Bachelor of Arts (BA)  
Degree Code 208A  

Programs of Study for Biology Majors

I. GENERAL EDUCATION CURRICULUM

Chemistry 1101-1110 and 1102-1120 fulfill the Science Inquiry Perspective. Math 1110 fulfills the Quantitative Literacy requirement.

II. LANGUAGE (Completion of 6 semester hours at the *intermediate level, or higher) 

6 semester hours 1040 and 1050 or 1060; or higher level courses.

*NOTE: Language 1010 and 1020 (or 1030) are prerequisites for the intermediate level courses.

F1 1050 or 1060 may be used in General Education Perspectives depending upon choices.

III. MAJOR REQUIREMENTS

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 (Pre: BIO 1801 & 1802 required for all additional BIO courses)

BIO 2400 (3) Genetics (Pre: CHE 1102, MAT 1025) OR BIO 2700 (3) Human Gen (Pre: CHE 1102, MAT 1025)

BIO 2012 (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] [WID]

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:

(Area A) Cellular or Subcellular

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 3308 (4) Microbiology (Pre: CHE 1102/1120)  
BIO 3800 (4) Molecular Bio [WID] (Pre: CHE2201/2101; ENG 2001)  
BIO 4001 (3) Developmental Bio (Pre: BIO 2600; BIO 2400 or 2700)  
BIO 4011 (1) Dev Bio Sem (honors) (Pre: BIO 2600; 2400/2700; Co: BIO 4001)

BIO 4513 (4) Plant Molecular Biology (Pre: BIO 3800; Sr. standing)  
BIO 4564 (4) Microscopy  
BIO 4568 (4) Immunology (Pre: BIO 2400/2700)  
BIO 4572 (3) Virology (Pre: BIO 2600)

(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] (Pre: ENG 2001)  
BIO 3313 (4) Global Change Ecology [WID] (Pre: ENG 2001)  
BIO 3315 (3) Conservation Biology [WID] (Pre: ENG 2001)  
BIO 3320 (3) Air Pollution  
BIO 4571 (4) Plant/Insect Interaction  
BIO 4601 (4) Animal Behavior-Ethology

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 w/C-)

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)

(Pre/Co: BIO 1801 w/ minimum "C")

(GHY 1010, 1020, 1040, PHY 1830 may be used in General Education Perspectives)

IV. MINOR REQUIRED

Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

V. ELECTIVES (taken to total 128 hours for the degree)

2 semester hours of free electives must be outside the major discipline.

Total major requirements (including language & minor) – 83-92; Gen Ed courses that may count in major (depends on choices) – 21; net major 62-71 hours.