

# MOLECULAR BIOSCIENCES

## BACHELOR OF SCIENCE

At least 124 hrs. (45 Junior/Senior hrs.) must be completed for graduation. Double majors must complete at least 15 hrs. unique to each major.

### I. General College Requirements (33 hrs.):

**English** (9 hrs.): ENGL 101 \_\_\_; ENGL 102 (or 105) \_\_\_;  
ENGL 203 (or 205, 209, 210, 211, 362) \_\_\_

**Oral Communication/Logic** (3 hrs.): COMS 130/230,  
PHIL 148/310, **OR** Exemption/Examination \_\_\_

**Western Civilization** (6 hrs.): HWC 204 (or 114) \_\_\_ and  
HWC 205 (or 115) \_\_\_

**Principal Course and/or Foreign Language Requirements** (*No more than one course from each topical subgroup from the principal course list can be applied toward fulfillment of this requirement. See Undergraduate Catalog and Timetable for list of principal courses and topical subgroups.*):

**Social Science** (3 hrs.) \_\_\_; **Humanities** (3 hrs.) \_\_\_; and three additional courses in foreign language, social sciences, or humanities: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

### II. General Science Requirements (36-37 hrs.):

- \_\_\_\_\_ CHEM 184 Foundations of Chemistry I (5 hrs.)
- \_\_\_\_\_ CHEM 188 Foundations of Chemistry II (5 hrs.)
- \_\_\_\_\_ CHEM 624 Organic Chemistry I (3 hrs.)
- \_\_\_\_\_ CHEM 625 Organic Chemistry I lab (2 hrs.)
- \_\_\_\_\_ CHEM 626 Organic Chemistry II (3 hrs.)
- \_\_\_\_\_ CHEM 627 Organic Chemistry II lab (2 hrs.)
- \_\_\_\_\_ MATH 115 Calculus I (3 hrs.) **and** MATH 116 Calculus II (3 hrs.) **OR** MATH 121 Calculus I (5 hrs.)
- \_\_\_\_\_ BIOL 570 Statistics (3 hrs.) **OR** MATH 365 (3 hrs.) **OR** PSYC 300 (3 hrs.)
- \_\_\_\_\_ PHSX 114 **and** PHSX 115 Coll. Physics I & II (8 hrs.) **OR** PHSX 211 **and** PHSX 212 General Physics I & II (8 hrs.)

### III. Molecular Biosciences Requirements (29 hrs.):

- \_\_\_\_\_ BIOL 150 (or 151, Honors) Principles of Molecular & Cellular Biology (4 hrs.)
- \_\_\_\_\_ BIOL 152 (or 153, Honors) Principles of Organismal Biology (4 hrs.)
- \_\_\_\_\_ BIOL 350 Principles of Genetics (3 hrs.)
- \_\_\_\_\_ BIOL 400 Fundamentals of Microbiology (3 hrs.)
- \_\_\_\_\_ BIOL 402 Fundamentals of Microbiology Lab (2 hrs.)
- \_\_\_\_\_ BIOL 405 Laboratory in Genetics (2 hrs.)
- \_\_\_\_\_ BIOL 416 Cell Structure and Function (3 hrs.)
- \_\_\_\_\_ BIOL 430 Molecular Biology Laboratory (3 hrs.)
- \_\_\_\_\_ BIOL 599 Senior Seminar in Molecular Biosciences (1 hr.)  
(*must be taken in senior year*)
- \_\_\_\_\_ BIOL 600 Introductory Biochemistry (4 hrs.)

### IV. General Biology Electives, Seminar and Laboratory Requirements (11 hrs.):

**BIOL courses numbered 400 or higher, including at least 2 hrs. of lab credit and 2 hrs. of a seminar/topics course (BIOL 419, 420, 701).** No more than 3 hrs. of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement with no more than 2 hours of BIOL 424 being applied towards the laboratory requirement.

BIOL \_\_\_\_\_ (\_\_\_\_ hrs.)

BIOL \_\_\_\_\_ (\_\_\_\_ hrs.)

BIOL \_\_\_\_\_ (\_\_\_\_ hrs.)

BIOL \_\_\_\_\_ (\_\_\_\_ hrs.)

BIOL \_\_\_\_\_ (\_\_\_\_ lab hrs.)

BIOL \_\_\_\_\_ (\_\_\_\_ lab hrs.)

BIOL \_\_\_\_\_ (\_\_\_\_ seminar hrs.)