

I. CORE CURRICULUM 44

Chemistry 1101-1110, 1102-1120 will count toward the science requirement. Math 1110 will count toward the math requirement. Depending on the concentration chosen, some courses may also apply toward social science requirement. Courses used to fulfill Core Curriculum requirements can also be used to fulfill major requirements.

II. MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above).....65-66

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 II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

A. Biology Core Requirements: 12 semester hours (must be completed before taking any other biology courses)

- BIO 1110 ____ (4) Concepts of Biology
- BIO 2000 ____ (4) Introduction to Botany
- BIO 2001 ____ (4) Introduction to Zoology

Major Designators
 2 Writing (W) ____ ____
 1 Speaking (S) ____
 Certified Proficiency in Communication (CPC) ____
 CPC is met by completion of W and S courses within the department with a grade of "C" or better.
Other Designators
 4 Writing (W) ____ ____ ____ ____
 (English 1000 and 1100 will count as 2 W)
 4 Multi Cultural (MC) ____ ____ ____ ____
 (History 1101 and 1102 will count as 2 MC)
 2 Numerical Data (ND) ____ ____
 2 Computer (C) ____ ____
 1 Cross Disciplinary (CD) ____ ____

B. Additional Required Biology Courses: 34 semester hours

- BIO 3302 ____ (3) Ecology (ND, C)
- BIO 3306 ____ (3) Genetics (ND)
- BIO 3436 ____ (3) Introduction to Evolutionary Biology (W, S, ND)

and one of the following:

- BIO 3301 ____ (4) Animal Physiology (W, ND)
- BIO 3308 ____ (4) Bacteriology
- BIO 3800 ____ (4) Molecular Biology (W, ND, C)
- BIO 4100 ____ (4) Cell Biology
- BIO 4555 ____ (4) Plant Physiology (W, ND, C)

Any four from the following (must include one plant biology course):

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| BIO 3304 ____ (3) Systematic Botany | BIO 3310 ____ (3) Marine Biology (W) |
| BIO 3314 ____ (4) Comparative Vertebrate Zoology | BIO 3456 ____ (3) Invertebrate Zoology |
| BIO 4551 ____ (3) Ornithology | BIO 4552 ____ (3) Entomology |
| BIO 4556 ____ (4) Mycology | BIO 4557 ____ (3) Ichthyology |
| BIO 4559 ____ (3) Mammalogy | BIO 4560 ____ (3) Herpetology |
| BIO 4601 ____ (3) Animal Behavior-Ethology (W, S, ND) | |

7-9 elective hours to complete 34 semester hours _____

C. Required Cognate Courses: 19 semester hours

NOTE: 12 semester hours of cognate courses are counted in Core Curriculum requirements.

Chemistry

- CHE 1101/1110 ____ (4) Intro. Chem. I (ND) & lab
- CHE 1102/1120 ____ (4) Intro. Chem. II (ND) & lab

- CHE 2201/2203 ____ (4) Organic Chemistry I & lab
- OR** (consult advisor)
- CHE 2210 ____ (4) Quantitative Analysis (W)

Mathematics

- MTH 1110 ____ (4) Calculus w/ Analytic Geometry I (ND)
- STT 2810 ____ (3) Intro to Data Analysis & Statistical Inference (ND, C)

D. Basic Science Concentration: 12-13 semester hours

Choose Option 1 (13 hours) or Option 2 (12 hours). Students are encouraged to complete a minor in their chosen concentration by selection of one or two additional courses (consult advisor).

Option 1 (Complete 13 hours with at least 1 course from each area)

- Area 1. ECO 2030 ____ (3) Principles of Eco – Price Theory
- Area 2. GLY 1101 ____ (4) Intro to Physical Geology (ND)
- GLY 1102 ____ (4) Intro to Historical Geol (ND, CD)
- GLY 1103 ____ (4) Intro to Envir & Appl Geol (ND)
- Area 3. GHY 1010 ____ (3) Physical Geography
- GHY 3100 ____ (3) Weather and Climate

Option 2 (12 semester hours required)

- CHE 2202/2204 ____ (4) Organ. Chem. II & lab (W)
- PHY 1103 ____ (4) General Physics (W, ND)
- PHY 1104 ____ (4) General Physics (W, ND)

III. MINOR (optional)

IV. ELECTIVES (taken to a minimum of 128 hours for the degree) 18-19

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