courses are recommended:  
 CH 409 Biochemistry  
 MA 421 Differential Equations
6. A minor **is not** required.
7. **GENERAL ELECTIVES: ..... 27 semester hours** \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_
8. **TOTAL HOURS FOR GRADUATION ..... 128 SEMESTER HOURS**
9. **Pre-assessment and Exit Examinations:** During the first term of enrollment at Athens State, the chemistry major must complete a pre-assessment examination. During the final term of enrollment at Athens State, the chemistry major must complete the major field achievement examination for chemistry.

### Chemistry Minor

A minor in Chemistry requires 20 semester hours of chemistry coursework including a minimum of 9 semester hours of upper division coursework which must be completed at Athens State University.  
 College Chemistry I, II or CH 303, 304, 305 ..... 8-9 semester hours  
 CH 324 /CH 324L Analytical Chemistry ..... 4 semester hours  
 Upper Level 300/400 Chemistry courses to be determined by Chemistry Faculty Advisor ..... 7-8 semester hours  
**TOTAL HOURS REQUIRED FOR MINOR: ..... 20 semester hours**

**Bachelor of Science - Chemistry Major**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 40.0501**

(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made and realize that all attempts are calculated in the GPA. Education courses with the prefixes ED, EL, ER, SC, SE, CE, and HPE may be repeated one time only ; and
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP).

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

**2. GENERAL EDUCATION REQUIREMENTS:**

**Area I.** Written Composition ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities and Fine Arts (12 semester hours)**

The Arts ..... 3 semester hours \_\_\_  
 Speech (SPH 106 or SPH 107) ..... 3 semester hours \_\_\_  
 Humanities Elective ..... 3 semester hours \_\_\_  
 Literature\* ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_

**Area III. Natural Sciences and Mathematics (12 semester hours)**

Calculus I\*\* ..... 4 semester hours \_\_\_  
 College Chemistry I and II ..... 8 semester hours \_\_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

History\* ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_  
 General Psychology ..... 3 semester hours \_\_\_  
 Other History/Behavioral or Social Science Elective ..... 3 semester hours \_\_\_

\*Students must complete a 6 semester hour sequence in either Area II Literature or Area IV History.

\*\*Prerequisites: Precalculus Algebra and Precalculus Trigonometry

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 42 SEMESTER HOURS**

<b>3.</b>	<b>MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)</b>	
	Calculus II .....	4 semester hours ___
	Calculus III .....	4 semester hours ___
	General Physics I (Calculus based) .....	4 semester hours ___
	General Physics II (Calculus based) .....	4 semester hours ___
	Electives .....	6 semester hours ___ ___
	<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>22 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: .....</b>	<b>64 SEMESTER HOURS</b>
<b>4.</b>	<b>PROFESSIONAL COURSES:</b>	
	CH 311/CH 311L Organic Chemistry I .....	5 semester hours ___
	CH 312/CH 312L Organic Chemistry II .....	5 semester hours ___
	CH 324 /CH 324L Analytical Chemistry .....	4 semester hours ___
	CH 330 Environmental Chemistry .....	3 semester hours ___
	CH 409 Biochemistry .....	3 semester hours ___
	CH 410/CH 410L Instrumental Analysis .....	4 semester hours ___
	CH 420 Intermediate Inorganic Chemistry .....	3 semester hours ___
	CH 430/CH 430L Physical Chemistry I .....	5 semester hours ___
	CH 431/CH 431L Physical Chemistry II .....	4 semester hours ___
	<b>TOTAL PROFESSIONAL HOURS: .....</b>	<b>36 SEMESTER HOURS</b>
5.	The chemistry major must complete a minimum, of 24 semester hours of upper division 300/400 level chemistry coursework at Athens State University.	
6.	<b>Pre-assessment and Exit Examinations: During the first term of enrollment at Athens State University, the chemistry major must complete a pre-assessment examination. During the final term of enrollment at Athens State, the chemistry major must complete the major field achievement examination for chemistry.</b>	
<b>7.</b>	<b>MINOR COURSES FOR CERTIFICATION:</b>	
	ED 301 Foundations of Education I .....	1 semester hour ___
	ED 302 Foundations of Education II .....	2 semester hours ___
	ED 305 Technology & Media in Education .....	3 semester hours ___
	SC 331 Issues and Management in Secondary Education .....	3 semester hours ___
	SC 333 <u>Teaching Reading/Writing in the Content Areas</u> .....	3 semester hours ___
	SC 362 <u>Assessment and Evaluation in Secondary Education</u> .....	3 semester hours ___
	PS 334 Adolescent Psychology .....	3 semester hours ___
	SE 301 Introduction to Exceptional Learners .....	3 semester hours ___
	CH 456 <u>Materials and Methods of Teaching Chemistry in Middle School/High School</u> .....	3 semester hours ___
	SC 486 <u>Internship in High School Education</u> .....	9 semester hours ___ ___
	<b>TOTAL MINOR REQ. FOR CERTIFICATION/LICENSURE .....</b>	<b>33 SEMESTER HOURS</b>
	<b>TOTAL HOURS FOR GRADUATION .....</b>	<b>133 SEMESTER HOURS</b>

## COMPUTER SCIENCE (CS)

The Department of Computer Science sponsors courses of study leading to a Bachelor of Science degree with a major in Computer Science (CS) or with a major in Computer Science - Computer Information Systems (CIS) option. The Department also sponsors minors in Computer Science, Computer Information Systems, and a Computer Networking (CN) minor with certification program.

CS and CIS curricula emphasize structured programming, problem solving, and software engineering, and require significant hands-on experience using hardware and software resources available in state-of-the-art computer laboratories maintained by the Department. To ensure up-to-date content, CS and CIS curricula are continually undergoing revision. Complementing the department's full-time faculty, several highly qualified, practicing, computer professionals serve as adjunct faculty. In addition to teaching, the adjunct faculty assist full-time faculty to revise courses and to design courses of study that are responsive to the dynamic external computer science environment—the demands of business, industry, government, and research organizations.

The CS curriculum is designed to prepare students for the job market and/or for graduate school. With regard to the student's immediate objective to analyze problems and design software solutions as part of a software development team in industry, government, and/or a research organization, or to meet admission requirements of graduate programs in Computer Science, approved electives should be chosen carefully.

The CIS curriculum focuses on problem solving in a business environment. The goal of this curriculum is to prepare the student for the job market as a technically oriented member of an information systems development team.

The Computer Information Systems (CIS) program is a multi-disciplinary program comprised of both computer science and business courses. In addition to most of the computer programming courses, students take a wide range of business courses, including accounting, economics, management, and statistics. CIS majors take the same rigorous general education courses taken by all CS majors. Students pursuing the CIS degree should be good problem-solvers and critical thinkers as well as technically savvy. Most CIS majors select careers as systems analysts or programmers of business information systems.

Comprised of eight courses (See Course Descriptions), the Computer Networking (CN) curriculum is approved by the National Association of Communication Systems Engineers (NACSE), a non-profit, vendor neutral association of Information Science and Information Technology professionals. The student who successfully completes CN 301, CN 302, CN 303, CN 304, and a locally administered certification exam can certify as a NACSE Associate Network Specialist (NANS); the student who successfully completes all eight CN courses and a locally administered certification exam can certify as a NACSE Senior Network Specialist (NSNS). The course textbooks are provided as a licensed package covering all topics leading to the NANS or the NSNS certification including Web based supplemental materials. WestNet products are not authorized for participation in textbook buy-back, used textbook, sharing or redistribution programs.

Regarding work-based academic credit for CS and/or CIS courses, when the work experience has been evaluated and accepted as appropriate, a written examination covering the content area of the course(s) will be administered by the Department. If a passing grade is earned, academic credit will be awarded. Work-based academic credit will not be awarded for any CN course.

The Computer Science Department imposes the following requirements and restrictions on accepting computer science courses from other institutions:

- No RPG or computer applications courses will be accepted.
- Not more than 3 semester hours of FORTRAN will be accepted.
- Introduction to Information Systems and Basic Programming will not be accepted as electives.
- "System Analysis and Design" courses cannot be substituted for CS 451 or CS 452.
- "Work-based experience" credit cannot be substituted for CS 451 or CS 452.
- Locally administered certification examination.

**Bachelor of Science - Computer Science Major**  
**MAJOR CODE: 11.0101A**

Program components for the Bachelor of Science degree with a major in Computer Science include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	6 semester hours	___	___
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	<b>At least one</b> fine arts course .....	3 semester hours	___	
	<b>At least one</b> literature course .....	3 semester hours	___	
	Other Humanities/Fine Arts courses .....	6 semester hours	___	___
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Precalculus Algebra <u>or</u> Precalculus Algebra and Trigonometry .....	3 semester hours	___	
	Natural Sciences (lab based) .....	8 semester hours	___	___
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	<b>At least one</b> history course .....	3 semester hours	___	
	Other History/Behavioral or Social Science courses .....	9 semester hours	___	___
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b>41 SEMESTER HOURS</b>		

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL COURSES):**  
 \*\*Precalculus Trigonometry ..... 3 semester hours \_\_\_  
 Calculus I ..... 4 semester hours \_\_\_  
 Calculus II ..... 4 semester hours \_\_\_  
 Calculus III ..... 4 semester hours \_\_\_  
 CS 305 Concepts of Computer Programming ..... 3 semester hours \_\_\_  
 Computer Programming Class ..... 3 semester hours \_\_\_  
 General electives ..... 0-5 semester hours \_\_\_
- \*\*If Precalculus Algebra (3 semester hours) is completed to satisfy the Area III mathematics requirement, the student should complete Precalculus Trigonometry (3 semester hours) in addition to Precalculus Algebra. Completion of Precalculus Algebra and Trigonometry (4 semester hours) will satisfy both the Area III mathematics requirement and the Area V requirement for Trigonometry.

**TOTAL MAJOR PREREQUISITE HOURS: ..... 19-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**  
 Linear Algebra or MA 310 Matrices and Linear Algebra ..... 3 semester hours \_\_\_  
 MA 308 Discrete Mathematics ..... 3 semester hours \_\_\_  
 MA 320 Modern Algebra ..... 3 semester hours \_\_\_
- Two of the following: ..... 6 semester hours \_\_\_ \_\_\_**  
 MA 316 Vector Analysis  
 MA 421 Differential Equations  
 MA 423 Numerical Analysis or  
 MA 331 Applied Statistics of Probability\*
- CN 301 Networking Fundamentals ..... 2 semester hours \_\_\_  
 CS 309 Introduction to Digital Logic Design ..... 3 semester hours \_\_\_  
 CS 309L Digital Design Lab ..... 1 semester hour \_\_\_  
 CS 317 Computer Science I (C++) ..... 3 semester hours \_\_\_  
 CS 318 Computer Science II (C++) ..... 3 semester hours \_\_\_  
 CS 340 Introduction to Assembly Language ..... 3 semester hours \_\_\_  
 CS 372 Data Structures ..... 3 semester hours \_\_\_  
 CS 409 Computer Organization and Architecture ..... 3 semester hours \_\_\_  
 CS 414 Programming Languages ..... 3 semester hours \_\_\_  
 CS 415 Computer Systems Software ..... 3 semester hours \_\_\_  
 CS 451 Software Engineering ..... 3 semester hours \_\_\_  
 CS 452 Senior Software Engineering Project ..... 3 semester hours \_\_\_  
 CS 452L Senior Software Engineering Project Lab ..... 1 semester hour \_\_\_  
 CS 472 Algorithm Analysis ..... 3 semester hours \_\_\_  
 Upper Level 300/400 Computer Science Electives\*\*\* ..... 6 semester hours \_\_\_ \_\_\_

\*\*\*Any computer science (CS), computer information systems (CIS), or computer networking (CN) course to be used as an upper level computer science elective must have prior approval of the student's Faculty Advisor.

**TOTAL PROFESSIONAL HOURS ..... 58 SEMESTER HOURS**

5. The Computer Science major must complete a minimum of 24 semester hours of upper division 300/400 level coursework in computer science (CS), Computer Information Systems (CIS), or Computer Networking (CN) at Athens State University. At least 6 semester hours of CS, CIS, or CN electives must be completed at Athens State University.
6. A minor **is not** required.
7. **GENERAL ELECTIVES ..... 6 Semester Hours \_\_\_ \_\_\_**
8. **TOTAL HOURS FOR GRADUATION ..... 124-128 SEMESTER HOURS**

*\*MA 331 does not count toward a math major*

9. **Pre-assessment and Exit Examinations:**  
 The Department of Computer Science requires all CS majors to complete both an entrance and an exit examination. Used to place the student in the appropriate initial course in the CS or CIS curriculum, the **entrance examination** is developed by the Department. This examination will be graded locally and the results known immediately. For a CS major to graduate from Athens State University, the exit examination must be completed; however, the result of this examination is not a criterion for graduation.

### **Computer Science Minor**

A minor in Computer Science requires 22 semester hours distributed in the following way:

MA 308 Discrete Mathematics .....	3 semester hours
CS 305 Concepts of Computer Programming .....	3 semester hours
CS 309 Introduction to Digital Logic Design .....	3 semester hours
CS 309L Digital Design Lab .....	1 semester hour
CS 317 Computer Science I (C++) .....	3 semester hours
CS 318 Computer Science II (C++) .....	3 semester hours
CS 372 Data Structures .....	3 semester hours
CS 472 Algorithm Analysis .....	3 semester hours
<b>TOTAL HOURS IN MINOR: .....</b>	<b>22 semester hours</b>

**Bachelor of Science - Computer Science Major**  
**(Computer Information Systems Option)**  
**MAJOR CODE: 11.0101B**

Program components for the Bachelor of Science degree with a major in Computer Science - Computer Information Systems Option) include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS.**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	<b>At least one</b> fine arts course .....	3 semester hours	__	
	<b>At least one</b> literature course .....	3 semester hours	__	
	Other Humanities/Fine Arts courses .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Precalculus Algebra or higher .....	3 semester hours	__	
	Natural Sciences (lab based) .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	<b>At least one</b> history course .....	3 semester hours	__	
	Economics (ECO 231 Principles of Economics) required .....	3 semester hours	__	
	Other History/Behavioral or Social Science courses .....	6 semester hours	__	__
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b>41 SEMESTER HOURS</b>		

3.	<b>MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)</b>	
	Business Calculus .....	3 semester hours ___
	Principles of Accounting .....	3 semester hours ___
	Statistical Methods of Business I .....	3 semester hours ___
	Microcomputer Applications .....	3 semester hours ___
	CS 305 Concepts of Computer Programming .....	3 semester hours ___
	Computer Programming Courses (any language) .....	6 semester hours ___
	General electives .....	2 semester hours ___
	<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>23 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. REQ. &amp; MAJOR PREREQUISITE HOURS: .....</b>	<b>64 SEMESTER HOURS</b>

4.	<b>PROFESSIONAL COURSES:</b>	
	MG 350 Financial Management .....	3 semester hours ___
	MG 346 Principles of Management .....	3 semester hours ___
	MG 353 Project Management .....	3 semester hours ___
	MK 331 Marketing Principles .....	3 semester hours ___
	MA 308 Discrete Mathematics .....	3 semester hours ___
	CS 309 Digital Logic Design .....	3 semester hours ___
	CS 309LDigital Logic Design Lab .....	1 semester hour ___
	CS 317 Computer Science I (C++) .....	3 semester hours ___
	CS 318 Computer Science II (C++) .....	3 semester hours ___
	CIS 325 The Digital Enterprise .....	3 semester hours ___
	CIS 365 Visual Application Development .....	3 semester hours ___
	CS 372 Data Structures .....	3 semester hours ___
	CIS 440 Database Systems .....	3 semester hours ___
	CIS 450 Human-Computer Interaction .....	3 semester hours ___
	CS 451 Software Engineering .....	3 semester hours ___
	CS 452 Senior Software Engineering Project .....	3 semester hours ___
	CS 452L Senior Software Engineering Project Lab .....	1 semester hour ___
	Upper Level Computer Science Electives* .....	6 semester hours ___

\*Any computer science (CS), computer information systems (CIS), or computer networking (CN) course to be used as an upper level computer science elective must have prior approval of the student's Faculty Advisor.

