## **MOLECULAR GENETICS B.S.**

All students must meet the Degree and University Requirements.

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

## **MAJOR REQUIREMENTS**

Requirement Description		Credits
MMG 1010	First Year Colloquium	1
MMG 1020	Unseen Wrlds:Microbes & You	3
MMG 1030	Methods in Microbial Ecology	2
INTRODUCTORY BIOLOGY. Choose 1 of the following options:		8
Option A:		
BCOR 1400 & BCOR 1450	Exploring Biology 1 and Exploring Biology 2	
Option B:	'	
BIOL 1000 & BIOL 1005	AP Biology 1 and AP Biology 2	
Option C:		
BIOL 1000 & BCOR 1425	AP Biology 1 and Accelerated Biology	
CS 1210	Computer Programming I	3
MATH 1212	Fundamentals of Calculus I	3-4
or MATH 1234	Calculus I	J
CHEM 1400	General Chemistry 1	4
CHEM 1450	General Chemistry 2	4
CHEM 2580	Organic Chemistry 1	4
CHEM 2585	Organic Chemistry 2	4
MMG 2010	Microbiol & Infectious Disease	4
MMG 2040	Intro Molecular Genetics	4
MMG 2060	Intr Biomedical Research Meth	3
BCOR 2300	Genetics	3
BCOR 2505	Molecular & Cell Biology	3
or BCOR 2500	Molecular & Cell Biology w/lab	
BIOC 3001	Fundamentals of Biochemistry	3
or BIOC 3005	Biochemistry I	
or BIOC 3005	Biochemistry I	

or BIOC 3075	Adv Biochem of Human Disease	
STAT 1410	Basic Statistical Methods 1	3
or STAT 3000	Med Biostat&Epidemiology	
MMG 4899	Senior Seminar	1
Choose 6 credits fro	m the following MMG courses:	6
MMG 3010	Applied Cell & Mol Bio Lab	
MMG 3330	Genetics and Genomics	
MMG 3270	Cancer Genetics	
Choose 9 credits fro	m the following MMG courses:	9
BIOC 3007	Biochemistry Lab	
MMG 2114	Vaccines: Science and Ethics	
MMG 3110	Bacterial Genetics	
MMG 3200	Environmental Microbiology	
MMG 3220	Adv Medical Microbiology w/lab	
MMG 3230	Immunology	
or BHSC 342	0 Immunology	
MMG 3250	Eukaryotic Virology	
MMG 3300	Emerging Infectious Diseases	
MMG 3310	Survey Bioinformatic Databases	
MMG 3320	Advanced Bioinformatics	
MMG 2990	Special Topics	
or MMG 399	0 Special Topics	
or MMG 499	0 Special Topics	
or MMG 599	0 Special Topics	
MMG 5990	Special Topics (When title is Human Microbiome)	
Other MMG course	s offered at the 3000 or 5000 level not listed below	
Choose 6 additional	credits from above and/or below courses:	6
MMG 2995	Undergraduate Research	
or MMG 3995 Undergraduate Research		
MMG 2994	Teaching Assistantship	
or MMG 399	4 Teaching Assistantship	
MMG 2993	Independent Study	
or MMG 399	3 Independent Study	
MMG 2991	Internship	

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or MMG 399	1 Internship	
ASCI 3180	Endocrinology	
BIOL 3560	Developmental Biology	
BIOL 3505	Neurobiology	
MLS 3300	Clinical Microbiology II	
BHSC 3440	Immunology Lab	
NFS 3203	Food Microbiology	
PHRM 3010	Pharmacology and Therapeutics	
PHRM 5720	Gr Toxicology	
Other advisor approved science courses listed at the 3000 or 5000 level		

## **RESTRICTIONS**

Ineligible Minors: Molecular Genetics