

Northeastern State University
College of NATURAL SCIENCES AND HEALTH PROFESSIONS
Department of NATURAL SCIENCES
Tahlequah, OK
SPRING 2015

INSTRUCTOR: Dr. Suneeti Jog

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Office Hours: T and R: 9-10am, W: 9am-12 and 1-4pm

COURSE TITLE AND NUMBER: SYSTEMATIC BOTANY, BIOL 4114 and BIOL 5114

CLASS DAYS & TIME:

Lecture – Tuesday and Thursday 12.00 -1.15pm SL 214

LAB: Tuesday 1.30 – 3.20pm SL 214

PREREQUISITES: Plant Biology, Biology 3003

CATALOG DESCRIPTION OF COURSE: The study of the relationships of plants and their classification; lecture, herbarium use, and field studies.

COURSE PURPOSE: This class fulfills the systematic botany portion of the organismic degree plan. This course can also be used as elective hours for the Organismic Biology major and as additional botany hours in the Fish/Wildlife major.

STUDENT LEARNING OUTCOMES: This course is designed to present the current principles and practices of plant systematics. The classification of plants requires a synthesis of many field of plant biology including biogeography, ecology, cladistics, genetics, plant biochemistry, morphology and anatomy. Systematic Botany contains a strong field experience and fulfills the requirement for a field course in the biology degree programs. After completing this class the student should understand and be able to do the following:

1. use basic terminology used to describe plants
2. recognize major plant families
3. understand the procedures by which plants are classified
4. learn the basics principles and rules of plant nomenclature
5. appreciate the role of taxonomy in the biological sciences

INSTRUCTIONAL MATERIALS: (Required Textbook)

1. Keys and Descriptions for the Vascular Plants of Oklahoma. January 2012 edition. Oklahoma Flora Committee.
2. Plant Systematics 2nd ed. by Simpson, Elsevier Publishing Company
3. Fruit Key and Twig Key to Trees and Shrubs, William M. Harlow
4. 10x hand lens
5. Notepad

LECTURE SCHEDULE:

Jan 13-15 Introduction, Nomenclature Chp. 1 and 16

Jan 22-22 Nomenclature (cont.) and Morphology Chp. 16 and 9

Jan 27-29 Morphology (cont.), Descriptions, Illustrations, Journals Chp. 9 and Appendices

Feb 3 – Feb 5 Plant identification, collections, documentation and herbaria Chp. 15, 17

Feb 10-12 Plant identification, collections, documentation and herbaria Chp. 18

Feb 17-19 Classification, Floral Formulas, Chp. 7 (Amborellales, Nymphaeales, Austrobaileyales)

Feb 24-26 Magnoliids Chp. 7 (Laurales, Magnoliales, Piperales)

Feb 27 **EXAM 1**

Mar 3 - Mar 5 Monocots Chp. 7 (Acorales, Alismatales, Petrosaviales, Dioscoreales, Pandanales, Liliales)

Mar 10-12 Monocots Chp. 7 (Asparagales, Arecales, Poales)

Mar 17-19 **SPRING BREAK – NO CLASSES**

Mar 24-26 Monocots Chp. 7 (Commelinales, Zingiberales)

Apr 3-5 Eudicots Chp. 8 (Ranunculales – Saxifragales)

April 7-10 Rosids and Eurosids I Chp. 8 (Geraniales – Rosales)

April 10 **EXAM 2**

April 15-17 Eurosids I and Eurosids II Chp. 8 (Brassicales – Sapindales)

April 22-24 Asterids Chp. 8 (Cornales – Ericales)

April 29-May 1 Euasterids I Chp. 8 (Gentianales – Solanales), Euasterids II Chp. 8 (Apiales – Dipsacales)

May 7 **FINAL EXAMINATION**

STUDENT PERFORMANCE ACTIVITIES: (*Attendance/Punctuality*) Regular attendance is expected and enthusiastic participation assumed. Field conditions may be cold and wet with

moderate hiking or climbing. You should wear appropriate clothing; open-toe shoes are not permissible. In the event of inclement weather NSU will announce closings on local radio and television stations. If any student requires special accommodations, let me know during the first week of class. No make-up exams except for official University absences.

Additional University policies are listed at:

<http://offices.nsuok.edu/academicaaffairs/SyllabiInformation.aspx>

STUDENT EVALUATION:

Grades will be assigned based on total points accumulated during the semester. Final letter grades are calculated on the basis of 90% = A. The available number of total points from various sources are:

	BIOL 4114	BIOL 5114
Lecture Exams	200 points	200 points
Lecture Final	200 points	200 points
Lab Exams	200 points	200 points
Lab Quizzes	50 points	50 points
Keying assignments	50 points	50 points
Collection	100 points	200 points
TOTAL	800 points	900 points

Plant Collection: it is not possible to understand the similarities and differences between individual plants and groups of plants without careful and extensive examination of those plants. Making a collection is fundamental to the study of plant systematics.

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