**TOTAL PROFESSIONAL HOURS .....** **53 SEMESTER HOURS**

5. The Computer Information Systems major must complete a minimum of 24 semester hours of upper division 300/400 level coursework in computer science (CS), Computer Information Systems (CIS), or Computer Networking (CN) at ASU. At least 6 semester hours of CS, CIS, or CN electives must be completed at Athens State University.

6. A minor is **not** required.

7. **GENERAL ELECTIVES .....** **11 Semester Hours** \_\_\_ \_\_\_ \_\_\_

8. **TOTAL HOURS FOR GRADUATION .....** **124-128 SEMESTER HOURS**

9. **Pre-assessment and Exit Examination:**

The Department of Computer Science requires all CS majors to complete both an entrance and an exit examination. Used to place the student in the appropriate initial course in the CS or CIS curriculum, the **entrance examination** is developed by the Department. This examination will be graded locally and the results known immediately. For a CS major to graduate from Athens State University, the exit examination must be completed; however, the result of this examination is not a criterion for graduation.

### Computer Information Systems Minor

A minor in Computer Information Systems requires 21 semester hours distributed in the following way:

MA 308 Discrete Mathematics .....	3 semester hours
CS 305 Concepts of Computer Programming .....	3 semester hours
CS 317 Computer Science I (C++) .....	3 semester hours
CS 318 Computer Science II (C++) .....	3 semester hours
CIS 325 The Digital Enterprise .....	3 semester hours
CIS 365 Visual Application Development .....	3 semester hours
Computer Science or Computer Information Systems upper level elective .....	3 semester hours
<b>TOTAL HOURS IN MINOR: .....</b>	<b>21 semester hours</b>

**Bachelor of Science - Computer Science Major**  
**(Computer Networking Option)**  
**MAJOR CODE: 11.0101C**

Program components for the Bachelor of Science degree with a major in Computer Science - Computer Networking Option include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS.**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	<b>At least one</b> fine arts course .....	3 semester hours	__	
	<b>At least one</b> literature course .....	3 semester hours	__	
	Other Humanities/Fine Arts courses .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Precalculus Algebra <u>or</u>			
	Precalculus Algebra and Trigonometry .....	3 semester hours	__	
	Natural Sciences (lab based) .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	<b>At least one</b> history course .....	3 semester hours	__	
	Other History/Behavioral or Social Science courses .....	9 semester hours	__	__
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b><u>41 SEMESTER HOURS</u></b>		

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**
- |                                       |                    |     |
|---------------------------------------|--------------------|-----|
| **Precalculus Trigonometry .....      | 3 semester hours   | ___ |
| Calculus I .....                      | 4 semester hours   | ___ |
| Calculus II .....                     | 4 semester hours   | ___ |
| Calculus III .....                    | 4 semester hours   | ___ |
| C++ (CS 317 Computer Science I) ..... | 3 semester hours   | ___ |
| Computer Programming Class .....      | 3 semester hours   | ___ |
| General Electives .....               | 0-5 semester hours | ___ |

\*\*If Precalculus Algebra (3 semester hours) is completed to satisfy the Area III mathematics requirement, the student should complete Precalculus Trigonometry (3 semester hours) in addition to Precalculus Algebra. Completion of Precalculus Algebra and Trigonometry (4 semester hours) will satisfy both the Area III mathematics requirement and the Area V requirement for trigonometry.

**TOTAL MAJOR PREREQUISITE HOURS: ..... 19-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**
- |   |                  |     |
|---|------------------|-----|
| MA 308 Discrete Mathematics .....                         | 3 semester hours | ___ |
| MA 310 Linear Algebra .....                               | 3 semester hours | ___ |
| MA 331 Theory of Statistics and Probability .....         | 3 semester hours | ___ |
| CS 309 Introduction to Digital Logic Design .....         | 3 semester hours | ___ |
| CS 318 Computer Science II .....                          | 3 semester hours | ___ |
| CS 340 Introduction to Assembly Language .....            | 3 semester hours | ___ |
| CS 372 Data Structures .....                              | 3 semester hours | ___ |
| CS 409 Computer Organization and Architecture .....       | 3 semester hours | ___ |
| CS 415 Computer Systems Software .....                    | 3 semester hours | ___ |
| CS 451 Software Engineering .....                         | 3 semester hours | ___ |
| CS 452/ CS 452L Senior Software Engineering Project ..... | 4 semester hours | ___ |
| CN 301 Network Fundamentals .....                         | 2 semester hours | ___ |
| CN 302 Local Area Networks .....                          | 2 semester hours | ___ |
| CN 303 Wide Area Networks .....                           | 2 semester hours | ___ |
| CN 304 Network Architectures .....                        | 2 semester hours | ___ |
| CN 401 Internetworking Devices .....                      | 2 semester hours | ___ |
| CN 402 The Internet .....                                 | 2 semester hours | ___ |
| CN 403 Network Processes and Protocols .....              | 2 semester hours | ___ |
| CN 404 Enterprise Network Design .....                    | 2 semester hours | ___ |
| Math or CS/CIS/CN elective (approved by Advisor) .....    | 3 semester hours | ___ |
| CS/CIS/CN elective (approved by Advisor) .....            | 3 semester hours | ___ |

**TOTAL PROFESSIONAL HOURS: ..... 56 SEMESTER HOURS**

5. **The Computer Networking major must complete a minimum of 19 semester hours of upper division 300/400 level coursework in Computer Science (CS), Computer Information Systems (CIS), or Computer Networking (CN) at Athens State University. At least 6 semester hours of CS, CIS, CN or Math electives must be completed at Athens State University.**

6. A minor is not required.

7. **GENERAL ELECTIVES ..... 8 SEMESTER HOURS**

8. **TOTAL HOURS FOR GRADUATION: ..... 124-128 SEMESTER HOURS**

9. **PRE-ASSESSMENT AND EXIT EXAMINATIONS:**

The Department of Computer Science requires all CS majors to complete both an entrance and an exit examination. The **entrance examination** is developed by the Department and is used to place the student in the appropriate initial course in the CS or CIS curriculum. This examination will be graded locally and the results known immediately. For a CS major to graduate from Athens State University, the exit examination must be completed; however, the result of this examination is not a criterion for graduation.

### Computer Networking Minor

A student majoring in computer science or computer information systems may complete a minor in Computer Networking by completing 16 semester hours of CN courses. Students in other majors must complete the following additional courses:

MA 308 Discrete Mathematics .....	3 semester hours
CS 305 Concepts of Computer Programming .....	3 semester hours
CS 309 Introduction to Digital Logic Design .....	3 semester hours
CS 309L Introduction to Digital Logic Design Lab .....	1 semester hour
CS 317 Computer Science I (C++) .....	3 semester hours
CS 318 Computer Science II (C++) .....	3 semester hours
CS 340 introduction to Assembly Language .....	3 semester hours
CS 409 Computer Organization and Architecture .....	3 semester hours
CS 415 Computer System Software .....	3 semester hours
<b>TOTAL ADDITIONAL COURSES .....</b>	<b>25 semester hours</b>

## ENGLISH (EH)

English as an academic field encompasses both theory and practice in the reading and interpreting of literature as well as in written and oral communication. All courses are designed to engage the intelligence, excite the imagination, improve scholarship, and increase the enjoyment of literature and language. Appropriate transferred courses may be substituted, when so evaluated, for listed courses. Those students desiring to be certified as English teachers for the public schools should follow the Licensure and Certification track.

### **Bachelor of Arts - English Major**

**MAJOR CODE: 23.0101**

Program components for the Bachelor of Arts degree with a major in English include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Finite Math or its equivalent required ..... 3 semester hours \_\_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_\_ \_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_ \_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**  
 General Education Electives ..... 12 semester hours \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 CIS 146 Microcomputer Applications\_or  
 CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_  
 General electives ..... 8 semester hours \_\_\_ \_\_\_ \_\_\_  
**TOTAL MAJOR PREREQUISITE COURSES ..... 19-23 SEMESTER HOURS**  
**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**  
 EH 312 Dramatic Literature ..... 3 semester hours \_\_\_  
 EH 325 Myth: Ritual and Culture ..... 3 semester hours \_\_\_  
 EH 414 History of the English Language ..... 3 semester hours \_\_\_  
 EH 431 Poetry and Poetics ..... 3 semester hours \_\_\_  
 EH 425 Shakespeare: The Sonnets and the Plays ..... 3 semester hours \_\_\_  
 EH 433 Fiction ..... 3 semester hours \_\_\_  
 EH 452 Chaucer and Medieval Literature ..... 3 semester hours \_\_\_  
 Electives in English ..... 18 semester hours \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_\_\_  
**Choose from the following courses:**  
 EH 304 Southern Literature  
 EH 307 Major Authors I  
 EH 308 Major Authors II  
 EH 314 Nineteenth Century British Studies  
 EH 316 American Masterpieces  
 EH 330 Literary and Critical Theory  
 EH 400 Creative Writing  
 EH/RE 416 Interpreting the Text  
 EH 440 African-American Studies  
 EH 450 Renaissance Literature 1550-1680  
 EH 451 Restoration/Eighteenth Century  
**TOTAL PROFESSIONAL HOURS: ..... 39 SEMESTER HOURS**
5. A minor is required. .... 18 Semester Hours
6. All B.A. English majors must take an exit exam before graduation. Please see your English advisor to set up a date/time.
7. **GENERAL ELECTIVES ..... 7 Semester Hours** \_\_\_ \_\_\_
8. **TOTAL HOURS FOR GRADUATION: ..... 124-128 SEMESTER HOURS**

### English Minor

A minor in English consists of 21 semester hours of English coursework of which 12 semester hours must be taken at Athens State University including the following courses or their equivalents:

- EH 312 Dramatic Literature ..... 3 semester hours  
 EH 425 Shakespeare: The Sonnets and the Plays ..... 3 semester hours  
 EH 431 Poetry and Poetics ..... 3 semester hours  
 Choose from the following courses ..... 12 semester hours  
 EH 304 Southern Literature  
 EH 307 Major Authors I  
 EH 308 Major Authors II  
 EH 314 Nineteenth Century British Studies  
 EH 316 American Masterpieces  
 EH 325 Myth: Ritual and Culture  
 EH 413 Composition for Teachers  
 EH/RE 416 Interpreting the Text  
 EH 433 Fiction  
 EH 440 African-American Studies  
 EH 450 Renaissance Literature 1550-1680  
 EH 451 Restoration/Eighteenth Century  
 EH 452 Chaucer and Medieval Literature  
**TOTAL HOURS FOR MINOR ..... 21 semester hours**

**Bachelor of Arts - English Major**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 23.0101**

(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made and realize that all attempts are calculated in the GPA. Education courses with the prefixes ED, EL, ER, SC, SE, CE, and HPE may be repeated one time only.
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP); and
- 6) complete the 18 semester hours in Literature sequences as required by the degree before being admitted to the Teacher Education Program.

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

**2. GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	___
<b>Area II.</b>	<b>Humanities and Fine Arts</b> (12 semester hours) .....		
	ENG 261 English Literature I .....	3 semester hours	___
	ENG 262 English Literature II .....	3 semester hours	___
	SPH 106 Fundamentals of Speech Communication <u>or</u>		
	SPH 107 Fundamentals of Public Speaking .....	3 semester hours	___
	THR120 Theatre Appreciation <u>or</u>		
	THR 126 Introduction to Theatre .....	3 semester hours	___
<b>Area III.</b>	<b>Natural Sciences and Mathematics</b> (11 semester hours)		
	Finite Math or its equivalent required .....	3 semester hours	___
	Natural Sciences (lab based required) .....	8 semester hours	___
<b>Area IV.</b>	<b>History, Social and Behavioral Sciences</b> (12 semester hours)		
	General Psychology .....	3 semester hours	___
	Social and Behavioral Sciences .....	6 semester hours	___
	History .....	3 semester hours	___

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):**

ENG 251 American Literature I .....	3 semester hours	___
ENG 252 American Literature II .....	3 semester hours	___
ENG 271 World Literature I .....	3 semester hours	___
ENG 272 World Literature II .....	3 semester hours	___
General Electives .....	9 semester hours	___ ___ ___

**TOTAL MAJOR PREREQUISITE HOURS: ..... 21 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: ..... 62 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

EH 303 Journalism .....	3 semester hours	___
EH 311 Drama Production .....	3 semester hours	___
EH 312 Dramatic Literature .....	3 semester hours	___
EH 320 Grammar for Teachers .....	3 semester hours	___
EH 325 Myth: Ritual and Culture or EH 454 Young Adult Literature .....	3 semester hours	___
EH 401 Speech: Conflict Management .....	3 semester hours	___
EH 414 History of the English Language .....	3 semester hours	___
EH 425 Shakespeare .....	3 semester hours	___
EH 431 Poetry and Poetics .....	3 semester hours	___
EH 433 Fiction or EH 316 American Masterpieces .....	3 semester hours	___
EH 452 Chaucer and Medieval Literature .....	3 semester hours	___

**TOTAL PROFESSIONAL HOURS: ..... 33 SEMESTER HOURS**

5. **MINOR COURSES FOR CERTIFICATION IN ENGLISH/LANGUAGE ARTS:**

ED 301 Foundations of Education I .....	1 semester hour	___
ED 302 Foundations of Education II .....	2 semester hours	___
ED 305 Technology & Media in Education .....	3 semester hours	___
SC 331 Issues and Management in Secondary Education .....	3 semester hours	___
SC 333 Teaching Reading/Writing in the Content Areas .....	3 semester hours	___
SC 362 <u>Assessment and Evaluation in Secondary Education</u> .....	3 semester hours	___
SE 301 <u>Introduction to Exceptional Learners</u> .....	3 semester hours	___
EH 457 <u>Materials and Methods of Teaching English/Language Arts in Middle ... School/High School</u> .....	3 semester hours	___
PS 334 Adolescent Psychology .....	3 semester hours	___
SC 486 <u>Internship in High School Education</u> .....	9 semester hours	___ ___ ___

**TOTAL MINOR REQ. FOR CERTIFICATION/LICENSURE: ..... 33 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION ..... 128 SEMESTER HOURS**

6. For the student obtaining high school certification who wishes a middle school (Grades 4-8) endorsement in language arts, the following courses are required:

EL 413 Teaching Reading in the Intermediate Grades .....	3 semester hours
ED 321 Teaching Language Arts .....	3 semester hours
PS 332 Child Psychology .....	3 semester hours

**NOTE: IF THE FIFTEEN-WEEK INTERNSHIP WAS NOT COMPLETED IN GRADES 7-8, AN ADDITIONAL SEVEN-WEEK INTERNSHIP MUST BE COMPLETED IN MIDDLE SCHOOL GRADES.**

## GENERAL SCIENCE (GS)

The General Science major may earn either the Bachelor of Science degree or the Bachelor of Science degree with teacher licensure in middle/secondary schools (6-12). The Bachelor of Science General Science degree is structured to prepare the student for (1) careers or graduate programs requiring multi-disciplinary scientific background and (2) middle/secondary school teaching in Biology, Chemistry, Physics, and Earth Science.

