

# BIOL 154—Introduction to Botany (4 credits)

Alexey Shipunov

Fall 2011



## SYLLABUS

**Class Dates** : August 24 to December 9, 2011

### Course Description :

This course will introduce the principles of plant structure, function, and diversity as evolved over time. You will gain a better understanding of plant life, diversity and distribution on this planet and learn to appreciate plants as elaborate and beautiful organisms, which are a significant part of our culture. You will learn about historical experiments and persons, who had a significant impact on the field and get introduced to current findings. In the labs you will observe plant structure and gain experience on how to collect and analyze experimental data.

**Instructor** : Dr. Alexey Shipunov

**Office** : Moore 229

**Office Hours** : Wednesdays and Fridays, 10 a.m. to 12 a.m.

**Phone** : 858-3116

**E-mail** : alexey.shipunov@minotstateu.edu

**Lectures** : Mondays, Wednesdays and Fridays, 8:00 a.m. to 8:50 a.m., Moore 16

**Textbook** : Two textbooks could be used:

1. Stern's Introductory Plant Biology (Bidlack & Jansky., 12 ed., McGraw-Hill)
2. Plant Biology (Rost et al., 2nd ed., Thomson Brooks/Cole)

**Web site** : [http://ashipunov.info/shipunov/school/biol\\_154/](http://ashipunov.info/shipunov/school/biol_154/)

Please note that lecture slides from the Web site are NOT containing all information which is given on lectures.

**Laboratories** : Monday afternoons, Moore 210 (please check the time for your section).

There will be also outdoor labs.

### Grading :

Four exams are given during the semester. Only three best exams contribute to the final grade. Missed exams count zero points. There are **no make-up** exams.

There are five legitimate reasons for absence: (1) emergency situations, (2) attested medical conditions, (3) military duty, (4) participation in MSU sports events, and (5) dependent sick leave. Absence from exams or laboratories needs to be announced to the instructor in advance. I strongly recommend attending lectures regularly. Lecture contents will not exactly follow the textbook and additional information will be supplied.

Receiving zero points for more than one laboratory results in a failed course. Grading of laboratories is based on reports and/or drawings. Written reports and/or drawings are prepared and finished during laboratory sessions and passed to the instructor right after the particular laboratory session.

In addition, at the end of every lecture I will give one short test question to answer.

A total of  $\approx 600$  points (the actual total could be different) can be earned. Points will be distributed as follows (values may vary):

**Lecture tests** :  $\approx$  60 points (1–3 points per question)

**Three best exams** :  $\approx$  300 points (exam distribution curves will be graded)

**Laboratories** : 240 points (20 points per lab)

**Letter Grades** : A  $\geq$  90%, B  $\geq$  80%, C  $\geq$  70% D  $\geq$  60%, F < 60% of a total. A minimum of one letter grade will be deducted from the grade for academic dishonesty / plagiarism.

**Tentative Course Schedule** :

Week 1	Aug 24, 26	Botany as a science, importance of plants; no lab
Week 2	Aug 29, 31, Sep 2	Plant cells, organelles and tissues; Lab 1
Week 3	Sep 7	Plant tissues; no lab
"		<b>1st exam: September 9th</b>
Week 4	Sep 12, 14, 16	Roots; Lab 2
Week 5	Sep 19, 21, 23	Stems; Lab 3
Week 6	Sep 26, 28, 30	Leaves; Lab 4
Week 7	Oct 3	Leaves; Lab 5
"		<b>2nd exam: October 7th</b>
Week 8	Oct 10, 12, 14	Photosynthesis; no lab
Week 9	Oct 17, 19, 21	Water transport; meiosis and life cycles; Lab 6
Week 10	Oct 24, 26, 28	Seed and flower; Lab 7
Week 11	Oct 31, Nov 2	Flower and fruit; Lab 8
"		<b>3rd exam: November 4th</b>
Week 12	Nov 7, 9	Plant diversity; Lab 9
Week 13	Nov 14, 16, 18	Protists, fungi and mosses; Lab 10
Week 14	Nov 21, 23	Ferns and gymnosperms; Lab 11
Week 15	Nov 28, 30, Dec 2	Angiosperms; Lab 12
Week 16	Dec 5, 7, 9	Angiosperms; no lab
		<b>4th Exam: Tuesday December 13th, 8:00–8:50 a.m., Moore 16</b>

*Please note that the schedule is a subject to change. Only exam dates are fixed.*