

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

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

_____ 1040 _____ and 1050 _____ or 1060 _____; or higher level courses _____

**NOTE: Language 1010 and 1020 (or 1030) are prerequisites for the intermediate level courses.
FL 1050 or 1060 may be used in General Education Perspectives depending upon choices.*

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/min grade "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]

BIO 4910 _____ (3) Capstone Internship in Biology [CAP]

C. Additional Required Biology Courses: Choose 17 semester hours in courses numbered 2000 and above. (Pre: BIO 1801 & 1802 for all BIO courses)

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 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: BIO 2400/2600/2700; CHE 1102 & 1120)
- BIO 3800 _____ (4) Molecular Bio [WID] (Pre: CHE2201/2101; RC 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 (Pre: Sr. standing)
- BIO 4568 _____ (4) Immunology (Pre/Co: BIO 2400; Sr. standing)
- BIO 4572 _____ (3) Virology (Pre: BIO 2600; Sr. standing)

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: RC 2001)
- BIO 3313 _____ (4) Global Change Ecology [WID] (Pre: RC 2001)
- BIO 3315 _____ (3) Conservation Biology [WID] (Pre: RC 2001)
- BIO 3320 _____ (3) Air Pollution Effects on Plants & People (Pre: Jr stdg)
- BIO 4571 _____ (4) Plant/Insect Interaction in Terres Ecosys (Pre: Sr stdng)
- BIO 4601 _____ (4) Animal Behavior-Ethology (Pre: Sr standing)

Area C Anatomy or Physiology

- BIO 3301 _____ (4) Human Sys Phys [WID] (Pre: CHE2201/2101; RC 2001)
- BIO 3314 _____ (4) Comparative Vertebrate Zoo [WID] (Pre: RC 2001)
- BIO 4555 _____ (4) Plant Physiology (Pre: CHE 1102 & 1120; Sr. standing)
- BIO 4563 _____ (3) Biology of Aging (Pre: Sr. standing)

Area D Biodiversity

- BIO 2000 _____ (4) Introduction to Botany
- BIO 2001 _____ (4) Introduction to Zoology
- BIO 3304 _____ (4) Systematic Botany (Pre: BIO 2000)
- BIO 4551 _____ (4) Ornithology (Pre: Sr. standing)
- BIO 4552 _____ (4) Entomology (Pre: Sr. standing)
- BIO 4556 _____ (4) Mycology (Pre: Sr. standing)
- BIO 4557 _____ (4) Ichthyology (Pre: Sr. standing)
- BIO 4558 _____ (3) Taxonomy of the Fleshy Fungi (Pre: Sr. standing)
- BIO 4559 _____ (4) Mammalogy (Pre: Sr. standing)
- BIO 4560 _____ (4) Herpetology (Pre: Sr. standing)
- BIO 4569 _____ (4) Invertebrate Zoology (Pre: Sr. standing)

D. Required cognate courses: 31 semester hours

Chemistry

- CHE 1101/1110 _____ (4) Introductory Chem I & lab
- CHE 1102/1120 _____ (4) Introductory 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 or higher)

Physics or Geography (minimum 8 hours)

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

IV. MINOR REQUIRED.....12-21

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)..... 4-13

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