BIOL 200 COURSE SYLLABUS
GENERAL BIOLOGY II Spring 2009

Lecture: Tuesday and Thursday 2:00-3:15 in room SCI 121
Laboratory: meets at different times Tuesday through Thursday in room SCI 102

INSTRUCTORS

Dr. Adam K. Ryburn 436-3063
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COURSE DESCRIPTION AND OBJECTIVES

This course examines the discipline of biology, including the vocabulary and basic principles of biological science. It covers the broad areas of anatomy, morphology, physiology, diversity, and ecology of living organisms, in particular plants and animals. Success in this course will depend upon each student's accumulation, appreciation, and application of biological knowledge.

The objective is to:

A) To introduce the student to the principal fields of biological science.
B) To introduce the student to the basic structures (organs), external and internal, of animals and plants.
C) To consider the major physical and biological processes occurring in plants.
D) To survey the diversity of plants and animals by studying and comparing the manner in which representatives of the major groups live and reproduce.
E) To examine living and preserved examples of plant and animal structures.
F) To make the student aware of people's great dependence upon and manifold uses of plants and animals.

TEXT & REQUIRED MATERIALS

Freeman, Scott. 2008. *Biological Science, 3rd Edition.* Pearson Prentice Hall Publishing. ISBN: 0321543270

VanDeGraaff, Kent M. and John L. Crawley. 2005. *A Photographic Atlas for the Biology Laboratory. 5th Edition.* Morton Publishing. ISBN: 0895826844

Laboratory Manual for General Biology II – Handouts

Three-ring notebook (1 ½") to hold standard 8.5" x 11" paper.

A packet of 100 -- 3" x 5" ruled note cards.

LECTURE & LABORATORY PROCEDURES

The course includes two 75-minute lectures and one 110-minute laboratory that meets weekly. This course is offered in the liberal arts tradition; thus you are expected to learn a body of facts

and concepts. Topics will be discussed in depth in order that you will have an understanding of the discipline's origins and present diversity.

A tentative schedule of lecture and laboratory topics is attached. Lecture presentations will consist of introductions to the important facets of biology. Laboratory work will illustrate and support these facets. Reading assignments will be made periodically. You are responsible for all assigned material. Complete assigned readings prior to their discussion in lecture. The material presented in the course can be difficult, but will be easier to understand if you read the book first.

ATTENDANCE: Punctual attendance is essential to success in this course because of the integrated nature of the lectures and labs and the quizzes and exams. It is assumed that excessive absence will result ultimately in inferior academic achievement by the student, thus the following College's Academic Policies & Standards pertaining to attendance will be observed. Students must attend one of the first two lectures as well as the first laboratory or the student's place will be declared "vacant". Students missing 25% or more of class, any time from the second week of class up until the last day to withdraw from the course (March 20) will be removed from the course by the student's instructor and receive a WI (withdrawn involuntarily). Attendance will be monitored by in-class participation.

If you are not in class, you are not learning! Missed lectures, labs, homework assignments, examinations, and quizzes cannot be made up unless justification for being absent from class is provided and accepted beforehand. **Arrive to class on time and do not leave class early.**

CONDUCT IN LECTURES: Since all students are entitled to an environment that is conducive to learning, you are expected to keep disruptions to a minimum. You should be in class and ready to begin on time. If you do come in late, be as quiet as possible. All devices that generate sound, including pagers, **cell phones**, electronic games, radios, CD players and MP3 players (iPods, etc.) **MUST** be turned off before class begins. Disruption of class, whether by latecomers, noisy devices, or inconsiderate behavior (e.g. talking), will **NOT** be tolerated. Repeated violations by individuals may result in penalties, including being dropped from the class. If any of these devises are found to be operating during any exam or quiz, this action will result in failure of the assignment.

EXAMS, QUIZZES, CLASS ASSIGNMENTS, & GRADING

EXAMS: Four exams will be given on the following dates. The first three cover all the material presented in lecture and assigned readings since the previous exam. **The final exam is comprehensive, thus covering all material presented during the semester.** Each exam will be worth 100 points.

Thursday	19 February
Tuesday	31 March
Tuesday	5 May
Tuesday	12 May (Final 11:00-1:30 pm)

POLICY ON MISSED EXAMS: If you are unable to take an exam you must contact Dr. Ryburn prior to the exam or within 24 hours of the date of the exam and provide a valid, documented excuse (doctor's note, arrest report, etc.) as to why you cannot take the exam in order to schedule a make-up. Failure to notify us within 24 hours will result in a grade of zero for that exam. This policy will be strictly enforced.

