Biology 203: General Botany (5.0 Units)

Instructor: Dr. Gillian Schultz **Email:** gschultz@sccd.ctc.edu
Office: SAM 117 **Office Hours**:

Class Meetings:

Section	Class Hours	Days	Room
Lecture	11:20-2:20	M W	SAM 202
Lab/Disc	11:20-2:05	T, Th	SAM 305

Required Text: Biology. 7th edition. N. A. Campbell, and J.B. Reece.
Biology 203 Lab Packet Grace Sparks. Available in the Copy Center.
Biology 203 Lecture Outlines Gillian Schultz. Available in the Copy Center

Course content: This course covers the fundamental principles of botany, evolution and ecology. We will be exploring the conditions necessary for life on this planet, and those factors responsible for the evolutionary process in relation to geological time. We will explore the fundamental structures of plants, and how they develop, the processes by which plants take up and distribute nutrients and their role in growth and development. Next, we will study the vital process of reproduction, and how plants respond to internal and external stimuli. We will then examine the diversity of organisms traditionally classified in the Kingdom Plantae: Fungi, Algae, Bryophytes, Conifers and finally the flowering plants. Finally, we will explore ecology and survey the biomes, which are most often defined by the plant life which comprises them.

Summer Calender/Administrative Dates:

June 25	Classes start
July 4	HOLIDAY – No class
July 6	Last day to withdraw without a "W" on your transcript
August 4	Last day to change credit status and/or withdraw (with a "W" on the transcript)
August 16	Final exam

Academic Conduct: Cheating, plagiarism and other forms of academic misconduct will not be tolerated. If you are caught cheating, you will be subject to the maximum form of academic discipline including but not limited to a failing grade on the assignment/quiz/exam or for the course.

Class conduct: The use of cell phones, pagers or other electronic personal communication devices is not permitted during either lecture or laboratory time. Please place all electronic devices on "vibrate." You will be allowed one infraction. For every incident after that, you will lose 10 points in the course.
-No visitors are allowed in the classroom without the approval of the instructor.
-The use of tape recorders during lecture is permitted as long as the owner is present.

While I encourage the active participation of the students in lecture, please do not have personal conversations during this time. If this becomes a persistent problem, I will ask you to leave the first time. The second time, you will be subject to disciplinary behavior.

Attendance:
While there is no grade for attendance to lecture, attendance is strongly recommended. You are responsible for all of the material covered in lectures and quiz questions will be taken mostly from lecture material. It is strongly recommended that you have a class buddy who can give you notes. In addition, quizzes will be held at the beginning of lectures and will begin promptly at the start of class. Therefore it is in your interest to be ON TIME. As the lowest exam and quiz scores are dropped, there will be NO MAKE-UP quizzes

Points and Grading: Grades will be based upon total points earned on assignments, labs and quizzes.

Point Breakdown	**Total**
Quizzes 4 (100 pts each)*	300
Prelectures 17@ 5 pts each	85
Homework assignments	~100
Laboratory exercises- 6 @ 10 points each	60
Field Trip (2) @ 20 pts each	40
TOTAL	585

* indicates that the lowest grade will be dropped.

Grades will be calculated according the the percentage of total points possible that you have earned according to the following scale:

Percentage	**Grade**	**Percentage**	**Grade**	**Percentage**	**Grade**
95-100	4.0	84	2.9	73	1.8
94	3.9	83	2.8	72	1.7
93	3.8	82	2.7	71	1.6
92	3.7	81	2.6	70	1.5
91	3.6	80	2.5	69	1.4
90	3.5	79	2.4	68	1.3
89	3.4	78	2.3	67	1.2
88	3.3	77	2.2	66	1.1
87	3.2	76	2.1	65	1.0
86	3.1	75	2.0	63-64	0.9
85	3.0	74	1.9	61-62	0.8
				59-60	0.7

Students who withdraw from classes during the third and fourth weeks of the quarter will receive W grades. The W grade is not used in the calculation of GPA. Z grades are assigned only under very specific circumstances and must be discussed with me in advance. You should do this before your option for withdrawing has expired.

COURSEWORK:

Quizzes: There will be a total of 4 lecture quizzes, each worth 100 points. Your lowest exam score will be dropped. ***THERE WILL BE NO MAKE-UP QUIZZES***. If you should miss an exam, then that will be your lowest score. If you miss two exams, then you should consider dropping the course. Quizzes will be based upon lecture material. Exams will be mostly multiple-choice but will also include some written questions (definitions) and diagrams. You will need to bring a scantron (882-E) for each exam.

Studying for Exams: This course will present large amounts of material in each lecture/chapter. To master this material, you should plan on studying daily (or at least 5-6 days/week). Cramming the night before a test will not be a successful strategy for this course. If you need help with study techniques or in planning your study time, please see me in my office hours or by appointment. At the end of each chapter there is a series of study questions. Taking the time to answer and understand these questions would be an excellent way to prepare for the quizzes.

Pre Lecture Worksheets: To encourage you to keep up with the reading and to be prepared prior to class, you will have pre lecture worksheets. These will be graded on a pass/fail basis (depending upon completeness). Keys will be posted in my office window after the lecture and it will be your responsibility to check your answers. You should be able to answer all of the questions by reading your textbook..

