

CELL AND MOLECULAR BIOLOGY, MS

The Master's in Cell and Molecular Biology program is designed to enhance the competitiveness of students applying to postgraduate professional schools, especially Medical and Dental School, but also Veterinary School, Optometry School, Business School, Law School, and Ph.D. programs.

Requirements

Students must complete a total of 30 credit hours, with a cumulative GPA of a 3.0 or higher on a 4.0 scale, in order to receive the MS degree.

Required Courses

Course ID	Title	Credits
Required Courses		
CELL 7860	Master's Seminar (to be taken in both Fall and Spring) ¹	6
Electives		
Select 24 credits of Electives		24
Total Credit Hours		30

¹ This course will include on site work experiences coupled with formal classroom presentations summarizing the work. The Experiential component includes 50 required hours per semester and will be tailored to the student's career path which can range from traditional laboratory research to Service Learning programs in medical or professional settings.

The remaining 24 credits will consist of lecture or lab courses such as the electives listed below.

Elective Courses

Course ID	Title	Credits
CELL 6000	Biomedical Ethics	3
CELL 6010	Cellular Biochemistry	3
CELL 6030	Molecular Biology	3
CELL 6035	Molecular Biology Lab	1
CELL 6050	Foundations of Pharmacology	3
CELL 6070	Neurobiology of Aging	3
CELL 6080	Adv Dev & Cell Biol II	3
CELL 6110	Human Histology	4
CELL 6130	Embryology	3
CELL 6150	Methods in Neuroscience	3
CELL 6160	Developmental Biology	3
CELL 6180	Biomedical Research in Animals	3
CELL 6200	General Endocrinology	3
CELL 6210	Physiology	3
CELL 6220	Microbiology	3
CELL 6225	Microbiology lab	1
CELL 6230	Virology	3
CELL 6310	Cellular Neuroscience	3
CELL 6320	Systems Neuroscience	3
CELL 6325	Neuroanatomy Lab	1
CELL 6340	Neurobiology of Disease	3
CELL 6350	Developmental Neurobiol	3
CELL 6370	Molecular Neurobiology	3
CELL 6400	Regenerative Biology	3
CELL 6430	Introductory Bioinformatics	3
CELL 6440	Adv Molecular Biology	3
CELL 6450	Genome Biology	3
CELL 6480	Head and Neck Anatomy	3

CELL 6490	Anatomy	4
CELL 6550	Syn Org of the Brain	3
CELL 6560	Pathophysiology	3
CELL 6710	Molec Biology of Cancer	3
CELL 6750	Cell Biology	3
CELL 6755	Cell Biology Lab	1
CELL 6840	Current Topics Dev Biol	2

Students may be permitted to take electives from other departments with the approval of the program's Co-Directors.