

ADVANCED MOLECULAR BIOLOGY OPTION

This option is offered within the following major(s):

- Biochemistry and Molecular Biology - College of Science (<http://catalog.oregonstate.edu/college-departments/science/school-life-sciences/biochemistry-biophysics/biochemistry-molecular-biology-bs-hbs/>)

The Advanced Molecular Biology option is designed for students interested in pursuing graduate work in molecular life sciences or entering the workforce in the biotechnology and pharmaceutical industries. It provides advanced training in genomics, epigenetics and other areas of current research in molecular biology, in addition to the core courses in the major. Students are strongly encouraged to participate in undergraduate research, and up to six research credits can be applied to the Upper-division Science Elective requirements. Faculty advisors work with students to help them identify electives, research opportunities, and professional internships that align with their interests.

Option Code: 972

| Code | Title | Credits |
|---|---|---------|
| Core | | |
| BB 345 | INTRODUCTION TO BIOLOGICAL SEQUENCE ANALYSIS | 2 |
| Electives | | |
| Select 19 or more credits from the following: | | 19 |
| BB 360 | INTRODUCTION TO NEUROSCIENCE | |
| BB 361 | NEUROSCIENCE OF SENSORY AND MOTOR SYSTEMS | |
| BB 401 | UNDERGRADUATE RESEARCH | |
| BB 460 | ADVANCED CELL BIOLOGY | |
| BB 484 | CHROMATIN AND EPIGENETICS | |
| BB 485 | APPLIED BIOINFORMATICS | |
| BI 311 | GENETICS | |
| BI 445 | EVOLUTION | |
| BOT 460 | FUNCTIONAL GENOMICS | |
| BOT 475 | COMPARATIVE GENOMICS | |
| BOT 476 | INTRODUCTION TO COMPUTING IN THE LIFE SCIENCES | |
| MB 302 | GENERAL MICROBIOLOGY | |
| MB 303 | GENERAL MICROBIOLOGY LABORATORY | |
| MB 310 | BACTERIAL MOLECULAR GENETICS | |
| MB 416 | IMMUNOLOGY | |
| MB 420 | MICROBIAL GENOMES, BIOGEOCHEMISTRY, AND DIVERSITY | |
| MB 436 | THE HUMAN MICROBIOME | |
| ST 352 | INTRODUCTION TO STATISTICAL METHODS | |
| Z 425 | EMBRYOLOGY AND DEVELOPMENT | |
| Z 438 | BEHAVIORAL NEUROBIOLOGY | |
| Total Credits | | 21 |

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