

BIOLOGY 204 SPRING 2012 LECTURE SYLLABUS
Drs. Mike Simpson, Brian Hentschel and Annalisa Berta
MWF - NH 100, 12:00-12:50
<<http://blackboard.sdsu.edu>>

Course Objectives: This class will provide a basic introduction to the origins and diversity of life forms. Evolution is the underlying theme with emphasis placed on presenting diversity within a phylogenetic framework. General principles of biology are covered, as well as comparative structure, physiology, nutrition, circulation, gas exchange, reproduction, and development, including major evolutionary trends.

Student Learning Outcomes: *After completing this course, students should be able to:*

1) Explain the phylogenetic relationships and the structural and reproductive features of the major groups of life. 2) Recite the major biological processes and systems. 3) Summarize the significant ecological relationships of life. 4) Understand the nature of scientific research. *Students will be assessed for the above skills by written exams and quizzes.*

Instructors: This class is team-taught to provide expertise in the areas of 1) evolution, microbes, basal eukaryotes, fungi, “algae” and plants (Dr. Simpson), 2) invertebrate animals (Dr. Hentschel), and 3) vertebrate animals (Dr. Berta). **Dr. Rypien is responsible for all administrative duties (e.g., add/drop, lab issues).** Questions regarding specifics of course content should be directed to the appropriate instructor. As noted below under **Final Grades**, questions regarding your final grade should be directed to **Dr. Simpson**.

Instructors	Office	Office Hours	Phone	Email
Dr. Krystal Rypien	LS 236			krypien@mail.sdsu.edu
Dr. Mike Simpson	LS 268	MW 1-2*	619-594-4479	msimpson@sunstroke.sdsu.edu
Dr. Brian Hentschel	PS 147	WF 1-2*	619-594-0358	hentsche@sunstroke.sdsu.edu
Dr. Annalisa Berta	LS 250	MW 10-11*	619 594-5392	aberta@sunstroke.sdsu.edu

*or by appointment

Required Printed Materials:

Campbell Biology (9th edition) by Reece et al. Pearson Benjamin Cummings, New York, 2011 - available at Aztec Shops and KB books.

Lecture Expectations: Much of the material covered in lecture is also covered in the text (see lecture schedule), but most lectures will offer greater detail or cover material not in the text. Thus, please try to attend all lectures. Read the assigned material prior to class, as this will make lectures much easier to follow and fully comprehend. Turn off cell phones and pagers during class. Do not talk or use cell phones during lectures- this is disruptive and discourteous to everyone else. If you must leave before the conclusion of lecture, please do so quietly.

Blackboard: We will be using this online software system to make supplements available, report grades, and contact you about various course issues. After you register for the course, please access Blackboard <<http://blackboard.sdsu.edu>> and check for messages and content. Further information will be provided in class.

Course Etiquette: Please no personal talking during class lectures. Turn off ipods, cell/smart phones, etc. during class. **No texting in class!** (This can be annoying/distracting to others.)

Exams and Grading: Lecture exams and quizzes together are worth **250 points**, divided as follows:

Lecture Block #1 (Dr. Simpson) – four quizzes, to be announced the lecture before, the lowest dropped (**10 points**); iQuizzes (**5 points**), one 50-minute exam (**65 points**).

Lecture Block #2 (Dr. Hentschel) - three quizzes, to be announced the lecture before, the lowest dropped (**10 points**); iQuizzes (**5 points**), one 50-minute exam (**65 points**).

Lecture Block #3 (Dr. Berta) – one scheduled quiz (**10 points**) to be announced in class at least two lectures before the quiz; one comprehensive final exam (worth **85 points** => 65 from the last third of the course, 10 from the first third, and 10 from the second third).

Lecture exams will include matching, multiple choice, fill-in, and/or short essay questions. Make-up exams will consist entirely of essay questions, and will be given for the first two exams only. You must contact the appropriate instructor no later than the day after the regular exam with a valid medical excuse to be considered for taking a make-up exam. Answer keys will be posted after the exam on Blackboard. If you have questions about grading, please check the posted answer key beforehand. If you wish to have grading reconsidered, you must re-submit your original exam and clearly and specifically state your case in writing (to the instructor who gave the exam) within 7 days of receiving your graded exam; anything later will not be considered for re-grading. **No electronic devices (incl. iPods, CD players, calculators, etc.) or hoods may be used / worn during any exam!**

Letter grades will be assigned according to standard categories: A = 90-100%; B = 80-89.9%; C = 70-79.9%; D = 60-69.9%; F = <60%. The top and bottom 2-3% of each category might earn +/- grades depending on class distributions.

Final Grades: Assignment of final course grades will be a joint decision by Drs. Simpson, Hentschel and Berta. However, questions concerning your final grade should be directed to **Dr. Simpson**.

iQuizzes: iQuizzes may be available on Blackboard only for a specified time period determined by your instructor. Students are responsible for checking their iQuiz grades to ensure that these were recorded properly during the period of time that a particular iQuiz was open. If any errors occur in recording your grade for an iQuiz, immediately contact the Blackboard help line (594-3189) or, as a last resort, your section instructor. Otherwise, you will forfeit the points. One hint: Be sure to click the "Submit" button when finished (not "Save;" clicking the latter will lock you into "in progress"). If you go back to the iQuiz, you must completely re-take it again.

