

COURSE OUTLINE
BIO 101; SECTIONS 005 & 006
SPRING 2007

Instructor:	Dr. Michelle Vieyra	Lecture:	9:00 - 9:50 am Mon, Wed, Fri SBDG 327
Office:	SBDG 209	Credits:	4
Office hours:	Mon. 2:00 – 4:30 pm Wed. 2:00 – 4:30 pm	Lab:	Sec 5: Tues. 1:40PM- 4:20PM, SBDG 107 (Dr. Michelle Vieyra) Sec 6: Tues. 8:00AM- 10:40AM, SBDG 103 (Mr. Brad Reinhart)
Phone:	(803) 641-3608		
e-mail:	michellev@usca.edu		

Required lecture text: Biology, 7th Ed. by Peter Raven et al.

Required laboratory text: Biology 101 Laboratory Manual by Jackson and Yates

Course Objectives: This course will introduce the student to the underlying principles governing the science of biology. Its primary emphasis will be on cellular components and processes. Upon completion of this course students will be expected to understand the following:

1. The basic chemistry that governs biology
2. The major biological molecules used by cells
3. The structure of prokaryotic and eukaryotic cells
4. How materials get into and out of cells
5. How cells convert sunlight and food into energy
6. Cellular reproduction (mitosis and meiosis)
7. Mendelian Genetics and inheritance
8. The structure of DNA and how it is replicated
9. Synthesis of proteins

Methods of Presentation and Evaluation: Information will be presented through lectures along with appropriate visual aids. -Traditional exams (4) will be used to evaluate your progress in the class. These exams will include multiple choice, terms/definitions, and short answer. A final cumulative exam will also be given.

-There will be several unannounced quizzes during the semester. You are expected to have reviewed the material from the previous lecture in preparation. These will be administered during the first 10 minutes of class, and there will be **no make-up opportunities** for absence or late arrival.

-There are also two assessment exams to be taken by each of you using blackboard. The first must be taken the first week of lecture classes, the second the last week of lecture classes. They are worth 10 points each for completing the exam. The score you receive will not effect the amount of credit you get for taking it.

-You will be required to complete one written library research assignment. Full details will be handed out in class on February 19.

The final course grade will be based on the following point distribution where lecture is worth 75% of the total grade and lab is worth 25% of the total grade. You must pass lab with a 60% or above to pass the course.

4 Lecture exams	150 pts. each	600
1 Final exam	150 pts.	150
10 Quizzes	5 pts. each	50
Library research assignment	80 pts.	80
Pre/Post Assessments	10 pts each	20
Laboratory assignments (see pg. 3 for point breakdown)		<u>300</u>
		1200 total pts.

GRADING SCALE:

A (90-100%)	1080-1200	B+ (86-89%)	1020-1079
B (80-85)	960-1019	C+ (76-79%)	900-959
C (70-75)	840-899	D+ (66-69%)	780-839
D (60-65)	720-779	F (0-59)	below 720

Schedule for BIO 101, Sections 005 and 006 for spring 2007

Date	Topic	Chapter
17-Jan	The Science of Biology	1
19-Jan	The Nature of Molecules	2
22-Jan	The Nature of Molecules cont.	2
24-Jan	The Chemical Building Blocks of Life	3
26-Jan	The Chemical Building Blocks of Life cont.	3
29-Jan	The cell	5
31-Jan	The cell cont.	5
2-Feb	The cell cont.	5
5-Feb	The Plasma Membrane	6
7-Feb	The Plasma Membrane cont.	6
9-Feb	Cell-Cell Interactions	7
12-Feb	Exam 1	1,2,3,5,6,7
14-Feb	An Introduction to Energy, Enzymes, and Biochemical Pathways	8
16-Feb	Energy, Enzymes, and Biochemical Pathways cont.	8
19-Feb	How to Write a Research Paper - Assign Paper Topics	
21-Feb	Deriving Energy from Food (Cellular Respiration)	9
23-Feb	Deriving Energy from Food cont.	9
26-Feb	Photosynthesis	10
28-Feb	Photosynthesis cont.	10
2-Mar	Exam 2	8,9,10
5-Mar	Mitosis	11
7-Mar	Mitosis cont.	11
9-Mar	Meiosis and Reproduction	12
12-Mar	SPRING BREAK	NO CLASS
14-Mar	SPRING BREAK	NO CLASS
16-Mar	SPRING BREAK	NO CLASS
19-Mar	Meiosis cont.	12
21-Mar	Patterns of Inheritance	13
23-Mar	Patterns of Inheritance cont.	13
26-Mar	Patterns of Inheritance cont. - PAPER DUE	13
28-Mar	DNA	14
30-Mar	DNA	14
2-Apr	Exam 3	11,12,13,14
4-Apr	Genes and How They Work	15
6-Apr	Transcription	15
9-Apr	Translation	15
11-Apr	Gene Technology	16
13-Apr	Gene Technology cont.	16
16-Apr	Genomes	17
18-Apr	Gene Expression	18
20-Apr	Gene Expression cont.	18
23-Apr	Gene Expression cont.	18
25-Apr	Exam 4	15,16,17,18
27-Apr	Final Exam Review/ Evaluations	
8-May	FINAL EXAM 9AM	Comprehensive

