

Organismal Biology (BIO 101 A and B) Course Syllabus - Winter 2010

Instructors	Office	Phone	Email
Greg Anderson	530A Carnegie	x6110	ganderso@bates.edu
Carolyn Lawson	512 Carnegie	x6048	clawson@bates.edu
Rebecca Sommer	345 Carnegie	x8202	rsommer@bates.edu

Required Text

Biology Concepts and Connections, 6th Edition, by Campbell, Reece, Taylor, Simon and Dickey, published by Pearson Benjamin Cummings.

Bates Biology 101 Laboratory Guide – Winter 2010, available at the Bates College Store.

Biology Web Resources

Bates Lyceum: <https://lyceum.bates.edu/login/index.php> class lecture material can be downloaded from Lyceum.

BIO 101 course site: <http://abacus.bates.edu/~ganderso/biology/bio101/index.html>

Department On-Line Resources: <http://abacus.bates.edu/~ganderso/biology/resources/>

Kimball's Biology Pages: <http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/>

Additional Staff Support

Peer Assisted Learning Group (PALG): We'll describe the PALG system in our first class meeting. PALG sessions will be held weekly, times will be announced. Attendance is optional but strongly encouraged as previous generations of BIO 101 students have found that regular attendance at PALG meetings has been very helpful. You can learn more about the Bates PALG system at <http://www.bates.edu/x165752.xml> Our PALG Leaders are: Clyde Bango, cbango@bates.edu and Harita Dharaneeswaran, hdharane@bates.edu.

Teaching Assistants (TAs) and Technical Writing Assistants (TWAs): TAs will be introduced in each lab section. They are in lab to assist you in understanding and completing the work involved in each lab experience. TWAs are trained scientific writing peer tutors and will be very helpful for beginning to learn the process of presenting information in scientific journal format.

Writing Workshop: Seri Lowell, x6159, slowell@bates.edu, <http://www.bates.edu/x154615.xml>

Mathematics and Statistics Workshop: Grace Coulombe, x8374, gcoulomb@bates.edu, http://abacus.bates.edu/acad/acad_support/msw/index.html

Course Meeting Times

Lecture meets MWF 8:15-9:20 (Lec A) or 9:30-10:35 (Lec B) in PGREW 301 (Filene rm)
Laboratories meet 1:05-4:00 pm W (L1), Th (L3) or F (L4) or 8:00-10:50 am Th (L2)

R. Sommer's Office Hours and Question/Answer Sessions

Office Hours: Monday 11:00 am – 12:30 pm, and by appointment

Open Question and Answer Session: Most Thursdays 3:00-5:00 pm, Room TBA

Class Schedule & Readings W 2009

<u>Week</u>	<u>Dates</u>	<u>Topic</u>	<u>Required Reading</u>
1	Jan 11 Jan 13 Jan 15	Course Structure and Introduction Species & Classification Origin of Life Prokaryotes and Protists	Chapter 1: 1-12 Ch 14: 276-289 Ch 15: 293-314 Ch 16: 318-337
2	Jan 18 Jan 20 Jan 22	No class MLK celebration Plants & Fungi Animal Diversity	Ch 17: 340-361 Ch 18: 364-385, Ch 19:389-399
3	Jan 25 Jan 27 Jan 28	Statistics and Fick's Law/Diffusion Animal Structure and Function Nutrition & Digestion	Ch 5: 75-78 Ch 20: 412-426 Ch 21: 428-449
4	Feb 1 Feb 3 Feb 5	EXAM 1 Gas Exchange	Ch 22: 452-463
5	Feb 8 Feb 10 Feb 12	Circulation	Ch 23: 466-481
6	Feb 15-19	No class Winter Recess	
7	Feb 22 Feb 24 Feb 26	Cell Reproduction Development	Ch 8: 125-148 Ch 27: 532-559
8	Mar 1 Mar 3 Mar 5	Immune System Scientific Writing (guest lecture Seri Rudolph)	Ch 24: 484-501
9	Mar 8 Mar 10 Mar 12	EXAM 2 (prepare early, I'll be attending SOT Meeting) No class Plant Structure	Ch 31: 620-640, Ch 17
10	Mar 15 Mar 17 Mar 19	Plant Nutrition & Transport	Ch 32: 642-657
11	Mar 22 Mar 24 Mar 26	Plant Control Systems Photosynthesis	Ch 33: 660-676 Ch 7: 106-120
12	Mar 29 Mar 31 Apr 2	Homeostasis	Ch 25: 504-514
13	Apr 5 Apr 7 Apr 9	Chemical Regulation Wrap up/Final Exam Review	Ch 26: 516-530, Ch 27

Exams and Grades

Final Exam for **Lec A**: Thursday, **April 15, 8:00-10:00 am**, PGREW 301 (Filene Room)

Final Exam for **Lec B**: Tuesday, **April 13, 10:30-12:30 am**, PGREW 301 (Filene Room)

There will be two in-class exams (2/3 and 3/8) and a semi-cumulative final exam during finals week. Each in-class exam is worth 18% of your final grade. In-class exams will be at 8:00-9:20 am (Lec A) and 9:30-10:50 am (Lec B). The final exam will emphasize material since exam 2 but will also cover general concepts and integrating topics from the whole course. The final exam is worth 20% of your final grade. Time for exam review questions will be given in class and during the weekly Q/A Session (Th. 3:00-5:00 pm). Students must achieve an exam average of 55% or higher to pass the course, regardless of other work in the course. Students will sign an Honor Statement with each exam pledging that they have neither received nor given information about the exam content from or to any other student.

Final grade will be based on:

Exam 1	18%
Exam 2	18%
Final Exam	20%
Diversity Project	10%
Laboratory	34%

Final letter grades will be assigned as:

≥ 90% = some kind of A
≥ 80% = some kind of B
≥ 70% = some kind of C
≥ 55% = some kind of D
< 55% = F

Diversity Project: See the Laboratory Guide pages 8-11 for detailed instructions. Each laboratory group will study an assigned taxonomic group of organisms at the Phylum or Class level and present their findings at a poster session held in week 8 of class (March 1-5). The Diversity Project is worth 10% of your final grade.

Lab will consist of observations, development of basic research and statistical skills, and experimental work. Laboratory participation, worksheets, reports and other work, as detailed in the lab manual, will comprise 34% of your final grade. Laboratory attendance is required.

Class attendance and participation is expected and will be considered during final letter grade assignment. Lectures will be more effective (and more enjoyable) if we make it as interactive as possible. In lecture, I will pose questions to the class to help indicate the level at which I expect students to understand the course material.

Individuals or groups committing plagiarism or other academic misconduct will be referred to the appropriate deans for disciplinary action by the College, will receive zero credit for the work in question, and may fail the course. If you do not understand what constitutes academic misconduct, please see an instructor for clarification and see the Bates websites on plagiarism, cheating and falsifying data at <http://www.bates.edu/x35307.xml>. Additional information on plagiarism can be found at <http://abacus.bates.edu/pubs/Plagiarism/plagiarism.html>.