### **Bachelor of Science - General Science Major**

**MAJOR CODE: 30.1801**

#### **1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

##### **To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### **2. GENERAL EDUCATION REQUIREMENTS:**

**Area I.** Written Composition ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities and Fine Arts** (12 semester hours)

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts Elective ..... 6 semester hours \_\_\_ \_\_\_

**Area III. Natural Sciences and Mathematics** (12 semester hours)

Calculus I\* ..... 4 semester hours \_\_\_

Biology I and II ..... 8 semester hours \_\_\_ \_\_\_

**\*Prerequisites: Precalculus Algebra and Precalculus Trigonometry**

**Area IV. History/Behavioral and Social Sciences** (12 semester hours)

**At least one** History course ..... 3 semester hours \_\_\_

Other History/Behavioral Science or Social Science Electives ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 42 SEMESTER HOURS**

<b>3.</b>	<b>MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)</b>	
	Calculus II .....	4 semester hours ___
	Calculus III .....	4 semester hours ___
	General Chemistry I .....	4 semester hours ___
	General Chemistry II .....	4 semester hours ___
	General Physics I (Calculus based) .....	4 semester hours ___
	General Physics II (Calculus based) .....	4 semester hours ___
	CIS 146 Microcomputer Applications .....	3 semester hours ___
	<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>27 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: .....</b>	<b>69 SEMESTER HOURS</b>
<b>4.</b>	<b>PROFESSIONAL COURSES:</b>	
	MA 421 Differential Equations .....	3 semester hours ___
	CH 305/CH 305L Fundamentals of Organic Chemistry .....	3 semester hours ___
	CH 324 /CH 324L Analytical Chemistry .....	4 semester hours ___
	BI 301/BI 301L Cell Structure and Function .....	4 semester hours ___
	BI 303/BI 303L General Ecology .....	4 semester hours ___
	PY 303/PY 303L Calculus Physics III (Modern Physics) .....	4 semester hours ___
	PY 309 Mechanics I <u>or</u> PY 312 Electricity and Magnetism I <u>or</u> PY 344 Principles of Optics .....	3-4 semester hours ___
	GS 300/GS 300L Introduction to Astronomy .....	4 semester hours ___
	GS 301/GS 301L Atmospheric Science .....	4 semester hours ___
	GS 302/GS 302L Earth Science .....	4 semester hours ___
	<b>TOTAL PROFESSIONAL HOURS: .....</b>	<b>37-38 SEMESTER HOURS</b>
<b>5.</b>	<b>General Electives .....</b>	<b>21-22 semester hours</b>
	<b>TOTAL HOURS FOR GRADUATION: .....</b>	<b>127-129 SEMESTER HOURS</b>

**Bachelor of Science - General Science Major**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 30.1801**

(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made and realize that all attempts are calculated in the GPA. Education courses with the prefixes ED, EL, ER, SC, SE, CE, and HPE may be repeated one time only; and
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP).

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

**2. GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	___ ___
<b>Area II.</b>	<b>Humanities and Fine Arts</b> (12 semester hours)		
	Fine Arts .....	3 semester hours	___
	Speech (SPH 106 or SPH 107) .....	3 semester hours	___
	Humanities Elective .....	3 semester hours	___
	Literature* .....	3 semester hours ___ or .....	6 semester hours ___ ___
<b>Area III.</b>	<b>Natural Sciences and Mathematics</b> (12 semester hours)		
	Calculus I** .....	4 semester hours	___
	Biology I and II .....	8 semester hours	___ ___
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences</b> (12 semester hours)		
	History * .....	3 semester hours ___ or .....	6 semester hours ___ ___
	General Psychology .....	3 semester hours	___
	Behavioral Science or Social Science Elective .....	3 semester hours	___

**\*Students must complete a 6 semester hour sequence in either Area II Literature or Area IV History.**

**\*\*Prerequisites: Precalculus Algebra and Precalculus Trigonometry**

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 42 SEMESTER HOURS**

<b>3. MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)</b>	
Calculus II .....	4 semester hours ___
Calculus III .....	4 semester hours ___
General Chemistry I .....	4 semester hours ___
General Chemistry II .....	4 semester hours ___
General Physics I (Calculus based) .....	4 semester hours ___
General Physics II (Calculus based) .....	4 semester hours ___

**TOTAL MAJOR PREREQUISITE COURSES: ..... 24 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: ..... 66 SEMESTER HOURS**

<b>4. PROFESSIONAL COURSES:</b>	
MA 421 Differential Equations .....	3 semester hours ___
CH 305/CH 305L Fundamentals of Organic Chemistry .....	3 semester hours ___
CH 324/CH 324L Analytical Chemistry .....	4 semester hours ___
BI 301/BI 301L Cell Structure and Function .....	4 semester hours ___
BI 303/BI 303L General Ecology .....	4 semester hours ___
PY 303/PY 303L Calculus Physics III (Modern Physics) .....	4 semester hours ___
PY 309 Mechanics I or PY 312 Electricity and Magnetism I or PY 344 Principles of Optics .....	3-4 semester hours ___
GS 300/GS 300L Introduction to Astronomy .....	4 semester hours ___
GS 301/GS 301L Atmospheric Science .....	4 semester hours ___
GS 302/GS 302L Earth Science .....	4 semester hours ___

**TOTAL PROFESSIONAL HOURS: ..... 37-38 SEMESTER HOURS**

<b>5. MINOR COURSES FOR CERTIFICATION:</b>	
ED 301 Foundations of Education I .....	1 semester hour ___
ED 302 Foundations of Education II .....	2 semester hours ___
ED 305 Technology & Media in Education .....	3 semester hours ___
SC 331 Issues and Management in Secondary Education .....	3 semester hours ___
SC 333 <u>Teaching Reading/Writing in the Content Areas</u> .....	3 semester hours ___
PS 334 Adolescent Psychology .....	3 semester hours ___
SE 301 <u>Introduction to Exceptional Learners</u> .....	3 semester hours ___
SC 362 <u>Assessment and Evaluation in Secondary Education</u> .....	3 semester hours ___
GS 456 <u>Materials and Methods of Teaching General Science in Middle School/High School</u> .....	3 semester hours ___
SC 486 <u>Internship in High School Education</u> .....	9 semester hours ___ ___ ___

**TOTAL PROFESSIONAL EDUCATION HOURS: ..... 33 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION ..... 136-137 SEMESTER HOURS**

6. For the student obtaining high school certification who wishes a middle school (Grades 4-8) endorsement in general science, the following courses are required:

EL 413 Teaching Reading in the Intermediate Grades .....	3 semester hours
ED 420 Teaching Science .....	3 semester hours
PS 332 Child Psychology .....	3 semester hours

**NOTE: IF THE FIFTEEN-WEEK INTERNSHIP WAS NOT COMPLETED IN GRADES 7-8, AN ADDITIONAL SEVEN-WEEK INTERNSHIP MUST BE COMPLETED IN MIDDLE SCHOOL GRADES.**

# HEALTH SCIENCE

## Bachelor of Science - Health Science Major

MAJOR CODE: 51.9999

Program components for the Bachelor of Science degree with a major in Health Science include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Precalculus Algebra or higher ..... 3 semester hours \_\_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_\_ \_\_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS** ..... **41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**

CIS 146 Microcomputer Applications <u>or</u>				
CS 301 Problem Solving With Computers .....	3 semester hours	___		
Legal Environment of Business .....	3 semester hours	___		
General Electives .....	17 semester hours	___	___	___
		___	___	___

**TOTAL MAJOR PREREQUISITE HOURS: ..... 19-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

The Health Science major culminates in a baccalaureate degree for nursing professionals, or for students who are certified in a para-medical field such as, but not limited to, dental hygiene, medical records, medical technology, health physics, or animal health technology. Professional course requirements for the major may be satisfied by completion of Area V and completion of a minimum of 24 semester hours of Faculty Advisor approved coursework from one of the following departments: Biology, Chemistry, Physics, Mathematics, Computer Science. The student seeking a position involving supervision of personnel may wish to consider the following management option:

MG 320 Organizational Communication and Leadership .....	3 semester hours	___		
MG 346 Principles of Management .....	3 semester hours	___		
MG 349 Human Resource Management .....	3 semester hours	___		
MG 375 Organizational Behavior .....	3 semester hours	___		
PS 368 Industrial and Personnel Psychology .....	3 semester hours	___		
SO 304 Sociology of Work <u>or</u>				
Faculty Advisor approved College of Business elective .....	3 semester hours	___		
Business Electives .....	6 semester hours	___	___	

**TOTAL PROFESSIONAL HOURS: ..... 24 SEMESTER HOURS**

5. A minor **is not** required.

6. **GENERAL ELECTIVES ..... 40 Semester Hours** \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_

7. **TOTAL HOURS FOR GRADUATION ..... 128 SEMESTER HOURS**

**Bachelor of Science - Health and Wellness Management Major**  
**MAJOR CODE: 13.1314**

A major in health and wellness management with a Bachelor of Science degree responds to a need to prepare professionals with expertise in health fitness who become employed in such areas as business, industry, service agencies, correctional institutions and hospitals.

Program components for the Bachelor of Science degree with a major in Health Science include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	___	___
<b>Area II.</b>	<b>Humanities and Fine Arts</b> (12 semester hours)			
	The Arts .....	3 semester hours	___	
	Speech (SPH 106 or SPH 107) .....	3 semester hours	___	
	Literature* .....	3 semester hours	___	or .....
		6 semester hours	___	___
	Humanities/Fine Arts Elective .....	3 semester hours	___	
<b>Area III.</b>	<b>Natural Sciences and Mathematics</b> (11 semester hours)			
	Finite Math or higher .....	3 semester hours	___	
	Natural sciences (lab based required) .....	8 semester hours	___	___
<b>Area IV.</b>	<b>History, Social and Behavioral Sciences</b> (12 semester hours)			
	History* .....	3 semester hours	___	or .....
		6 semester hours	___	___
	General Psychology .....	3 semester hours	___	
	Behavioral Science or Social Science Elective .....	3 semester hours	___	

\*Students must complete a 6 semester hour sequence either Area II Literature or in Area IV History.

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):**
- |   |                  |             |
|---|------------------|-------------|
| Fundamentals of Fitness .....   | 3 semester hours | ___         |
| Foundations of Physical Education .....                                   | 3 semester hours | ___         |
| Personal Health .....   | 3 semester hours | ___         |
| Safety & First Aid .....  | 3 semester hours | ___         |
| Anatomy and Physiology .....  | 4 semester hours | ___         |
| Physical Education Activity (At least 3 different activity courses) ..... | 3 semester hours | ___ ___ ___ |

**TOTAL MAJOR PREREQUISITE COURSES: ..... 19-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**
- |   |                  |     |
|---|------------------|-----|
| HPE 301 Coaching Theory and Officiating .....                       | 3 semester hours | ___ |
| HPE 325 Kinesiology .....   | 3 semester hours | ___ |
| HPE 326 History and Principles of Physical Education .....          | 3 semester hours | ___ |
| HPE 327 Physiology of Exercise .....                                | 3 semester hours | ___ |
| HPE 333 Care and Prevention of Athletic Injuries .....              | 3 semester hours | ___ |
| HPE 354 Contemporary Health and Physical Education Activities ..... | 3 semester hours | ___ |
| HPE 355 Health Related Fitness and Nutrition .....                  | 3 semester hours | ___ |
| HPE 400 Organization and Administration of Physical Education ..... | 3 semester hours | ___ |
| HPE 401 Measurement and Evaluation of Physical Education .....      | 3 semester hours | ___ |
| HPE 427 Principles of Exercise Prescription and Assessment .....    | 3 semester hours | ___ |
| HPE 431 Motor Development and Physical Activity .....               | 3 semester hours | ___ |
| PS 332 Child Psychology .....                                       | 3 semester hours | ___ |
| PS 334 Adolescent Psychology .....                                  | 3 semester hours | ___ |
| PS 335 Adult Psychology .....                                       | 3 semester hours | ___ |
| SO 471 Aging in a Mass Society .....                                | 3 semester hours | ___ |
| PSHA 349 Human Resources Management .....                           | 3 semester hours | ___ |
| PSHA 446 Public Safety Concepts and Systems .....                   | 3 semester hours | ___ |
| PSHA 465 Senior Research Project .....                              | 4 semester hours | ___ |
| HPE 480 Internship in Physical Education .....                      | 9 semester hours | ___ |

**TOTAL PROFESSIONAL HOURS: ..... 64 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION: ..... 124-128 SEMESTER HOURS**

5. A minor is **not** required.

## HISTORY (HY)

The history faculty seek to develop in its students an appreciation of our cultural heritage, an understanding of the world in which we live, and an awareness of the future. It strives to develop in its majors the research abilities necessary for graduate work. Through courses of interest to the non-major; it makes the student aware of the cultural legacy from Europe, England, and the United States and affords an opportunity to study other areas of the world. The History Department, acting in conjunction with the College of Education, offers students who wish to become secondary school teachers the Bachelor of Arts degree in history with teacher certification in addition to the traditional Bachelor of Arts in history degree.

### Bachelor of Arts - History Major

**MAJOR CODE: 54.0101**

Program components for the Bachelor of Arts degree with a major in History include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	<b>At least one</b> fine arts course .....	3 semester hours	__	
	<b>At least one</b> literature course .....	3 semester hours	__	
	Other Humanities/Fine Arts courses .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Finite Math or its equivalent required .....	3 semester hours	__	
	Natural Sciences (lab based) required .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	<b>At least one</b> history course .....	3 semester hours	__	
	Other History/Behavioral or Social Science courses .....	9 semester hours	__	__
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b>41 SEMESTER HOURS</b>		

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**

The history major should complete a 6 hour semester sequence in history (Western Civilization, World History, or United States History) in addition to satisfying the Area IV requirement.