CHANGES: The instructor reserves the right to make changes in the lecture or laboratory schedule, the number of quizzes and exams given, and the contents of each exam as deemed necessary.

ATTENDANCE POLICY: Students are expected to adhere to the University attendance policy as stated in the Student Handbook. In this regard, the instructor may impose a penalty for absences in excess of 25% of regularly scheduled class meetings (lectures and labs) by assigning an “F” in the course. Absences, *neither excused nor unexcused*, absolve the student from meeting class assignments. Lecture exam dates are clearly stated in the syllabus, and all students are expected to take the exam at the regularly scheduled time. Make-up lecture exams will be considered only for a **documented, excusable** reason. If there is an illness or emergency, you are expected to contact the instructor immediately. Be prepared to show documentation (doctor’s excuse, etc.). Failure to contact the instructor within 24 hours will forfeit any chance of making up the test.

Attending lecture and taking notes is the sole responsibility of the student. Under no circumstance will the instructor provide copies of lecture notes or slides for students.

LABORATORY ATTENDANCE: Because of their nature, **laboratory investigations cannot be made up** – therefore students must make every effort to attend laboratory sessions. If you miss a laboratory investigation, you will not be allowed to take the associated quizzes or turn in a lab report the following week. This also applies if you come in late, leave early, or do not participate fully. You cannot write a report on a laboratory investigation that you did not do.

Laboratory Schedule for BIO 101, Spring 2007

Date	Topic	Assignment due
23-Jan	Measurement Techniques: Investigation #1	Notebook/Skills Test 10pts
30-Jan	quiz and in-class lab report for #1	Quiz 20pts, Report #1 20pts
6-Feb	Organic Molecules in Cells: Investigation #2	Notebook/Skills Test 10pts
13-Feb	quiz and in-class lab report for #2	Quiz 20pts, Report #2 20pts
20-Feb	Cells and Microscopy: Investigation #3	Notebook/Skills Test 10pts
27-Feb	quiz and in-class lab report for #3	Quiz 20pts, Report #3 20pts
6-Mar	Enzymes: Investigation #4	Notebook/Skills Test 10pts
13-Mar	Spring Break - no lab	HAVE FUN!
20-Mar	quiz and in-class lab report for #4	Quiz 20pts, Report #4 20pts
27-Mar	Photosynthesis: Investigation #5	Notebook/Skills Test 10pts
3-Apr	quiz and in-class lab report for #5	Quiz 20pts, Report #5 20pts
10-Apr	Chi Square and Mendelian Genetics: Investigation #7 & 8	Notebook/Skills Test 10pts
17-Apr	quiz and in-class lab report for #7 & 8	Quiz 20pts
24-Apr		Report #6 20pts

You must purchase a binder, folder or notebook of some sort for use in lab. You will need it the first day.

COMPUTER USE AND EMAIL: All laboratory reports will require the use of a computer. You must be able to log on to the USCA computer system in order to accomplish these laboratory exercises. If you do not know how to sign on to the USCA computer system, you should contact the CSD HELP desk as soon as possible.

All official email communications, including class announcements, are made to USCA email accounts. **Students should check their USCA email account on a regular basis** and use this account for communication with the instructor.

DISABILITY STATEMENT: If you have a physical, psychological, and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A B&E, (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

HONESTY: You are expected to follow the honor pledge on every assignment:

“On my honor as a University of South Carolina at Aiken student, I have neither given nor received any unauthorized aid on the assignment/examination. To the best of my knowledge, I am not in violation of academic dishonesty.”

Academic dishonesty will result in failure on the assignment of question.

If you have questions or need help with anything in this course (lecture or lab) please email your instructor and set up an appointment to meet with him/her. Dr. Vieyra will generally be available MWF afternoons.