Spring 2014 Biology Major with Evolutionary Biology Option Courses

1. Mathematics

Subject	Number	Course Title	Credits
Math	217	Calc with Algebra & Trig II	5
Math	221	Calculus&Analytic Geometry	5
Statistics	301	Intro-Statistical Methods	3
Statistics	371	Intro Applied Stats-Life Sci	3

2. Chemistry

Subject	Number	Course Title	Credits
Chemistry	103	General Chemistry	4
Chemistry	104	General Chemistry	5
Chemistry	343	Intro Organic Chemistry	3
Chemistry	344	Intro Organic Chemistry Lab	2
Chemistry	345	Intmed Organic Chemistry	3

3. Physics

Subject	Number	Course Title	Credits
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

4. Introductionary Biology

Subject	Number	Course Title	Credits
Biology/Zoology	101	Animal Biology	3
Biology/Zoology	102	Animal Biology Laboratory	2
Biolog/Botany	130	General Botany	5
BIO/BOT/ZOO	151	Introductory Biology	5
BIO/BOT/ZOO	152	Introductory Biology	5
Biocore	383	Cellular Biology	3
Biocore	384	Cellular Biology Lab	2
Biocore	587	Biological Interactions	3

Foundational Course (Not required if completing Biocore)

Subject	Number	Course Title	Credits
Botany/Genetics/Zoology	466	General Genetics	3

5. Intermediate/Advanced courses

Subject	Number	Course Title	Credits
Anthropology/Botany/Zoology	410**	Evolutionary Biology	3

^{**} does not co-count in category "D" for Evoltionary Biology Option

5A. CELLULAR AND SUBCELLULAR BIOLOGY

Subject	Number	Course Title	Credits	Lab/Week
Agronomy/Horticulture	338	Plant Breeding&Biotechnolgy	3	
Animal Sciences/Dairy Science	362	Veterinary Genetics	2	1
Biochemistry	501	Introduction-Biochemistry	3	
Biochemistry	508	General Biochemistry II	3-4	
Biochemistry	625	Coenzymes&Cofactors-Enzymology	2	
Biochemistry	651	Biochemical Methods	3	4
Biochemistry/Botany	621	Plant Biochemistry	3	
Biochemistry/Med Micro & Immunology	575	Biology of Viruses	2	
Biochemistry/Nutritional Sciences	510	Biochm Prin-Human&Anml Nutr	3	
Biochemistry/Pharmacology	620	Eukaryotic Molecular Biology	3	
Biomolecular Chemistry	503	Human Biochemistry	3	
Biomolecular Chemistry	504	Human Biochemistry Lab	2	6
Botany/ Entomology/Plant Pathology	505	Plant-Microbe Interactions	3	
Botany/Genetics/Zoology	466	General Genetics	3	
Genetics/Medical Genetics	562	Human Cytogenetics	2	
Medical Microbiol & Immunology	341	Immunology	3	
Microbiology	470	Micro Genetics & Mol Machines	3	
Microbiology	551	Physiol Dvrsty-Procryot Lab	2	6
Microbiology/Biomolecular Chemistry	668	Microbiol-Atomic Resolution	3	
Microbiology/Soil Science	523	Soil Microbiology & Biochem	3	
NTP/Zoology	635	Neurobiology of Disease	2	
NTP	675	Molecular Mechanisms of Brain Damage	2	
Psychology	411	Epigetics and the Brain	3	
Zoology	562	Human Cytogenetics	2	
Zoology	470	Intro to Animal Development	3	

5B. ORGANISMAL BIOLOGY

Subject	Number	Course Title	Credits	Lab/Week
Anatomy/Neurosci Training Prgm/Physiology	630	Neuronal Mech-Sensatn & Memory	3	
Animal Sciences/Zoology	520	Ornithology	3	
Botany	500	Plant Physiology	4	3
Botany/Entomology/Plant Path	505	Plant-Microbe Interactions	3	
Botany/Plant Pathology	332	Fungi	4	4
Entomolog/Zoology	302	Introduction to Entomology	4	3
Genetics	545	Genetics Laboratory	2	4
Kinesiology	314	Physiology of Exercise	4	2
Medical Microbiol & Immunology	410	Medical Mycology	2	
Medical Micro & Immunology/Patho-Bio Sci/Zoology	350	Parasitology	3	
Microbiology	303	Biology of Microorganisms	3	
Microbiology	304	Biology of Microorganisms Lab	2	4
Microbiology	330	Host-Parasite Interactions	3	
Microbiology	526	Physiol of Microorganisms	3	
Neurosci Training Prgm/Physiol/Zoology NTP	524 675	Neurobi II:Intr-Brain&Behav	3	
Nutritional Sciences	431	Nutrition in the Life Span	3	

