



Roger Williams University
Fall 2006
BIO 111: Biology I

Instructor: Dr. David L. Taylor

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Office hours: Monday & Wednesday, 1:00 PM – 3:00 PM, or by appointment

Course Description and Objectives: *Biology I* is an introduction to the unity and diversity of life, and the ecological interactions among organisms that affect their survival. As such, an underlying theme of the course is the principles of evolution by means of natural selection. Upon completing the course, students will understand the principal concepts in evolution and ecology; concepts that are the foundation of all biology classes. Students will also understand the mechanisms by which natural selection operates and the evolutionary innovations utilized by diverse organisms.

Course Information: Number 15911, Section 02, Credits 4.0

Lecture Time and Location: MWF, 12:00 PM – 12:50 PM, MNS 210

Lecture Texts (Required):

- (1) Campbell, N.A., and J.B. Reece. 2005. *Biology*, 7th edition. Benjamin Cummings.
- (2) Knisely, K. 2005. *A Student Handbook for Writing in Biology*, 2nd Edition. W.H. Freeman & Co.

Lecture Website: A website has been designed for this course using “Blackboard” software. The Blackboard site is accessed from <http://blackboard.rwu.edu>. A “username” and “password” are required to log onto the system. The username by default is your Campus Cruiser login, i.e., the first initial of your first name, then your entire last name, followed by three digits. The first digit is the fourth digit of your birthday (e.g., if your birthday is 01/04/82, this number would be “4”, the second digit is the last number of your RWU ID number, and the third digit is the last number of your social security number. The password is the first initial of your first name, the first initial of your last name, and the last four digits of your social security

number. After initial login, you have the option of changing your password. Usernames and passwords previously used in the system should remain valid. Contact the Blackboard administrator, Bonnie Hatch, at bbtech@rwu.edu for access problems.

Exams: Students are evaluated by three lecture exams (100 pts each) and one final exam (100 pts). The first exam includes material from the start of class. Subsequent exams (including the final) are non-cumulative, and thus, include only the material covered since the previous exam.

Make-Up Exams: To be eligible to take a make-up exam you *MUST* contact me *prior to* the regularly scheduled exam time/date or provide valid University excuse (documentation). A grade of zero will be recorded if the student does not strictly follow this procedure.

Extra Credit: Aside from the “Professor Meeting” (see below), there are no extra credit assignments.

Seminar Synopses: Students are to attend two of the Science and Mathematics Seminars and write a brief synopsis of each presentation (2-3 pages). The synopsis should include a thorough account of the speaker’s presentation, significance of the topic(s) covered, and the student’s personal evaluation of the speaker (*positives and negatives*). Each assignment is graded out of 50 points. Both synopses are due on the last day of class (Friday, December 8), but students are *highly* encouraged to turn in each assignment within one week of a given seminar. A listing of speakers and topics of the seminars is found at <http://www.rwu.edu/fcas/biology/seminar.htm>. Seminars are held in MNS 200 and begin at 4:00 PM (typically Wednesday), unless noted otherwise.

Professor Meeting: Students are to schedule at least one meeting with the professor before Thanksgiving Recess (Wednesday, November 22). Meetings lasting approximately 30 minutes may involve discussions about the class or any other number of topics. The objective of each meeting is to increase the communication between student and professor. By understanding student interests and ambitions, I, as professor, will be better prepared to design a curriculum that benefits both student and teacher. Students participating in one meeting have 15 points added to their final grade. Students who do not attend a meeting by Thanksgiving Recess do not receive the bonus points.

Lecture Attendance: Attendance will not be recorded throughout the semester for lecture, but I *strongly suggest* students come to class (see *Roger Williams University 2006-2007 Undergraduate Catalog*, p. 60). There is a tremendous amount of material covered in the course, and a student’s overall success in learning the material depends on their attendance. Daily quizzes may be administered if attendance drops below suitable levels as deemed by the professor.

Laboratory Time, Location, and Grade: *Biology I* has a required laboratory component (BIO 111L), of which there are three sections. Sections 1-3 of lab meet Tuesdays 8:00 AM –10:50 AM, 11:00 AM – 01:50 PM, and 06:00 PM – 09:00 PM, respectively. The laboratory portion of the course accounts for 30% of the final grade.

