General Biology
Biology 101.05
Spring Quarter 2006

Instructor: Heidi A. Iverson, Ph.D.	**Email:** hiverson@sccd.ctc.edu
Class Homepage: http://faculty.northseattle.edu/hiverson/	**Office:** IB 2423C #18
Office Hours: Tues 2-3pm and by appointment	**Office Phone Number:** 526-7008
Course Lecture Times: M/T/W: 12-1:50pm; F 12-12:50pm	**Classroom:** AS 1617

Required Texts:	Essential Biology 2nd ed.: Campbell, Reece and Simon (ISBN 0-8053-7473-6)
Recommended Texts:	The Cartoon Guide to Genetics Updated Ed.: Gonick and Wheelis

Course Description: Basic biological concepts with emphasis on cell anatomy, general cell processes, exploration of molecular genetics, inheritance, evolution, plant and animal diversity, morphology, limited reproduction, and phylogeny of the living organisms.

Course Prerequisite: Eligibility for ENG 101 recommended.

Evaluation: Your grade is evaluated as follows:

Exams	5 @ 100 points each	500 pts
Lecture Quizzes	5 @ 10 points each	50 pts
Lab Quizzes	4 @ 15 points each	60 pts
Lab Exercises	9 (out of 10) @ 20 points each	180 pts
Lab Practical	1 @ 100 points each	100 pts
Participation	10 points	10 pts
Total		900 pts

Your grade is based on the following NSCC grade scale:
(For a more detailed look at my grade scale, please see the course website).

4.0-3.5 A/A-	90-100%
3.4-2.9 B+/B	80-89.9%
2.8-2.2 B-/C+	70-79.9%
2.1-1.5 C/C-	60-69.9%
1.4-0.9 D+/D	50-59.9%
0.8-0.0	below 50%

Tentative Lecture Exam Schedule
Note that Lab Quizzes are given along with Exams. See Schedule for Lab Material.

Date	Lecture Exam Topics
Exam 1 Mon 4/17	*Introduction, The Chemistry of Life, Macromolecules, Cells, Cell Membranes and Walls*
Exam 2 Mon 5/1	*Diffusion, Osmosis, Transport, Energy, Enzymes, Cellular Respiration, Photosynthesis*
Exam 3 Mon 5/15	*DNA Structure, Function, & Replication, Mitosis, Meiosis, Biology of Cancer*
Exam 4 Mon 6/5	*Protein Synthesis, Inheritance, DNA Technology, Viruses*
Exam 5 Thurs 6/21	*Evolution, Ecology, Prokaryotes, Protists, Plants, Animals*

GENERAL POLICIES AND REMINDERS

Exams: Lecture examinations will ***not*** be cumulative. Make up examinations are rarely given, and are **only given** when prior arrangements have been made with the instructor. Make up exams may be in an alternate format, (read, probably an essay exam). If prior arrangements are not made a 0% will be assigned for a missed exam. Lecture Exams will consist of multiple choice, true/false, short answer and essay questions. A Scantron Form and an #2 pencil are required for all lecture exams. These may be purchased at the bookstore or at the Munch Mart.

Laboratory Quizzes: Laboratory Quizzes occur on the same day as lecture examinations. They are short quizzes that typically focus on the application of laboratory material. There will not be a Laboratory Quiz given with Exam 5. (See Lab Practical below).

Laboratory Exercises: Lab exercises and handouts will be made available online. It is your responsibility to print and read these exercises ***before*** attending lab. Lab exercises are typically due one week after completion of the lab.

Laboratory Practical: A cumulative laboratory practical will be given the 11th week of the quarter. There are absolutely no make-ups for this exam. More details to follow.

Lecture Content and Testable Material: I expect students to read the appropriate text and/or lab chapters **before** the corresponding lecture or laboratory. I will try to cover the majority of material presented in the text, but time is always against the instructor. Therefore, lecture content will most likely not cover all of the material presented in the textbook; however, students are responsible for material presented in **both** the lecture and the in the assigned textbook pages. Material not covered in the lecture, but presented in the textbook **is** testable material.

Attendance: Students should attend every class session. It is the student's responsibility to obtain lecture notes, handouts, or other materials in case of an absence. Rescheduling of exams should be done **prior** to the appropriate date, and only due to the most critical of situations. I will do all I can to help students who must miss class due to illness or other emergencies, but **I must know as soon as possible.** A student who stops attending class without an official withdrawal will be assigned a grade based on the work completed up to that point.

Commitment: This is a course that will require a great deal of individual effort by each student. I have given you a detailed schedule of the quarter for a reason. With this schedule, you will be able to stay on top of the material, and should not be pressed for time. Attendance, attentiveness, and effort are essential for success in the class. Be aware that college level science courses typically require a minimum of 2 hours of study time for every one hour in class.

Electronic Devices: Out of respect for your instructor and fellow students, please turn off cell phones and pagers before class. No electronic devices of any sort may be used during exams.

Fragrance Policy: Due to the increasing numbers of individuals developing chemical sensitivities and the increasing awareness of such conditions, **everyone who attends this class is asked to refrain from wearing any fragrance or perfume.** The greatest feasible efforts will also be taken to ensure a fresh air environment free of not only the above mentioned fragrances but also potentially harmful substances such as carbon monoxide, formaldehyde, carpet odor, organic solvents, etc. Individuals who are unsure of the importance of this policy should see the Associate Dean for additional information.