(In addition to Area IV) .....	6 semester hours	___	___
Electives in History .....	6 semester hours	___	___
CIS 146 Microcomputer Applications <u>or</u>			
CIS 301 Problem Solving with Computers .....	3 semester hours	___	
Free Electives. ....	9 semester hours	___	___

**TOTAL MAJOR PREREQUISITE HOURS: ..... 24 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 65 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

**300 and 400 level courses:**

HY 300 Historiography .....	3 semester hours	___		
American History .....	12 semester hours	___	___	___
European History .....	12 semester hours	___	___	___
Non-Western History .....	6 semester hours	___	___	
<b>TOTAL PROFESSIONAL HOURS: .....</b>	<b>33 SEMESTER HOURS</b>			

5. The student should realize that for graduate school a reading knowledge of one or two languages generally is required.

6. A minor is required. .... 18 semester hours

7. **GENERAL ELECTIVES** ..... 12 semester hours \_\_\_ \_\_\_ \_\_\_

8. **TOTAL HOURS FOR GRADUATION** ..... **128 semester hours**

**HISTORY MINOR**

History is an approved area of study for a minor. The student must complete at least 18 semester hours of history distributed as follows:

American History .....	6 semester hours
European History .....	6 semester hours
Non-Western History .....	3 semester hours
History Elective .....	3 semester hours
<b>TOTAL HOURS FOR MINOR</b> .....	<b>18 semester hours</b>

**Bachelor of Arts - History Major**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 54.0101**

(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made and realize that all attempts are calculated in the GPA. Education courses with the prefixes ED, EL, ER, SC, SE, CE, and HPE may be repeated one time only.
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP); and
- 6) complete the 12 semester hours in History sequence as required by the degree before being admitted to the Teacher Education Program.

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS.**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

**2. GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	__ __
<b>Area II.</b>	<b>Humanities and Fine Arts</b> (12 semester hours)		
	The Arts .....	3 semester hours	__
	Speech (SPH 106 or SPH 107) .....	3 semester hours	__
	Humanities/Fine Arts Elective .....	3 semester hours	__
	Literature .....	3 semester hours	__
<b>Area III.</b>	<b>Natural Sciences and Mathematics</b> (11 semester hours)		
	Finite Math or higher .....	3 semester hours	__
	Natural Sciences (lab based required) .....	8 semester hours	__ __
<b>Area IV.</b>	<b>History, Social and Behavioral Sciences</b> (12 semester hours)		
	U.S History I and II .....	6 semester hours	__ __
	General Psychology .....	3 semester hours	__
	Behavioral Science or Social Science Elective .....	3 semester hours	__

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):**  
 CIS 146 Microcomputer Applications or CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_  
 History of Western Civilization I, II or World History I, II\*\* ..... 6 semester hours \_\_\_ \_\_\_  
 Free Electives ..... 12 semester hours \_\_\_ \_\_\_

\*\*History of Western Civilization or World History must be taken as a sequence.

**TOTAL MAJOR PREREQUISITE COURSE HOURS: ..... 21 SEMESTER HOURS**

**TOTAL GEN. ED. REQUIREMENTS AND MAJOR PREREQUISITE HOURS: ..... 62 SEMESTER HOURS**

4. **PROFESSIONAL COURSES**  
 HY 300 Historiography ..... 3 semester hours \_\_\_  
 American History ..... 12 semester hours \_\_\_ \_\_\_  
 European History ..... 12 semester hours \_\_\_ \_\_\_  
 Non-Western History (Neither American nor European) ..... 6 semester hours \_\_\_ \_\_\_

**TOTAL PROFESSIONAL COURSE HOURS: ..... 33 SEMESTER HOURS**

5. **MINOR COURSES FOR CERTIFICATION:**  
 ED 301 Foundations of Education I ..... 1 semester hour \_\_\_  
 ED 302 Foundations of Education II ..... 2 semester hours \_\_\_  
 ED 305 Technology & Media in Education ..... 3 semester hours \_\_\_  
 SC 331 Issues and Management in Secondary Education ..... 3 semester hours \_\_\_  
 SC 333 Teaching Reading/Writing in the Content Areas ..... 3 semester hours \_\_\_  
 SC 362 Assessment and Evaluation in Secondary Education ..... 3 semester hours \_\_\_  
 SE 301 Introduction to Exceptional Learners ..... 3 semester hours \_\_\_  
 PS 334 Adolescent Psychology ..... 3 semester hours \_\_\_  
 HY 302 Alabama History ..... 3 semester hours \_\_\_  
 HY 450 Materials and Methods of Teaching History in Middle School/High School ..... 3 semester hours \_\_\_  
 SC 486 Internship in High School Education ..... 9 semester hours \_\_\_ \_\_\_

**TOTAL MINOR REQ. FOR CERTIFICATION/LICENSURE: ..... 36 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION: ..... 131 SEMESTER HOURS**

6. For the student obtaining high school certification who wishes a middle school endorsement (Grades 4-8) in history, the following courses are required:  
 EL 413 Teaching Reading in the Intermediate Grades ..... 3 semester hours  
 ED 423 Teaching Social Studies ..... 3 semester hours  
 PS 332 Child Psychology ..... 3 semester hours

**NOTE: IF THE FIFTEEN-WEEK INTERNSHIP WAS NOT COMPLETED IN GRADES 7-8, AN ADDITIONAL SEVEN-WEEK INTERNSHIP MUST BE COMPLETED IN MIDDLE SCHOOL GRADES.**

## INSTRUMENTATION (IT)

The Instrumentation program prepares graduates for careers as instrumentation technologists in such diverse areas as data acquisition, process control, system integration, installation, and repair for laboratories and medical facilities, as well as for industries such as power generation, chemical processing, pulp and paper processing, electronic fabrication, and heavy manufacturing.

The program is intended as a terminal degree program for students who do not intend to pursue an education beyond the baccalaureate level. A student who wishes to pursue a program which offers a greater level of preparation and which serves as an entry point for graduate study should consider the Bachelor of Science in Physics with Instrumentation option.

### Bachelor of Science - Instrumentation Major

**MAJOR CODE: 41.9999**

Program components for the Bachelor of Science degree with a major in Instrumentation include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Precalculus Algebra or Precalculus Algebra & Trigonometry 3-4 semester hours \_\_\_

General Physics I (Calculus based) ..... 4 semester hours \_\_\_

General Physics II (Calculus based) ..... 4 semester hours \_\_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS** ..... **41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**  
 Calculus I ..... 4 semester hours \_\_\_\_  
 General electives (Should be fulfilled by completion of introductory electronics courses (e.g., AC and DC circuits, semiconductor electronics, analog electronics, digital electronics, microprocessors, trouble shooting and repair).....19 semester hours \_\_\_\_ \_\_\_\_  
 \_\_\_\_\_
- TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**
- TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**  
 MA 304 Calculus II ..... 4 semester hours \_\_\_\_  
 CIS 301 Problem Solving With Computers ..... 3 semester hours \_\_\_\_  
 CH 301 Introductory Chemistry ..... 3 semester hours \_\_\_\_  
 PY 303 Calculus Physics III (Modern Physics) ..... 4 semester hours \_\_\_\_  
 IT 306 Interfacing Techniques ..... 4 semester hours \_\_\_\_  
 IT 316 Applied Digital Design ..... 4 semester hours \_\_\_\_  
 IT 320 Math Methods for Instrumentation ..... 4 semester hours \_\_\_\_  
 IT 400 Advanced Analog Instrumentation ..... 4 semester hours \_\_\_\_  
 IT 401 Applied Data Communications ..... 4 semester hours \_\_\_\_  
 IT 420 Electro-Optics ..... 4 semester hours \_\_\_\_  
 IT 425 Introduction to Robotics ..... 4 semester hours \_\_\_\_  
 IT 440 Process Control Instrumentation ..... 4 semester hours \_\_\_\_  
 IT 441 Computer Instrumentation ..... 4 semester hours \_\_\_\_  
 Electives (Faculty Advisor approved courses in instrumentation, physics, mathematics or computer science) ..... 8 semester hours \_\_\_\_ \_\_\_\_
- TOTAL PROFESSIONAL HOURS: ..... 58 SEMESTER HOURS**
5. The Instrumentation major must complete a minimum of 15 semester hours of upper division 300/400 level instrumentation coursework at Athens State University.
6. A minor **is not** required.
7. **GENERAL ELECTIVES ..... 6 semester hours \_\_\_\_ \_\_\_\_**
8. **TOTAL HOURS FOR GRADUATION ..... 128 SEMESTER HOURS**

### Instrumentation Minor

The minor must include the following courses or their approved equivalents of which at least 9 semester hours must be taken at Athens State University.

- Introductory Level Electronics Courses (Should include background in AC and DC Circuits, Semiconductor Electronics, Analog and Digital Electronics, Microprocessors, and Troubleshooting) ..... 15 semester hours  
 Calculus I, II (MA 303, 304) ..... 8 semester hours  
 IT 306 Interfacing Techniques ..... 4 semester hours  
 IT 316 Applied Digital Design ..... 4 semester hours  
 IT Electives ..... 8 semester hours  
**TOTAL HOURS FOR MINOR: ..... 39 semester hours**

## JUSTICE STUDIES (JS)

The Justice Studies program enhances student opportunities in the criminal justice field. These opportunities include professional roles in law enforcement and correctional administration, security positions in private industry, judicial administration, and probation and parole.

Students pursuing degrees in Justice Studies will be able to apply knowledge attained about criminal law and processes, theoretical concepts of crime causation and control, and will acquire competency in understanding research regarding management practices and policymaking within criminal justice agencies. Justice Studies students will have the opportunity to apply technical knowledge of criminal justice, and research skills in an internship which allows for varied learning experiences in actual agency settings.

### Bachelor of Science - Justice Studies Major

**MAJOR CODE: 43.0104**

Program components of the Bachelor of Science degree with a major in Justice Studies include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	<b>At least one</b> fine arts course .....	3 semester hours	__	
	<b>At least one</b> literature course .....	3 semester hours	__	
	Additional courses in Humanities/Fine Arts .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Finite Math or its equivalent required .....	3 semester hours	__	
	Natural Sciences (lab based) required .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	<b>At least one</b> history course .....	3 semester hours	__	
	Additional courses in History/Behavioral and Social Sciences	9 semester hours	__	__
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b><u>41 SEMESTER HOURS</u></b>		

3.	<b>MAJOR PREREQUISITE COURSES (PREPROFESSIONAL)</b>	
	Introduction to Criminal Justice .....	3 semester hours ___
	Law Enforcement <u>or</u> Policing <u>or</u> Corrections <u>or</u> Security .....	3 semester hours ___
	CIS 146 Microcomputer Applications <u>or</u> CIS 301 Problem Solving with Computers .....	3 semester hours ___
	General Electives .....	14 semester hours ___ ___ ___
	<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>23 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. REQ. &amp; MAJOR PREREQUISITE HOURS: .....</b>	<b>64 SEMESTER HOURS</b>
4.	<b>PROFESSIONAL COURSES:</b>	
	JS 301 Criminal Justice Process .....	3 semester hours ___
	JS/PO 302 Criminal Law .....	3 semester hours ___
	JS 400 Law Enforcement in America .....	3 semester hours ___
	JS/SO 401 Adult Corrections .....	3 semester hours ___
	JS/SO 452 Advanced Criminology .....	3 semester hours ___
	PO 303 Comparative State and Local Government .....	3 semester hours ___
	PO/PS/SO 342 Methods of Behavioral Science Research .....	3 semester hours ___
	MG/PSHA/PO 377 Public Administration .....	3 semester hours ___
	JS/PO/PSHA 455 Public Administration Ethics .....	3 semester hours ___
	JS/PSHA 465 Senior Research Project .....	4 semester hours ___
	Justice Studies Electives .....	6 semester hours ___ ___
	<b>TOTAL PROFESSIONAL HOURS: .....</b>	<b>37 SEMESTER HOURS</b>
5.	A minimum of 27 semester hours of upper division JS/PO/PSHA coursework must be completed at Athens State University.	
6.	A minor <b>is not</b> required.	
7.	<b>GENERAL ELECTIVES .....</b>	<b>27 Semester Hours</b> ___ ___ ___ ___ ___ ___ ___
	<b>TOTAL HOURS FOR GRADUATION .....</b>	<b>128 SEMESTER HOURS</b>

### Justice Studies Minor

A minor in Justice Studies requires the completion of eighteen semester hours of coursework to consist of the following:

JS 301 Criminal Justice Process .....	3 semester hours ___
JS 302 Criminal Law .....	3 semester hours ___
JS 452 Advanced Criminology .....	3 semester hours ___
Justice Studies electives .....	9 semester hours ___ ___ ___
<b>TOTAL HOURS FOR MINOR .....</b>	<b>18 semester hours</b>

## LIBERAL STUDIES

The Liberal Studies program is designed to benefit students who seek progression and mobility in their educational and career goals. The program provides maximum flexibility in course selection while allowing the student to concentrate on subject matter of particular relevance.

The Liberal Studies program also is intended for those students who wish to enrich and satisfy their personal goals through non-specialized collegiate study.

While no specified major courses are required, the student must comply with all requirements for the Bachelor of Science degree and applicable university requirements (See General University Requirements).

The following limitations apply to the Bachelor of Science in Liberal Studies:

- (a) A minor is not permitted in the Liberal Studies program.
- (b) Liberal Studies may not be considered as a minor to any other degree program.
- (c) Liberal Studies may not be considered as a second major with any other degree program.
- (d) The Bachelor of Science in Liberal Studies degree will be awarded only to students who have not declared a major in another program of study.
- (e) The Bachelor of Science in Liberal Studies degree will not be awarded concurrently with any other major.

### Bachelor of Science - Liberal Studies Major **MAJOR CODE: 24.0101**

Program components for the Bachelor of Science degree with a major in Liberal Studies include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	<b>6 semester hours</b>	__ __
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>		
	<b>At least one</b> fine arts course .....	3 semester hours	__
	<b>At least one</b> literature course .....	3 semester hours	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>		
	Finite Math or its equivalent required .....	3 semester hours	__
	Natural Sciences (lab based) required .....	8 semester hours	__ __
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>		
	<b>At least one</b> history course .....	3 semester hours	__
	Additional History/Behavioral and Social Science courses .....	9 semester hours	__ __ __
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b><u>41 SEMESTER HOURS</u></b>	

3. **PRE-PROFESSIONAL AND ELECTIVE COURSES:**

CIS 146 Microcomputer Applications or  
CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_\_  
General Electives ..... 19-20 semester hours

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**TOTAL PRE-PROFESSIONAL HOURS ..... 20-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & PRE-PROFESSIONAL HOURS ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

General electives at the 300 and 400 level ..... 64 semester hours

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**TOTAL HOURS FOR GRADUATION ..... 124-128 SEMESTER HOURS**

## MATHEMATICS (MA)

The Department of Mathematics offers two tracks for its majors. The track leading to the Bachelor of Science degree with a minimum 18-hour minor will prepare the graduate for scientific endeavors requiring detailed and exact scientific analysis. The licensure/certification track which includes a 33-hour Education minor will prepare the student for a rewarding career as a high school and/or middle school mathematics teacher. A mathematics major combined with a Computer Science minor will open many career opportunities for the graduate.

