

Systematic Botany
BIOL 3534
Spring 2019
BO 209

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Required Texts: *Plant Systematics: A Phylogenetic Approach* 4th ed., Judd *et al.*; *Illustrated Flora of North Central Texas*, Diggs *et al.*; permanently bound field notebook

<u>Date</u>	<u>Topic – Presented in this order. Timing may differ as needed.</u>	<u>Chapter</u>
Jan 14	Course Introduction	
Jan 16	Introduction to Systematic Botany	1
Jan 21	<i>Martin Luther King, Jr. Day</i>	
Jan 23	The Evolution of Plant Diversity	5
Jan 28	The Evolution of Plant Diversity	5
Jan 30	Phylogenetic Classification	2
Feb 4	Phylogenetic Classification	2
Feb 6	Phylogenetic Classification	2
Feb 11	Introduction to Classification & Nomenclature	appendix 1
Feb 13	Introduction to Classification & Nomenclature	appendix 1
Feb 18	Introduction to Classification & Nomenclature	appendix 1
Feb 20	Green Plant Phylogeny	6
Feb 25	Green Plant Phylogeny	6
Feb 27	Non-flowering Tracheophytes	7
Mar 4	Non-flowering Tracheophytes	7
Mar 6	Examination #1	
Mar 11	Angiosperm Phylogeny: Overview	8
Mar 13	Angiosperm Phylogeny: Overview	8
Mar 18	<i>Spring Break</i>	
Mar 20	<i>Spring Break</i>	
Mar 25	Angiosperms	8
Mar 27	ANA Grade	8
Apr 1	Magnoliids	8
Apr 3	Monocots; Basal Eudicots	8
Apr 8	Monocots; Basal Eudicots	8
Apr 10	Core Eudicots	8
Apr 15	Eurosids: Fabids	8
Apr 17	Eurosids: Malvids	8
Apr 22	Asterids; Gentianids	8
Apr 24	Gentianids: Lamiids, Campanulids	8
Apr 29	History of Plant Classification	3
May 1	History of Plant Classification	3
May 8	Final Examination Wednesday 8:00-10:00 A.M.	

Laboratory Schedule – subject to adjustment as needed.

<u>Date</u>	<u>Topic/Activities</u>	
Jan 17	Introduction to the Lab	Activity 1: Recognizing Scientific Names
Jan 24	Vegetative Characters (CH 4)	Activity 2: Classification Exercise
Jan 31	Veg./Floral Characters (CH 4)	Activity 3: Nomenclature Exercise
Feb 7	Floral Characters (CH 4)	Activity 4: Keying Exercise
Feb 14	Activity 5: Plant Descriptions	Activity 6: Flowering Plants
Feb 21	Activity 7: Scope Exercise	Activity 8: Dichotomous Keys
Feb 28	Sight ID Plants; Keying Practice; Key Quiz	
Mar 7	Sight ID Plants; Keying Practice; Key Quiz	
Mar 14	Mid-term Exam: Sight ID	
<i>Mar 21</i>	<i>Spring Break</i>	
Mar 28	Sight ID Plants; Keying Practice; Key Quiz	
Apr 4	Sight ID Plants; Keying Practice; Key Quiz	
Apr 11	Sight ID Plants; Keying Practice; Key Quiz	
<i>Apr 18</i>	<i>Holiday Break</i>	
Apr 25	Final Exam: Sight ID	
May 2	Completed Plant Collections Due by 5:00 P.M.	

Course Objectives

The successful student will demonstrate operational familiarity with the glossary of systematic botany.
The successful student will effectively use the knowledge and skills needed to *identify* flowering plants.
The successful student will recognize ~100 plants *on sight*.
The successful student will be familiar with ~50 plant families.

Evaluation

	Portion of Final Grade
On-line exercises	1/7
Keying quizzes and laboratory exercises	1/7
Laboratory midterm exam	1/7
Laboratory final exam	1/7
Lecture midterm exam	1/7
Lecture final exam	1/7
Plant collection	1/7
100 properly prepared, correctly identified specimens	
3 specimens prepared for deposit in the M.S.U. herbarium	
properly utilized field notebook	

Grading

A ≥ 90%; B = 80-89.9%; C = 70-79.9%; D = 60-69.9%; F ≤ 59.9%

On-Line Exercises: Each week there will be two different sorts of on-line exercises.

Family of the Week is a “Discussion” to which you will contribute the name and description (or image) of one species belonging to the family of the week. No duplications will be accepted for credit, so you will need to review the earlier submissions before making your own.

Basic Skills Exercises will require you to define technical terms, work with units of measure or explore the literature of systematic botany. Responses to the exercises will differ depending on the type of exercise. All deadlines will be enforced. Identical or too-similar submissions will receive no credit.

Examinations: Exam dates are fixed.

Do not make doctor/dentist or any other appointments on exam dates, as they will not constitute excusable absences. In the event of an excusable absence on an exam day, a substitute exam will be administered.

- 1) Cell phones, electronic dictionaries, calculators or other electronic aids may not be used for exams. Personal effects will be placed in the front of the classroom during exams.
- 2) The final exam will be administered on the scheduled day and time, as reported in the Schedule of Classes posted November 2018.

Course Policies

Standards of Conduct

Out of courtesy to classmates and the instructor, please observe the following guidelines:

Don't walk through the front of classroom after class has begun or before class has ended.

Don't talk during lectures, videos, examinations or other official class activities.

Electronic Devices

At the beginning of each class period, turn off cell phones, pagers and other electronic devices that may make noise, disrupt or distract.

University Policies

Disability Accommodations

Students with disabilities must register with Disability Support Services before classroom accommodations can be provided. See me if this affects you.

Student Conduct

Please refer to the MSU Student Handbook for university policies related to student responsibilities, rights and activities ([2018-2019 Student Handbook](#)). For example, see page 43 for a statement on the university's policy on class attendance (attend all meetings of all classes), page 47 for valid grounds for an instructor drop (excessive absence, indifferent attitude, disruptive conduct, failure to meet class assignments), page 78 (section 2, bold) for a statement of student responsibility for email communications, and page 117 for definitions of academic dishonesty that may be subject to disciplinary action (cheating, plagiarism, and collusion).