

## Courses offered by the Biology Department during the spring semester of 2010.

Please note that this list does NOT replace the undergraduate bulletin. Check the bulletin for the courses you find interesting and make sure you understand all the details.

600 level courses are courses for graduate students and are open to exceptionally advanced undergraduates, with a special permission from the instructor

### Introduction Courses and First-Year Seminars

Number	Course	Instructors	prerequisites	Credit hours	Comments
065	Pneumonia	DeSaix		(3)	
101	Principles of Biology	Hogan; DeSaix		(3)	Does not count for the major
101L	Introductory Biology Lab	Stegenga		(1)	Does not count for the major

### Core Courses

Number	Course	Instructors	prerequisites	Credit hours	Comments
201	Ecology and Evolution	Servedio and Mitchell	101+ chem 101 or 102 (Grade C or better)	(4)	
202	Molecular Biology and Genetics	Hogan and Kieber; Matera and Harrell; Slep and TBA	101+ chem 101 or 102 (Grade C or better)	(4)	
205	Cellular and Developmental Biology	Reed and Rogers; Liljegren and Goldstein	202	(4)	

## Plant Biology

Number	Course	Instructors	prerequisites	Credit hours	Comments
271	Plant Biology	Gensel	101	(4)	Lab, Counts as organismal
561	Ecological plant geography	Peet	101 or geog 110	(3)	
639	Plant Molecular and Cell Biology	Dangl	Permission of the instructor	(2)	

## Cell and Developmental Biology

Number	Course	Instructors	prerequisites	Credit hours	Comments
441	Vertebrate Embryology	Harris	205 or 252	(3)	
441L	Vertebrate Embryology lab	Harris	Pre- or co- 441	(1)	Lab
445	Cancer Biology	Shemer	205	(3)	
447	Lab in Cell Biology	Jones A.	205 (C or better)	(4)	Lab
455	Behavioral Neuroscience	Burmeister	205	(3)	
639	Plant Molecular and Cell Biology	Dangl	Permission of the instructor	(2)	
642	Current topics in Cell Division	Bloom/Salmon	205 Permission of the instructor	(3)	
649	Seminar in Cell Biology	Bloom/Salmon	205 Permission of the instructor	(2)	

## Ecology and Evolution

Number	Course	Instructors	prerequisites	Credit hours	Comments
159	Prehistoric Life	Carter		(3)	Does not count for the major
159L	Prehistoric Life lab			(1)	Does not count for the major
276	Evolution of Vertebrate	Sockman		(3)	Counts as organismal
276L	Evolution of Vertebrate lab	Johnson	Pre- or co- 276	(1)	Lab
461	Fundamentals of Ecology	Umbanhowar	201	(4)	Lab
471	Evolutionary Mechanisms	Pfennig D. and Burch	201 and 202	(4)	Lab, Counts as organismal
490-001	Global Change Ecology	Buckley	201 or Permission of the instructor	(3)	
561	Ecological plant geography	Peet	101 or geog 110	(3)	
565	Conservation Biology	White	201	(3)	
669-001 669-002	Seminar in Ecology	Pfennig K Hurlbert	201 Permission of the instructor		

## Genetics, Molecular Biology and Biochemistry

Number	Course	Instructors	prerequisites	Credit hours	Comments
324	Molecular Basis of Disease	Rybarczyk	205	(3)	
430	Introduction to Biochemistry	Hogan B.	101, chem262 or 262H, 262L or 263L	(3)	
445	Cancer Biology	Shemer	205	(3)	
522	Bacterial Genetics	Matthysse	422	(3)	
622	Principles of Genetic Analysis II	Farber	621 Permission of the instructor	(4)	

## Physiology and Disease

Number	Course	Instructors	prerequisites	Credit hours	Comments
252	Human Anatomy and Physiology	Johnson; Shemer	101	(4)	Lab
324	Molecular Basis of Disease	Rybarczyk	205	(3)	
402	Infectious diseases	Duronio and Peifer	205	(3)	
445	Cancer Biology	Shemer	205	(3)	
531	Seminar: drugs and HIV	Duncan	205	(3)	

## Zoology and Animal Physiology

Number	Course	Instructors	prerequisites	Credit hours	Comments
278	Animal Behavior	Lohman C.	101 and 101L	(3)	Counts as organismal
278L	Animal Behavior lab	Lohman C.	Pre- or co- 278	(1)	Lab
350	Oceanography	Scotti		(3)	
451	Comparative Physiology	Hedrick and Kier	101 + 101L, and either phys 104+105 or phys 116+117	(3)	
451L	Comparative Physiology lab	Hedrick and Kier	Pre- or co- 451	(1)	Lab
455	Behavioral Neuroscience	Burmeister	205	(3)	
475	Biology of Marine Animals	Lohman K.	101 and 101L + 1 additional boil course	(4)	Lab, Counts as organismal
476	Avian Biology	Wiley	101 and 101L, co-476L	(3)	Counts as organismal
476L	Avian Biology lab	Wiley	Pre- or co- 476	(1)	Lab,
490	Mammalian Morphology and Adaptation	Johnson	Permission of the instructor	(3)	
290L	Mammalian Morphology and Adaptation Lab	Johnson	Permission of the instructor	(1)	Lab

## Teaching, Research and Others

Number	Course	Instructors	prerequisites	Credit hours	Comments
410	Principles and Methods of Teaching Biology	Coble	201 and 202 or 201 and 205	(4)	Counts as EE
291	Lab Intern in Biology	Stegenga; DeSaix	GPA biology 3.0 or higher Permission of the instructor	(1)	Does not count for the major
292	Lab Teaching assistant in Biology	Stegenga; DeSaix	GPA biology 3.0 or higher Permission of the instructor	(2)	Does not count for the major
211	Introduction to Research in Biology	Pukkila	201 or 202	(3)	Not for Seniors
293	Internship in Biology	Matson	201 or 202 Permission of the instructor	(3)	Does not count for the major Counts as EE
295	Undergraduate Research	Faculty members	201 or 202 Permission of the instructor	(3)	Does not count for the major Counts as EE
395/6	Undergraduate Research	Faculty members	201 or 202 and GPA 3.0 or higher Permission of the instructor	(1-3)	Counts as a lab if taken for 6 hr. or 3hr +boil 211 Counts as EE
691H/692 H	Senior Honors Thesis	Searles	395/6H of 395 Permission of the instructor	(3)	Seniors only
296	Directed Reading	TBA	Permission of the instructor	(1-3)	Does not count for the major

For additional courses related to research and honors thesis, please check the Biology manual

EE= Experiential Education