### Bachelor of Science - Mathematics Major (Track 1)

**MAJOR CODE: 27.0101**

Program components for the Bachelor of Science degree with a major in Mathematics include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition</b> .....	6 semester hours	___ ___
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>		
	<b>At least one</b> fine arts course .....	3 semester hours	___
	<b>At least one</b> literature course .....	3 semester hours	___
	Additional Humanities/Fine Arts courses .....	6 semester hours	___ ___
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>		
	Precalculus Algebra .....	3 semester hours	___
	Calculus Based Physics I .....	4 semester hours	___
	Calculus Based Physics II .....	4 semester hours	___
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>		
	<b>At least one</b> history course .....	3 semester hours	___
	Additional History/Behavioral and Social Science Courses .....	9 semester hours	___ ___ ___
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS</u></b> .....		<b><u>41 SEMESTER HOURS</u></b>	

3. **MAJOR PREREQUISITE COURSES (PREPROFESSIONAL)**  
 Students planning to major in mathematics at Athens State University are required to complete the following courses:  
 CIS 146 Microcomputer Application or  
 CS 301 Problem Solving With Computers ..... 3 semester hours \_\_\_  
 Precalculus Trigonometry ..... 3 semester hours \_\_\_  
 Calculus Sequence ..... 12 semester hours \_\_\_ \_\_\_ \_\_\_  
 General Electives ..... 1-5 semester hours \_\_\_ \_\_\_
- TOTAL MAJOR PREREQUISITE HOURS: ..... 19-23 SEMESTER HOURS**
- TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**  
 MA 308 Discrete Mathematics ..... 3 semester hours \_\_\_  
 MA 310 Matrices and Linear Algebra or its equivalent ..... 3 semester hours \_\_\_  
 MA 320 Modern Algebra ..... 3 semester hours \_\_\_  
 MA 330 Advanced Mathematical Software ..... 3 semester hours \_\_\_  
 MA 421 Differential Equations ..... 3 semester hours \_\_\_  
 MA 431 Introduction to Probability ..... 3 semester hours \_\_\_  
 Computer Programming Language Sequence (preferably CS 317, CS 318) ..... 6 semester hours \_\_\_ \_\_\_
- Plus THREE (3) mathematics electives from the following: ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_**  
 MA 316 Vector Analysis  
 MA 401 Complex Analysis\*  
 MA 423 Numerical Analysis  
 MA 428 Partial Differential Equations  
 MA 432 Introduction to Statistics  
 MA 441 Special Topics in Mathematics\*\*  
 MA 445 Mathematical Modeling and Simulation  
 MA 450 Advanced Calculus I\*  
 MA 451 Advanced Calculus II\*  
 MA 452 Real Analysis\*
- Additionally, at least ONE 2-SEMESTER SEQUENCE must be completed for the Mathematics Major.**  
**Options are:**  
 MA 401 Complex Analysis and MA 452 Real Analysis or  
 MA 421 Differential Equations and MA 428 Partial Differential Equations or  
 MA 431 Introduction to Probability and MA 432 Introduction to Statistics or  
 MA 450 Advanced Calculus I and MA 451 Advanced Calculus II
- TOTAL PROFESSIONAL HOURS: ..... 33 SEMESTER HOURS**
- \*Recommended if planning to attend graduate school.  
 \*\*Must be approved by Mathematics Department Chairperson.
5. **The Mathematics major must complete a minimum of 12 semester hours of upper division 300/400 level mathematics coursework at Athens State University. To be used toward completing a Mathematics major at Athens State, any mathematics course transferred to Athens State must be a grade of C or higher. Mathematics majors must maintain a 2.5 G.P.A. in mathematics courses taken at Athens State University.**
6. A minimum 18 semester hour MINOR is required and must be approved by a Mathematics faculty advisor. .... **18 semester hours**
7. **GENERAL ELECTIVES ..... 13 semester hours**
8. **TOTAL HOURS FOR GRADUATION ..... 124-128 SEMESTER HOURS**

9. **ASSESSMENT/EXIT EXAMS**

Assessment exams and an exit exam are required. For most mathematics courses, the instructor will administer an assessment exam. The Coordinator of Testing administers the exit exam. The student should contact the Testing Office in the Student Center for policies, procedures, and times for the exam. It is the student's responsibility to schedule and take the exit exam. It is suggested that the exit exam be taken during the term prior to the student's last semester. As a condition for graduation, all B.S. mathematics majors must satisfactorily complete an exit exam. The B.S. mathematics/18 hours minor exit exam covers topics and problems from algebra, trigonometry, the calculus sequence, discrete mathematics, linear algebra, modern algebra, differential equations, and introduction to probability.

**Mathematics Minor**

A minor in Mathematics requires 24 semester hours of mathematics including 9 semester hours of upper division coursework, at least 9 semester hours of which must be taken at Athens State University. The following courses must be included:

Calculus Sequence .....	12 semester hours
MA 310 Linear Algebra .....	3 semester hours
MA 421 Differential Equations .....	3 semester hours
Upper Division Mathematics Electives (Approved Mathematics courses above the calculus sequence) .	6 semester hours
<b>TOTAL HOURS FOR MINOR .....</b>	<b>24 semester hours</b>

**Bachelor of Science - Mathematics Major (Track 2)**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 27.0101**

**(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)**

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made and realize that all attempts are calculated in the GPA. Education courses with the prefixes may be repeated one time only ED, EL, ER, SC, SE, CE, and HPE; and
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP).

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

**2. GENERAL EDUCATION REQUIREMENTS:**

**Area I.** Written Composition ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_  
 Literature\* ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_  
 Speech (SPH 106 or SPH 107) ..... 3 semester hours \_\_\_  
 Humanities/Fine Arts Elective ..... 0 semester hours \_\_\_ or 3 semester hours \_\_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Precalculus Algebra ..... 3 semester hours \_\_\_  
 Calculus Based Physics I ..... 4 semester hours \_\_\_  
 Calculus Based Physics II ..... 4 semester hours \_\_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

History\* ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_  
 General Psychology ..... 3 semester hours \_\_\_  
 History/Behavioral or Social Science  
 Elective ..... 3 semester hours \_\_\_ or 6 semester hours \_\_\_ \_\_\_

**\*Students must complete a 6 semester hour sequence in either Area II Literature or Area IV History.**

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):**

CIS 146 Microcomputer Applications <u>or</u>		
CS 301 Problem Solving with Computers .....	3 semester hours	___
Precalculus Trigonometry .....	3 semester hours	___
Calculus Sequence .....	12 semester hours	___ ___
		___ ___
General Electives .....	1-5 semester hours	___ ___

**TOTAL PRE-PROFESSIONAL HOURS: ..... 19-23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

MA 308 Discrete Mathematics .....	3 semester hours	___
MA 310 Matrices and Linear Algebra or its equivalent .....	3 semester hours	___
MA 314 College Geometry** .....	3 semester hours	___
MA 330 Advanced Mathematical Software .....	3 semester hours	___
MA 331 Applied Probability and Statistics .....	3 semester hours	___
MA 441 Special Topics in Mathematics .....	3 semester hours	___
Computer Programming Language, CS 317 Computer Science I (C++), or its equivalent .....	3 semester hours	___

Plus FOUR (4) Mathematics Electives from the following: ..... 12 semester hours \_\_\_ \_\_\_

- MA 316 Vector Analysis
- MA 320 Modern Algebra\*
- MA 401 Complex Analysis
- MA 421 Differential Equations
- MA 423 Numerical Analysis
- MA 428 Partial Differential Equations
- MA 431 Introduction to Probability
- MA 432 Introduction to Statistics
- MA 445 Mathematical Modeling and Simulation
- MA 450 Advanced Calculus I
- MA 451 Advanced Calculus II
- MA 452 Real Analysis\*

\*Recommended if planning to attend graduate school.

\*\*Prerequisite for MA 454 Materials and Methods of Teaching Mathematics in Middle School/High School.

**TOTAL PROFESSIONAL COURSE HOURS ..... 33 SEMESTER HOURS**

5. **MINOR COURSES FOR CERTIFICATION:**

ED 301 Foundations of Education I.....	1 semester hour	___
ED 302 Foundations of Education II .....	2 semester hours	___
ED 305 Technology & Media in Education .....	3 semester hours	___
SC 331 Issues and Management in Secondary Education .....	3 semester hours	___
SC 333 <u>Teaching Reading/Writing in the Content Areas</u> .....	3 semester hours	___
SE 301 <u>Introduction to Exceptional Learners</u> .....	3 semester hours	___
PS 334 Adolescent Psychology .....	3 semester hours	___
SC 362 <u>Assessment and Evaluation in Secondary Education</u> .....	3 semester hours	___
MA 454 <u>Materials and Methods of Teaching Mathematics in Middle School/High School</u> .....	3 semester hours	___
SC 486 <u>Internship in High School Education</u> .....	9 semester hours	___ ___ ___

**TOTAL MINOR REQ. FOR LICENSURE/CERTIFICATION: ..... 33 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION ..... 126-130 SEMESTER HOURS**

6. For the student obtaining high school certification who wishes a middle school endorsement in **mathematics (Grades 4-8)**, the following courses are required:

EL 424 Teaching Mathematics in Intermediate Grades .....	3 semester hours
EL 413 Teaching Reading in the Intermediate Grades .....	3 semester hours
PS 332 Child Psychology .....	3 semester hours

**NOTE: IF THE FIFTEEN-WEEK INTERNSHIP WAS NOT COMPLETED IN GRADES 7-8, AN ADDITIONAL SEVEN-WEEK INTERNSHIP MUST BE COMPLETED IN MIDDLE SCHOOL GRADES.**

7. **ASSESSMENT/EXIT EXAMS**

Assessment exams and an exit exam are required. For most mathematics courses, the instructor will administer an assessment exam. The Coordinator of Testing administers the exit exam. The student should contact the Testing Office in the Student Center for policies, procedures, and times for the exam. It is the student's responsibility to schedule and take the exit exam. It is suggested that the exit exam be taken during the term prior to the student's last semester. The exit exam for the B.S. mathematics/education minor covers topics and problems from algebra, trigonometry, the calculus sequence, discrete mathematics, linear algebra, college geometry, applied probability and statistics, and special topics.

## PHYSICS (PY)

The Physics program prepares the graduate for a career as a research laboratory physicist, for entry into a number of related fields including engineering, medicine, medical research, geology/geophysics, instrumentation, and for graduate degree programs in physics and related disciplines. The five options in the Physics program (general, instrumentation, mathematics, chemistry, and computer science) allow students to customize their curriculum to specific career or graduate degree goals.

### Bachelor of Science - Physics Major (All Options)

**MAJOR CODE: 40.0801**

Program components for a Bachelor of Science degree with a major in Physics include:

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the gen. ed. requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

**2. GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours ____
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>	
	At least one fine arts course .....	3 semester hours ____
	At least one literature course .....	3 semester hours ____
	Other Humanities/Fine Arts courses .....	6 semester hours ____
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>	
	Precalculus Algebra <u>or</u> Precalculus Algebra and Trigonometry .....	3-4 semester hours ____
	College Chemistry I and II .....	8 semester hours ____
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>	
	At least one history course .....	3 semester hours ____
	Other History/Behavioral or Social Science courses .....	9 semester hours ____
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b><u>41 SEMESTER HOURS</u></b>

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**

**Precalculus Trigonometry .....	3 semester hours	___
General Physics I (Calculus based) .....	4 semester hours	___
General Physics II (Calculus based) .....	4 semester hours	___
Calculus I .....	4 semester hours	___
Calculus II .....	4 semester hours	___
Calculus III .....	4 semester hours	___
Electives .....	0-3 semester hours	___

\*\*If Precalculus Algebra (3 semester hours) is completed to satisfy the Area III mathematics requirement, the student should complete Precalculus Trigonometry (3 semester hours) in addition to Precalculus Algebra. Completion of Precalculus Algebra and Trigonometry (4 semester hours) will satisfy both the Area III mathematics requirement and the Area V requirement for trigonometry.

**TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

**PHYSICS PROGRAM CORE:**

MA 310 Matrices and Linear Algebra .....	3 semester hours	___
MA 421 Differential Equations .....	3 semester hours	___
PY 303 Calculus Physics III (Modern Physics) .....	4 semester hours	___
PY 306 Thermal Physics .....	3 semester hours	___
PY 309, 310 Mechanics I, II .....	6 semester hours	___ ___
PY 312, 412 Electricity and Magnetism I, II .....	6 semester hours	___ ___
PY 415 Intermediate Quantum Physics I .....	3 semester hours	___
CIS 301 Problem Solving with Computers .....	3 semester hours	___
<b>Total Required Physics Core .....</b>	<b>31 semester hours</b>	

**General Physics Option:**

Upper Level Math Elective (MA 316, MA 401, or MA 428) .....	3 semester hours	___
PY 344 Principles of Optics .....	4 semester hours	___
PY 435 Senior Laboratory .....	3 semester hours	___
Upper level 300/400 Physics electives .....	6 semester hours	___ ___

**Instrumentation Option:**

IT 306 Interfacing Techniques .....	4 semester hours	___
IT 316 Applied Digital Design .....	4 semester hours	___
IT 425 Introduction to Robotics .....	4 semester hours	___
IT 440 Process Control Instrumentation .....	4 semester hours	___
Upper level 300/400 Instrumentation or Physics elective .....	3-4 semester hours	___

**Mathematics Option:**

(Five mathematic electives from the following:)

MA 316 Vector Analysis .....	3 semester hours	___
MA 330 Advanced Mathematical Software .....	3 semester hours	___
MA 401 Complex Analysis .....	3 semester hours	___
MA 423 Numerical Analysis .....	3 semester hours	___
MA 428 Partial Differential Equations .....	3 semester hours	___
MA 445 Mathematical Modeling and Simulation .....	3 semester hours	___

**Chemistry Option:**

CH 311, 312 Organic Chemistry I, II .....	8 semester hours	___ ___
CH 324 Analytical Chemistry .....	4 semester hours	___
CH 410 Instrumental Analysis .....	4 semester hours	___
CH 410L Instrumental Analysis Lab		
CH 420 Intermediate Inorganic Chemistry .....	3 semester hours	___

**Computer Science Option:**

MA 308 Discrete Mathematics .....	3 semester hours	___
CS 317, 318 Computer Science I and II <u>or</u> two high level computer language courses .....	6 semester hours	___ ___
CS 372 Data Structures .....	3 semester hours	___

Two computer science electives from the following six courses: ..... 6-7 semester hours \_\_\_ \_\_\_

- CS 309 Introduction to Digital Logic
- CS 409 Computer Architecture
- CS 414 Programming Languages
- CS 415 Operating Systems
- CS 417 Object Oriented Programming
- CS 472 Algorithm Analysis

**TOTAL PHYSICS OPTION HOURS: ..... 15-20 SEMESTER HOURS**

**TOTAL PROFESSIONAL HOURS: ..... 46-51 SEMESTER HOURS**

- 5. The Physics major must complete a minimum of 15 semester hours of upper division 300/400 level physics coursework at Athens State University.
- 6. A minor is **not** required. However, the General Physics major is encouraged to complete a minor in Mathematics (see Mathematics program requirements.)

