

Welcome to Bio 10!

Lecture: Tuesday and Thursday
9:00 – 10:30
Room: PC 641

Lab: Tuesday 11:00-2:00 **or**
Thursday 11:00-2:00
Room: PC 313

Instructor: Kirsten Swinstrom, Ph.D.

Office: Petaluma Campus 675 Call Hall; 778-3962

email: kswinstrom@santarosa.edu

Office Hours: Thursday 2-4; or by appointment

Important Dates:

February 2, 2020 Last day to add a class with instructor's signature or add code

February 2, 2020 Last day to drop the class without a W symbol

February 23, 2020 Last day to opt for pass/no pass instead of grade

April 19, 2020 Last day to drop the class with a 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?ck=BIO10

Texts: Campbell Essential Biology with Physiology **with Mastering Biology** 6th edition
Petaluma Biology 10 Laboratory Manual

Canvas: I will post lecture slides, grades, announcements, and study guides on our Canvas webpage every week. Please check it frequently and let me know if you need help.

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>
3 Lecture Exams	100	300
3 Lab Exams	100	300
Lab Activities	10	30
In class assignments	varies	20
Dynamic Study Modules	~7	100
Clicker Questions	1	100
<u>1 Cumulative Final Exam</u>	<u>150</u>	<u>150</u>
Total		1000

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

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. If you miss 3 labs your overall grade will be lowered by 5%, you will lose an additional 5% for any labs missed after the third missed lab.

Lab Staff and Assistance: Our Science Lab Instructional Assistant, Danielle DeFever (ddefever@santarosa.edu), has a website: <https://profiles.santarosa.edu/danielle-defever> where she provides study and review materials for the lab. Please take advantage of these great resources.

Online homework, practice, and extra credit assignments: Most weeks you will have “dynamic study modules”(DSM) to complete that are based on your reading assignment. **No late work is accepted so please plan ahead.** There are also additional practice activities online and extra credit activities. I highly recommend that you complete these activities.

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 <http://www.masteringbiology.com/> using the course ID MBSWINSTROM9171169**

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 do not excuse late homework.

iClickers: You will be provided with an iClicker to use in class. You must use the same iclicker at every class, failure to do so will result in loss of points. You will earn points by answering clicker questions during lecture. You will earn half of these points for participation and the other half for providing the correct answer. I also use this for attendance. **You cannot make-up clicker points if you are absent or pick up the wrong clicker.**

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 dropping the class, 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 100 question Scantron form for every lecture exam and the final (4 total).** Scantrons are not needed for lab exams. 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. It is the practice of the Biological Sciences Department to not return exams to students. Exams will be available for review in my office after they are graded until the end of the semester.

Cheating: I expect students to comply with universal guidelines of academic integrity. All parties 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. If you need to use the restroom during an exam you must leave your exam and cell phone with me. Details of the student code of conduct can be found here: <https://student-conduct.santarosa.edu/>

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 and refrain from texting in class. If you wish to use a laptop to take notes do not use the web or other programs in class as this is disruptive to others.

Emergency Evacuation Plan:

In the event of an emergency during class that requires evacuation of the building, please leave the class immediately, but calmly. 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.

How to be successful in this class: As a reminder: for college courses you are expected to complete ~ 3 hours per week outside of class for every 1 hour spent in class. For Bio 10, that is **approximately 9 – 12 hours of study time every week**. Depending on your preparation this may or may not be enough to earn the grade you want, but it's a great place to start. Study groups are very helpful.

Before Class:

- *Actively* read the text assignment; *answer questions as you read*
- Complete the DSMs online, do the practice activities.

During Class:

- Come to every class, participate and ask questions

After Class:

- Rewrite lecture notes or fill in gaps in Cornell notes and make sure you understand every word. If not, review text, see tutor, and/or ask questions during the next lecture.
- Complete the online practice activities available on Mastering Biology. There is a general “study area” that you can explore on your own, there are also specific optional practice activities that I have chosen that will show up in your assignments. These are **very** helpful.
- Answer the questions posed in the learning goals posted on Canvas each week, don't wait until right before the test!
- Learn new vocabulary by writing and speaking the words often. Biology is a new language, and you cannot expect to become fluent without practice! Flashcards can help to learn vocabulary definitions, but **not** to truly understand concepts.
- The ability to communicate clearly is essential to earning a good grade in this course. Your exams will include short answer/essay questions, with problem-solving questions requiring you to apply information to new situations. You should be prepared to **explain** material presented in lecture as well as related terms and key concepts from your textbook.
- Research shows that you retain **much more** information if you teach it to somebody else. With that in mind, I strongly encourage you to form study groups early and schedule time to study collaboratively on a regular basis. Try explaining concepts to each other without using notes.
- **Practice writing** as the core of your study. See your study guide and textbook for topics (for example, find the end-of-chapter “Concept Review” and “Self-Quiz” questions that apply to what we've covered in lecture), and also work with your classmates. Pretend your study guide is an exam and take it as a test without referring to your notes.