Academic dishonesty will not be tolerated, and will result in a ZERO for the effected exam, quiz, or assignment. A second offense will result in a withdrawal from the class for the remainder of the quarter.

BIO 101 Spring 2006: Tentative Schedule				
Week	**DATE**	**Topics**	**Text**	**Lab Schedule**
1	M 4/3	What is Biology? What is Science? Intro to Chemistry	Ch 1, 2	
	T 4/3	The Chemistry of Life, Macromolecules	Ch 2,3	Lab 1: Microscopy
	W 4/4	**Lab 1: Microscopy**	Ch 3	
	F 4/6	Macromolecules	Ch 2,3	
2	M 4/10	Cell Structure and Function	Ch 4	
	T 4/11	Cell Structure and Function Note: **Lab 2** or **QUIZ 1 [Ch 1-4]**	Ch 4	Lab 2: Cell Diversity
	W 4/12	Cell Structure and Function Note: **Lab 2** or **QUIZ 1 [Ch 1-4]**	Ch 4	
	F 4/14	Exam Review, Cellular Energy	Ch 5	
3	M 4/17	**EXAM 1 [Ch 1-4, Labs 1 and 2]** Cellular Energy, Membranes and Diffusion	Ch 5	
	T 4/18	Cellular Energy, Membranes and Diffusion		Lab 3: Diffusion & Osmosis
	W 4/19	**Lab 3: Diffusion and Osmosis**	Ch 5	
	F 4/21	Cellular Respiration	Ch 6	
4	M 4/25	Cellular Respiration	Ch 6	
	T 4/26	Cellular Respiration, Photosynthesis **QUIZ 2 [Ch 5 and 6]**	Ch 6,7	Lab 4: Photosynthesis & Respiration
	W 4/27	**Lab 4: Photosynthesis and Respiration**	Ch 7	
	F 4/29	Photosynthesis, Exam Review	Ch 7	
5	M 5/1	**EXAM 2 [Ch 5-7, Labs 3 and 4]** Discovering the Structure of DNA	Ch 10	
	T 5/2	DNA: Structure, Function, Replication	Ch 10	Lab 5: Race for The Double Helix
	W 5/3	**Lab 5: Race for the Double Helix** Intro to Mitosis	Ch 8	
	F 5/5	Mitosis	Ch 8	
6	M 5/8	Mitosis and Meiosis	Ch 8	
	T 5/9	**QUIZ 3 [Ch 8 and 10]** Biology of Cancer	Ch 8	Lab 6: Mitosis and Meiosis
	W 5/10	**Lab 6: Mitosis and Meiosis**	Ch 8	
	F 5/11	Exam Review From DNA to Protein	Ch 10	
7	M 5/15	**EXAM 3 [Ch 8, 10, Labs 5 and 6]** From DNA to Protein	Ch 10	Lab 7: Transcription, Translation and Mutations
	T 5/16	**Lab 7: Transcription, Translation and Mutations**	Ch 10	
	W 5/17	DNA Technology: PCR, Gel Electrophoresis, Cloning	Ch 12	
	F 5/19	DNA Technology: PCR, Gel Electrophoresis, Cloning	Ch 12	
8	M 5/22	**Lab 8: Crime Scene Investigator-Day I** Biology of Viruses	Ch 10	
	T 5/23	**Lab 8: Crime Scene Investigator-Day II** Patterns of Inheritance	Ch 9	Lab 8: Crime Scene Investigator
	W 5/24	**Lab 8: Crime Scene Investigator-Day III** Patterns of Inheritance	Ch 9	
	F 5/26	Patterns of Inheritance, Chromosomal Inheritance	Ch 9	
9	M 5/29	-HOLIDAY- No class		
	T 5/30	**QUIZ 4 [Ch 9, 10, and 12]** Chromosomal Inheritance	Ch 9	Lab 9: Apes to Man
	W 5/31	Chromosomal Inheritance How Populations Evolve	Ch 9 Ch 13	

	F 6/2	**Lab 9: Apes to Man**		
10	M 6/5	**EXAM 4 [Ch 9, 10, and 12, Labs 7 and 8]** How Biological Diversity Evolves	 Ch 14	Lab 10: Owl Pellet Analysis
	T 6/6	Communities and Ecosystems	Ch 19	
	W 6/7	**Lab 10: Owl Pellet Analysis**		
	F 6/9	How Biological Diversity Evolves The Evolution of Prokaryotes and Protista	Ch 14 Ch 15	
11	M 6/11	The Evolution of Prokaryotes and Protista The Evolution of Plants and Fungi	Ch 15 Ch 16	EXAM: Lab Practical
	T 6/12	The Evolution of Plants and Fungi The Evolution of Animals	Ch 16 Ch 17	
	W 6/13	**Cumulative Lab Practical**		
	F 6/14	The Evolution of Animals	Ch 17	
Finals Week	M 6/18	**Quiz 5 [Ch 13, 14, 15, 16, 17]** The Evolution of Animals	 Ch 17	
	T 6/19	**TBD – Review Session**		No Lab
	W 6/20	**No Class**		
	THURS. 6/ 21	**FINAL EXAM, 1-3pm** **EXAM 5 [Ch 13, 14, 15, 16, 17, 19]**		

**This is a tentative schedule and is subject to change at any time.*