7. **GENERAL ELECTIVES ..... 13-18 SEMESTER HOURS**

**TOTAL HOURS FOR GRADUATION: ..... 128 SEMESTER HOURS**

### **Physics Minor**

A minor in Physics requires 24 semester hours of Physics coursework including 15 semester hours of upper division coursework, at least 9 semester hours of which must be taken at Athens State University. Strict adherence to course prerequisites must be observed.

**The minor must include the following courses or their approved equivalents:**

General Physics with Calculus I, II .....	8 semester hours
PY 303 Calculus Physics III (Modern Physics) .....	4 semester hours
Upper level Physics courses to be approved by Physics Faculty Advisor .....	12 semester hours
<b>TOTAL HOURS FOR MINOR .....</b>	<b>24 semester hours</b>

## POLITICAL SCIENCE (PO)

Political Science prepares students for careers in law, teaching, and public administration. The Bachelor of Arts degree requires a minor in another field. The Bachelor of Science degree does not require a minor. Scholarships are available to qualified students majoring in Political Science.

### Bachelor of Arts - Political Science Major

**MAJOR CODE: 45.1001A**

Program components for the Bachelor of Arts degree with a major in Political Science include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for a major(s).
- complete all course requirements for a minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I. Written Composition</b> .....	6 semester hours	___	___
<b>Area II. Humanities/Fine Arts (12 semester hours)</b>			
<b>At least one</b> fine arts course .....	3 semester hours	___	
<b>At least one</b> literature course .....	3 semester hours	___	
Other Humanities/Fine Arts courses .....	6 semester hours	___	___
<b>Area III. Mathematics and Natural Sciences (11 semester hours)</b>			
Finite Math or its equivalent required .....	3 semester hours	___	
Natural Sciences (lab based) required .....	8 semester hours	___	___
<b>Area IV. History/Behavioral and Social Sciences (12 semester hours)</b>			
<b>At least one</b> history course .....	3 semester hours	___	
Other History/Behavioral or Social Science courses .....	9 semester hours	___	___
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS</u></b> .....		<b><u>41 SEMESTER HOURS</u></b>	

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**
- Western Civilization or World History ..... 3 semester hours \_\_\_
- American National Government or  
 PO 304 Problems of American Government ..... 3 semester hours \_\_\_
- State and Local Government or  
 PO 303 Comparative State and Local Government or  
 Foreign National Government ..... 3 semester hours \_\_\_
- CIS 146 Microcomputer Applications or  
 CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_
- General Electives ..... 11 semester hours \_\_\_ \_\_\_ \_\_\_
- TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**
- TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**
- PO 303 Comparative State and Local Government ..... 3 semester hours \_\_\_
- PO 304 Problems of American Government ..... 3 semester hours \_\_\_
- PO 307 American Constitutional Law or PO 364 Civil Liberties ..... 3 semester hours \_\_\_
- PO 308 America and the World ..... 3 semester hours \_\_\_
- PO 342 Methods of Behavioral Science Research ..... 3 semester hours \_\_\_
- PO 351 American Public Policy ..... 3 semester hours \_\_\_
- PO 377 Public Administration ..... 3 semester hours \_\_\_
- PO 453 International Relations ..... 3 semester hours \_\_\_
- PO 465 Senior Research Project ..... 4 semester hours \_\_\_
- Electives in Political Science ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_
- TOTAL PROFESSIONAL HOURS: ..... 37 SEMESTER HOURS**
5. A minimum of 27 semester hours of upper division JS/PO/PSHA coursework should be completed at Athens State University.
6. A Faculty Advisor approved minor **is** required. .... 18 Semester Hours
7. **GENERAL ELECTIVES** ..... **9 Semester Hours** \_\_\_ \_\_\_
8. **TOTAL HOURS FOR GRADUATION** ..... **128 SEMESTER HOURS**

**Bachelor of Science - Political Science Major**  
**MAJOR CODE: 45.1001B**

Program components for the Bachelor of Science degree with a major in Political Science include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for a major(s).
- complete all course requirements for a minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition ..... 6 semester hours** \_\_ \_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_

**At least one** literature course ..... 3 semester hours \_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_ \_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Finite Math or its equivalent required ..... 3 semester hours \_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_ \_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_ \_\_ \_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**  
 Western Civilization or World History ..... 3 semester hours \_\_\_  
 American National Government or  
 PO 304 Problems of American Government ..... 3 semester hours  
 State and Local Government or  
 PO 303 Comparative State and Local Government or  
 Foreign National Government ..... 3 semester hours \_\_\_  
 CIS 146 Microcomputer Applications or  
 CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_  
 General Electives ..... 11 semester hours \_\_\_ \_\_\_ \_\_\_ \_\_\_

**TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**  
 PO 303 Comparative State and Local Government ..... 3 semester hours \_\_\_  
 PO 304 Problems of American Government ..... 3 semester hours \_\_\_  
 PO 307 American Constitutional Law or PO 364 Civil Liberties ..... 3 semester hours \_\_\_  
 PO 308 America and the World ..... 3 semester hours \_\_\_  
 PO 342 Methods of Behavioral Science Research ..... 3 semester hours \_\_\_  
 PO 351 American Public Policy ..... 3 semester hours \_\_\_  
 PO 377 Public Administration ..... 3 semester hours \_\_\_  
 PO 453 International Relations ..... 3 semester hours \_\_\_  
 PO 465 Senior Research Project ..... 4 semester hours \_\_\_  
 Electives in Political Science ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_

**TOTAL PROFESSIONAL HOURS: ..... 37 SEMESTER HOURS**

5. A minimum of 27 semester hours of upper division JS/PO/PSHA coursework should be completed at Athens State University.

6. A minor is **not** required.

7. **GENERAL ELECTIVES ..... 27 semester hours** \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_

8. **TOTAL HOURS FOR GRADUATION ..... 128 SEMESTER HOURS**

### Political Science Minor

The student seeking a minor in political science should complete eighteen semester hours in political science coursework to include:

- American National Government or  
 PO 304 Problems of American Government ..... 3 semester hours  
 PO 303 Comparative State and Local Government or  
 PO 305 Alabama Government ..... 3 semester hours  
 PO 308 America and the World or  
 PO 453 International Relations ..... 3 semester hours  
 Political Science Electives ..... 9 semester hours  
**TOTAL HOURS IN MINOR ..... 18 semester hours**

## PSYCHOLOGY (PS)

Students in psychology are offered a wide variety of courses designed to provide the basic knowledge and skills which are considered to be the basic foundation of the field of psychology.

Students entering the program will be assigned a Faculty Advisor during the first term. The student may consult the list posted outside the departmental office to determine his/her Faculty Advisor. The student should then meet his/her Faculty Advisor as soon as possible to review requirements of his/her chosen major.

During the last term, the student will be required to take an exit examination in psychology. At the present time, no passing score is required, but the student is encouraged to do as well as possible to help determine how much they have gained from their program of study.

### Bachelor of Arts - Psychology Major MAJOR CODE: 42.0101A

This program is designed for the student who ultimately wants to earn an advanced graduate degree in psychology. The program emphasizes high academic achievement and mastery of research methodology, which should prepare the student for high scores on the GRE and admission to nationally recognized graduate programs in psychology. After admission, the student is encouraged to take statistics and experimental psychology as soon as possible and then participate in a supervised research project. The specific objectives of this degree are to

- provide a knowledge base of psychology including major theories and research findings.
- teach a variety of statistical, methodological, and critical thinking skills which are needed for psychological research.
- instill an appreciation for the ethical principles governing the field of psychology.
- help the student achieve the highest possible score on the Graduate Record Examination.
- assist the student with application to nationally recognized graduate programs in psychology.

Program components for the Bachelor of Arts degree with a major in Psychology include:

#### 1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

##### **To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

##### ***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### 2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	At least one fine arts course .....	3 semester hours	__	
	At least one literature course .....	3 semester hours	__	
	Other Humanities/Fine Arts courses .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Finite Math or its equivalent required .....	3 semester hours	__	
	Natural Sciences (lab based) required .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	At least one history course .....	3 semester hours	__	
	Other History/Behavioral or Social Science courses .....	9 semester hours	__	__
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b>41 SEMESTER HOURS</b>		

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**
- |  |                          |             |
|--|--------------------------|-------------|
| General Psychology .....   | 3 semester hours         | ___         |
| CIS 146 Microcomputer Applications <u>or</u><br>CIS 301 Problem Solving with Computers ..... | 3 semester hours         | ___         |
| Electives in Psychology .....  | 6 semester hours         | ___ ___     |
| General electives .....  | 11 semester hours        | ___ ___ ___ |
| <b>TOTAL PRE-PROFESSIONAL HOURS: .....</b>   | <b>23 SEMESTER HOURS</b> |             |
| <b>TOTAL GEN. ED. REQ. &amp; PRE-PROFESSIONAL HOURS: .....</b>                               | <b>64 SEMESTER HOURS</b> |             |
4. **PROFESSIONAL COURSES:**  
The following courses must be completed at the 300/400 level:
- |  |                          |             |
|--|--------------------------|-------------|
| PS 331 Social Psychology .....   | 3 semester hours         | ___         |
| PS 332 Child Psychology <u>or</u> PS 334 Adolescent Psychology .....             | 3 semester hours         | ___         |
| PS 336 Psychology of Learning <u>or</u> PS 410 History and Systems of Psychology | 3 semester hours         | ___         |
| PS 341 Statistics with Advanced Topics in Behavioral Sciences .....              | 3 semester hours         | ___         |
| PS 352 Abnormal Psychology .....   | 3 semester hours         | ___         |
| PS 380 Experimental Psychology .....   | 4 semester hours         | ___         |
| PS 406 Physiological Psychology .....  | 3 semester hours         | ___         |
| PS 420 Cognitive Psychology .....  | 3 semester hours         | ___         |
| Faculty Advisor approved Psychology electives .....                              | 12 semester hours        | ___ ___ ___ |
| <b>TOTAL PROFESSIONAL HOURS: .....</b>   | <b>37 SEMESTER HOURS</b> |             |
5. A minimum of 24 semester hours of upper division psychology coursework must be completed at Athens State University.
6. A Faculty Advisor approved minor **is** required. .... 18 semester hours
7. **GENERAL ELECTIVES .....** **9 Semester Hours** \_\_\_ \_\_\_ \_\_\_  
The student is encouraged to select electives which will prepare him/her to obtain the highest possible score on the Graduate Record Examination (GRE). Such courses would include geometry, additional literature courses, and science courses.
8. **TOTAL HOURS FOR GRADUATION: .....** **128 SEMESTER HOURS**

**Bachelor of Science - Psychology Major**  
**MAJOR CODE: 42.0101B**

This program is designed for the student who wants to major in psychology and have the freedom to select a broad range of electives. It provides a strong foundation in psychology and a solid general education background. The specific objectives of this degree program are to:

- provide a knowledge base of psychology including major theories and research findings.
- teach a variety of clinical skills which will be useful in applied settings.
- instill an appreciation for the ethical principles governing the field of psychology.

Program components for the Bachelor of Science degree with a major in Psychology include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	6 semester hours	__	__
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>			
	<b>At least one</b> fine arts course .....	3 semester hours	__	
	<b>At least one</b> literature course .....	3 semester hours	__	
	Other Humanities/Fine Arts courses .....	6 semester hours	__	__
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>			
	Finite Math or its equivalent required .....	3 semester hours	__	
	Natural Sciences (lab based) required .....	8 semester hours	__	__
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>			
	<b>At least one</b> history course .....	3 semester hours	__	
	Other History/Behavioral or Social Science courses .....	9 semester hours	__	__
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b><u>41 SEMESTER HOURS</u></b>		

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**
- |  |                          |                 |
|--|--------------------------|-----------------|
| General Psychology .....                                   | 3 semester hours         | ___             |
| CIS 146 Microcomputer Applications <u>or</u>               |                          |                 |
| CIS 301 Problem Solving with Computers .....               | 3 semester hours         | ___             |
| Electives in Psychology .....                              | 6 semester hours         | ___ ___         |
| General electives .....                                    | 11 semester hours        | ___ ___ ___ ___ |
| <b>TOTAL MAJOR PREREQUISITE HOURS .....</b>                | <b>23 SEMESTER HOURS</b> |                 |
| <b>TOTAL GEN. ED. REQ. &amp; MAJOR PREREQUISITE HOURS:</b> | <b>64 SEMESTER HOURS</b> |                 |
4. **PROFESSIONAL COURSES:**  
The following courses must be completed at the 300/400 level:
- |  |                          |                 |
|--|--------------------------|-----------------|
| PS 331 Social Psychology .....                                       | 3 semester hours         | ___             |
| PS 332 Child Psychology <u>or</u> PS 334 Adolescent Psychology ..... | 3 semester hours         | ___             |
| PS 336 Psychology of Learning <u>or</u>                              |                          |                 |
| PS 410 History and Systems of Psychology .....                       | 3 semester hours         | ___             |
| PS 341 Statistics with Advanced Topics in Behavioral Science .....   | 3 semester hours         | ___             |
| PS 352 Abnormal Psychology .....                                     | 3 semester hours         | ___             |
| PS 380 Experimental Psychology .....                                 | 4 semester hours         | ___             |
| PS 420 Cognitive Psychology .....                                    | 3 semester hours         | ___             |
| PS 406 Physiological Psychology .....                                | 3 semester hours         | ___             |
| Faculty Advisor approved Psychology electives .....                  | 12 semester hours        | ___ ___ ___ ___ |
| <b>TOTAL PROFESSIONAL HOURS: .....</b>                               | <b>37 SEMESTER HOURS</b> |                 |
5. A minimum of 24 semester hours of upper division psychology coursework must be completed at Athens State University.
6. A minor is **not** required.
7. **GENERAL ELECTIVES .....** **27 semester hours** \_\_\_ \_\_\_ \_\_\_ \_\_\_  
\_\_\_ \_\_\_ \_\_\_
8. **TOTAL HOURS FOR GRADUATION: .....** **128 SEMESTER HOURS**

### Psychology Minor

- Students who desire a minor in psychology must complete the following courses:
- |   |                          |
|---|--------------------------|
| PS 331 Social Psychology .....  | 3 semester hours         |
| PS 420 Cognitive Psychology <u>or</u> PS 336 Psychology of Learning ..... | 3 semester hours         |
| PS 332 Child Psychology <u>or</u> PS 334 Adolescent Psychology .....      | 3 semester hours         |
| PS 352 Abnormal Psychology .....  | 3 semester hours         |
| PS 406 Physiological Psychology .....                                     | 3 semester hours         |
| Psychology Elective .....   | 3 semester hours         |
| <b>TOTAL HOURS IN MINOR .....</b>   | <b>18 semester hours</b> |

## PUBLIC SAFETY AND HEALTH ADMINISTRATION (PSHA)

The Public Safety and Health Administration (PSHA) program is concerned with the administration of public agencies, at all levels of government, which promote community health and safety. Fire, police, public works, public health, and emergency medical services frequently interact to prevent, manage, and reduce the consequences of all forms of public emergencies. The PSHA program prepares professionals in emergency response and allied health agencies for increased management and administration responsibilities, thus enhancing career opportunities.