LECTURE QUIZZES AND ASSIGNMENTS: Quizzes and in-class and take-home assignments will be given periodically in the lecture throughout the semester. These short exercises will cover your

knowledge on current topics from lecture and laboratory. It will be each student's responsibility to bring to class and use 3" x 5" note cards for the quizzes. Lecture exercises will total 100 points. **Exercises may or may not be announced ahead of time.**

Exam and quiz questions are designed to assess whether one has learned all of the factual material presented; whether one understands it; whether one has learned all of the principles that provide a conceptual framework for it; and finally whether one can use these principles and facts to generate new thoughts and answers to problems in biology.

Exams and quizzes will include a mix of questions in various formats: multiple choice, identification, short answer, fill-in-the-blank, labeling of drawings or diagrams, and essay. Identifications represent short answers—generally written as sentence fragments or phrases—that include specific factual information as who, what, when, where, why, how, and the scientific significance of the item. Each exam and quiz will be evaluated in terms of spelling, grammar, clarity of expression, and creativity, as well as technical expertise.

LAB ASSIGNMENTS: Each week students are required to complete and submit a laboratory exercise from the laboratory manual. Although completion of some exercises will require collaborative efforts, you are required to prepare your own assignments. **Those not prepared according to the instructions given or those submitted late will not be accepted.** Unless indicated otherwise, completed assignments are due at the beginning of the following lab period. Each assignment is worth 20 points. The lowest lab score will be dropped at the end of the semester.

LABORATORY QUIZZES: Eleven laboratory quizzes worth 10 points each will be given throughout the semester. Quizzes will cover material presented during the previous week's exercise. The lowest laboratory quiz score will be dropped at the end of the semester.

You are required to bring your textbook (*Biological Science* by Freeman) and your laboratory notebook to each laboratory period, unless instructed otherwise.

CLASS POINTS

Lecture	
Exercises	100 points
Exams	400 points
Laboratory	
Assignments	200 points
Quizzes	100 points
Total	800 points

Grade Levels (conversion of points into letter grade):

Grade	Percentage
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79

C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
E	<60

No extra credit will be given for papers, readings, reports, etc. for the purpose of grade improvement.

ACADEMIC HONESTY

The college's codes of academic honesty and conduct will be rigorously observed. In addition to the college criteria, the instructors makes the following provisos: any incident of academic dishonesty or academic misconduct, including cheating on exams, quizzes, homework, etc., when confirmed will result in a failing grade for the particular assignment and possible failure of the course. It is the responsibility of each individual to insure that other individuals do not see his or her homework, report, exam, or quiz answers, etc., and that other individuals do not plagiarize or otherwise misuse his or her work. Passive cooperation is unacceptable; it will be considered academic dishonesty.

INTERNET RESOURCES

More information related to this course can be found at anytime by accessing the Angel site for this course (http://angel.oneonta.edu). Here you will find an updated schedule of upcoming events in class, copies of handouts and homework assignments, answer keys to quizzes, exams, and homework assignments, and to check the current status of your grade in the course. To log in you will need to use your user ID and password. If any problems arise while trying to use or access the site, contact one of your instructors.

It is also highly encouraged that students attempt to utilize the online tutorials, illustrations, and quiz exercises provided by the publishers of the textbook. These materials can be found at the following website:

http://www.prenhall.com/freeman/

Other illustrations, diagrams, images, and supporting text can be found by referencing the topic at a number of internet search engines. For finding and viewing images, the best recourses are those of www.google.com and www.yahoo.com under the search images areas.

Section 1 (Tuesday from 10:00-11:50am) Dr. Ryburn

Section 2 (Tuesday from 12:00-1:50pm) Dr. Ryburn

Section 6 (Wednesday from 2:00-3:50pm) Dr. McEnroe

Section 3 (Thursday from 8:00-9:50am) Dr. Mann

Section 4 (Thursday from 10:00-11:50am) Dr. Lentz

Section 5 (Thursday from 12:00-1:50pm) Dr. Ryburn

The instructors reserve the right to modify the requirements of the course, the format of the examinations, and the scheduling of activities as necessary to enhance the learning process.

