**Intro to Horticulture– SCI 4322 – Q2 course – 0.75 credits**

INSTRUCTOR INFORMATION

Dr. Jeff Smith – Emeritus Director

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 our classes in B209 but may move to other locations depending on the topic and activities of the day.

COURSE OVERVIEW

Horticulture literally means “garden growing” and focuses on learning the methods and tools used to grow plants, especially those that are not commercial food plants. The majority of the class time (lecture and lab) will be spent on hands-on activities or looking for information on web sites. The focus will be on learning about plants as organisms and how to use this information to grow healthy plants for personal enjoyment. (Yes, you will have multiple opportunities to have plants to take home).

TEXTBOOKS

Plant Biology. Graham, Graham & Wilcox – don’t bring to class unless instructed.

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.
2. Know basic plant anatomy and how plants grow.
3. Be able to identify various factors that affect plant growth.
4. Learn different techniques to asexually reproduce plants.
5. Learn how to grow plants from seeds.
6. Conduct a controlled scientific experiment on growing plants.
7. Recognize and describe common plant families.
8. Use web resources or other references to supplement information about plants observed during class.
9. Learn about plant societies and other plant focus groups or resources.

COURSE RECOMMENDED MATERIALS AND CONSIDERATIONS

1. Have a notebook for taking notes.
2. Be prepared to be outside on announced class periods.
3. Ability to take pictures of plants may be useful.
4. Ability to consult plant identification apps may be helpful.

OUTLINE OF THE COURSE

This outline is tentative. Much will depend on the condition and growing state of the plant material. For example, plants don’t all grow at the same rate and some activities will be timed to when the plants are ready for the next step. The instructor reserves the right to introduce plants based on availability and opportunity.

Week 1 – Introduction to plants. What are they and how do they differ from animals?

Week 2 – Asexual reproduction techniques. Start of class growing experiment.

Week 3 – Growing plants from seeds.

Week 4 – More details on factors that affect plant growth (light, soil, water, fertilizer etc.)

Week 5 – Light and photoperiods. (Timing is everything).

Week 6 – Research week on Horticulture societies.

Week 7 – Diagnosis of plant growing problems. Introduction to Landscape design.

Week 8 – Data collection for class growing experiment. Writing of lab report.

Week 9 – Wrap up. Horticulture as applied to the Holidays.

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. Students that are 3-5 minutes late will be marked as tardy. Students who arrive after 5 minutes will be marked as absent. Students whose class schedule requires late arrival should notify the instructor. Prompt arrival is necessary to maximize our time. Students are not permitted to overlap the lab period with other classes without expressed permission by the instructor. Athletic competitions do count for excused absences.

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 end of course grade.

BASIS OF COURSE GRADE

Formative assessments – a summary assignment for each week will be assigned on Friday. These assignments will be due the next Friday’s class period.

Summative assessments – three larger projects are anticipated for the course:

1. Plant Family Presentation – a PowerPoint that describes various characteristics, examples and importance of a plant family. These will be shared with classmates.
2. Plant Society Presentation– this will be a report about a group or organization that specializes in the growth of a specific plant or plant group (e.g. Orchid Society).
3. Write-up of the plant growing experiment activity.

Additional details on the summative projects will be forthcoming.

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. These apps will be frequently used in class. Plan on using your notebook, laptop or cell phones for most data recording and gathering information.

MANDATORY FIELD TRIPS

We will spend some of our time in the field and in the BSU greenhouses.

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.