### Bachelor of Science - Public Safety and Health Administration Major

**MAJOR CODE: 43.0201**

Program components of the Bachelor of Science degree with a major in Public Safety and Health Administration include:

**1. APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

**2. GENERAL EDUCATION REQUIREMENTS:**

**Area I.** Written Composition ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_\_

**Area III. Mathematics and Natural Sciences (11 semester hours)**

Finite Math or its equivalent required ..... 3 semester hours \_\_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_\_ \_\_\_

**Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**  
**The Public Safety and Health Administration major must complete**  
 CIS 146 Microcomputer Applications or  
 CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_  
 The remaining hours in Area V must be completed in Fire Sciences, Nursing,  
 Fire Services Management (FCS), Criminal Justice (CJ), Emergency  
 Medical Services (EMS), Allied Health, or Environmental Management ..... 20 semester hours \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_\_\_  
**TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**
- TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**  
 PO 303 Comparative State and Local Government ..... 3 semester hours \_\_\_  
 PO 342 Methods of Behavioral Science Research or PSHA 401 Measurement .... 3 semester hours \_\_\_  
 and Evaluation  
 PSHA 349 Human Resources Management ..... 3 semester hours \_\_\_  
 PSHA 350 Introduction to the American Legal System or  
 PO 355 Health Policy in the U.S. .... 3 semester hours \_\_\_  
 PSHA 354 Contemporary Health and Physical Education Activities ..... 3 semester hours \_\_\_  
 PSHA 377 Public Administration ..... 3 semester hours \_\_\_  
 PO/PSHA 380 Public Finance ..... 3 semester hours \_\_\_  
 PSHA 446 Public Safety Concepts and Systems ..... 3 semester hours \_\_\_  
 PSHA 447 Public Health Concepts and Systems ..... 3 semester hours \_\_\_  
 PSHA 448 Managing the Public Safety and Health Emergency ..... 3 semester hours \_\_\_  
 PSHA 455 Public Administration Ethics ..... 3 semester hours \_\_\_  
 PSHA 465 Senior Research Project ..... 4 semester hours \_\_\_  
**TOTAL PROFESSIONAL HOURS: ..... 37 SEMESTER HOURS**
5. A minimum of 27 semester hours of upper division JS/PO/PSHA coursework must be completed at Athens State University.
6. A minor **is not** required.
7. **GENERAL ELECTIVES ..... 23 Semester Hours** \_\_\_ \_\_\_ \_\_\_ \_\_\_  
 \_\_\_\_\_
8. **TOTAL HOURS FOR GRADUATION: ..... 124 SEMESTER HOURS**

**PUBLIC SAFETY AND HEALTH ADMINISTRATION EXTRA-INSTITUTIONAL CREDIT**

Students majoring in Public Safety and Health Administration may be eligible to obtain up to a maximum of 12 semester hours upper-division academic credit for experience and advanced professional certifications. Academic credit may be awarded for official professional certification in a public safety and/or allied health field and/or work experience in a public safety or allied health supervisory and/or administrative position. Credit for basic certificates or credit previously awarded at another level or through another institution will not be duplicated.

Students meeting the qualifications for extra-institutional credit must register for particular courses based upon the students' credentials. Each course is 3 semester hours credit, and carries the standard per hour tuition. Students assume the responsibility for registering for the appropriate course(s), and for submitting to their Public Safety and Health Administration Faculty Advisor all appropriate certificate copies and documentation of appropriate work experiences. Students successfully documenting advanced professional skills and administrative experience will be awarded a score of P (passing) for appropriate coursework. Students may not register for this coursework their first term at Athens State University, but may register for this coursework during any subsequent term.

The particular courses for which qualified students should register are listed below with appropriate criteria.

- PSHA 459** Public Safety or Healthcare Supervisor (Must provide a letter of appointment from agency)
- PSHA 460** Public Safety or Healthcare Manager/Administrator (Must provide a letter of appointment from agency)
- PSHA 461** Paramedic/Public Safety or Healthcare Instructor (Must provide copy of certificate)
- PSHA 462** Haz-Mat Technician (Must provide copy of certificate)
- PSHA 463** Haz-Mat Specialist (Must provide copy of certificate)

## RELIGION (RE)

Religious Studies is an academic discipline covering a number of different areas. It includes a study of ancient and modern religions along with their religious ideas and practices. It investigates sacred texts that come from different religious traditions. Interpreting these texts requires knowledge of historical and sociological research methods along with literary theory covered in our curriculum. The field of religious studies also investigates the relationship between religion and culture. The religious studies program, therefore, provides students with the tools to engage in a serious study of the world's religions and their writings. Courses are designed to provide necessary knowledge and skills as well as generating reflection, discussion, and research.

### **Bachelor of Arts - Religion Major**

**MAJOR CODE: 38.0201A**

Program components for the Bachelor of Arts with a major in Religion include:

#### 1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

##### **To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### 2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition ..... 6 semester hours \_\_\_ \_\_\_**

##### **Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_\_

##### **Area III. Mathematics and Natural Sciences (11 semester hours)**

Finite Math or its equivalent required ..... 3 semester hours \_\_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_\_ \_\_\_

##### **Area IV. History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_\_ \_\_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**  
 Survey of the Old Testament or  
     Survey of the New Testament ..... 3 semester hours \_\_\_\_  
 CIS 146 Microcomputer Applications or  
     CIS 301 Problem Solving with Computers ..... 3 semester hours \_\_\_\_  
 General electives ..... 17 semester hours \_\_\_\_ \_\_\_\_ \_\_\_\_  
**TOTAL MAJOR PREREQUISITE HOURS: ..... 19-23 SEMESTER HOURS**  
**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 60-64 SEMESTER HOURS**
4. **PROFESSIONAL COURSES:**  
 Comparative Religion or History of World Religions or  
     RE 301 Religions That Shaped the World ..... 3 semester hours \_\_\_\_  
 PH 300 Moral Values in Today's Society or  
     RE 403 Religion in Life ..... 3 semester hours \_\_\_\_  
  
 Survey of Church History I or  
 Survey of Church History II or  
 RE 312 History of Judaism or  
 RE 314 History of Islam or  
 HY 310 History of American Religion ..... 3 semester hours \_\_\_\_  
  
 RE 409 Christian Thought in Early Centuries or  
 RE 412 The Hebrew Prophets or  
 RE 413 Wisdom and Devotion Literature ..... 3 semester hours \_\_\_\_  
  
 RE 327 Sociology of Religion ..... 3 semester hours \_\_\_\_  
 RE 351 Introduction to Christian Thought ..... 3 semester hours \_\_\_\_  
 RE 416 Interpreting the Text ..... 3 semester hours \_\_\_\_  
 Electives from the Area of Religion or Philosophy at the 300/400 level ..... 9 semester hours \_\_\_\_ \_\_\_\_  
**TOTAL PROFESSIONAL HOURS: ..... 30 semester hours**
5. A minor is **not** required, but encouraged.
6. **GENERAL ELECTIVES (Without a minor) ..... 34 semester hours** \_\_\_\_ \_\_\_\_ \_\_\_\_  
     \_\_\_\_ \_\_\_\_ \_\_\_\_  
     \_\_\_\_ \_\_\_\_ \_\_\_\_  
**GENERAL ELECTIVES (With an 18 semester hour minor) ..... 16 semester hours** \_\_\_\_ \_\_\_\_ \_\_\_\_  
     \_\_\_\_ \_\_\_\_
7. **TOTAL HOURS FOR GRADUATION ..... 124-128 semester hours**
8. It is recommended that religion and philosophy students planning to attend graduate school or seminary take at least 6 semester hours of foreign languages. The most common languages used in these disciplines are French, German, Greek, and Hebrew.
9. Philosophy or religion minor, church finance minor, behavioral science minor, religious education minor or philosophy minor: ..... 18 semester hours

### RELIGION MINOR

Nine semester hours in Religion and nine semester hours in Philosophy or Religion. .... \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_  
**TOTAL HOURS IN MINOR ..... 18 SEMESTER HOURS**

Religion courses accepted from non-accredited schools will serve only as general electives, will not apply toward humanities or social science elective requirements, and will not apply toward the minor.

## PHILOSOPHY MINOR

### Choose one from the following group:

PH 312 Logic	
PH 401 Skeptical, Critical, and Logical Thinking .....	3 semester hours ___

### Required:

PH 300 Moral Values in Today's Society .....	3 semester hours ___
PH 321 History of Philosophy I .....	3 semester hours ___
PH 322 History of Philosophy II .....	3 semester hours ___
PH 325 Philosophy of Religion .....	3 semester hours ___
Electives in the Humanities or Sciences .....	3 semester hours ___
<b>TOTAL HOURS IN MINOR .....</b>	<b>18 SEMESTER HOURS</b>

## BEHAVIORAL SCIENCE MINOR

### Choose one from the following group:

PS 352 Abnormal Behavior	
PS 304 Drugs and Behavior	
PS 406 Physiological Psychology .....	3 semester hours ___

### Choose one from the following group:

PS 331 Social Psychology	
PS 332 Child Psychology	
PS 402 Introduction to Clinical Psychology	
SO 360 The Contemporary American Family	
SO 471 Aging in a Mass Society .....	3 semester hours ___

### Required:

PS 334 Adolescent Psychology .....	3 semester hours ___
PS 335 Adult Psychology .....	3 semester hours ___
SO 362 Deviant Social Behavior .....	3 semester hours ___
SO 312 Majority/Minority Relations .....	3 semester hours ___
<b>TOTAL HOURS IN MINOR .....</b>	<b>18 SEMESTER HOURS</b>

## CHURCH FINANCE MINOR

### Choose one from the following group:

MG 303 Management Decision Support	
MG 349 Human Resources Management	
MG 353 Project Management	
MG 375 Organizational Behavior and Team Building	
MK 331 Principles of Marketing .....	3 semester hours ___

### Required:

AC 300 Principles of Accounting .....	3 semester hours ___
EC 310 Modern Economics .....	3 semester hours ___
MG 350 Financial Management .....	3 semester hours ___
GBA311 Legal Environment of Business .....	3 semester hours ___
MG 346 Principles of Management .....	3 semester hours ___
<b>TOTAL HOURS IN MINOR .....</b>	<b>18 SEMESTER HOURS</b>

## RELIGIOUS EDUCATION MINOR

RE 305 Survey of Religious Education .....	3 semester hours ___
*RE 405 Religious Education of Adults .....	3 semester hours ___
ER 310 Principles of Early Childhood Education .....	3 semester hours ___
RE 417 Senior Research Project in Religious Education .....	4 semester hours ___
**Elective in Education .....	6 semester hours ___
<b>TOTAL HOURS IN MINOR .....</b>	<b>19 SEMESTER HOURS</b>

\*Students who plan to work with children may substitute ER 350 Administering and Managing Early Childhood Programs for RE 405 Religious Education of Adults.

\*\*Electives may not be selected from courses that require Teacher Education Program.

## SOCIAL SCIENCE (SS)

Social science is an interdisciplinary program with a major concentration in history. Students also take a variety of courses in political science, economics, geography, and the behavioral sciences. An interdisciplinary approach can enhance a student's understanding of history, government, and world affairs. Many social science majors want to become certified to teach history, government, civics, economics, and geography in grades six to twelve. There are other careers, especially in government, open to social science majors.

Many universities permit a social science student with a major concentration in history to pursue an advanced degree in history. However, because graduate schools have different requirements, students should check in advance with the appropriate university to determine whether this degree is sufficient to gain admission in a graduate history program.

### **Bachelor of Science - Social Science Major**

**MAJOR CODE: 45.0101**

#### 1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### 2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I. Written Composition** ..... 6 semester hours \_\_\_ \_\_\_

**Area II. Humanities and Fine Arts** (12 semester hours)

The Arts ..... 3 semester hours \_\_\_

Speech (SPH 106 or SPH 107) ..... 3 semester hours \_\_\_

Humanities Elective ..... 3 semester hours \_\_\_

Literature ..... 3 semester hours \_\_\_

**Area III. Natural Sciences and Mathematics** (11 semester hours)

Finite Math or its equivalent required ..... 3 semester hours \_\_\_

Natural Sciences (lab based required) ..... 8 semester hours \_\_\_ \_\_\_

**Area IV. History, Social and Behavioral Sciences** (12 semester hours)

US History I and II ..... 6 semester hours \_\_\_ \_\_\_

General Psychology ..... 3 semester hours \_\_\_

Behavioral Science or Social Science Elective ..... 3 semester hours \_\_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 41 SEMESTER HOURS**

3.	<b>MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):</b>	
	CIS 146 Microcomputer Applications <u>or</u>	
	CIS 301 Problem Solving with Computers .....	3 semester hours ___
	Western Civilization I and II <u>or</u> World History I and II .....	6 semester hours ___
	Introduction to American National Government <u>or</u>	
	PO 304 Problems of American Government .....	3 semester hours ___
	Macroeconomics .....	3 semester hours ___
	Microeconomics .....	3 semester hours ___
	Geography 100 <u>or</u> GO 300 World Regional Geography .....	3 semester hours ___
	Elective .....	3 semester hours ___
	<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>24 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. AND MAJOR PREREQUISITE HOURS: .....</b>	<b>65 SEMESTER HOURS</b>
4.	<b>PROFESSIONAL COURSES:</b>	
	HY 300 Historiography .....	3 semester hours ___
	HY 302 Alabama History .....	3 semester hours ___
	HY 307 American Constitutional Law .....	3 semester hours ___
	HY 308 America and the World .....	3 semester hours ___
	<b>American History</b> (Choose two of the following) .....	6 semester hours ___ ___
	HY 304 Revolutionary American History	
	HY 305 American Expansion in the 19th Century	
	HY 306 20th Century America	
	HY 309 American Civil War and Reconstruction <u>or</u>	
	an approved elective in American History	
	<b>Non-American History</b> (Choose two of the following) .....	6 semester hours ___ ___
	HY 313 Revolutionary Europe	
	HY 314 19th Century Europe	
	HY 315 20th Century Europe	
	HY 321 England and Britain to 1688 <u>or</u> HY 322 England and Britain	
	HY 334 Middle East	
	HY 342 Modern Russia <u>or</u> an approved elective in Non-American History	
	<b>Social Science Requirements:</b>	
	PO 303 Comparative State and Local Government <u>or</u>	
	PO 305 Alabama Government .....	3 semester hours ___
	PO 351 American Public Policy .....	3 semester hours ___
	PO 453 International Relations .....	3 semester hours ___
	HY/GO 340 South America, Africa and Asia .....	3 semester hours ___
	<b>TOTAL PROFESSIONAL COURSE HOURS .....</b>	<b>36 SEMESTER HOURS</b>
5.	<b>General Electives .....</b>	<b>27 semester hours</b>
		___
		___
	<b>TOTAL HOURS FOR GRADUATION .....</b>	<b>128 SEMESTER HOURS</b>

**Bachelor of Science - Social Science Major**  
**(Licensure and Certification Track for Teaching in Secondary Education) (Grades 6-12)**  
**MAJOR CODE: 45.0101**

(Due to the No Child Left Behind Federal Act of 2001, the program listed below may have changed. See your advisor.)

