#### Welcome to Bio 10!

Lecture: Tuesday and Thursday

Lab: Tuesday 11:00-2:00 or

9:00 – 10:30 Thursday 11:00-2:00 Room: PC 639 Room: PC 313

**Instructor:** Kirsten Swinstrom, Ph.D. Office: Petaluma Campus 675 Call Hall; 778-3962

email: kswinstrom@santarosa.edu

homepage: https://profiles.santarosa.edu/kirsten-swinstrom

Office Hours: Please come to my office hours, I'm here to help! Tuesday and Wednesday 2-4 PM except

the fourth Tuesday of the month, which will be 2-3 PM

# **Important Dates:**

January 29, 2017 Last day to drop semester length class and be eligible for a refund February 5, 2017 Last day to register/add with the instructor's signature or add code February 5, 2017 Last day to drop a class without "W" symbol

April 23, 2017 Last day to drop a class with "W" symbol

**Course Description:** This is an introductory lecture and laboratory course for biology majors and non-majors. The course will cover the key concepts and vocabulary in: scientific method, ecology, biodiversity, physiology and anatomy, chemistry of life, cell and molecular biology, genetics, and evolution. The official course outline of record may be found here:

https://portal.santarosa.edu/srweb/SR CourseOutlines.aspx?CVID=23972&Semester=20137

If you have concerns about your ability to be successful in this class, or have tried and failed bio 10 in the past, please consider taking Biology 100 first; it is very helpful and it's not too late to switch!

**Time Commitment:** For all college classes you are expected to complete approximately 2-3 hours per week outside of class for every 1 hour spent in lecture. For Bio 10, that is approximately **9 hours of study time EVERY WEEK.** Depending on your level of preparation that may or may not be enough time for you to earn the grade you want.

**Texts**: Campbell Essential Biology with Physiology with Mastering Biology 5<sup>th</sup> edition

Petaluma Biology 10 Laboratory Manual

iClicker – you will need to purchase an iClicker to participate in class (the older versions are fine)

**Grading:** Your grade will be based on your total number of points as compared to the total number of points available for the entire semester.

	<u>Each</u>	<u>Total</u>
4 Lecture Exams	100	400
2 Lab Exams	100	200
Lab Assignments	10	20
Monitoring Project	100	100
Homework	5-10	~130
Clicker Questions	1	~100
1 Cumulative Final Exam	150	150
Total		1100

A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F = <60%

**Homework:** You are expected to read the text assignment each week before class. In addition, you will have an online homework assignment almost every week using the Mastering Biology website associated with your textbook. The website will list the assignments and the due dates. You will also occasionally be asked to complete written homework. These homework assignments will usually be given the class before they are due, so if you miss class, be sure to check with me or a classmate to get the assignment. Late homework is accepted for online work, but not work due in class.

Enrolling in Mastering Biology: If your textbook does not come with an access code you can buy access online when you register on the website. Register at <a href="http://www.masteringbiology.com/">http://www.masteringbiology.com/</a> using the course title: Swinstrom TTH Bio 10 Spring 2017 and the course ID MBSWINSTROM37696 Please note: you must use your name as you are registered at the JC and use only the last 4 digits or your student ID. You will be able to access this website and complete your homework from computers in the school computer lab or the library. Therefore, computer problems are not an excuse for late homework. With the exception of the last homework assignment, late homework is accepted but is penalized 20% for each day late.

**iClickers**: You will earn points by answering clicker questions during lecture and lab. You will earn half of these points for participation and the other half for providing the correct answer. I also use this for attendance so if you forget your iClicker please tell me so I can note your attendance. **You cannot make up clicker points if you are absent or forget your clicker**.

How to register your iClicker: You will need to use your clicker in class at least once before you can register it. After you have used it in class please go to <a href="www.iclicker.com/registration">www.iclicker.com/registration</a> to register. Be sure to use your name as you are registered at the JC, no nicknames and use only the last 4 digits or your student ID. You must have your clicker registered by the end of the second week of classes. If this will be a problem please let me know.

