SUL ROSS STATE UNIVERSITY - GENERAL BOTANY 1401 - FALL SEMESTER 2009

Professor: Jim Zech
Office: 218 Warnock Science Building
Phone: 837-8114
e-mail: jzech@sulross.edu
Office Hours: By appointment *or* T: 11:00 - 11:50 A.M.; 1:00 - 1:50 P.M.; MWF: 9:00 - 10:50 A.M.

Time and Place: Lecture: MWF: 11:00 - 11:50 A.M.; 201 WSB

Text: Biology of Plants, 7th Ed.; Raven, Evert, and Eichhorn
Discover the Chihuahuan Desert: General Botany. A Laboratory Manual for Biology 1401, 2nd Ed.; James C. Zech and A. Michael Powell

Tentative Class Schedule and Reading Assignments:

WEEK	DATE	LECTURE TOPICS	CHAPTERS	PAGES
1	8/19	Introduction	1	1-13
	8/21	Subdisciplines	1	9-10
2	8/24	Building Blocks	2	15-27
	8/26	Cells	3	35-58
	8/28	Cells	3	35-58
3	8/31	Cells	3	35-58
	9/2	Cells	3	35-58
	9/4	Cell Cycle: Mitosis	3	58-67
4	9/7	**LABOR DAY**		---
	9/9	DNA: Structure	9	163-169; 177
	9/11	DNA: Replication	9	163-169; 177
5	9/14	Protein Synthesis	9	167-174
	9/16	Protein Synthesis	9	167-174
	9/18	**FIRST EXAM**		---
6	9/21	Primary Growth: Tissues	23; 25	510-527; 547-551
	9/23	Primary Growth: Tissues	23; 25	510-527; 547-551
	9/25	Primary Growth: Roots	24	528-538
7	9/28	Primary Growth: Stems	25	551-558; 570-571
	9/30	Primary Growth: Leaves	25	559-567
	10/2	Secondary Growth: Stems	26	580-597
8	10/5	Photosynthesis	7	115-128
	10/7	Aerobic Respiration	6	102-114
	10/9	Transport: Diffusion	4	71-81
9	10/12	Translocation	30	676; 680-685
	10/14	Taxonomy	12	219-235
	10/16	**SECOND EXAM**		---
10	10/19	Alternation of Generations	12	235-237
	10/21	Alt. of Gen.: Details	17	376
	10/23	Meiosis	8	141-148
11	10/26	Homosporous/Heterosporous	17	376
	10/28	Nonvasc. Plts.: Bryophytes	16	345-367
	10/30	Bryophytes: Moss Life Cycle	16	345-367
12	11/2	Seedless Vascular Plants	17; 25	368-407; 558-559
	11/4	Fern Allies: Life Cycle	17	368-407
W	11/6	Fern Allies: Life Cycle	17	368-407
13	11/9	Ferns: life Cycle	17	368-407
	11/11	Vasc. Seed Plts: Gymnosperms	18	408-433
	11/13	**THIRD EXAM**		---
14	11/16	Gymnosperms: Pine Life Cycle	18	408-433
	11/18	Vasc. Seed Plts: Angiosperms	19	434-451
	11/20	Angiosperms: Flowers	19	434-451
15	11/23	**THANKSGIVING - NO CLASSES**		---
	11/25	**THANKSGIVING - NO CLASSES**		---
	11/27	**THANKSGIVING - NO CLASSES**		---
16	11/30	Angiosperms: M & EuD	19	436; 448-449
	12/2	Angiosperms: Life Cycle	19	448-449
	12/4	Angiosperms: Life Cycle	19	448-449
17	12/9	**FINAL EXAM (10:15 A.M. - 12:15 P.M.)**		

EuD = EuDicot; M = Monocot; Vasc = Vascular; Plts = Plants

POINT DISTRIBUTION:

Examinations:	
First, Second, Third Exams @ 100 =	300
Final (Selectively Comprehensive)	150
Quizzes: 4 quizzes at 10 points each	40
TOTAL POINTS LECTURE:	490
TOTAL POINTS LAB:	350 (including lab report @ 50 points)
TOTAL POINTS CLASS:	**840**

GRADING:

Your final grade in General Botany will be determined by the total points you receive divided by the total points possible and the scale listed below. There will be no deviation from this scale. I will also be determining a subjective grade. This will be determined by my evaluation of your attendance, participation, and attitude. The subjective grade will influence your final grade in the course, especially in borderline cases.

Grading Scale (percent of total points): A: 90-100: B: 80-89; C: 70-79; D: 60-69; F: 59 and lower

RULES TO LIVE BY:

This lecture has been scheduled for 50 minutes. You should plan to be here for the **ENTIRE** time block. I will start at the hour, plan to be on time. The back row is **CLOSED**, please sit towards the front. Bring your texts to class and read any applying material before coming to class. Keep the classroom clean. No smoking, eating, **CHEATING** (University Policy)**,** headphones, ***NO CELL PHONES***, **SLEEPING, FEET ON FURNITURE**, etc. Number one source.

ABSENCES:

MY BEST ADVICE IS DON'T BE. Regular attendance is expected and required to pass the course. If you must miss class see me **BEFORE** class or inform me **BEFORE** class so other arrangements can be made. I will not give make-up quizzes or exams unless I am contacted **BEFORE** the absence and/or presented with a written valid medical excuse or documentation of other valid reasons such as sickness or death in the family. Quizzes and exams must be made up within **1 week** of their originally scheduled date.

FINDING THE BALANCE; CHOICES; BE RESPONSIBLE FOR YOUR ACTIONS OR LACK OF ACTIONS

OBJECTIVES OF THIS COURSE (INCLUDING LAB):

- Understand the role of key figures and events in the history of biological science.
- Understand terminology relevant to biological laboratory and field work.
- Explore the applications of scientific skills and knowledge to daily living.
- Understand the safe and proper use of laboratory and field equipment and supplies.
- Understand the principles of experimental laboratory research and proper reporting techniques.
- Understand principles of classification.
- Recognize major cell structures and their function.
- Analyze cell division and reproduction.
- Understand respiration and photosynthesis.
- Understand the role of DNA and RNA in the process of protein synthesis.
- Understand genes, and chromosomes.
- Analyze characteristics of fungi, algae, mosses, and ferns.
- Analyze characteristics of gymnosperms and angiosperms.
- Analyze characteristics of roots, stems, and leaves.
- Understand mechanisms of plant reproduction.
- Understand the effects humans have on the environment.

DISABILITIES INFORMATION:

Qualified students with disabilities needing academic or other accommodations to ensure full participation in the programs, services and activities at SRSU should contact the Disability Services Coordinator, in University Center 211, Box C-171, Alpine, TX 79832 (432-837-8178).