

BIOL 114 Introductory Plant Biology II

Spring Semester 2018¹

Lecture: 10:10-11:00 MWF, EPS 400

Text: *Biology of Plants*, Raven et al., 8th Edition, 2013

Instructors: Dr. Ed Schilling

Lectures and Topics

| Date | Topic | Text Reading Ch. | Date | Topic | Text Reading Ch. |
|--------------------------------|--|------------------|---|--|------------------|
| 1/10 | Introduction to the Angiosperms/Seeds | 19 | 3/05 | The Process of Evolution – Events | 11 |
| 1/12 | Early Development of the Plant Body | 22 | 3/07 | Evolution – Mechanisms | 11 |
| 1/15 | <i>Martin Luther King Holiday – No Class</i> | | | | |
| 1/17 | Cells and Tissue of the Plant Body | 23 | 3/09 | Evolution – Speciation | 11 |
| 1/19 | Cells and Tissue of the Plant Body | 23 | <i>March 12 – March 16 Spring Break, No Class</i> | | |
| 1/22 | Root: Structure & Development | 24 | 3/19 | Evolution – Speciation | 11 |
| 1/24 | Shoot: Primary Structure & Development | 25 | 3/21 | Evolution - Polyploidy; Adaptive Radiation | 11 |
| 1/26 | Shoot: Primary Structure & Development | 25 | 3/23 | Evolution of Angiosperms (Pollination) | 20 |
| 1/29 | Shoot: reproduction/flowers | 25 | 3/26 | Plants & People – Agricultural Revolution | 21 |
| 1/31 | Secondary Growth in Stems | 26 | 3/28 | Plants & People – Green Revolution & more | 21 |
| 2/02 | Secondary Growth in Stems | 26 | <i>3/30 Spring Recess No Class</i> | | |
| 2/05 TEST 1 – 50 points | | | 4/02 TEST 3 – 50 points | | |
| 2/07 | Regulating Growth & Development | 27 | 4/04 | Ecology I | 31 |
| 2/09 | Regulating Growth & Development | 27 | 4/06 | Ecology II | 31 |
| 2/12 | Regulating Growth & Development | 27 | 4/09 | Global Ecology | 32 |
| 2/14 | External Factors and Plant Growth | 28 | 4/11 | Global Ecology | 32 |
| 2/16 | External Factors and Plant Growth | 28 | 4/13 | Ecology special topic | 31 |
| 2/19 | External Factors and Plant Growth | 28 | 4/16 | Symbiotic relationships of fungi | 14 |
| 2/21 | Plant Nutrition and Soils | 29 | 4/18 | Plants & People – Botanical Medicines | 21 |
| 2/23 | Movement of Water and Solutes | 30 | 4/20 | Humans and the Biosphere | TBA |
| 2/26 | Movement of Water and Solutes | 30 | 4/23 | Humans and the Biosphere | TBA |
| 2/28 TEST 2 – 50 points | | | 4/25 | Humans and the Biosphere | TBA |
| 3/02 | The Process of Evolution – Overview | 11 | 4/27 | Humans and the Biosphere | TBA |

4/30 Study Day

5/07 Mon - Final Exam 8-10 a.m. – Cumulative 100 points

Grading:

| | |
|-------------------------------------|----------------|
| Lecture Quizzes (Daily @ 5, drop 3) | 175 |
| Midterm Exams (3 @ 50) | 150 |
| Assignments (3 @ 25) | 75 |
| Final Exam (1 @ 100) | 100 |
| Total | 500 pts |

Final Points/Letter Grade

| | |
|--------------|--------------|
| 460-500 = A | 390-399 = C+ |
| 450-459 = A- | 350-389 = C |
| 440-449 = B+ | |
| 410-439 = B | 300-349 = D |
| 400-409 = B- | 0-299 = F |

Assignments¹ (20 points each): Darwin Day Report, McClung Worksheet; Biome Worksheet; Garden Worksheet

¹Schedule/assignments subject to change with notice

BIO 114 GENERAL BOTANY – SYLLABUS PAGE 2 - CLASS POLICIES

A. Class **attendance** is required. All electronic devices (other than clickers) are to be turned off.

B. The Canvas system will be used to help deliver course material; e-mail for communication.

C. Lecture Exams.

1. No make-up exams will be given unless a student has a valid excuse as recognized by the University:

- a. A death in the family.
- b. A medical illness of a severity that prevents a student from attending class.
- c. A University-sponsored activity or event that requires that a student miss class.

2. In order to take a make-up exam a student must notify the Lecture Instructor by E-mail within 24 hours after the regularly scheduled exam time and provide written documentation explaining your absence. Students missing an exam due to a University sponsored event should provide the Lecture Instructor with paper documentation of the event prior to the scheduled exam so a make-up can be scheduled.

3. Written documentation for any absence from an exam is subject to verification and approval by the Lecture Instructor. The document should provide contact information for the authority of the document, reason for your absence and expected length of absence.

4. Scheduling of a make-up exam must be arranged within 24 hours from original exam scheduled date.

5. Make-up exams must be completed within 5 days from the exam's scheduled date.

D. Lecture Quizzes - Three lecture quizzes are dropped so there are no excused make-up quizzes.

E. DISABILITY STATEMENT:

If you need course adaptations or accommodations because of a documented disability or if you have emergency information to share, please contact the Office of Disability Services at 2227 Dunford Hall 865-974-6087 E-mail: ods@utk.edu. This will ensure that you are properly registered for services.

F. STUDENT LEARNING OUTCOMES:

1. Populations of organisms (especially plants, in this course) and their cellular components have changed over time through both selective and non-selective evolutionary processes (Evolution).

2. All living systems (organisms [especially plants, in this course], ecosystems, etc.) are made of structural components whose arrangement determines the function of the systems (Structure and Function).

3. Information (DNA, for example) and signals are used and exchanged within and among organisms (especially plants, in this course) to direct their functioning (Information Flow and Storage).

4. All living things (especially plants, in this course) acquire, use, and release matter and energy for cellular / organismal functioning (Transformations of Energy and Matter).

5. Living systems are interconnected, and they interact and influence each other on multiple levels (Systems).

G. GENERAL EDUCATION OUTCOMES: This course addresses the following Natural Sciences (NS) Outcomes:

1. Students will demonstrate ability to use the basic vocabulary of a course's discipline.

2. Students will demonstrate knowledge of fundamental principles, experimental techniques or chief discoveries of a course's discipline.

3. Students will demonstrate understanding of experimental techniques used by a course's discipline