Labs: The lab is an integral part of this course. You are expected to read both the lab manual assignment and the text reading assignment prior to coming to lab. Please bring your entire lab manual to each lab; we sometimes need other sections other than the current week. Your textbook is not required for lab, but can occasionally be helpful. If you miss a lab it is sometimes possible to attend one of my other lab sections for that week, otherwise, you will not be able to make up the assignment for that lab. Please talk to me before attending another section. Safety protocols will be explained in lab on the first day. Failure to follow safety procedures or mishandling of equipment will result in suspension of two lab periods.

Lab Staff and Assistance: We have two great resources for extra help in the biology lab. Our Science Lab Coordinator, Dr. Scott Lorbeer (slorbeer@santarosa.edu), will have lab study sessions most Fridays from 1-2 in the lab (more info to come in lab). Our Science Lab Instructional Assistant, Danielle Sanger (dsanger@santarosa.edu), will have longer review sessions on Fridays before lab exams. She also has a website: <a href="https://profiles.santarosa.edu/danielle-sanger">https://profiles.santarosa.edu/danielle-sanger</a> where she provides study and review materials for the lab. Please take advantage of these great resources.

**Field Trips and Monitoring Project:** We will be working with the Farallones Marine Sanctuary to collect data on the health of the marine protected areas near us. You will be making a significant contribution to their database and we will be collecting data that will be used by scientists for many years to come. You can choose to go work either in the sandy beach habitat or the rocky intertidal. The final result will be a research poster!

You must choose one of the following dates for your field trip (more info and sign-ups in lab): Rocky Intertidal: Carmet Beach Friday, February 24<sup>th</sup> 2-5 PM Sandy Beach: Salmon Creek Beach, April 21<sup>st</sup> 10-2:00 or April 22<sup>nd</sup> 11-3:00

**Attendance:** If a student misses more than two class sessions, please be aware that on the third absence, s/he may be dropped from the class; however, this is not a guarantee that a student will be dropped. Students who choose not to continue the course are responsible for turning in a drop card to the admissions office or online. Failure to officially drop the course may result in an "F". If you miss work after the deadline to drop and have an acceptable reason (like hospitalization), an "Incomplete" may be more appropriate. When in doubt, ask.

**Exams:** Exams will typically be a combination of multiple choice questions, short answers and essay questions. You will need a standard Scantron form for every exam. You may make-up an exam only under very extraordinary circumstances. You must contact the instructor with your request before the exam begins. Instructor approval is required.

Cheating: I expect students to comply with universal guidelines of academic integrity. This refers to cheating on exams as well as plagiarism (copying the work of others and turning it in as your own). <u>All parties</u> involved in cheating or plagiarism will be given a zero for that assignment and may be suspended from class for two class periods. You may not wear headphones or use or look at any electronic device (including cell phones) during exams; doing so will be deemed cheating and you will receive zero points for the exam and be reported to the Dean. Details of the student code of conduct can be found here: <a href="http://www.santarosa.edu/for\_students/rules-regulations/scs/section1.shtml">http://www.santarosa.edu/for\_students/rules-regulations/scs/section1.shtml</a>

Classroom Etiquette: All students shall comply with the standards of conduct for the college. If a student disrupts the learning environment in any way, s/he will be asked to leave the class for two class meetings and will be subject to further disciplinary action. Please silence your cell phones before coming to class. If you wish to use a laptop to take notes do not use the web or other programs in class. This is disruptive to students around you. If you use your laptop in this way you will lose the option of using your laptop in class.

#### **Emergency Evacuation Plan:**

In the event of an emergency during class that requires evacuation of the building, please leave the class immediately, but calmly. We will meet in the parking lot. I will take roll to make sure everyone got out safely so please check in with me immediately. If you are a student with a disability who may need assistance in an evacuation, please see me during my office hours as soon as possible so we can discuss an evacuation plan.