Pathology & Lab Med	404	Pathophys Princ-Hum Disease	3	
Physiology	335	Physiology	5	2
Physiology	435	Fund of Human Physiology	5	3
Psychology	406	Psychology of Perception	3	
Psychology	414	Cognitive Psychology	3	
Zoology	611	Comparatv&Evolutionry Physiol	3	
Zoology	612	Comparative Physiology Lab	2	4
Zoology	521	Birds of Southern WI	3	3
Zoology	400	Mammology	3	*

5C. ECOLOGY

Subject	Number	Course Title	Credits	Lab/Week
Botany/ Forest & WL Ecol/Zoology	460	General Ecology	4	3
Envir St/Land Arc	361	Wetlands Ecology	3	
ENVIR ST/Zoology	510	Ecology of Fishes	3	
ENVIR ST/Zoology	511	Ecology of Fishes Lab	2	4
Envir Studies	651	Conservation Biology	3 (on-line)	
Forest & WL Ecol	379	Princ-Wildlife Management	3	

5D. EVOLUTION AND SYSTEMATICS

Subject	Number	Course Title	Credits	Lab/Week
Botany	401	Vascular Flora of Wisconsin	4	4
Microbiology	450	Divrsty, Ecol&Evolutn-Microorg	2	
Psychology	450	Animal Behavior-Primates	3	
Zoology	425	Behavioral Ecology	3	

5E. APPLIED BIOLOGY, AGRICULTURAL, AND NATURAL RESOURCES

350	World Hunger & Malnutrition	3	
300	Cropping Systems	3	
501	Principles-Plant Breeding	3	
311	Comparative Animal Nutritn	3	
313	Animal Feeds&Diet Formulatn	1	2
361	Intro to Animal & Vet Genetics	2	2
363	Principles of Animal Breeding	2	2
351	Principles-Econ Entomology	3	
471	Intro-Environmental Health	3	
432	Principles-Food Preservation	3	
410	Principles of Silviculture	3-4	3 optional
306	Terr Vertbrt:Life Hist&Ecol	4	2
335	Hum/An Relatn:Bio&Phils Iss	3	
500	Molecular Biology Techniques	3	2
372	Colloquium-Organic Agriculture	1	
332	Human Nutritional Needs	3	
	501 311 313 361 363 351 471 432 410 306 335 500 372	300 Cropping Systems 501 Principles-Plant Breeding 311 Comparative Animal Nutritn 313 Animal Feeds&Diet Formulatn 361 Intro to Animal & Vet Genetics 363 Principles of Animal Breeding 351 Principles-Econ Entomology 471 Intro-Environmental Health 432 Principles-Food Preservation 410 Principles of Silviculture 306 Terr Vertbrt:Life Hist&Ecol 335 Hum/An Relatn:Bio&Phils Iss 500 Molecular Biology Techniques 372 Colloquium-Organic Agriculture	300 Cropping Systems 3 501 Principles-Plant Breeding 3 311 Comparative Animal Nutritn 3 313 Animal Feeds&Diet Formulatn 1 361 Intro to Animal & Vet Genetics 2 363 Principles of Animal Breeding 2 351 Principles-Econ Entomology 3 471 Intro-Environmental Health 3 432 Principles-Food Preservation 3 410 Principles of Silviculture 3-4 306 Terr Vertbrt: Life Hist&Ecol 4 335 Hum/An Relatn:Bio&Phils Iss 3 500 Molecular Biology Techniques 3 372 Colloquium-Organic Agriculture 1

6. Seminar

Biology 675 Evolution Seminar	1
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CALS Capstone Courses: policy online at http://biologymajor.wisc.edu/resources/cals-capstone/

Subject Descr	Number	Course Title	Credits
Bmolchem	504	Human Biochemistry Lab	2
F & WL Ecol	599	Wildlife Research Capstone	3
Microbiology	551	Physiol Dvrsty-Procryot Lab	2
Physiology	435	Fund of Human Physiol	5
Zoology	612	Comparative Physiology Lab	2