

**Evolution of Land Plants BIOL 3133 Syllabus**  
**SPRING 2013 MW: 2 - 2.50pm**

**INSTRUCTOR: Dr. Suneeti Jog**

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Office Hours: M and W 9am -10am, 11am -12 noon, 1pm - 2pm and 3pm - 4pm

**COURSE TITLE AND NUMBER:** Evolution of Land Plants, Biology 3133

**CLASS DAYS & TIME:**

**Lecture – Monday and Wednesday 2:00-2:50**

**LAB: Tuesday 10-11.50**

**PREREQUISITES:** Cell Biology, Biology 3124

**CATALOG DESCRIPTION OF COURSE:** 3 Hours. Evolutionary history of land plants illustrated with vegetative and reproductive morphology, beginning with a description of major algal divisions. Includes some extinct plants but emphasizes extant forms. Lecture, lab and field.

**COURSE PURPOSE:** This course fulfills the evolution requirement for the organismic degree plan. This course can be used as elective hours for the Organismic Biology major and as additional botany hours in the Fish/Wildlife major.

**STUDENT LEARNING OUTCOMES:** The overall goals of this course are the student's development of an appreciation of the morphology and evolution and the diversity of form and structure of the major groups of land plants. Each student will learn:

1. to distinguish between major groups of land plants
2. the evolutionary relationships and trends within land plants
3. to comprehend the descriptive terminology associated with plants
4. to appreciate the array of diversity and function within various plant organs and structures
5. to communicate with botanists using specialized vocabulary pertaining to vascular plant morphology

**INSTRUCTIONAL MATERIALS: (Required Textbook)**

Lecture: Morphology and Evolution of Vascular Plants, Third Edn. Gifford and Foster

Lab Manual: None. Handouts will be provided in lab and will be posted on Blackboard.

Biology 3133 will utilize the Blackboard system. Make sure that you set your email address in the Blackboard system so that you will receive class announcements.

**INSTRUCTIONAL PROCEDURES:** The sequence of topics will closely follow the syllabus; readings from the textbook should be completed BEFORE the lecture period. You must to class prepared and participate in order to be successful.

**STUDENT PERFORMANCE ACTIVITIES:** (*Attendance/Punctuality*) Regular attendance is expected. There are no make-up exams except for University excused absences. If you are a member of an athletic team you must supply a copy of your team's schedule to the instructor. In class quizzes and assignments may not be made up except for University excused absences. No cell phone use in class (including texting and just checking your messages).

**ASSIGNMENT DUE DATES:** Exam and assignment dates are listed in the course outline.

**STUDENT EVALUATION:**

Grades will be assigned based on the total score from all examinations. Each mid-term examination will be worth 100 points and the final examination will be for 200 points. The maximum possible score will be 400. None of the exams will be cumulative except for the final exam which will include all chapters considered in class. You will be required to learn all terminology, Latin names of plants, and morphological and anatomical characteristics. Extra credit will not be given to anyone.

Letter grades will be assigned as follows: Above 90% = A, 80-89% = B, 70-79% = C, 60-69% = D, Below 60% = F

Lecture Exams	300 points
Final Exam	200 points
Lab Exams	200 points
Lab Quizzes	100 points
<b>TOTAL</b>	<b>800 points</b>

**LECTURE SCHEDULE:** Classroom time or lectures are used to help facilitate a student's learning by directing the student's attention to the most important ideas and concepts. This does not exclude the importance of other material in the text not brought up in lecture. The syllabus is tentative and we will follow it as closely as possible. The required textbook will serve as a guideline and material from those chapters mentioned should be studied. Material provided in the textbook will be supplemented with lecture notes and handouts. Students should take notes in class as exams will be based on lecture material as well as the textbook. **It is imperative that students read the text material prior to lectures.**

Jan 9 - Introduction, origin of land plants. Chp. 1

Jan 14 -16 Salient features of vascular plants, Alternation of generations. Chp.2

Jan 21 **Martin Luther King Holiday**

Jan 23 - Vegetative Sporophyte Chp. 3

Jan 28, 30 – Sporangia Chp. 4, Gametangia Chp. 5

Feb 4- Embryogeny Chp. 6

Feb 6 **FIRST HOURLY EXAMINATION**

Feb 11, 13 – Early Vascular Plants Chp. 7

Feb 18, 20 - Psilophyta Chp. 8

Feb 25, 27 - Lycophta Chp. 9

Mar 4, 6 – Sphenophyta Chp. 10, Filicophyta Chp. 11.

Mar 11 **SECOND HOURLY EXAMINATION**

Mar13 - Filicophyta (cont.) Chp.12-13.

Mar 18, 20 **SPRING BREAK – NO CLASSES**

Mar 25, 27 - Gymnosperm Morphology and Progymnospermophyta Chp.14.