Laboratory: Active participation in laboratories is required. You should plan on spending the entire course period in the classroom. If you complete the labs prior to the end of the class period, you can work on reviewing lecture notes, studying and discussing questions or problems with me or your classmates. You are expected to bring your lab manual to every laboratory meeting. Labs will be due one week after

their in-class completion. Answers should be written in clear, complete sentences. **Late labs will not be accepted.**

Grade disputes: if you think you deserve more points on your paper or test, you must state so in writing (mistakes in arithmetic excepted). Type your reasons on a piece of paper and include a passage from the textbook for justification (class notes and class tape recordings not acceptable justification). You must include the original graded assignment with your petition. Only individual disputes will be acknowledged. Arguments made by one student on behalf of another will not be considered. IN ANY DISPUTE, OUR TEXTBOOK WILL BE USED AS FINAL AUTHORITY. Grade disputes must be presented within one week of receiving the graded assignment from me.

After each quiz is returned, there will be a "cooling off" period. With the exception of arithmetic issues, you must save all disputes and/or discussions of the quiz until the next class period.

Course withdrawal:
If you decide to drop this course for any reason, you must officially withdraw with the registrar or you will receive a failing grade in the course. I do not give V (instructor's withdrawal) grades or Incompletes unless there have been extreme circumstances such as a family death or prolonged illness.

TO SUCCEED IN THIS CLASS, YOU WILL NEED TO DO THE FOLLOWING:
1) Attend lectures and labs
2) Take good notes.
3) Skim the reading prior to each lecture and REREAD it after lecture, focussing on what was emphasized in class.
4) Make a vocabulary list for each lecture
5) Form study groups with other students
6) Seek help from me or go to the tutoring center.

Week	*Date*	*Lecture Topics*	*Lab Exercises*	*Readings*
1	**M** 6/25	Course introduction Evolution by natural selection: history and evidence		Ch 22:Descent With Modification Interview:436-437
	Tu 6/26		Antibiotic Resistance Part I #1 Evolution in Paper Dot Populations	Ch 18:346-351
	W 6/27	Variation, Mendelian genetics, and population genetics Microevolution: real populations violate Hardy-Weinberg equilibrium		Ch 23: Evolution of Populations
	Th 6/28		Types of selection; Speciation Antibiotic Resistance Part II	Ch 24:Origins of Species
2	**M** 7/2	Macroevolution: the tree of life		Ch 25:Phylogeny and Systematics Ch 26:Tree of Life
	Tu 7/3		Antibiotic Resistance Part III Using phylogenetic trees Prokaryote diversity	Ch 27:534-547 Bacteria and Archaea
	W 7/4	HOLIDAY	HOLIDAY	
	Th 7/5		EXAM 1 **Protista**	Ch 28:Protista
3	**M** 7/9	Fungi Movie: The Rotten World About Us		Ch 31: Fungi
	Tu 7/10		#2 The Miscellaneous Eukaryotes: Diversity of Protists	Ch 31
	W 7/11	Introduction to plants: distinguishing features and overview of diversity Cell structure and tissues		**Ch 29:573-579** **Ch 35:717-721**
	Th 7/12	Plants (continued)	#3 Fun with Fungi: bring in at least one specimen of your own	*Review: Fig 6.9, 6.18, 6.28, 7.13*; Ch 36:738-744
4	**M** 7/13	How plants grow: primary and secondary growth		Ch 35:721-734 Interview:710-711
	Tu 7/14		#4 Plant Cell Structure and Water Relations	Ch 35: 712-716
	W 7/15	Plant hormones and responses to environmental factors		Ch 39:788-815
	Th 7/16	**Exam 2 (100 points) TAKE HOME**		

	Date	*Lecture Topics*	*Lab Exercises*	*Readings*
5	**M** 7/23	Soils and plants Plant transport systems		Ch 37:756-768 Ch 36:738-753
	Tu 7/24		# 5 Plant Organs: stems, roots, leaves	Ch 35:712-716
	W 7/25	Plant transport systems (cont.)		*Ch 36:738-753*
	Th 7/26	Plant life cycles & reproduction	*Sexual Encounters of the Floral Kind*	*Ch 38:771-782; Ch 29:580-588; Ch 30:591-606*
6	**M** 7/30	Plant life cycles & reproduction (cont.)		*Ch 38:771-782; Ch 29:580-588; Ch 30:591-606*
	Tu 7/31		#6 Beyond the Birds and the Bees: Plant Reproduction	
	W 8/1	Introduction to Ecology		Ch 50:1080-1086 Interview:1078-1079
	Th 8/2		**Exam 3** (100 pts)	
7	**M** 8/6	Population growth and regulation Community ecology: direct species interactions		Ch 52:1136-1156 Ch 53:1159-1165, 1168-1170
	Tu 8/7		#7 Field Trip!!! UW Botany Greenhouse	Ch 38:771-782; Ch 29:580-588; Ch 30:591-606
	W 8/8	Community ecology: disturbance and succession		Ch 53:1159-1180
	Th 8/9	Abiotic components of ecosystems		Ch 50:1086-1104 Ch 54:1184-1191
8	**M** 8/13	Energy flow in ecosystems		Ch 53:1166-1167 Ch 54:1191-1206
	Tu 8/14		#8 Another Field Trip!!! Soils, Plants, and People (Interlaken Park	--
	W 8/15	Biodiversity, conservation biology		Ch 55:1209-1229
	Th 8/16	**Exam 4** (100 pts)		