

# Molecular Biology and Genetics Track

## Requirements for the Major in Biology - Molecular Biology and Genetics Track

The major requires successful completion of the following:

Code	Title	Semester Hours
<b>Course Requirements <sup>1,2</sup></b>		
BIOL 130	Field Investigations in Biology	4
BIOL 133	Introductory Molecular Biology and Genetics <sup>3</sup>	4
BIOL 223	Genetics (Lab)	4
BIOL 233	Molecular Cell Biology	4
BIOL 243	Molecular Methods (Lab)	4
BIOL 424	Senior Seminar	4
CHEM 120	General Chemistry (Lab)	4
or CHEM 150	Advanced General Chemistry (Lab)	4
Select four of the following courses in molecular biology and genetics (attribute BIOM): <sup>4</sup>		16
BIOL 213	Evolutionary Biology	
BIOL 218	Principles of Animal Nutrition and Metabolism	
BIOL 236	Biochemistry	
BIOL 280	Molecular Genetics (Lab)	
BIOL 312	General and Human Physiology	
BIOL 314	General and Human Physiology (Lab)	
BIOL 316	Biochemistry of Metabolism and Molecular Biology (Lab)	
BIOL 317	Biochemistry of Metabolism and Molecular Biology	
BIOL 318	Molecular Revolutions in Medicine	
BIOL 319	Cancer Cell Biology (Lab)	
BIOL 320	Cancer Cell Biology	
BIOL 322	Genes and Behavior	
BIOL 323	Environment and Development	
BIOL 325	Biology of Aging	
BIOL 331	Immunology	
BIOL 333	Developmental Biology (Lab)	
BIOL 334	Developmental Biology	
BIOL 335	Advanced Topics in Evolutionary Biology	
BIOL 339	Microbiology	
BIOL 340	Microbiology (Lab)	
BIOL 360	Virology	
BIOL 388	Epigenetics	
BIOL 389	Epigenetics (Lab)	
CHEM 316	Biochemistry of Metabolism and Molecular Biology (Lab)	
NEUR 208	Neurobiology	
NEUR 351	Experimental Neurobiology (Lab)	
<b>Total Semester Hours</b>		<b>44</b>

Code	Title	Semester Hours
<b>Additional Requirements</b>		
A comprehensive examination		

<sup>1</sup> Courses numbered below 130 do not count toward the major.

<sup>2</sup> At least four of the required and elective Biology courses must have a laboratory.

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3 The Department of Biology will allow an AP test score of 5 or a higher level IB test score of 6 or 7 to substitute for BIOL 133. Students should be advised that mastery of the material covered in BIOL 133 is important as majors will be tested on it during their comprehensive exams.

4 Students may only receive credit once for courses delivered as both lab and non-lab offerings.