

Spring 2017 Biology Major Neurobiology - Updated 12/15/16				
<b>1. Math</b>			Credits	
Math	217	Calc with Algebra & Trig II	5	
Math	221	Calculus&Analytic Geometry	5	
Math	222	Calculus&Analytic Geometry	4	
Statistics	301	Intro-Statistical Methods	3	
Statistics	371	Intro Applied Stats-Life Sci	3	
<b>2. Chemistry</b>				
Chemistry	103	General Chemistry I	4	
Chemistry	104	General Chemistry II	5	
Chemistry	343	Intro Organic Chemistry	3	
Chemistry	344	Intro Organic Chemistry Lab	2	
Chemistry	345	Intmed Organic Chemistry	3	
<b>3. Physics</b>				
Physics	103	General Physics	4	
Physics	104	General Physics	4	
Physics	201	General Physics	5	
Physics	202	General Physics	5	
Physics	207	General Physics	5	
Physics	208	General Physics	5	
<b>4. Introductory Biology</b>				
Biology/Zoology	101	Animal Biology	3	
Biology/Zoology	102	Animal Biology Laboratory	2	
Biology/Botany	130	General Botany	5	
Biology/Botany/Zoology	151	Introductory Biology	5	
Biology/Botany/Zoology	152	Introductory Biology	5	
Biocore	383	Cellular Biology	3	
Biocore	384	Cellular Biology Lab	2	
Biocore	587	Biological Interactions	3	
<b>Foundational Courses (not required if completing Biocore)</b>				
Agron/Hort	338	Plant Breeding & Biotechnology	3	
Biochem	501	Introduction-Biochem	3	
Biochem	508	General Biochemistry II	3	
Genetics	466	Principles of Genetics	3	
Genetics	468	General Genetics II	3	
Microbiology	470	Micro Genetics & Mol Machines	3	
<b>5. Intermediate/Advanced</b>				
Psych	454	<a href="#">Behavioral Neuroscience</a>	3	
<b>5A. Cellular and Molecular Neurobiology</b>			Credits	Approved Lab
NTP/Physiol/Zoology	616	<a href="#">Lab Course in Neurobiology &amp; Behavior</a>	4	Y
NTP/Zoology	655	<a href="#">Modeling Neurodevelopmental Disease</a>	3	
Psych	411	<a href="#">Epigenetics &amp; the Brain</a>	3	
Zoology	400	<a href="#">General Molecular Biology</a>	3	
Zoology	625	Development of the Nervous System	2	
Zoology	604	<a href="#">Computer-based Gene &amp; Disease/Disorder Research Lab</a>	2	Y

<b>5B Systems Neurobiology</b>				
Anatomy/NTP/Pharmacol-M/ Physiol/Psych	611	<a href="#">Systems Neuroscience</a>	4	
Anatomy/NTP/Physiol	630	Neuronal Mechanisms for Sensation & Memory in the Cerebral Cortex	3	
CS&D	210	<a href="#">Neural Basis of Communication</a>	3	
Ed Psych	326	<a href="#">Mind, Brain &amp; Education</a>	3	
Kines	531	<a href="#">Neural Control of Movement</a>	3	
Psych	406	<a href="#">Psychology of Perception</a>	3	
Psych	501/581	<a href="#">Hormones, Brain &amp; Behavior</a>	4	
<b>5C. Ecology</b>				
Botany/F&W Ecol/Zoology	460	<a href="#">General Ecology</a>	4	Y
Envir St/Zoology	510	<a href="#">Ecology of Fishes</a>	3	
Envir St/Zoology	511	<a href="#">Ecology of Fishes Lab</a>	2	Y
Envir St/Land Arc	361	<a href="#">Wetlands Ecology</a>	3	
F&W Ecol	379	<a href="#">Principles of Wildlife Management</a>	3	
F&W Ecol/Land Arc/Zoology	565	<a href="#">Principles of Landscape Ecology</a>	2	
Microbio	375	<a href="#">The Microbiome of Plants, Animals &amp; Humans</a>	3	
PI Path	375	<a href="#">Plant Microbiomes</a>	4	Y
<b>5D. Evolution &amp; Systematics</b>				
Anthro/Botany/Zoology	410	<a href="#">Evolutionary Biology</a>	3	
Botany	422	<a href="#">Plant Geography</a>	3	
Entom/Genetics/Zoology	624	<a href="#">Molecular Ecology</a>	3	
Genetics	468	<a href="#">General Genetics II</a>	3	
Microbio	450	<a href="#">Diversity, Ecology &amp; Evolution of Microorganisms</a>	2	
Psych	450	<a href="#">Primates and Us</a>	3	
Zoology	300	<a href="#">Invertebrate Biology &amp; Evolution</a>	3	
Zoology	301	<a href="#">Invertebrate Biology &amp; Evolution Lab</a>	2	Y
<b>E. Applied Biology, Agriculture &amp; Natural Resources</b>				
AAE/Agronomy/Inter-Ag/Nutr Sci	350	<a href="#">World Hunger &amp; Malnutrition</a>	3	
Agronomy	300	<a href="#">Cropping Systems</a>	3	
Agronomy/Hort/PI Path	360/375	<a href="#">Genetically Modified Crops: Science, Regulation &amp; Controversy</a>	2	
Agronomy	377	<a href="#">Cropping Systems of the Tropics</a>	3	
Agronomy/Hort	501	<a href="#">Principles of Plant Breeding</a>	3	
An Sci/Dy Sci/Nutr Sci	311	<a href="#">Comparative Animal Nutrition</a>	3	
An Sci/Dy Sci	313	<a href="#">Animal Feeds &amp; Diet Formulation</a>	1	N
An Sci/Dy Sci	361	<a href="#">Introduction to Animal &amp; Veterinary Genetics</a>	2	N
An Sci/Dy Sci	363	<a href="#">Principles of Animal Breeding</a>	2	N
Biology/Genetics	522	<a href="#">Evolution Seminar Series</a>	1	
Botany	575	<a href="#">Principles &amp; Applications of Forensic Botany</a>	3	N
Botany/PI Path	575/375	<a href="#">Frontiers in Plant Biology</a>	1	

