Molecular Biology Major - Fall 2015 Courses

Level: E = Elementary, I = Intermediate, A = Advanced (L&S students needs at least 60 credits of I/A)
Be sure to check pre-requisites!
Schedule appointment with MolBio advisor: http://molecularbio.ls.wisc.edu/advising.htm

Course Number	Credits	Level	Course Title
Math/Stats			
Math 211	5	I	Calculus (lec/dis)
Math 221	5	I	Calculus and Analytic Geometry I (lec/dis)
Math 213	3	I	Calculus and Introduction to Differential Equations (lec/dis)
Math 222	4	I	Calculus and Analytic Geometry II (lec/dis)
Statistics 301	3	I	Introduction to Statistical Methods (lec/dis)
Statistics 371	3	I	Introductory Applied Stats for the Life Sciences (lec/dis)
Introductory Chemistry			
Chemistry 103	4	E	General Chemistry I (lec/lab/dis)
Chemistry 104	5	E	General Chemistry II (lec/lab/dis)
Chemistry 108	5	E	Chemistry in Our World (lec/lab/dis)
Chemistry 109	5	E	Advanced General Chemistry (lec/lab/dis)
Chemistry 115	5	E	Chemical Principles I (lec/lab/dis)
Organic Chemistry/Analytical Chemistry			
Chemistry 343	3	I	Introductory Organic Chemistry (lec/dis)
Chemistry 344	2	I	Introductory Organic Chemistry Lab (lab/dis)
Chemistry 345	3	I	Intermediate Organic Chemistry (lec/dis)
Chemistry 327	4	I	Fundamentals of Analytical Science (lec/lab/dis)
Chemistry 329	4	I	Fundamentals of Analytical Science (lec/lab/dis)
Physics			
Physics 201	5	I	General Physics (lec/lab/dis)
Physics 202	5	I	General Physics (lec/lab/dis)
Physics 207	5	I	General Physics (lec/lab/dis)
Physics 208	5	I	General Physics (lec/lab/dis)
Introductory Biology & Genetics			
Biology/Botany/Zoology 151	5	E	Introductory Biology I (lec/lab/dis)
Biology/Botany/Zoology 152	5	E	Introductory Biology II (lec/lab/dis)
Botany/Genetics/Zoology 466	3	I	General Genetics (lec/dis)
Biochemistry			
Biochemistry 501	3	A	Introduction to Biochemistry (lec)
Biochemistry 507	3	A	General Biochemsitry I (lec)

Molecular Biology			
Biochem/Genetics/Microbio 612	3	I/A	Prokaryotic Molecular Biology (lec)
Genetics 545	2	A	Genetics Laboratory (lab)

Advanced Courses			
Development			
Zoology 555	3	I/A	Laboratory in Developmental Biology (lab)

Microbiology			
Microbiology 303	3	I	Biology of Microorganisms (lec)
Microbiology 304	2	I	Biology of Microorganisms (lab)
Microbio/Oncology/Pl Path 640	3	I/A	General Virology-Multiplication of Viruses (lec)

Genetics			
Genetics 565	3	I	Human Genetics (lec)
Genetics/Microbio 607	3	I	Advanced Microbial Genetics (lec)
Microbiology 470	3	I	Microbial Genetics & Molecular Machines (lec)

Cell Biology			
Biochem/Zoology 630	3	I/A	Cellular Signal Transduction Mechanisms (lec)
MM&I/Microbio/Path-Bio 528	3	I	Immunology (lec)
Oncology 401	2	I	Introduction to Experimental Oncology (lec)
Neurosci/Zoology/Psych 523	3	I	Neurobiology (lec/dis)
Zoology 570	3	I	Cell Biology (lec/dis)

Biochemistry and Physical Chemistry			
Biochem/Nutri Sci 510	3	A	Biochemical Principles of Human & Animal Nutrition (lec)
Biochemistry 651	3	A	Biochemical Methods (lec/lab)
Chemistry 561	3	A	Physical Chemistry (lec/dis)
Chemistry 565	4	A	Biophysical Chemistry (lec/dis)

Quantitative and Computation Sciences			
F&W Eco/Hort/Stats 571	4	I	Statistical Methods for Bioscience I (lec/dis)
BMI/Computer Sci 576	3	A	Inroduction to Bioinformatics (lec)
Comp Sci/Math 425	3	I	Introduction to Combinatorial Optimization (lec)
Statistics 333	3	A	Applied Regression Analysis (lec/dis)
Statistics 541	3	I	Introduction to Biostatistics

Lab Courses/Independent Research			
Microbiology 304	2	I	Biology of Microorganisms (lab)
Molecular Biology 681	3	A	Senior Honors Thesis I
Molecular Biology 682	3	A	Senior Honors Thesis II
Molecular Biology 691	3	A	Senior Thesis I
Molecular Biology 692	3	A	Senior Thesis II
Molecular Biology 699	1-4	A	Directed Studies