Bachelor of Science (BS) Teaching
Degree Code 209A

    Checksheet for Biology Majors
    BIOLOGY SECONDARY EDUCATION LICENSURE

I. GENERAL EDUCATION CURRICULUM ............................................................................................................... 44


II. PROFESSIONAL EDUCATION REQUIREMENTS ................................................................................................................. 24

A minimum grade of C is required in each professional education course. CI 2300 & FDN 2400 are required prior to admission to Teacher Educ.

   CI 2300 (2) Teaching and Learning in the Digital Age (Entry course to teacher education)
   FDN 2400 (2) Critical Perspectives on Teaching and Learning (Pre or Co: CI 2300) (Entry course to teacher education)
   PSY 3010 (3) Psychology Applied to Teaching (Pre or Co: CI 2300)
   SPE 3300* (3) Creating Inclusive Learning Communities (Pre: CI 2300, FDN 2400, PSY 3010)
   C I 3400* (2) Policies and Practice in Educational Assessment (Pre: CI 2300, FDN 2400, PSY 3010) English
   C I 4900 (12) Student Teaching [CAP] (All courses in professional core must be completed with grades of C (2.0) or higher prior to student teaching, along with other courses (including methods and reading) identified within the major.)

*Admission to Teacher Education required.

NOTE: To be admitted to the Teacher Education Program students must take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exams are required for student teaching.

III. MAJOR REQUIREMENTS (Not including 12 semester hours already counted in I, above) ............................................................................ 55-56

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.

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. Additional Required Biology Courses: 22-23 semester hours (Pre: BIO 1801 & 1802 for all remaining BIO courses)

   BIO 2400 (3) Genetics (Pre: BIO 1801, CHE 1102, MAT 1025)
   BIO 2410 (1) Genetics Laboratory (Pre/Course: BIO 2400/2700)
   BIO 3312 (3) Environmental Studies [WID] (Pre: ENG 2001)
   BIO 3436 (3) Introduction to Evolutionary Biology
   BIO 3521 (1) Secondary Science Field Experience (Pre: Jr/Sr standing)
   BIO 3800 (4) Molecular Biology [WID] (Pre: CHE 2101 or 2201; ENG 2001)
   BIO 3301 (4) Human Systems Physiology [WID] (Pre: 1 semester organic CHE; ENG 2001) OR BIO 4555 (4) Plant Phys (Pre: CHE 1102/1120)

Biodiversity: Choose one course from the following: 3-4 semester hours

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

C. Required Cognate Courses: 37 semester hours (12 semester hours of cognate courses are counted in general ed requirements.)

   Chemistry
   CHE 1101/1110 (4) Intro. Chem I & lab
   CHE 1102/1120 (4) Intro. Chem II & lab (Pre: CHE 1101/1110)
   CHE 2101/2203 (4) Fundamentals of Organic Chem I & lab (Pre: CHE 1102/1120)

   Mathematics
   MAT 1110 (4) Calc w/Analytical Geom. I (Pre: MAT 1025 w/C-)
   STT 2810 (3) Intro to Statistics (Pre: MAT 1010)

   Physics
   PHY 1103 (4) General Physics I (Co: MAT 1020 or 1025)
   PHY 1104 (4) General Physics II (Pre: PHY 1103)

   General Science (minimum grade of “C” required)
   G S 4403 (3) Tchg Sci in Mid/HS [WID] (Pre: ENG 2001)

   Geology
   GLY 1101 (4) Intro to Physical Geology

IV. MINOR (optional)

V. ELECTIVES (taken to total 128 hours for the degree) ........................................................................................................... 4-5

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

Net Major hrs: 55-56

128