Course Syllabus

Summer Petaluma Campus 2017

BIO 10: Introduction to Principles of Biology

Sections 8811 & 8892

INSTRUCTOR: Albert Carranza

Office Hours:

Monday - Thursday: 2:30- 3:30PM or by appointment

Office: PC 322

E-mail: acarranza@santarosa.edu

LECTURE HOURS:

Monday-Thursday **9:00-10:55AM** **Call Bldg 639**

LAB INSTRUCTION: **PC 313**

Monday and Wednesday (section 8811)

OR **11:30AM- 2:30 PM**

Thursday and Tuesday (section 8892)

TEXTS (REQUIRED):

Simon, Reece & Dickey, 2014

Campbell Essential Biology with Physiology , 5th Ed.

ISBN 9780321967671

Reserve copy available in the Mahoney Library, please have a current study identifation card and the following information:

CALL NUMBER	BARCODE
QH308.2 .C344 2013	33155005952802

Bio 10 Laboratory Manual Petaluma Campus available at bookstore and through Amazon:

ISBN 978-1535547871

SUPPLIES: (Required for Lecture Exams)

5 scantrons and #2 pencils

Course Syllabus

COURSE DESCRIPTION:

Introductory course in biology including: scientific method, ecology, bio diversity, physiology and anatomy, chemistry of life, cell and molecular biology, genetics, and evolution. Meets general education laboratory science requirement. (CR/NC option)

Transfer Credit: CSU; UC.
Recommended: Eligibility for ENGL 100 or ESL 100.

Objectives:

Upon completion of this course, students will be able to:

1. Apply the steps in the scientific method to problem solving in biological investigation.

2. Apply laboratory techniques, including proper microscope use, to observing and experimenting with biological phenomena.

3. Describe the role of biotic and/or abiotic factors to structuring biomes, ecosystems, communities, and populations, and how humans interact with these systems.

4. Correlate the structure and function of plant and animal organ systems, organs, tissues and cells.

5. Compare and contrast the cell structure and function of prokaryotic and eukaryotic cells and of plant and animal cells.

6. Show the relationships between the structure of atoms, molecules, biological polymers, and their significance to structure and function of cells, physiology, genetics, and evolution.

7. Integrate knowledge of molecular genetics, inheritance, and cell division (mitosis and meiosis), and apply these to evolutionary biology.

8. Synthesize knowledge of the mechanisms of evolution, adaptation, and speciation.

9. Recognize major evolutionary patterns and adaptations in the biodiversity of major taxa (domains, kingdoms, and phyla).

10. Describe the values, themes, methods, and history of the discipline and relate them to a course of study in the major.

The complete course outline is available at the following link
https://portal.santarosa.edu/SRweb/SR_CourseOutlines.aspx?CVID=23972&Semester=20137

Course Syllabus

Tentative Class Schedule

Dates	Lecture Topics	Text Pages	Lab Topic
19-Jun	Introduction to Biology	Chapter 1	Biological Concepts
20-Jun	Basic Chemistry	Chapter 2	
21-Jun	Biological Molecules	Chapter 3	Water
22-Jun	Cells and Microscopy	Chapter 4	
26-Jun	Cell Structure & Function	Chapter 4	Enzymes
27-Jun	Cellular Energy & Enzymes	Chapter 5	
28-Jun	Photosynthesis	Chapter 7	***Lab Exam 1***
29-Jun	Cellular Respiration	Chapter 6	
3-Jul	***Exam I: Cell & Chem***		***No Lab***
4-Jul	**4th of July Holiday No Classes**		
5-Jul	Cell Reproduction	Chapter 8	Microscopes / Cells
6-Jul	Mendelian Genetics	Chapter 9	
10-Jul	Post-Mendelian Genetics	Chapter 9	Mitosis
11-Jul	DNA Replication, Protein Synthesis	Chapter 10	
12-Jul	DNA Technology	Chapter 12	Evolution
13-Jul	***Exam 2: Genetics***		
17-Jul	Microevolution	Chapter 13	***Lab Exam 2***
19-Jul	Macroevolution	Chapter 14	
20-Jul	***Exam 3: Evolution***	Chapter 15	GMO Lab 1
21-Jul	Plants: Diversity and function	Chapters 16, 28	
24-Jul	Plants: Diversity and function	Chapters 28, 29	GMO Lab 2
25-Jul	Animal Diversity	Chapter 17	
26-Jul	Animal Diversity	Chapter 17	Fungi
27-Jul	Animal: Digestion/ Gas exchange	Chapters 22, 23	
31-Jul	Human : Digestion, Transport	Chapters 22, 23	Plants
1-Aug	***Exam 4 Physiology***		
2-Aug	Climate and Terrestrial Biomes	Chapter 18	Animals
4-Aug	Aquatic Biomes	Chapter 18	
7-Aug	Ecosystems	Chapter 20	***Lab Exam 3***
8-Aug	Community Ecology	Chapter 20	
9-Aug	Population Ecology	Chapter 19	
10-Aug	***Final Exam***		

GRADING SYSTEM

TEST or ASSIGNMENT		EACH	TOTAL
Lab Exams:			300
Concepts, Water, Enzymes		100 pts	
Mitosis, Meiosis, Genetics, Evolution		100 pts	
Protists, Fungi, Plants, Animals		100 pts	
Lecture Exams:			400
Chemistry & Cells		100 pts	
Genetics		100 pts	
Evolution		100 pts	
Physiology		100pts	
Final Exam:			200
Ecology		100 pts	
Comprehensive		100 pts	
Assignments			
Taxonomy Lesson		10 pts	10
On-line Quizes		10 pts	90
Evolution Lab		30 pts	30
GMO Lab Review		30 pts	30
Participation & Attendance		100 pts	100
	Semester	Total	1160

Exam points are awarded as a percent of the highest score.
Final grades are calculated as a percent of the total possible points as follows:

100-90%	**A**
89-80%	**B**
79-70%	**C**
69-55%	**D**
54-0%	**F**

EXPECTATIONS

Attendance: Required. Tardiness or leaving early is disruptive to the class. Email me if you cannot attend due to illness or some other emergency. Missed classes and tardiness will affect your participation grade, as well as your exam performance. Repeated occurrences may result in your being dropped as per the SRJC policy.

