

## B.S. IN BIOLOGICAL SCIENCES CURRICULUM - 124 HRS.

A MINIMUM GRADE OF "C" IS REQUIRED IN ALL BIO COURSES

### A. **BIOLOGY CORE - 21 HRS:**

BIO 1134 Biology I \*  
BIO 1144 Biology II \*  
BIO 2103 Cell Biology  
BIO 3013 Writing for Bio  
BIO 3304 Gen Micro \*  
BIO 4133 Human Genetics

### B. **BIOLOGY AREA COURSES – 24 HRS**

6 hrs minimum required from each Area. 24 hrs total required.

Three Biology Area Courses must include a laboratory (\*).

A minimum of one animal course and one plant course is required from Areas 2, 3, or 4.

#### 1. **MOLECULES AND CELLS:**

BCH 4603/4613/4013 Biochemistry  
BIO 3103 Genetics I\*  
BIO 4114 Cellular Physiology \*  
BIO 4324 Soil Microbiology\*  
BIO 4413 Immunology  
BIO 4433 Principles of Virology  
BIO 4503 Vertebrate Histology \*  
BIO 4504 Comparative Vertebrate Embryology \*

#### 2. **ANATOMY AND PHYSIOLOGY:**

BIO 3504 Comparative Anatomy \*  
BIO 4204 Plant Anatomy\*  
BIO 4214 General Plant Physiology \*  
BIO 4514 Animal Physiology \*

#### 3. **ORGANISMS: (One animal course and one plant course are recommended)**

BIO 2113 Plant Biology \*  
BIO 2213 Survey of Plants & Fungi \*  
BIO 3303 Parasitology \*  
BIO 3524 Biology of Vertebrates \*  
BIO 4203 Taxonomy of Spermatophytes \*  
BIO 4224 Aquatic Botany\*

#### 4. **ECOLOGY AND EVOLUTION:**

BIO 3104 Ecology \*  
BIO 4113 Evolutionary Biology  
BIO 4213 Plant Ecology \*

### C. **Life Science Electives -10 hours:** (Hours in excess of 24 hrs from Area courses may be deducted from Life Science Elective hours). Life Science electives may be taken in other life science departments but must be courses for respective "majors".

**A maximum of 3 hrs. of Directed Individual Study may be used as Life Science Electives.**

### D. **Physical Science and Math Core - 26 hrs.:**

CH 1213 Chem I; CH1211 Invest. in Chem I; CH 1223 Chem II; CH 1221 Invest in Chem II  
CH 4513 Organic Chem I; CH 4523 Organic Chem II  
PH 1113 General Physics I **AND:** PH 1123 General Physics II **OR** PH 1133 Physics III  
MA 1313 College Algebra **AND** MA 1323 Trigonometry **OR** MA 1713 Calculus will suffice

### E. **College of Arts & Sciences Core Requirements - 36 hrs, General Electives - 14 hrs.**

The following courses may not be used to meet the above science requirements: BIO 1004, BIO 1023, BIO 1033/1001, BIO 1043, BIO 1123, BIO 1033/1001, BIO 1043, BIO 1123, BIO 2004, BIO 2014, BIO 4713/6713.

### MINOR IN BIOLOGICAL SCIENCES - 28 HRS

CH 1213, 1223-Chem I & II; CH 1211, 1221 - Invest Chem I & II; Biology Core (less BIO 3013) - 18 hrs; 1 course from area 3 or 4

\*Indicates that the course includes a lab.

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