

I. GENERAL EDUCATION CURRICULUM..... 44  
Chemistry 1101-1110 and 1102-1120 fulfill the Science Inquiry Perspective. Math 1110 fulfills the Quantitative Literacy requirement.

II. FOREIGN LANGUAGE (Completion of 6 semester hours at the \*intermediate level, or higher) ..... 6  
\_\_\_\_\_ 1040 \_\_\_\_\_ and 1050 \_\_\_\_\_ or 1060 \_\_\_\_\_; or higher level courses \_\_\_\_\_  
*\*NOTE: Foreign language 1010 and 1020 (or 1030) are prerequisites for the intermediate level courses.*

III. MAJOR REQUIREMENTS (Not including 12 semester hours already counted in I, above) ..... 53  
2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under III. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian. No more than 46 semester hours of biology courses may be counted toward the BA Degree.

A. Biology Core Requirements: 8 semester hours (must be completed before taking any other biology courses)  
BIO 1801 \_\_\_\_\_ (4) Biological Concepts I (Co: CHE 1101)                      **AND**                      BIO 1802 \_\_\_\_\_ (4) Bio Concepts II (Pre: BIO 1801 w/minimum "C")

B. Required Biology Course: 9 semester hours  
BIO 2400 \_\_\_\_\_ (3) Genetics (Pre: BIO 1801, CHE 1102, MAT 1025)    **OR**                      BIO 2700 \_\_\_\_\_ (3) Human Gen (Pre: BIO 1802, CHE 1102, MAT 1025)  
BIO 3436 \_\_\_\_\_ (3) Introduction to Evolutionary Biology  
**and** one of the following Senior Capstones: (Pre: Senior Standing; WID)  
BIO 4501 \_\_\_\_\_ (3) Independent Research [CAP]    BIO 4700 \_\_\_\_\_ (3) Seminar in Biological Science [CAP]  
BIO 4910 \_\_\_\_\_ (3) Capstone Internship in Biology [CAP]

C. Additional Required Biology Courses: Choose 17 semester hours in courses numbered 2000 and above.  
At least one course must be Junior Writing [WID] course. One course must be selected from each of the following areas:  
(Any course used to meet a requirement above may not be used to meet a requirement here.)

- Area A Cellular or Subcellular**  
BIO 2400 \_\_\_\_\_ (3) Genetics (Pre: BIO 1801, CHE 1102, MAT 1025)  
BIO 2410 \_\_\_\_\_ (1) Genetics Lab (Pre/Co: BIO 2400/2700)  
BIO 2600 \_\_\_\_\_ (3) Cell Biology (Pre: CHE 1102)  
BIO 2610 \_\_\_\_\_ (1) Cell Biology Lab Pre: MAT 1025; Pre/Co: BIO 2600)  
BIO 2700 \_\_\_\_\_ (3) Human Genetics (Pre: BIO 1802, CHE 1102, MAT 1025)  
BIO 3308 \_\_\_\_\_ (4) Microbiology (Pre: CHE 1102/1120)  
BIO 3309 \_\_\_\_\_ (4) Developmental Biology  
BIO 3800 \_\_\_\_\_ (4) Molecular Bio [WID] (Pre: 1sem organic CHE; ENG 2001)  
BIO 4564 \_\_\_\_\_ (4) Microscopy  
BIO 4568 \_\_\_\_\_ (4) Immunology (Pre: BIO 2400/2700)

- Area B Evolution or Ecology**  
BIO 2000 \_\_\_\_\_ (4) Introduction to Botany  
BIO 2001 \_\_\_\_\_ (4) Introduction to Zoology  
BIO 3302 \_\_\_\_\_ (4) Ecology  
BIO 3312 \_\_\_\_\_ (3) Environmental Studies [WID]  
BIO 3320 \_\_\_\_\_ (3) Air Pollution  
BIO 4571 \_\_\_\_\_ (4) Plant/Insect Interaction in Terrestrial Ecosystems  
BIO 4601 \_\_\_\_\_ (3) Animal Behavior-Ethology) [WID]

- Area C Anatomy or Physiology**  
BIO 3301 \_\_\_\_\_ (4) Human Sys Phys[WID] (Pre: 1 sem org CHE; ENG 2001)  
BIO 3314 \_\_\_\_\_ (4) Comparative Vertebrate Zoo [WID] (Pre: ENG 2001)  
BIO 4555 \_\_\_\_\_ (4) Plant Physiology (Pre: CHE 1102/1120)  
BIO 4563 \_\_\_\_\_ (3) Biology of Aging  
BIO 4569 \_\_\_\_\_ (4) Invertebrate Zoology

- Area D Biodiversity**  
BIO 2000 \_\_\_\_\_ (4) Introduction to Botany  
BIO 2001 \_\_\_\_\_ (4) Introduction to Zoology  
BIO 3304 \_\_\_\_\_ (3) Systematic Botany (Pre: BIO 2000)  
BIO 3310 \_\_\_\_\_ (4) Marine Sciences  
BIO 4551 \_\_\_\_\_ (3) Ornithology  
BIO 4552 \_\_\_\_\_ (4) Entomology  
BIO 4556 \_\_\_\_\_ (4) Mycology  
BIO 4557 \_\_\_\_\_ (4) Ichthyology  
BIO 4558 \_\_\_\_\_ (3) Taxonomy of the Fleshy Fungi  
BIO 4559 \_\_\_\_\_ (3) Mammalogy  
BIO 4560 \_\_\_\_\_ (3) Herpetology  
BIO 4569 \_\_\_\_\_ (4) Invertebrate Zoology  
BIO 4570 \_\_\_\_\_ (4) Parasitology

D. Required cognate courses: 31 semester hours  
**Chemistry**  
CHE 1101/1110 \_\_\_\_\_ (4) Intro to Chem I & lab  
CHE 1102/1120 \_\_\_\_\_ (4) Intro to Chem II & lab (Pre: CHE 1101/1110)  
CHE 2201/2203 \_\_\_\_\_ (4) Organic Chem I & lab (Pre: CHE 1102/1120)  
CHE 2202/2204 \_\_\_\_\_ (4) Organic Chem II & lab (Pre: CHE 2201/2203)

**Mathematics**  
MAT 1110 \_\_\_\_\_ (4) Calc w/ Analytical Geometry I (Pre: MAT 1025 w/C-)  
STT 2810 \_\_\_\_\_ (3) Introduction to Statistics (Pre: MAT 1010)  
**Physics or Geography (minimum 8 hours)**

IV. MINOR REQUIRED..... 12-20  
Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

Major Requirements that count in Gen Education:		
Quantitative Lit	MAT 1110	4 s.h.
Science Inquiry	CHE 1101/1110	4 s.h.
	CHE 1102/1120	4 s.h.
Perspectives (depends on choices)	FL 1050	3 s.h.
Total Major hrs:	71	
Gen Ed-up to 15 hrs:	- 15	
Net Major hrs:	56	

V. ELECTIVES (taken to total 128 hours for the degree) ..... 5-13  
2 semester hours of free electives must be outside the major discipline. 128