Envir St/Geog/PI Path/Urb R PI	400/475/3 75/590	<a href="#">Food Systems, Sustainability, and Climate Change</a>	3	Y
Entom	351	<a href="#">Principles of Economic Entomology</a>	3	
Entom/Zoology	371	<a href="#">Medical Entomology</a>	3	Y
Envir St/Pop Hlth	471	Introduction to Environmental Health	3	
F&W Ecol	306	<a href="#">Terrestrial Vertebrates: Life History &amp; Ecology</a>	4	Y
F&W Ecol	410	<a href="#">Principles of Silviculture</a>	3-4	
Genetics/Hort	550	<a href="#">Molecular Approaches for Potential Crop Improvement</a>	3	
Hort	372	<a href="#">Colloquium in Organic Agriculture</a>	1	
Hort/Path-Bio	500	<a href="#">Molecular Biology Techniques</a>	3	Y
Microbio/Soil Sci	425	Environmental Microbiology	3	
Nutr Sci	332	Human Nutritional Needs	3	
<b>F. Other Lab Courses</b>				
Agronomy/Botany/Hort	340	<a href="#">Plant Cell Culture &amp; Genetic Engineering</a>	4	Y
Anatomy/Kines	329	<a href="#">Human Anatomy-Kinesiology</a>	2	Y
An Sci/Dy Sci	362	<a href="#">Veterinary Genetics</a>	2	N
An Sci/F&W Ecol/Zoology	521	<a href="#">Birds of Southern Wisconsin</a>	3	Y
Biochem	551	<a href="#">Biochemical Methods</a>	4	Y
BMolChem	504	<a href="#">Human Biochemistry Laboratory</a>	2	Y
Botany	305	<a href="#">Plant Morphology &amp; Evolution</a>	4	Y
Botany/Plant Path	332	<a href="#">Fungi</a>	4	Y
Botany	500	<a href="#">Plant Physiology</a>	4	Y
Entom/Zoology	302	<a href="#">Introduction to Entomology</a>	4	Y
Kines	314	<a href="#">Physiology of Exercise</a>	4	Y
Genetics	545	<a href="#">Genetics Laboratory</a>	2	Y
Microbio	304	<a href="#">Biology of Microorganisms Laboratory</a>	2	Y
Microbio	551	<a href="#">Physiological Diversity of Prokaryotes Lab</a>	2	Y
Physiol	335	<a href="#">Physiology</a>	5	Y
Physiol	435	<a href="#">Fundamentals of Human Physiology</a>	5	Y
<b>Seminar</b>				
Zoology	500	<a href="#">Undergrad Neurobiology Seminar</a>	1	
<b>Capstone (CALs only)</b>				
BMolChem	504	<a href="#">Human Biochemistry Laboratory</a>	2	Y
Botany/F&W Ecol/Zoology	460	<a href="#">General Ecology</a>	4	Y
Envir St/Zoology	511	<a href="#">Ecology of Fishes Lab</a>	2	Y
Microbio	551	<a href="#">Physiological Diversity of Prokaryotes Lab</a>	2	Y
Physiol	435	<a href="#">Fundamentals of Human Physiology</a>	5	Y