**Field Botany – SCI 4321 – Q1 course – 0.75 credits**

INSTRUCTOR INFORMATION

Dr. Jeff Smith – Emeritus Director of Academic Affairs

Office- Elliott B009C

Contact – please contact me at [jsmith4@bsu.edu](mailto:jsmith4@bsu.edu) as I do not have an office phone.

Office hours – by arrangement. Zoom office hours available by request.

COURSE MEETING INFORMATION

2:00 MWF (lecture) and 2:00 – 3:50 T (lab)

We will start most of our classes in B209

COURSE OVERVIEW

Field Botany focuses on learning the methods and tools used to identify common trees, shrubs and other plants in the field. The majority of the class time (lecture and lab) will be outdoors. The Ball State University campus is an especially rich area for field botany work. I anticipate that we will cover 130-150 different plants during the course.

TEXTBOOKS

Plant Biology. Graham, Graham & Wilcox – don’t bring to class unless instructed. This will be a reference book.

Trees of Indiana. Tekiela. – DO bring this little handbook with you to class every session.

Readings and handouts as assigned.

COURSE OBJECTIVES

By the end of the course the student should be able to:

1. Have a working vocabulary of plant parts and terms used in identification
2. Be able to use a “key” to identify an unknown plant.
3. Recognize many common trees, shrubs and other plants.
4. Understand the binomial nomenclature system used to name plants.
5. Recognize and describe common plant families.
6. Be able to use phone apps for plant identification.
7. Use web resources or other references to add to the information about each plant observed during class.

COURSE RECOMMENDED MATERIALS AND CONSIDERATIONS

1. Have a field notebook for taking notes. Devices can be used for notes but remember we will be outside, and rain is always a possibility.
2. Be prepared to be outside every class period (appropriate clothing, shoes, head covering, protection against pests, water or other liquids, etc.)
3. Ability to take pictures of plants will be useful.
4. Ability to consult plant identification apps will be useful.
5. A magnifying device of some sort will be useful.

OUTLINE OF THE COURSE

This outline is tentative. Much will depend on the weather and condition of the plant material. For example, some plants must be seen early in the semester before they drop their leaves. The instructor reserves the right to introduce plants based on opportunity. Plants will usually be clustered together during presentation so that plants of the same genus can be directly compared.

Week 1 – Introduction to common terms and how to use a Key. Start of MAD Horse species

(plants with opposite leaves, Maples, Ash, Dogwood and Horse chestnut)

Week 2 – completion of MAD Horse species

Week 3 – Forbs and grasses of the Prairie

Week 4 – Trees with alternate leaves (non-Oaks)

Week 5 – Trees with alternate leaves (non-Oaks)

Week 6 – Oaks

Week 7 – Shrubs – natives and common landscaping plants

Week 8 – Deciduous and Evergreen Gymnosperms

Week 9 – More Gymnosperms and course wrap-up

ACADEMIC HONESTY

The course will follow the expectations for academic honesty as described in the student handbook. Any work submitted is automatically assumed to be the sole work of the student. Exceptions should have citations. If in doubt about work submission and the need to use citations please consult with the instructor.

ATTENDANCE

Students are expected to be on time for all class periods. We will usually leave the building to work outside immediately after attendance is taken and any class announcements have been made. Students that are 3-5 minutes late will be marked as tardy. Students who arrive after 5 minutes will be marked as absent (chances are we will have already left the classroom and can you find us?). Students whose class schedule requires late arrival should notify the instructor. Prompt arrival is necessary to maximize our time outside moving from one location to another.

Athletes – Not that early dismissal from class, especially on the Tuesday lab days is permitted only if there is a meet or game. Early dismissals do NOT apply to practices. If you do have a game, please let me know at the beginning of class and check in with me when you leave.

EVALUATION

Grades will be calculated on a percentage of points obtained out of points available. A standard grading scale will be used:

A = 90% or higher

B = 80 – 90%

C = 70 – 80%

D\* = less than 70%

The instructor reserves the right to use + grades if applicable on the final course grade.

BASIS OF COURSE GRADE

**Formative assessments** – weekly summary assignments and/or quizzes on the plants observed during the week. Your field notes will be critical to be able to answer these questions.

**Summative assessments** – two larger projects are anticipated for the course:

1. Plant Family Presentation – a PowerPoint document that describes various characteristics, examples, and importance of a plant family. These will be shared with classmates.
2. Master Plant List – this will be an Excel, Google spreadsheet or other data manager application of all plants seen during the course and added to your field notebook. Think of this as being similar to a Birder’s Master Bird List.

Additional details on the summative projects will be coming.

MAKE-UP WORK

All work is expected by the class period of the due date. Work will be accepted within 24 hours without penalty. Work submitted after 24 hours without prior arrangements will be penalized 5% each day.

**If something happens and you know you will be late with an assignment, please contact the instructor to make arrangements. It is also usually better to submit incomplete work on time than be very late with complete work.**

TECHNOLOGY USE

Students are encouraged to locate and download a plant ID app to their phone. Laptops will have minimum use because of the field nature of the course. Plan on using your field notebook and cell phones for most data input for your records.

MANDATORY FIELD TRIPS

We will spend much of our time in the field. Some trips may be across campus requiring extensive walking or use of the campus shuttle. Some meeting locations may NOT be in the classroom to save time. Changes in meeting location will be announced in advance.

DIVERSITY AND INCLUSION POLICY

Ball State University aspires to be a university that attracts and retains a diverse faculty, staff, and student body. We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse as expressed in our Beneficence Pledge and through university resources found here.