

College Document # _____
UCC Document # _____
Date Received _____

CATALOG YEAR 2006-2007
(Please use separate form for each add/change)

COLLEGE/SCHOOL : _____ College of Arts & Sciences _____

Current Catalog Page(s) Affected _____ pg. 260 _____

Course: Add: X Delete: _____
(check all that apply) Change: Number _____ Title _____ SCH _____
Description _____ Prerequisite _____

If new, provide Course Prefix, Number, Title, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current catalog, copy and paste the text from the and indicate changes in red.

BIOL 4440 Plant Systematics. Four semester hours.

An introduction to plant systematics with an emphasis on flowering plants. Topics will include principles of classification, rules of nomenclature, plant identification and the use of keys, the evolutionary relationships among plant groups, species concepts, and experimental approaches to systematics. Prerequisite: BIOL 1411 or permission of the instructor. Laboratory fee: \$30.00. (Cross-listed with BIOL 5440)

Justification: Addition of upper-level undergraduate biology elective.

Program: Add: _____ Change: _____ Attach new/changed Program of Study description and 4-year plan. If in current catalog, copy and paste the text from the and indicate changes in red.

Minor: Add: _____ Delete: _____ Change: _____ Attach new/changed minor. If in current catalog, copy and paste the text from the and indicate changes in red.

Faculty: Add: _____ Delete: _____ Change: _____ Attach new/changed faculty entry. If in current catalog, copy and paste the text from the and indicate changes in red.

College Introductory Pages: Add information: _____ Change information: _____ Attach new/changed information. If in current catalog, copy and paste the text from the and

indicate changes in red.

Approvals:

Signature

Date

Chair
Department Curriculum Committee

Chair
Department

Chair
College Curriculum Committee

Dean

Biology 4440 – Plant Systematics

Texas A&M International University - Department of Biology and Chemistry

Professor: Dr. Joshua Stevenson

Office: Lbvsc 385D

Section:

Office Hours:

Time:

Email: jstevenson@tamiu.edu

Room:

Course Description and Objectives

An introduction to plant systematics with an emphasis on flowering plants. Topics will include principles of classification, rules of nomenclature, plant identification and the use of keys, the evolutionary relationships among plant groups, species concepts, and experimental approaches to systematics. A collection of 15 properly identified plants is required. Prerequisite: BIOL 1411 or permission of the instructor.

Student Outcomes

- Ability to define the models and principles of biological systematics
- Ability to describe the phylogeny of modern plant groups
- Ability to identify features of plant families commonly found in south Texas

Text(s) and/ or Reading(s)

Judd, W. S., C. S Campbell, E. A. Kellogg, P. F. Stevens, and M. J. Donoghue. 2002. *Plant Systematics: A Phylogenetic Approach*. Sinauer Associates Inc., Sunderland, MA.

Course Topics

1. The science of plant systematics
2. Methods and principles of biological systematics
3. Classification and system in flowering plants
4. Taxonomic evidence: structural and biochemical characters
5. Molecular systematics
6. Evolution of plant diversity
7. Overview of green plant phylogeny
8. Lycophytes, ferns and allies, and extant gymnosperms
9. Phylogenetic relationships of angiosperms

XX is the last day to drop a course or withdraw from the University.

Evaluation

Weekly quizzes (drop lowest quiz)	25%	Grade Scale:	A – Excellent	90-100 %
Test #1	25%		B – Good	80-89 %
Test #2	25%		C – Average	70-79 %
<u>Final exam</u>	<u>25%</u>		D – Passing	60-69%
Lecture value:	100%		F – Failure	below 60%

Course total = 70% lecture value + 30% lab value = 100%

Your lecture grade will reflect the value of both the lecture and lab combined. You will receive only one grade for both of these components. You will not receive a separate lab grade. You must pass both the lecture and the lab independently to receive a passing grade in this course.

Final value will be rounded to the nearest full percentage (e.g. 69.49% = D, 69.50% = C)

Weekly Quizzes: Take place at the beginning of Friday classes and will be based on material from the previous week's lectures. Students not present when the quiz is handed out will not get a quiz and receive a score of 0 for that quiz. When calculating course grade, the lowest quiz score will be dropped.

Tests: The vast majority of test questions will be derived from lecture content, however, a few questions may also be taken from material in assigned textbook chapters that may not have been discussed in lecture. * Scantron forms required for each exam *

Final Exam: The final exam is comprehensive, but will emphasize material covered since the third exam and will be given only at the date and time stipulated in the university final exam schedule.

WebCT: Lectures online - http://www.tamtu.edu/webct/WebCT_Login_Page.shtml

There will be no make-up tests. Please see the attendance rules in the student handbook regarding valid excuses. Regardless of the excuse, appropriate documentation is required to substantiate the date and time in question.

There will be no extra credit assignments.

This syllabus is subject to change.