# **DEGREE PLANNING GUIDE: 2018-19**



#### **BIOCHEMISTRY-B.S.**

| First year (<28 credits)  | <b>Sophomore</b> (28-59 credits)                           | Junior (60-91 credits)  | Senior (92+ credits)  |
|---|--|---|---|
| Semester 1<br>MATH 113 *<br>CHEM 111or<br>115 BIOL 207  | Semester 1<br>CHEM 201 (Fall only)<br>PHYS 211<br>BIOL 209 | Semester 1<br>CHEM 440<br>CHEM 331 (Fall only or CHEM 332<br>Spring only)<br>BCHM 301                               | Semester 1 BIOL 295 or higher course** or BIOL 400-level, excluding research                |
| Semester 2<br>MATH 114<br>CHEM 112 (if 111 taken in fall)<br>(or CHEM 300 if CHEM 115 was<br>taken in fall)<br>BIOL 208 | Semester 2<br>CHEM 202 (Spring only)<br>PHYS 212           | Semester 2 CHEM 442 (Spring only) CHEM 332 (Spring only or CHEM 331 Fall only) BIOL 295 or higher course** BCHM 302 | Semester 2 CHEM elective* BIOL 295 or higher course** or BIOL 400-level, excluding research |

# **Requirements for Degree**

### **Program Core Courses**

BIOL 207 Genetics, Ecology, & Evolution BIOL 208 Biological Communication and Energetics

BIOL 209 Biology of Sustainability

CHEM 111 General Chemistry I & CHEM 112 General Chemistry II or CHEM 115

CHEM 201 Organic Chemistry I

CHEM 202 Organic Chemistry II

CHEM 440 Biochemistry I

CHEM 442 Biochemistry II

BCHM 301-302 Biochemistry Seminar Series (0-2 credits)

CHEM 331 Chemical Thermodynamics & Reaction Dynamics or CHEM 332 Quantum Chemistry & Molecular Spectroscopy (CHEM 331 or CHEM 332 is required, the other is optional.)

Plus 12 additional credits numbered BIOL 295 or higher. Four credits must be 400-level, excluding research. Four credits may be in research at the 300-level.

4 additional credits in CHEM, selected in consultation with the advisor. CHEM 300, Quantitative Analysis, is strongly recommended.

### **Allied Requirements**

MATH 113 Calculus I MATH 114 Calculus II PHYS 211 Introduction to Classical Physics I PHYS 212 Introduction to Classical Physics II

### **Special Notes**

\*Biochemistry majors who do not place into MATH 113 may start with MATH 108 Calculus with Review I. Students who do not place into MATH 108 should consult with the Math Resource Center (MaRC) about how best to prepare for MATH 108. biochemistry majors should not take MATH 101 or MATH 111.

\*\*Elective courses in this interdisciplinary major must be selected only after consultation with a faculty advisor in the appropriate Chemistry or Biology departments.