April 1, 3 - Seed Ferns, Cycadeoids, Cycads Chp.15

April 8, 10 – Ginkgophyta Chp. 16

April 15 **THIRD HOURLY EXAMINATION**

April 17 Coniferophyta Chp. 17

April 22, 24 Gnetophyta Chp.18

April 29, May 1- Magnoliophyta - Angiosperm Morphology, Evolution, and Reproduction. Chp.19, 20

May 10 **FINAL CUMULATIVE EXAMINATION**

**ACADEMIC MISCONDUCT:** Academic misconduct includes cheating (using unauthorized materials, information, or study aids in any academic exercise), plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any and all other actions that may improperly affect the evaluation of a student's academic performance or achievement, or assisting others in any such act or attempts to engage in such acts. Academic misconduct in any form is inimical to the purposes and functions of the University and therefore is unacceptable and prohibited.

Any faculty member, administrator or staff member may identify an act of academic misconduct and should report that act to the department head/college dean, Vice President for Academic Affairs or administrative supervisor.

Students violating the standards of academic honesty are subject to disciplinary action including reduction of a grade(s) in a specific course, assignment, paper, or project; a formal or informal reprimand at the professorial, dean, or academic vice president level; expulsion from the class in which the violation occurred; expulsion from a program; or expulsion from the university.

**ADA COMPLIANCE:**

If any member of the class feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with you and the University's Office of Student Affairs to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class.

Please notify the instructor of such disability and the desired accommodations at the first class attended.

### **INCLEMENT WEATHER / DISASTER POLICY:**

The following are basic premises for the inclement weather policy at Northeastern:

1. Safety of students and employees is the number one priority when implementing the inclement weather policy.
2. Classes are expected to be held if at all possible.
3. It is the student's and faculty's responsibility to receive the information when weather is questionable.
4. Neither students nor faculty are expected to risk life or limb.
5. Faculty are encouraged to be flexible regarding absences related to severe weather.
6. If any one of Northeastern's campuses is closed, it is the responsibility of the University to disseminate information pertaining to such closing as early as possible.
7. Faculty members are obligated to hold classes if the university is not closed, unless the faculty member is unable to get to the campus.

#### **Policy Statements:**

1. The specific person(s) responsible for making the decision concerning the closing of each of the three campuses are: (Tahlequah-President and Provost/Vice President for Academic Affairs; Broken Arrow – Campus Dean in conjunction with the President and Provost/Vice President for Academic Affairs; Muskogee – Campus Dean in conjunction with the President and Provost/Vice President for Academic Affairs). The President will notify the Vice President for University Relations who in conjunction with his staff, will notify the public through the news media and the campus community through email, NSU homepage, NSU telephone message and switchboard message and other means when available. The Provost/Vice President of Academic Affairs will notify faculty.
2. During times of inclement weather, decisions concerning day classes will be made by 5:00 a.m. in order for the media to be notified and for the students to receive the announcement before they leave home. Decisions concerning evening/night classes will be made by 1:00 p.m. if at all possible or feasible.
3. The following media will be notified regarding closing of the campus:

#### **Radio Stations:**

KRMG	740 AM	Tulsa
KTLQ	1350 AM	Tahlequah
KEOK	102 FM	Tahlequah
KMMY (Y97)	9700 FM	Muskogee
KVOO	1170 AM	Tulsa
KBEZ	92.9 FM	Tulsa
KMYZ	104.5 FM	Tulsa
KHTS	106.9 FM	Tulsa

#### **Television Stations:**

KJRH	Channel 2	Tulsa
KOTV	Channel 6	Tulsa
KTUL	Channel 8	Tulsa

Faculty members need to include this information (stations and call numbers) in all their course syllabi so that students will have a record of where they can obtain information.

4. The message sent to the news media should indicate whether the entire campus is closed or if classes are not being held. Unless the administrative offices are specifically mentioned as being closed, always assume they are open. See Staff Handbook regarding leave for such occasions.
5. Essential services will remain open with a skeleton crew:
  - a. University Housing/Residence Halls
  - b. Physical Plant
  - c. Campus Police
  - d. University Center
6. The Physical Plan will clear sidewalks and parking lots based upon the “Accessible Route” plan. This plan takes into consideration location of ADA entrances to buildings.
7. Classes are expected to be held if at all possible; however, occasionally a faculty member may not be able to get to class due to unique weather conditions in the area in which he/she lives. If the University is open, but a faculty member feels it is impossible to travel to campus, he/she must notify the dean and request personal leave. See Faculty Handbook, 6.12.
8. Faculty are encouraged to be flexible regarding student absences due to inclement weather. Consideration should be given to faculty developing make up material for distribution in case of faculty or student absences from individual classes.

Please go to <http://offices.nsuok.edu/academicaffairs/SyllabiInformation.aspx> for required information pertaining to:

1. Academic Misconduct
2. American Disabilities Act Compliance
3. Inclement Weather/Disaster Policy
4. Teach Act
5. Accessibility
6. Release of Confidential Information