**NOTE: To teach in secondary schools, the students MUST:**

- 1) complete the below listed requirements to include the minor for certification and licensure;
- 2) contact the certification officer in the College of Education for approval of appropriate professional education courses and compliance with NCLB Federal Act of 2001 and State Department of Education licensure standards;
- 3) maintain a grade point average of at least a 2.5 on a 4.0 scale in the teaching field and overall education. A 2.75 is required in the professional studies. This is a requirement for student teaching and for graduation.
- 4) repeat courses in which D's and F's are made and realize that all attempts are calculated in the GPA. Education courses with the prefixes ED, EL, ER, SC, SE, CE, and HPE may be repeated one time only.
- 5) understand that underlined courses in the minor require admission into the Teacher Education Program (TEP);
- 6) complete the 12 semester hours in History sequences and the 6 semester hours in Macroeconomics and Microeconomics as required by the degree before being admitted to the Teacher Education Program.

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for a major(s).
- complete all course requirements for a minor (if applicable).
- complete all of the general education requirements for the degree.
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED. PLEASE FOLLOW CAREFULLY.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	Written Composition .....	6 semester hours	___	___
<b>Area II.</b>	<b>Humanities and Fine Arts</b> (12 semester hours)			
	The Arts .....	3 semester hours	___	___
	Speech (SPH 106 or SPH 107) .....	3 semester hours	___	___
	Humanities/Fine Arts Elective. ....	3 semester hours	___	___
	Literature .....	3 semester hours	___	___
<b>Area III.</b>	<b>Natural Sciences and Mathematics</b> (11 semester hours)			
	Finite Math or its equivalent required .....	3 semester hours	___	___
	Natural Sciences (lab based required) .....	8 semester hours	___	___
<b>Area IV.</b>	<b>History, Social and Behavioral Sciences</b> (12 semester hours)			
	U.S History I and II .....	6 semester hours	___	___
	General Psychology .....	3 semester hours	___	___
	Behavioral Science or Social Science Elective .....	3 semester hours	___	___

**TOTAL GENERAL EDUCATION REQUIREMENTS: ..... 41 SEMESTER HOURS**

3.	<b>MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL):</b>	
	CIS 146 Microcomputer Applications <u>or</u> CIS 301 Problem Solving with Computers .....	3 semester hours ___
	Western Civilization I and II <u>or</u> World History I and II .....	6 semester hours ___
	Introduction to American National Government <u>or</u> PO 304 Problems of American Government .....	3 semester hours ___
	Macroeconomics .....	3 semester hours ___
	Microeconomics .....	3 semester hours ___
	Geography 100 <u>or</u> GO 300 World Regional Geography .....	3 semester hours ___
	<b>TOTAL MAJOR PREREQUISITE HOURS: .....</b>	<b>21 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. REQ. AND MAJOR PREREQUISITE HOURS: .....</b>	<b>62 SEMESTER HOURS</b>
4.	<b>PROFESSIONAL COURSES:</b>	
	HY 300 Historiography .....	3 semester hours ___
	HY 302 Alabama History .....	3 semester hours ___
	HY 307 American Constitutional Law .....	3 semester hours ___
	HY 308 America and the World .....	3 semester hours ___
	<b>American History</b> (Choose two of the following) .....	6 semester hours ___ ___
	HY 304 Revolutionary American History	
	HY 305 American Expansion in the 19th Century	
	HY 306 20th Century America	
	HY 309 American Civil War and Reconstruction <u>or</u> an approved elective in American History	
	<b>Non-American History</b> (Choose two of the following) .....	6 semester hours ___ ___
	HY 313 Revolutionary Europe	
	HY 314 19th Century Europe	
	HY 315 20th Century Europe	
	HY 321 England and Britain to 1688 <u>or</u> HY 322 England and Britain	
	HY 334 Middle East	
	HY 342 Modern Russia <u>or</u> an approved elective in Non-American History	
	<b>Social Science Requirements:</b>	
	PO 303 Comparative State and Local Government <u>or</u> PO 305 Alabama Government .....	3 semester hours ___
	PO 351 American Public Policy .....	3 semester hours ___
	PO 453 International Relations .....	3 semester hours ___
	HY/GO 340 South America, Africa and Asia .....	3 semester hours ___
	<b>TOTAL PROFESSIONAL COURSE HOURS .....</b>	<b>36 SEMESTER HOURS</b>
5.	<b>MINOR COURSES FOR CERTIFICATION:</b>	
	ED 301 Foundations of Education I .....	1 semester hour ___
	ED 302 Foundations of Education II .....	2 semester hours ___
	ED 305 Technology & Media in Education .....	3 semester hours ___
	SC 331 Issues and Management in Secondary Education .....	3 semester hours ___
	SC 333 <u>Teaching Reading/Writing in the Content Areas</u> .....	3 semester hours ___
	SC 362 <u>Assessment and Evaluation in Secondary Education</u> .....	3 semester hours ___
	PS 334 Adolescent Psychology .....	3 semester hours ___
	SE 301 <u>Introduction to Exceptional Learners</u> .....	3 semester hours ___
	SS 450 <u>Materials and Methods of Teaching History in the Middle School/</u> <u>High School</u> .....	3 semester hours ___
	EC 450 <u>Materials and Methods of Teaching Economics in the Middle School/</u> <u>High School</u> .....	3 semester hours ___
	SC 486 <u>Internship in High School Education</u> .....	9 semester hours ___ ___ ___
	<b>TOTAL MINOR REQUIREMENTS FOR CERTIFICATION/LICENSURE: .....</b>	<b>36 SEMESTER HOURS</b>
	<b>TOTAL HOURS FOR GRADUATION .....</b>	<b>134 SEMESTER HOURS</b>

6. For the student obtaining high school certification who wishes a middle school endorsement in social science (**Grades 4-8**), the following courses are required:

EL 413 Teaching Reading in the Intermediate Grades .....	3 semester hours
ED 423 Teaching Social Studies .....	3 semester hours
PS 332 Child Psychology .....	3 semester hours

**NOTE: IF THE FIFTEEN-WEEK INTERNSHIP WAS NOT COMPLETED IN GRADES 7-8, AN ADDITIONAL SEVEN-WEEK INTERNSHIP MUST BE COMPLETED IN MIDDLE SCHOOL GRADES.**

## SOCIOLOGY (SO)

The program in Sociology seeks to provide students with a comprehensive background for graduate study in sociology. For students preparing for careers in social service, probation/parole, mental health, and related areas, Sociology provides an important background knowledge base.

Specific competencies emphasized in all sociology degree programs include

- a knowledge base that emphasizes the knowledge, theory, and application of core sociological concepts.
- problem solving skills which have been formed by a sociological frame of reference.
- the ability to collect, analyze, and interpret research data.
- the knowledge and skill required to work in human services agencies.
- the background and the ability to do graduate school work.

A departmental exit exam or successful completion of SO 490 is required of all students completing a major in sociology.

### **Bachelor of Arts - Sociology Major**

**MAJOR CODE: 45.1101A**

Program components for the Bachelor of Arts degree with a major in Sociology include:

#### 1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

##### **To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

#### 2. **GENERAL EDUCATION REQUIREMENTS:**

**Area I.** Written Composition ..... 6 semester hours \_\_\_ \_\_

##### **Area II. Humanities/Fine Arts (12 semester hours)**

**At least one** fine arts course ..... 3 semester hours \_\_\_

**At least one** literature course ..... 3 semester hours \_\_\_

Other Humanities/Fine Arts courses ..... 6 semester hours \_\_\_ \_\_

##### **Area III. Mathematics and Natural Sciences (11 semester hours)**

Finite Math or its equivalent required ..... 3 semester hours \_\_\_

Natural Sciences (lab based) required ..... 8 semester hours \_\_\_ \_\_

##### **Area IV History/Behavioral and Social Sciences (12 semester hours)**

**At least one** history course ..... 3 semester hours \_\_\_

Other History/Behavioral or Social Science courses ..... 9 semester hours \_\_\_ \_\_ \_\_

**TOTAL GENERAL EDUCATION REQUIREMENTS ..... 41 SEMESTER HOURS**

<b>3.</b>	<b>MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)</b>	
	CIS 146 Microcomputer Applications <u>or</u>	
	CIS 301 Problem Solving with Computers .....	3 semester hours ___
	Electives in Sociology .....	6 semester hours ___ ___
	General electives .....	14 semester hours ___ ___ ___
		___ ___
	<b>TOTAL PRE-PROFESSIONAL HOURS: .....</b>	<b>23 SEMESTER HOURS</b>
	<b>TOTAL GEN. ED. REQ. &amp; PRE-PROFESSIONAL HOURS: .....</b>	<b>64 SEMESTER HOURS</b>
<b>4.</b>	<b>PROFESSIONAL COURSES:</b>	
	The following courses must be completed at the 300/400 level.	
	SO 312 Majority/Minority Group Relations .....	3 semester hours ___
	SO 314 Population Study .....	3 semester hours ___
	SO 341 Statistics with Advanced Topics in Behavioral Science .....	3 semester hours ___
	SO 342 Methods of Behavioral Science Research .....	3 semester hours ___
	SO 360 The Contemporary American Family .....	3 semester hours ___
	SO 361 Social Analysis .....	3 semester hours ___
	SO 362 Deviant Social Behavior .....	3 semester hours ___
	SO 460 Sociological Theories .....	3 semester hours ___
	SO 490 Senior Sociology Seminar .....	1 semester hour ___
	Electives in Sociology .....	9 semester hours ___ ___ ___
	<b>TOTAL PROFESSIONAL HOURS: .....</b>	<b>34 SEMESTER HOURS</b>
5.	A minor is required .....	18 semester hours
6.	<b>GENERAL ELECTIVES .....</b>	<b>12 semester hours ___ ___ ___ ___</b>
7.	<b>TOTAL HOURS FOR GRADUATION: .....</b>	<b>128 SEMESTER HOURS</b>

**Bachelor of Science - Sociology Major**  
**MAJOR CODE: 45.1101B**

Program components for the Bachelor of Science degree with a major in Sociology include:

1. **APPLICABLE GENERAL UNIVERSITY REQUIREMENTS:**

**To graduate, each student must:**

- complete a minimum of 33 semester hours of the last 39 semester hours at ASU.
- complete 60 to 64 semester hours of upper level college/university credit (300-400 level courses).
- complete a minimum of 15 semester hours of upper (300/400) level coursework in his or her major at Athens State University, not including courses taken by consortium arrangement. School or departmental regulations may require more than 15 semester hours of coursework in the major at Athens State University.
- complete all course requirements for major(s).
- complete all course requirements for minor (if applicable).
- complete all of the general education requirements for the degree.
- attain an overall grade point average of 2.0, a 2.0 on all coursework attempted at Athens State University and at least a 2.0 in the major field. School or departmental regulations may require more than a 2.0 grade point average (see major requirements in each discipline).
- complete the total hour requirement as specified by the degree.
- complete the teacher certification requirements (if applicable).

***EACH STUDENT MUST ASSUME RESPONSIBILITY FOR KNOWING THE ACADEMIC REQUIREMENTS FOR THE DEGREE THAT IS BEING PURSUED.***

2. **GENERAL EDUCATION REQUIREMENTS:**

<b>Area I.</b>	<b>Written Composition .....</b>	<b>6 semester hours</b> ___ __
<b>Area II.</b>	<b>Humanities/Fine Arts (12 semester hours)</b>	
	<b>At least one</b> fine arts course .....	3 semester hours ___
	<b>At least one</b> literature course .....	3 semester hours ___
	Other Humanities/Fine Arts courses .....	6 semester hours ___ __
<b>Area III.</b>	<b>Mathematics and Natural Sciences (11 semester hours)</b>	
	Finite Math or its equivalent required .....	3 semester hours ___
	Natural Sciences (lab based) required .....	8 semester hours ___ __
<b>Area IV.</b>	<b>History/Behavioral and Social Sciences (12 semester hours)</b>	
	<b>At least one</b> history course .....	3 semester hours ___
	Other History/Behavioral or Social Science courses .....	9 semester hours ___ __ __
<b><u>TOTAL GENERAL EDUCATION REQUIREMENTS .....</u></b>		<b><u>41 SEMESTER HOURS</u></b>

3. **MAJOR PREREQUISITE COURSES (PRE-PROFESSIONAL)**

**The Sociology major must complete**

CIS 146 Microcomputer Applications <b>or</b> CIS 301 Problem Solving with Computers .....	3 semester hours	___
Electives in Sociology .....	6 semester hours	___ ___
General electives .....	14 semester hours	___ ___ ___
.....		___ ___

**TOTAL MAJOR PREREQUISITE HOURS: ..... 23 SEMESTER HOURS**

**TOTAL GEN. ED. REQ. & MAJOR PREREQUISITE HOURS: ..... 64 SEMESTER HOURS**

4. **PROFESSIONAL COURSES:**

The following courses must be completed at the 300/400 level:

SO 312 Majority/Minority Group Relations .....	3 semester hours	___
SO 314 Population Study .....	3 semester hours	___
SO 341 Statistics with Advanced Topics in Behavioral Science .....	3 semester hours	___
SO 342 Methods of Behavioral Science Research .....	3 semester hours	___
SO 360 The Contemporary American Family .....	3 semester hours	___
SO 361 Social Analysis .....	3 semester hours	___
SO 362 Deviant Social Behavior .....	3 semester hours	___
SO 460 Sociological Theories .....	3 semester hours	___
SO 490 Senior Sociology Seminar .....	1 semester hour	___
Electives in Sociology .....	9 semester hours	___ ___ ___

**TOTAL PROFESSIONAL HOURS: ..... 34 SEMESTER HOURS**

5. A minor is **not** required.

6. **GENERAL ELECTIVES: ..... 30 semester hours** \_\_\_ \_\_\_ \_\_\_  
 ..... \_\_\_ \_\_\_ \_\_\_  
 ..... \_\_\_ \_\_\_ \_\_\_  
 ..... \_\_\_ \_\_\_

7. **TOTAL HOURS FOR GRADUATION: ..... 128 SEMESTER HOURS**

**SOCIOLOGY MINOR**

A minor in Sociology requires the completion of eighteen semester hours of coursework to consist of the following:

SO 312 Majority/Minority Group Relations .....	3 semester hours
SO 362 Deviant Social Behavior .....	3 semester hours
SO 460 Sociological Theories .....	3 semester hours
Sociology Electives .....	9 semester hours
<b>TOTAL HOURS IN MINOR: .....</b>	<b>18 semester hours</b>