Biology 1010: Principles of Biology

(Section 003)

Professor: Dr. John Lytle

Email: JLytle1@CSUStan.edu

Lectures: P167, 3:30-4:45, Tuesdays & Thursdays

Final exam:

Tuesday, Dec. 18th, at 2:00pm

The final exam is **comprehensive**. It covers recent lectures (\sim 50%) and also previous course material (\sim 50%).

Grades: 100-90% =A

89.9-80% =B 79.9-67% = C 66.9-57% = D <56.9 = F

Grades are not rounded

Missed exam:

Another comprehensive exam is offered on the same day as the final exam for students who missed an exam. This exam covers information from all 4 units. These are new questions, typically at a higher difficulty.

Exams:

Bring on exam day: 1. Scantron 882E

2. Number 2 pencils & erasers

Note: You must put your full name on everything you submit for grading, or it will not be graded & it will receive a zero. Most students make this mistake only once!

Approx. points:		# of each
Midterm Exams:	100	3*
Final Exam:	200	1
Online Homework	50	
Weekly quizzes:	10	11*
Approx. total*:	550	

***Note:** The lowest midterm exam **and** quiz score will be dropped & not used for student grade assessment. (Except for zeroes earned from cheating! These will not be dropped)

Grades will be posted on Blackboard after each exam. When you see a mistake, get it corrected right away. **DO NOT** wait until the end of the semester.

Supplies:

Required:

Scantrons: 100 question: **882E** <u>Clickers</u>: iClicker (used is fine)

<u>Clickers must be registered on Blackboard</u> <u>Text:</u> **Biology Now** by Houtman, Scudellari, Malone, Second Edition (with online component) Note: online component can be purchased separately: digital.wwnorton.com/bionowcore **Concepts of Biology** Available at: openstaxcollege.org/textbooks/concepts-ofbiology Recommended:

Pencil, ruler, good notebook, brain

Lectures: parts online on blackboard

Print out lectures before classes. If you miss a lecture, fill in blanks from another student & have them catch you up to speed.

Locating your professor:

JLytle1@CSUStan.edu Office Hours: room N252, 2:00-3pm Tuesdays & Thursdays;

11:00-1pm Wednesdays (Please send email for appointment prior to visiting office hours) Include **BIOL1010** in the subject of your emails when emailing me.



Weekly Quizzes

There will be an equivalent of a 10 question quiz each week. Questions will come in the format of clicker questions during lectures. The days the quizzes are held will not be announced ahead of time. Questions may include material covered in the past 2 lectures.

Online Questions

With the textbook, you have access to the Inquizitive website. You must create an Inquizitive account as you will access it to complete your online homework. Check Blackboard for a useful file on how to log in and create an account. **Only** log in through the Blackboard link! This is the way your earned points will be recorded and transferred to Blackboard at the end of the semester.

Expected Learning Outcomes (from CSUS)

GENERAL EDUCATION GOALS 1. To provide an overview of the principles, methodologies, and perspectives of biology. Concepts include: cell theory, evolution, genetics, biochemistry, and the nature of science. 2. To develop an understanding of fundamental concepts to allow effective written communication on biological issues. Specifically, students will write essay questions on exams to demonstrate their knowledge of the course material.

 To provide working background to analyze and critically evaluate biological issues and facilitate continuous inquiry and life-long learning in scientific and non-scientific settings.
To provide the framework to understand, examine critically and use information from various reliable sources to answer future biological questions.

5. To understand the relationships between the fields of biology, chemistry, physics, geology, and other sciences with an emphasis on how these fields are interrelated.

6. To develop more informed views of the connections of biology with respect to current and future issues of ethical judgment and social responsibility.

More Learning Outcomes:

- a. Understand the fundamental principles & generalizations of biology.
- b. Understand the fundamental structure & function of living organisms.
- c. Understand genetic, molecular, biochemical, & evolutionary aspects of life science.
- d. Understand the scientific method & the use of experimental tools in a laboratory setting.
- e. Understand physiological & environmental aspects of life science.

Course Performance: To do well in this class, you must prepare by reading all required materials prior to lecture & lab. Ask questions about any concepts & materials you don't understand. Attend all lectures & take thorough notes. Expect to read, review, & study the lecture material (textbook chapters) & lecture notes several times to earn a passing grade. If you have trouble with the material, please e-mail/call/see me immediately.

This course covers a substantial amount of material over the semester, and you will be exposed to a great deal of new scientific terminology. There is a significant failure rate, mainly because students profoundly underestimate the course requirements and the level of difficulty on the exams. You should be prepared to devote 12 hours a week outside of class to studying for this course.

Attendance: Excessive absences from lecture and/or lab will result in the student being dropped from the course. Arriving late, leaving early, and/or being removed from lecture and/or lab due to disruptive behavior may be considered an absence (& may result in further disciplinary action).

Suggested Study Approach – Be an active student:

- Read textbook chapter
- Read end of chapter Summary
- Print and answer Study Guides (on Blackboard)
- Answer quéstions at the end of chapters
- Re-write/re-type your lecture & lab notes
- Come to office hours
- Learn how you learn! Then do whatever works best for you.
- Review/Study often (short daily study sessions are best vs. long infrequent study sessions - This is the best way to learn new material of any kind)
- Form/join a study group!

