

B.S. in Biology *with Molecular Biology Emphasis*

Requirements (27-30 credits plus cognate requirements):

- Cognate requirements (1 yr. Calculus, 2 yrs. Chemistry, 1 yr. Physics)
- 101, 111, 102, 112 General Biology I and II with labs (8)
- 251. Cell Biology (3)
- 265. Ecology (3)
- 282. Genetics (3)
- 283. Genetics Lab (2)
- 366. Cell Phys. & Biochemistry (3)
- One of the Following:
 - 382. Molecular Genetics (3)
 - 387. Genomics (3)
 - 388. Bioinformatics (3)
- One of the Following Labs:
 - 336L. Biochemistry Lab (2)
 - 390. Molecular Biology Lab(4)
 - 391 Forensic Molecular Biology Lab (5)
 - 396. Research (3)* , 397H. Senior Honors Thesis (3)*, or 398. Internship (1-3)*

Electives (8-11 credits): any of the following courses can be chosen to complete the requirements for this emphasis if not previously taken for required credit:

- 252. Cell Biology Lab (2)
- 296. Introduction to Research (1)
- 302. Microbiology (4)
- 314 Advance Microbiology (3)
- 315. Immunology (4)
- 317. Biology of Persistent Diseases (3)
- 319. Evolution (3)
- 366L. Biochemistry Lab (2)
- 377. Molecular Pathogenesis (3)
- 382. Molecular Genetics (3)
- 387. Genomics (3)
- 388. Bioinformatics (3)
- 390. Molecular Biology Lab (4)
- 391. Forensic Molecular Biology Lab (5)
- 396. Research (3)*, 397. Senior Honors Thesis (3)*, or 398. Internship (1-3)*

The rapid recent advances in the areas of genetics, molecular biology and related biotechnologies have created a strong demand for college graduates with specialized training in these areas. Hands-on experience in the use of the latest techniques is particularly important to this training. This new program within the Biology major is designed for students seeking a rigorous, laboratory-intensive curriculum to prepare them for health-related professions, research jobs or graduate programs in a number of areas related to molecular biology.

Program for a Biology Major with a Molecular Biology Emphasis

Biology majors choosing to focus their coursework on Molecular Biology courses will receive a Biology B.S./Molecular Biology Emphasis. This specialized Biology major requires 38 credit hours, including 11 required courses (27-30 hours) and elective courses totaling 8-11 hours. This track allows students to receive the strong background in fundamental Biology required of all majors, while also specializing in the areas of Molecular Biology. Students will follow the program outlined at left.

