MOLECULAR BIOLOGY (M.S.)

For details about this program, including program description, admission requirements, and contact information, click here (https://www.montclair.edu/graduate/programs-of-study/molecular-biology-ms/).

Program Requirements

Code	Title	Credits
Core Courses		
BIOL 547	Molecular Biology I	3
BIOL 548	Molecular Biology II	4
BIOL 556	Molecular Biology of Proteins	3
BIOL 592	Graduate Colloquium	1
Research in Biological Literature		
BIOL 597	Research in Biological Literature	1
Electives and Culminating Activity		
Concentration/Specialization Courses		
Select 14 credits (if completing a thesis) - 17 credits (if completing BIOL 599 or a Lab course) from the following:		14-17
Biology Electives		
BIOL 505	Experimental Cell Culture	
BIOL 512	Special Topics in Modern Genetics	
BIOL 515	Population Genetics	
BIOL 520	Plant Physiology	
BIOL 533	Advanced Cell Biology	
BIOL 540	Mammalian Physiology	
BIOL 549	Special Topics in Developmental Biology	
BIOL 550	Special Topics in Microbiology	
BIOL 552	Biology of Lipids	
BIOL 555	Medical Genetics	
BIOL 557	Virology	
BIOL 558	Microbial Genetics	
BIOL 560	Molecular Genetics	
BIOL 561	Genomics	
BIOL 562	Special Topics in Molecular Biology	
BIOL 563	Statistical Genomics	
BIOL 564	Proteomics	
BIOL 566	Bioinformatics	
BIOL 568	Advanced Neuroscience	
BIOL 587	Special Topics in Advanced Molecular Biology	
BIOL 593	Molecular Ecology	
BIOL 594	Signal Transduction	
BIOL 598	Selected Techniques in Molecular Biology	
Non-Departmental Approved Electives		
0-9 credits may be completed from the following:		
CHEM 570	Advanced Biochemistry	
CHEM 575	Enzyme Kinetics and Mechanisms	
CHEM 577	Nucleic Acid Biochemistry	
CHEM 578	Biochemistry Laboratory Techniques	
CHEM 579	Biomolecular Assay Development	
CHEM 582	Biochemical Pharmacology	
Culminating Activity		
Select one of the following options:		3-6
Thesis		
BIOL 698	Master's Thesis	
Complete BIOL 698 for 6 credits. Submit the completed Thesis original and one copy to the Graduate Office. See Thesis Guidelines for details.		
Non-Thesis Research Option		
BIOL 599	Introduction to Biological Research	
Complete BIOL 599 for 4 credits. Present a research summary to a committee of 3 faculty members. Results are reported to the Graduate School.		
Non-Thesis Lab Option		
Complete a Laboratory Course for 3-4 credits with approval from graduate advisor.		
Present a research summary to a committee of 3 faculty members. Results are reported to the Graduate School.		
Total Credits		**32**