Scantron Forms: You must bring one Parscore form (**F-289-Par-L**) and a #2 pencil to the first exam (other exams to be determined). Aztec and KB bookstores have these forms. For quizzes, please follow instructions from the professor for that section.

Student Misconduct: We have a zero-tolerance policy for cheating of any sort. Any student caught cheating in this class, to whatever degree, will be reported to SDSU Judicial Procedures. At a minimum, the student will receive a “zero” on the particular exercise (exam, lab exercise, etc.).

Help: If you are having trouble in the course, please see the instructor as soon as possible. Attend office hours if necessary – these are provided for you to ask questions. The Advising Center and Counseling Services offer help with improving academic and test-taking skills.

LECTURE SCHEDULE – SPRING 2012

Simpson/ Hentschel/ Berta

Evolution – 4 lectures
 Prokaryotes, Fungi, basal Euk, Plants – 11 lectures
 Invert Animals - 14 lectures
 Vertebrates – 14 lectures

Week of:	Lecture Topic	Text Reading*
I/18	W Introduction, Evidence for Evolution	Ch 1: 12-18; Ch 22
	F Evolution of Populations	Ch 23
I/23	M The Origin of Species	Ch 24, 25: 523-527
	W Phylogeny and the Tree of Life	Ch 26
	F Bacteria & Archaea	Ch 27
I/30	M Evolution of Eukaryotes, Alveolates	Ch 28: 575-585
	W Stramenopiles, Reds & other basal Eukaryotes	Ch 28: 585-598
	F Fungi	Ch 31
II/06	M Fungi	Ch 31
	W Green Plants	Ch 29: 600-606
	F Land Plants	Ch 29: 606-610
II/13	M Vascular Plants	Ch 29: 610-617 Ch 35: 738-750
	W Seed Plants	Ch 30: 618-625 Ch 35: 751-754
	F Flowering Plants	Ch 30: 625-635 Ch 38: 801-819
II/20	M Plant Nutrition & Growth	Ch 36: 764-84; Ch 37; Ch 39: 824-44
	W Exam 1: 65 points	
	F Introduction to Animals: Phylogeny	Ch 32; Ch 6: 121; Ch 25: 518-519
II/27	M Introduction to Animals: Form & Function I	Ch 33: 666-669; Ch 6: 99; Ch 7: 132-134; Ch 40: 852-858; Ch 41: 880-882; Ch 46: 997-1002; Ch 47: 1021-1026; Ch 21: 445-447; Ch 33: 673;
	W Introduction to Animals: Form & Function II	Ch 50: 1110-1111; Ch 42: 897-899, 916-918; Ch 44: 960-962; Ch 49: 1062-1063; Ch 50: 1088-1090, 1095, 1101-1102
	F Early Diverging Animals	Ch 33: 670-673, Ch 41: 881-882
III/05	M Lophotrochozoa I	Ch 33: 674-677; Ch 44: 960-961
	W Lophotrochozoa II: Mollusca	Ch 33: 677-681
	F Lophotrochozoa III: Annelida	Ch 33: Ch 42: 899, 916; Ch 44: 961; Ch 50: 1111
III/12	M Introduction to Ecdysozoa	Ch 32: 668-669; Ch 33: 683-684; Ch 50: 1036
	W Arthropoda I	Ch 33: 684-692
	F Arthropoda II	Ch 21: 446; Ch 42: 899, 916, 918; Ch 44: 961; Ch 50: 1090, 1095, 1110
III/19	M Deuterostomia	Ch 33: 692-695; Ch 34: 697-701
	W Invertebrate Population & Community Ecology	Ch 52: 1145; Ch 53; Ch 54: 1194-1200
	F More on Invertebrate Feeding & Reproduction and some of Dr Hentschel's Research	TBA
March 26 – April 1 Spring Break		

IV/02	M	Review of Invertebrate Animals	
	W	Exam 2: 65 points	
	F	Origin & Characteristics of Vertebrates	697-704
IV/9	M	Fishes	705-709; 900, 917; 1094
	W	Amphibians and the new conquest of the land	709-712; 958-959; 999-1000
	F	Amniota & Origin of the Amniote Egg	713-717; 860; 901
IV/16	M	Macroevolutionary changes	525-529
	W	Vertebrate Development	1024-1044
	F	Vertebrate Locomotion	1104-1107
IV/23	M	Origin of Birds and Flight	717-720; 920-921; 957-958
	W	Animal Behavior	Ch. 51
	F	Mammals I	720-725; 902-905; 921
IV/30	M	Mammals II	860; 863-864; 960-966; 1011-1013
	W	Human Evolution	726-733, 1010
	F	Fate of the Planet	1187-1190, 1238-1244, 1250-1260
V/07	M	Review	
	W	Study and Consult day	
V/ 11	F	Final Exam: 85 points (1:00-3:00 PM)	

- Text: **Campbell Biology** (9th edition) by Reece et al., Pearson Benjamin Cummings, New York, 2011.