



## Biology 241: General Botany

**Instructor:** Caprice Disbrow

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**Office Hours:** TTh 3:30-4:30 or by appointment

**Lecture:** Tuesday Thursday 10:00am-11:30pm, 1840 Baker Hall

**Lab:** Tuesday Thursday 12:30 pm- 3:30pm, 1840 Baker Hall

**Course Description:** Covers the principles of ecology and the phylogeny of bacteria, protists, fungi, and plants with emphasis on development, morphology, and physiology of higher plants. Field trips taken.

**Text Book:** Campbell *Biology* 10<sup>th</sup> or 11<sup>th</sup> Edition, Reese et al. 2017, Pearson.

**Lab Manual:** Provided : Life Sciences Department, Santa Rosa JC, Spring 2019, Biology 2.3 Laboratory Manual

**Also Required:** Lab Notebook (plain white, dotted or graph paper) 50-100 pages, hardbound (not spiral)  
Scantron 882 and number 2 pencils for exams

### Assignments and Points (subject to change):

Assignment	Points	Total	Description
Lectures Exams	100 x4	400	Essay, short answer, fill-in, & multiple choice
Lab Exams	100 x2	200	Short answer
Scientific Report	75 x1	75	Typed, written report using the scientific method
Lab Summaries	20 x3+15	75	Botanist, Sci. Method, Transport, Photosynthesis, Hormones
Quizzes	10 x5	50	Pop quizzes in discussion, lecture, and lab
Lab Notebook	20 x2	40	Participation & assignments
Participation		60	Lecture and Lab
Comprehensive Final	100 x1	100	Short answer, fill-in, & multiple choice
<b>Total</b>		<b>1000</b>	

**Grading:** In general, grading will follow the traditional 90/80/70/60% breakdown.

**Exams:** There are four midterm exams and one comprehensive final exam. The midterm exams are not comprehensive. The lectures and reading will be covered on the exams. If you need to take the exam early please contact me as early as possible. You may take the exam late but you must contact me before the scheduled exam. If you miss the exam and do not contact me before the scheduled exam period you will receive zero points for the exam. I will keep possession of all exams, you may not make a copy of any part of your exams. Scantron 882 are used.

**Lecture:** Lecture reading assignments should be completed prior to the date of the lecture.

**Assignments:** Writing assignments will be submitted electronically at the beginning of lecture. There will be a 5% penalty for turning in reports or papers after lecture begins on the day it is due. Reports turned in after due date will receive a 10% penalty per day. You may not turn a paper in more than 3 days late.

**Quizzes:** There will be online quizzes, some due at the beginning or end of class and labs. There is no make-up for missed quizzes.

**Laboratory:** The laboratory portion of this course will meet twice per week. There will be two practical exams in the laboratory. Lab participation will be graded at the end of each lab session, therefore, to obtain points you must be present for the entire lab session. It is important that you come to lab on time since instructions for the lab are giving at the beginning of the lab period.

**Students in need of an academic adjustment in the college learning environment:**

Any student who feels s/he may need an academic adjustment based on the impact of a learning disability should contact Disability Resources, phone (707)527-4278. A Learning Disability Specialist will review your needs and determine appropriate accommodations.

All information and documentation is confidential. Please feel encouraged to make an appointment with me privately to discuss your specific learning needs in my class and to ensure I received your academic adjustment letter.

**Inclusivity:** Discrimination or harassment based on gender, gender identity, race, nationality, ethnicity, religion, sexual orientation, or disability is will not be tolerated in any form.

[Academic Integrity](#) and [Student Conduct](#) and [College Policies](#): Refer to the Catalog for a full explanation; the following is an excerpt from the catalog

It is expected that a student's academic work be of his/her own making, failure to abide by this standard of conduct is considered to be academic dishonesty. **Types of Academic Dishonesty include:** Copying from others on a quiz, examination, or assignment ("cheating"), allowing another student to copy one's work on a quiz, exam, or assignment, having others take any exam instead of taking the exam oneself, giving other students information that allows the student an undeserved advantage on an exam, such as telling a peer what to expect on a make-up exam or prepping a student for a test in another section of the same class

If a student cheats (for example: copies the answers from another student, has notes during the exam, has a cell phone during the exam, changes answers on a scantron after they have been graded, retaining or copying exam questions) they will receive a zero for the exam and your name will be forwarded to the Vice President of Student Services. A second act of academic dishonesty will result in a zero for the course.

Cell phones must be turned off and left in the front of the classroom during the exam. No notes will be brought to your desk while taking the exam. All phones, bags, packs, notes, jackets, and hats must be left at the front of the room. If you have any notes, books or cell phones with you while taking the exam you will receive a zero for the exam. You may not leave and re-enter the exam in progress.

Plagiarism is a form of cheating, if you copy information from the internet, books, friends, etc and use it as your own work in a report, you will receive zero points.

**Appropriate behavior in class:** For the consideration of your fellow classmates, please turn off your cell phones during class and exams. Please refrain from talking during class, if you have a question during class, please raise your hand and ask the instructor. Come to class on time.

**Attendance:** Attendance is an important part of learning biology; therefore attendance will be monitored and graded as participation.

**Dropping the Course:** It is the student's responsibility to fill out the appropriate forms to be dropped from the course. Do not assume that I will drop you from the course if you stop attending class. If you fail to drop the course and stop attending you will receive an F in the course

**Student Learning Outcomes:**

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

1. Compare and contrast the ecology and evolution of algal protists, cyanobacteria, plants, and fungi using cladistic classification.
2. Apply and integrate information from one or more levels of biological organization to study of cell mechanisms, anatomy, physiology, ecology, and evolution of plants, protists, or fungi.
3. Analyze global environmental problems with application of ecological principles to determine the impact of one on the other.
4. Investigate and evaluate biological phenomenon and summarize results in written scientific format.
5. Perform laboratory techniques, including microscopy, with a high level of expertise without assistance or instruction.

**Objectives:**

During the course, students will:

1. Outline the classification system for major groups within the bacteria, algal protists, fungi and plants, and be able to correctly identify and classify selected example organisms.
2. Examine endosymbiotic evidence linking cyanobacterial photosynthesis to protists and plants.
3. Differentiate between zygotic, sporic, and gametic meiosis life cycle patterns of protists, fungi and plants life cycles.
4. Identify major evolutionary structural and reproductive advances in plants.
5. Explain the phylogenetic relationships between major taxonomic groups and relate these links to evolutionary history using cladistic models.
6. Identify and explain the functions of the basic structures of organisms (emphasis on plants) and describe the complementary relationships between these structures and their functions.
7. Describe the physiological functions of plants in relationship to the natural habitats in which plants have evolved.
8. Explain the processes of life histories and development in plants from the embryo to the mature adult, including the influences of hormones and environmental factors.
9. Explain the principles of ecology, emphasizing populations, communities, and ecosystems.
10. Describe the consequences of human impacts of the global and local environment with an emphasis on conservation biology.

**Emergency Information:** In case of an emergency where you would usually call 911, at Santa Rosa JC you must instead dial **527-1000 (from a cell phone) or 1000 (from a campus phone)** for an immediate police response. In the event of an emergency during class that requires evacuation of the building, please leave the class immediately, but calmly to make sure everyone got out of the building safely. During lecture, gather in Beck Parking Lot. During lab, gather on the lawn between Baker and Bech. Wait to receive further instructions. 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.