For lab:

- Read the text and lab manual before coming to every lab and fill in some of the answers.
- After lab, Make/review flashcards of all terms and lists.
- Try to explain each lab exercise out loud to someone else (or yourself) to be sure you understand it. Until you can explain it out loud clearly to someone else, you don't really understand it.

Tentative Lecture Schedule

Week	Dates	Reading Assignment	Lecture topics	Homework Due Friday
1	1/14, 1/16	Chapter 1	Welcome and introduction to biology and the process of science	
2	1/21 , 1/23	Chapters 2	Tuesday: no classes Thursday: Chemistry	
3	1/28, 1/30	Chapters 3, 4	Chemistry and Cells	DSM CH 2 & 3
4	2/4, 2/6	Chapter 4; 5 and page 306	Cells and Energy	DSM CH 4
5	2/11, 2/13		Tuesday: Lecture Exam 1 Thursday: No classes	
6	2/18, 2/20	Chapter 6	Cell Respiration	DSM CH 5
7	2/25, 2/27	Chapters 7 & 8	Photosynthesis Mitosis	DSM CH 6, 7
8	3/3, 3/5	Chapters 8 & 10	Meiosis DNA and RNA	DSM CH 8
9	3/10, 3/12	Chapters 10	Transcription and Translation Viruses and vaccines	DSM CH 10
10	3/17, 3/19		Spring Break!	
11	3/24, 3/26	Chapters 11, 12	Tuesday: Gene regulation, cancer Thursday: Lecture Exam 2	DSM CH 11
12	3/31, 4/2	Chapter 9	Inheritance	
13	4/7, 4/9	Chapters 9, 14	Inheritance and Evolution	DSM CH 9
14	4/14, 4/16	Chapters 13	Evolution	DSM CH 13
15	4/21, 4/23	Chapters 19, 20 and 18 (climate change section)	Ecology	DSM CH 19
16	4/28, 4/30		Tuesday: Lecture Exam 3 Thursday: Ecology	DSM CH 20
17	5/5, 5/7	Chapters 28, 29, 21, 22	Plant structure and evolution; Comparative animal anatomy and physiology	DSM CH 29
18	5/12, 5/14	Chapter 23	Comparative animal anatomy and physiology	DSM CH 23
19	5/21		Thursday: Final Exam 7-9:45 AM	

Tentative Lab Schedule

Week	Dates	Lab Manual Reading Assignment	Text Reading Assignment	Due in lab
1	1/14, 1/16	Biological Concepts	Chapter 1	
2	1/21 , 1/23	No labs this week, extra office hours available on Thursday		
3	1/28, 1/30	Water	Chapter 2 and osmosis section from chapter 5	
4	2/4, 2/6	Enzymes	Pages 80-82	
5	2/11, 2/13	No labs this week, extra office hours available on Tuesday		
6	2/18, 2/20	Lab Exam 1 (100 pts)		
7	2/25, 2/27	Microscopes and Cells	Chapter 4	
8	3/3, 3/5	Mitosis	Chapter 8	Microscope practical (10 pts)
9	3/10, 3/12	Meiosis	Chapter 8	
10	3/17, 3/19	Spring Break!		
11	3/24, 3/26	Lab Exam 2 (100 pts)		
12	3/31, 4/2	Genetics	Chapter 9	Genetics handout (10 pts)
13	4/7, 4/9	Evolution	Chapter 13	Evolution handout (10 pts)
14	4/14, 4/16	Protists and Pondwater	Protist section from Ch. 15	Pond water drawings
15	4/21, 4/23	Fungi	Fungi section from Ch. 16	
16	4/28, 4/30	Plants	Plant section of chapter 16, Chapter 28, & pp 628-631	
17	5/5, 5/7	Animals	Chapter 17	
18	5/12, 5/14	Lab Exam 3 (100 points)		
19	5/19, 5/21	No labs – finals week		