### **Accommodations for Students with Disabilities:**

If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, use of service animal, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak with me privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly (778-2491), as soon as possible to better ensure such accommodations are implemented in a timely fashion.

# **Tentative Lecture Schedule**

Week	Dates	Lecture topics	Reading Assignment	Mastering Biology HW
1	1/17, 1/19	Introduction to Science and Biology	Chapter 1	
2	1/24, 1/26	Introduction continued and Chemistry	Chapters 1 and 2	HW 1
3	1/31, 2/2	Chemistry and Cells	Chapters 3 and 4	HW 2
4	2/7, 2/9	Cells	Chapter 5 and page 306	HW 3
5	2/14, 2/16	Tuesday: Lecture Exam 1 Thursday: no class today		HW 4
6	2/21, 2/23	Cell Respiration and Photosynthesis	Chapters 6 & 7	HW 5
7	2/28, 3/2	DNA structure and function	Chapter 10	HW 6
8	3/7, 3/9	Mitosis and Cancer; Meiosis	Chapter 8 and pages 211-215	HW 7
9	3/14, 3/16	Tuesday: Lecture Exam 2 Thursday: Inheritance	Chapter 9	HW 8
10	3/21, 3/23	Spring Break!		No Homework
11	3/28, 3/30	Inheritance and Evolution	Chapters 9 & 13	HW 9
12	4/4, 4/6	Evolution	Chapters 13 and 14 and pages 294-298, 311	HW 10
13	4/11, 4/13	Ecology: Populations, Community Biology and Food Webs	Chapters 19 & 20	HW 11
14	4/18, 4/20	Tuesday: Lecture Exam 3 Thursday: Nutrient Cycles and Human Impacts		No Homework
15	4/25, 4/27	More Nutrient Cycles and Human Impacts; Plants	Pages 373-379, 391-399 and Chapter 20	HW 12
16	5/2, 5/4	Plants and Animal Homeostasis	Chapters 28, 29, 21	HW 13
17	5/9, 5/11	Tuesday: Digestion Thursday: Lecture Exam 4	Chapters 22	HW 14
18	5/16, 5/18	Animal Gas Exchange and Circulation	Chapter 23	HW 15
19	5/25	Final Exam: Thursday 7-9:45 AM		No Homework

### **Lab Schedule**

Week	Dates	Laboratory topic	Text Reading Assignment
1	1/17, 1/19	Intro to Beach Monitoring	
2	1/24, 1/26	Biological Concepts	Chapter 1
3	1/31, 2/2	Water	Chapter 2 and osmosis section from chapter 5
4	2/7, 2/9	Enzymes	Pages 80-82
5	2/14, 2/16	Tuesday: Lab Exam 1 Thursday: no lab	
6	2/21, 2/23	Tuesday: Rocky Intertidal Monitoring Preparation Quiz (homework due) Thursday: Lab Exam 1	Monitoring handouts/homework
7	2/28, 3/2	Microscopes and Cells	Chapter 4
8	3/7, 3/9	Mitosis, microscope quiz (10 points)	Chapter 8
9	3/14, 3/16	Meiosis	Chapter 8
10	3/21, 3/23	Spring Break	
11	3/28, 3/30	Lab Exam 2	
12	4/4, 4/6	Genetics (10 points)  This material will appear on your lecture exam	Chapter 9
13	4/11, 4/13	Evolution This material will appear on your lecture exam	Chapter 13
14	4/18, 4/20	Sandy Beach Monitoring Prep (homework due) Quiz	Monitoring Handouts/homework
15	4/25, 4/27	Monitoring Project	Research articles
16	5/2, 5/4	Monitoring Project	Research articles
17	5/9, 5/11	Monitoring Project	Research articles
18	5/16, 5/18	Poster Session	
19		No labs – finals week	