Academic Standards: Students enrolled in *Biology I* are expected to abide to the “Academic Integrity Undergraduate Pledge”. The definitions and penalties for violations of academic integrity apply to this course. (see *Roger Williams University 2006-2007 Undergraduate Catalog*, p. 59-60). Moreover, students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of Turnitin.com service is subject to Terms and Conditions of Use posted on the Turnitin.com site.

Disabilities: If a student has a disability that qualifies under the Americans with Disabilities Act and requires accommodations, he/she should contact the Office of Academic Development, located in the University Library, for information on appropriate policies and procedures.

Student Health Statement: Some procedures and materials utilized in the laboratory may pose a health risk to certain individuals. If you suspect that your involvement in laboratory may compromise your health, consult Health Services before participating in any laboratory activities.

Evaluation and Grading Policy:

Evaluation	Points
Exam 1	100
Exam 2	100
Exam 3	100
Final exam	100
Seminar synopses (2)	100
Total Lecture Points	500

Grade contribution	Percent of final grade
Lecture	70%
Laboratory	30%

Percentage	Final Grade
100-93	A
92-90	A-
89-87	B+
86-83	B
82-80	B-
79-77	C+
76-73	C
72-70	C-
69-67	D+
66-63	D
62-60	D-
< 60	F

LECTURE SCHEDULE

Date		Topic	Chapter Readings
30-Aug	Wed	Introduction to syllabus and What is science?	1
1-Sep	Fri	Exploring diversity and unity in life	1, 22
4-Sep	Mon	No class – Labor Day	-
6-Sep	Wed	Exploring diversity and unity in life	1, 22
8-Sep	Fri	Proteins and nucleic acids	5
11-Sep	Mon	Molecular genetics	16, 17
13-Sep	Wed	<i>No class</i>	-
15-Sep	Fri	Molecular genetics	16, 17
18-Sep	Mon	Molecular genetics	16, 17
20-Sep	Wed	Inheritance of genes	13, 14
22-Sep	Fri	Inheritance of genes	13, 14
25-Sep	Mon	EXAM 1	-
27-Sep	Wed	Evolution of populations	23
29-Sep	Fri	Evolution of populations	23
2-Oct	Mon	Origin of species	24
4-Oct	Wed	Phylogeny and systematics	25
6-Oct	Fri	Origins of life	26
9-Oct	Mon	No class – Columbus Day	-
10-Oct	Tue	Origins of life	26
11-Oct	Wed	Viruses	18
13-Oct	Fri	Prokaryotes	18, 27
16-Oct	Mon	Protists	28
18-Oct	Wed	Protists	28
20-Oct	Fri	Fungi and slime molds	28, 31
23-Oct	Mon	EXAM 2	-
25-Oct	Wed	Plant diversity I	28, 29
27-Oct	Fri	Plant diversity I	29
30-Oct	Mon	Plant diversity II	30
1-Nov	Wed	Plant diversity II	30
3-Nov	Fri	Introduction to animal diversity	32
6-Nov	Mon	Invertebrates: Sponges and cnidarians	33
8-Nov	Wed	Invertebrates: Flatworms and molluscs	33
10-Nov	Fri	Invertebrates: Arthropods, annelids, and echinoderms	33
13-Nov	Mon	Characteristics and evolution of chordates	34

15-Nov	Wed	EXAM 3	-
17-Nov	Fri	Vertebrates: Fishes	34
20-Nov	Mon	Vertebrates: Tetrapods	34
22/24-Nov	Wed/Fri	No class – Thanksgiving Recess	-
27-Nov	Mon	Introduction to ecology	50
29-Nov	Wed	Population ecology	52
1-Dec	Fri	Population ecology	52
4-Dec	Mon	Community ecology	53
6-Dec	Wed	Community ecology	53
8-Dec	Fri	Ecosystems	54
13-Dec	Wed	FINAL EXAM	Time: 10:00-12:00

Important Dates from the Academic Calendar, Fall Semester 2006:

- 30-Aug (Wed): All fall classes begin
- 5-Sep (Tues): Last day to add a course without instructor's permission
- 11-Sep (Mon): Last day to add a course with instructor's permission
- 18-Sep (Mon): Last day to drop a course without the W (withdrawal) grade
- 6-Oct (Fri): Warning Grades due in the Office of the Registrar
- 27-Oct (Fri): Last day to drop a course and receive the W (withdrawal) grade
- 8-Dec (Fri): Last day of classes