Proverb:

"He who asks a question is a fool for a minute; he who does not ask remains a fool forever".



There is help on campus for students struggling with biology! The Central Valley Math & Science Alliance, located in 124 Naraghi Hall, is a free walk-in science and math tutoring center that does not require appointments. With both student and faculty tutors available from 8am – 6pm daily, there should be someone available to answer your questions. The Biology Club is a group of students who have gone through general biology courses and they are willing to offer advice and help, especially if you buy them coffee or bring them cookies. Tutoring Services on the ground floor of the CSUS Library (L-112) has drop-in tutoring for biology; check their office or website for their schedule. The Advising Resource Center, Student Support Services and the Program for Academic and Career Excellence (P.A.C.E.) in the MSR Building may be useful sources of aid for you. Of course, I will work hard to help you in class and out. Come to office hours, communicate with me and let me know your frustrations and I will respond.

Make-Ups: No make-up quizzes will be given. Make-up exams will only be permitted for valid documented reasons **and** with approval of the instructor. Additionally, the instructor **must be notified within 24 hours** of the exam that is missed for any make-up to be considered. Make-up exams are to be scheduled at the prerogative of the instructor.

Academic Integrity: Dishonesty & Cheating:

Academic dishonesty defrauds all those who depend upon the integrity of the college, its courses, its certificates & degrees. Students are expected to follow ethical standards & policies at CSUS. These standards & policies will be strictly enforced in this course. Any student caught violating the academic integrity policies will receive a **zero** on the exam/ quiz/assignment/etc. in question, will lose any Extra Credit points earned, & may be dropped and/or receive an **F** in the course. Additionally, students may face further disciplinary action & consequences as described in the CSUS Catalog.

Classroom/Laboratory Conduct: Policy on Cell Phones, iPhones, PDAs, Electronic Devices, etc.: Please be courteous & respectful of your instructor & your fellow classmates by turning off any cell phones, iPhones, etc., prior to coming to class. Use of these devices (e.g., texting) is not allowed in class. Note: During exams, quizzes, etc., the use of electronic devices (cell phones, iPods, etc.) is not permitted. Any student caught using electronic devices will receive a **zero** on the exam/quiz/assignment/etc. in question, & may receive an **F** in the course. **Note:** Talking and/or whispering during quizzes, exams, etc., will be considered a violation of the academic integrity (i.e., dishonesty and/or cheating). Students may be moved prior to and/or during quizzes, exams, etc. if talking and/or whispering occurs.

Disruptive behavior: Disruptive behavior may result in students being removed from lecture/lab and/or dropped from the course (this includes use of electronic devices as mentioned above). Additionally, students may face further disciplinary action & consequences as described in the CSUS Catalog.

Special Conditions: Please contact me if you have any special needs that need to be addressed in order for you to perform well in this course. Please register with the DRS *prior* to the week before an exam in order to set up necessary accommodations. **Note:** There are numerous resources available to help students at CSUS. Please feel free to seek help for tutoring, guidance, counseling, health care, etc., during your time at CSUS.

Note: Course Syllabus and/or Course Schedule are subject to change as needed to meet the course objectives. Any changes will be announced in class & be distributed to the students (i.e., posted on Blackboard).

BIO-1010 T	Centative	Course	Schedule
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Week #:		
Start date	Lecture Topic	Readings & Homework
1 : 8/20	Introduction	Biology Now: Ch. 1
2 : 8/27	Science and Learning Fundamental Building Blocks Biological Molecules	Biology Now: Ch. 3 & 4
3 : 9/3	Cells Plasma Membrane Energy & Enzymes	Biology Now: Ch. 4
4 : 9/10	Cellular Respiration Photosynthesis	Biology Now: Ch. 5
5 : 9/17	Exam #1 (Tuesday) Photosynthesis Genetics, Cell Division	Biology Now: Ch. 6
6 : 9/24	Genetics, Cell Division	Biology Now: Ch. 7
7 : 10/1	Meiosis DNA, Mendel & Genetics	Biology Now: Ch. 8
8 : 10/8	Chromosomes & Inheritance	
9 : 10/15	Exam #2 (Tuesday) Darwin & Evolution Microevolution & Macroevolution	Biology Now: Ch. 11 & 12
10 : 10/22	Macroevolution Microbes	Biology Now: Ch. 13 & 15
11 : 10/29	Microbes Plants	Biology Now: Ch. 16
12 : 11/5	Plants, Fungi	
13 : 11/12	Animals	Biology Now: Ch. 17
14 : 11/19	Exam #3 (Tuesday) No Class Thursday	
15 : 11/26	More Animals Ecology Part 1: Populations	Biology Now: Ch. 18 & 19
16 : 12/3	Ecology Part 2: Communities & Ecosystems	Biology Now: Ch. 20
17 : 12/10	No Class	Party time! Just kidding. Study everything.
18 : 12/17	Final Exam (Tuesday, December 18th at 2:00pm)	