

**SUL ROSS STATE UNIVERSITY - PLANT TAXONOMY - BIO 3602 & 5607- SUMMER I - 2014**

**Professor:** Jim Zech  
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**Office Hours:** By appointment or any day after class, during break, etc.

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**Time and Place:** Lecture/Lab: MTWTHF: 8:00 - 12:30 P.M.; 206 WSB

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**Rec. Text:** Vascular Plant Families, James Payne Smith, Jr. (If you can find it!!)

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**Tentative Class Topics/Schedule:**

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<b>WEEK</b>	<b>LECTURE/LAB TOPIC</b>
<b>One:</b>	
. 3 June:	Introduction
. 4 June:	Terms
. 5 June:	History
. 6 June:	History
<b>Two:</b>	
. 9 June:	<i>Terms/History Exam</i>
. 10 June:	Fern Allies
. 11 June:	Ferns
. 12 June:	Field Trip: CDRI and <i>Fern and Allies Exam</i>
. 13 June:	Gymnosperms
<b>Three</b>	
. 16 June:	Gymnosperms
. 17 June:	Angiosperm Morphology
. 18 June:	Angiosperm Reproduction
. 19 June:	TBA: Angiosperm Monocots or Field Trip DMP (Long Day)
. 20 June:	TBA: Angiosperm Monocots or Field Trip DMP (Long Day)
<b>Four</b>	
. 23 June:	<i>Gymnosperm Exam</i>
. 24 June:	Angiosperm Monocots
. 25 June:	Angiosperm Eudicots
. 26 June:	Angiosperm Eudicots
. 27 June:	<i>Angiosperm Monocot Exam</i>
<b>Five</b>	
. 30 June:	Angiosperm Eudicots
. 1 July:	Angiosperm Eudicots
. 2 July:	Angiosperm Eudicots
. 3 July:	Field Trip: BIBE (Long Day)
. 4 July:	Independence Day, No Class
<b>Six</b>	
. 7 July:	Study Walks for Final; <b>ALL ASSIGNMENTS ARE DUE!</b>
. 8 July:	<i>Final Exam, 8:00 a.m.</i>

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## POINT DISTRIBUTION:

### Examinations:

Terms/History:	50
Ferns and Allies:	50
Gymnosperms:	50
Angiosperm Monocot:	50
Grocery Store (Final):	50
Angiosperm Eudicots (Final):	100
Family Expert	50
Key Construction:	50 (100 for grad credit)
Collection (grad credit)	300
Research Paper (grad credit)	100
<b>TOTAL POINTS:</b>	<b>450 (900 for grad credit)</b>

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## GRADING:

Your final grade in Plant Taxonomy 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

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## RULES TO LIVE BY:

This class has been scheduled for 4.5 hours. You should plan to be here for the **ENTIRE** time block. I will start at 8:00 A.M., plan to be on time. Keep the classroom clean. Always handle microscopes, prepared slides, and demonstration material with care. No tobacco, drinking, eating, **CHEATING** (Exams are to be completed individually - No group effort; University Policy), **SLEEPING**, toes, head phones, cell phones, feet on furniture, etc. Family Expert is to be presented with power point. We will be reading several papers and discussing them during class. **PLEASE** read **ALL** papers assigned and be ready to contribute to the discussion.

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## 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 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. Exams must be made up within **1 week** of their originally scheduled date.

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## **ASSIGNMENTS:**

**FAMILY EXPERT:** Prepare a 10 minute power point presentation on a randomly chosen plant family. Include aspects like: distribution; size; economic importance; Texas species; Trans-Pecos species; unique morphology; unique reproductive structure; etc. **DUE:** Within appropriate week (see schedule).

**KEY CONSTRUCTION:** Construct a taxonomic key (must be *TYPED*), following the rules, for 20 species we cover this session (for Graduate credit include 40 species). Points will be awarded for the structure of the key and if each species can be identified. **DUE: 7 July, 2014, by noon.**

**QUESTION OF THE DAY:** Turn in a *TYPED* list of the questions of the day *and* answers for bonus points (one per question/answer). **DUE: 7 July, 2014, by noon.**

**GRAD CREDIT:** See assignment sheets for collection and research paper (**DUE: 7 July, 2014, by noon.**); see key construction; Powerpoint perfection; discussion leaders; additional exam questions for same total points.

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

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### **OBJECTIVE OF THE COURSE:**

To gain a better understanding of plant taxonomy, and be able to identify ferns, fern allies, gymnosperms, and angiosperms of the area, with a concentration on family characteristics.

### **PROGRAM LEARNING OUTCOMES (undergrad):**

- Demonstrate a mastery of aerobic respiration and its significance for living organisms.
- Be able to identify evolution and the processes that influence it.
- Be able to identify the components of cell structure and their functions.
- Compare the fundamental concepts of Mendelian genetics.
- Compare and contrast the process of photosynthesis to other cellular processes.
- Be able to identify the processes of molecular biology.

### **PROGRAM LEARNING OUTCOMES (grad):**

- Demonstrate competence in the area of evolution through natural selection.
- Demonstrate successful application of the scientific method in the investigation of a biological topic or issue.
- Demonstrate competence in the application of taxonomy.
- Identify the significant events and people in the development of the biological sciences.

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### **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 Counseling and Accessibility Services, 112 Ferguson Hall, Box C-122, 432-837-8203.