DISTRICT POLICY ON ATTENDANCE:

It shall be the policy of the Sonoma County Junior College District to maintain an attendance policy and procedures consistent with State and local requirements.

1. Attendance
a. Students are expected to attend all sessions of the course in which they are enrolled.
b. Any student with excessive absences may be dropped from the class.

2. Excessive Absence Defined
a. A student may be dropped from any class when that student's absences exceed ten percent (10%) of the total hours of class time.
b. Instructors shall state in each course syllabus what constitutes excessive absence for that course.

3. Excused vs. Unexcused absences
a. Unless state or federal law requires that the absence be deemed excused, no instructor shall be required to make a distinction between excused and unexcused absences.
b. If individual Instructors wish to distinguish between excused and unexcused absences the instructor shall state in each course syllabus all criteria for any excused absences in addition to those required by state or federal law.

4. Nonattendance
a. Students who fail to attend the first two class meetings of a full semester course, or the first class meeting for classes that meet once a week may be dropped by the instructor. For classes that meet online, students must log on and initiate participation by 11:59 p.m. of the third day from the official start date of the class.
b. Faculty are required to drop all No-Show students by the Census Date of each census course. A No-Show is an enrolled student who has not attended any class meeting of the course at any time, or who has not contacted the instructor to make arrangements to remain enrolled in the course. For classes that meet online, a No-Show is an enrolled student who has not logged on and initiated active participation by 11:59 p.m. of the third day from the official start date of the class.

Lecture Exams: There are **NO** makeup exams, however you may arrange to take a lecture exam in ***advance*** (adequate notice must be given).

Lab Exams: There are **NO** makeup Lab Exams.

Note! Anyone missing the **FINAL EXAM** (for any reason) may fail regardless of previous scores.

Code of Conduct: Please come to class prepared to learn and participate. Coming or going after class has started is disruptive. Students who disrupt the learning of others, may be asked to leave the classroom and may be disciplined. Inappropriate behavior, cheating, or plagiarism will not be tolerated. Those who cheat or plagiarize will be penalized points and may not receive credit for their assignment or they may receive disciplinary action that will result in an “F” in the course.

Cell Phones: PLEASE be sure they're turned off during class!

If you are having problems keeping up with class please come to see me before you get too far behind!

Special Considerations: If you have any special needs or concerns please do not hesitate to let me know. We will be working in a hands-on environment, therefore challenges may arise that do not generally come up in a lecture classroom. During labs close physical proximity and possible physical contact may occur (especially microscope labs). Please let me know if this makes you uncomfortable.

Accommodations for Students with Disabilities
If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to the instructor as soon as possible. You may also speak with the instructor privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Analy Village on the Santa Rosa campus, and Jacobs Hall on the Petaluma Campus.

Assignments:
Textbook Reading: Read your text before coming to a lecture on that topic. This will help you understand the lectures and help you keep up with the pace. Read and learn thoroughly the pages in your text that refer directly to lecture material or study guide questions. Material not covered in either of these ways should be looked upon as reference material.

Laboratory Material: The Lab Manual is used to test lab concepts. Answer all questions carefully. Unless indicated, lab material may be helpful for lecture exams, but will not be directly tested. However most material will be covered in lab exams.

On-line Quizzes: The course Canvas page provides lessons, lecture notes and other study resources pertaining to each topic we cover in class. While these are mostly optional, you MUST complete 9 of the on-line quizzes by the end of the semester. Please note that each quiz closes after a certain date. Try to complete them as soon as we've covered material that the quiz pertains to. This will help you better prepare for exams. If you do not have reliable internet access at home, computers are available to you on campus. I'm happy to help you complete this course requirement. Don't hesitate to let me know.

Participation and Effort: Ultimately your success in school (or a job) will result from your willingness to be actively engaged in your work. 100 points will be given for your active participation in lab and lecture. This includes: attentiveness, participation in group and individual exercises; attendance and staying until the end of class; and completion of laboratory preparation assignments or quizzes.

Student Grievances: All necessary forms for these procedures can be found on the college website at http://www.santarosa.edu/for_students/rules-regulations/ and at the Student Affairs Office on either the Santa Rosa or Petaluma Campus.

In Case of Emergency…
Evacuation/Fire Alarm Sounding: Audible alarm means exit the building. We will meet in the grass area between Lark and Baker Hall and I will take roll. DO NOT LEAVE the designated area before you have been accounted for.

Earthquakes: Take shelter under desk, table or doorframe to protect yourself. After shaking stops – if there is damage – collect your belongings and evacuate the area. Again, we will meet in the pre-determined area and I will take roll.

Power Outage: If there is a power outage for longer than 10 minutes, we will evacuate the building and meet at our pre-determined area. At this point we will attempt to locate another classroom with power to resume class.

Reporting an Emergency: Call the Junior College Police Dept. dispatch at 527-1000.