GENERAL BIOLOGY II – BIOL 200
TENTATIVE SCHEDULE OF LECTURE ACTIVITIES

Date	Lecture Topics
15-Jan	Introduction. Biology and the Tree of Life (Ch. 1)
20-Jan	Evolutionary Processes and Patterns (Ch. 24-25)
22-Jan	Evolutionary Processes and Patterns (Ch. 24-25)
27-Jan	Protists (Ch. 29) and Fungi (Ch. 31)
29-Jan	Green Plants (Ch. 30)
3-Feb	Plant Form and Function: Cell Types and Tissues (Ch. 36)
5-Feb	Plant Form and Function: Cell Types and Tissues (Ch. 36)
10-Feb	Plant Form and Function: Roots and Stems (Ch. 36)
12-Feb	Plant Form and Function: Stems and Leaves (Ch. 36)
17-Feb	Water and Sugar Transport in Plants (Ch. 37)
19-Feb	**Exam 1**
24-Feb	Winter Break – NO CLASS
26-Feb	Winter Break – NO CLASS
3-Mar	Plant Sensory Systems, Signals, and Responses (Ch. 39)
5-Mar	Plant Reproduction: Flowers, Gametogenesis, and Sporogenesis (Ch. 40)
10-Mar	Plant Reproduction: Pollination and Fertilization. Seeds and Fruits (Ch. 40)
12-Mar	An Introduction to Animals (Ch. 32)
17-Mar	An Introduction to Animals (Ch. 32)
19-Mar	Protostome Animals (Ch. 33)
24-Mar	Protostome Animals (Ch. 33)
26-Mar	Deuterostome Animals (Ch. 34)
31-Mar	**Exam 2**
2-Apr	Deuterostome Animals (Ch. 34)
7-Apr	Spring Break – NO CLASS
9-Apr	Spring Break – NO CLASS
14-Apr	Animal Form and Function (Ch. 41)
16-Apr	Animal Form and Function (Ch. 41)
21-Apr	Animal Nutrition (Ch. 43)
23-Apr	Gas Exchange and Circulation (Ch. 44)
28-Apr	Gas Exchange and Circulation (Ch. 44)
30-Apr	Animal Reproduction (Ch. 48)
5-May	**Exam 3**
12-May	**Comprehensive Final Exam (11:00-1:30pm)**

GENERAL BIOLOGY II – BIOL 200
TENTATIVE SCHEDULE OF LABORATORY ACTIVITIES

Date	Laboratory Topics
Lab 1 (1/20 - 1/22)	Review of Some Basic Biological Principles
Lab 2 (1/27 - 1/29)	A Branch From the Tree of Life
Lab 3 (2/3 - 2/5) *	Diversity of Plants
Lab 4 (2/10 – 2/12) *	Plant Cells and Tissues
Lab 5 (2/17 – 2/19) *	Flowering Plants Structure and Function
2/24 – 2/26	Winter Break – NO CLASSES
Lab 6 (3/3 & 3/5) *	Economic Botany and Mycology: A Web Exercise
Lab 7 (3/10 & 3/12) *	Flowering Plant Reproduction
Lab 8 (3/17 & 3/19) *	Simple Animals, Flatworms, and Roundworms
Lab 9 (3/24 & 3/26) *	Segmented Worms, Mollusks, and Arthropods
Lab 10 (3/31 & 4/2) *	Echinoderms and Chordates
4/7 & 4/9	Spring Break – NO CLASSES
Lab 11 (4/14 & 4/16) *	Dissection of Frog
Lab 12 (4/21 & 4/23) *	Animal Digestion
Lab 13 (4/28 & 4/30) *	Comprehensive Course Review

* Quiz

TIPS FOR SUCCESS

- Attend every class period and arrive on time.
- Don't fall behind. Keep up with all reading materials and assignments.
- Read assigned Ch.(s) and posted lecture notes before you come to class.
- Come to class prepared. Ask questions if you don't understand something.
- Take charge of your own learning. Study for understanding of the concepts, not just memorization of "facts".
- Be alert and take good notes. Go over your notes soon after class and make extra notes from your reading.
- Consider studying with other students outside of class to discuss the material and prepare for exams.
- Use the course Angel site to obtain notes, relevant links, and important announcements.
- Above all, make a commitment to this class and determine to do your very best this semester!