

**Biol Sci 330-0: *Plant Biology***  
**Dr. Christina T. Russin**  
**MWF 1:00-1:50 pm Tech L-361**  
**Proposed Syllabus for Spring 2009**

<b>Dates</b>	<b>Lecture Topics</b>	<b>Textbook</b>
3/30	introduction	
4/1	plant cell	Chap. 3
3	cells and tissues	Chap. 4
4/6	growth and development	Chap. 11
8	roots and soil	Chap. 5
10	stems	Chap. 6
4/13	secondary growth	pp. 90-95, 99-103
15	leaves	Chap. 7
<b>End of material for first exam, Friday, Apr. 17<sup>th</sup> (covers 3/30 – 4/15)</b>		

<b>Dates</b>	<b>Lecture Topics</b>	<b>Textbook</b>
4/20	transpiration and translocation	Chap. 9
22	photosynthesis – light reactions	pp. 166-176
24	photosynthesis – Calvin cycle	pp. 176-178
4/27	sexual reproduction and plant breeding	Chaps. 12, 14
29	algae	Chap. 18
5/1	bryophytes	Chap. 20
5/4	seedless vascular plants	Chap. 21
6	paleobotany	
<b>End of material for second exam, Friday, May 8<sup>th</sup> (covers 4/20 – 5/6)</b>		

<b>Dates</b>	<b>Lecture Topics</b>	<b>Textbook</b>
5/11	gymnosperms	Chap. 22
13	gymnosperm walk	
15	angiosperms	Chap. 23
5/18	flowers, fruits, and seeds	Chap. 8
20	plant disease	
22	ecology	Chap. 25
5/25	<b>Memorial Day – no class</b>	
27	biomes	Chap. 26
29	human uses	
<b>End of material for third exam, Monday, June 1<sup>st</sup> (covers 5/11 – 5/29)</b>		

**INSTRUCTOR:**

Dr. Christina T. Russin  
Hogan 6-110B  
(847) 467-4878, c-russin@northwestern.edu  
office hours: M W 10:00-11:30 am or by appointment

**TEACHING ASSISTANT:**

Becky Tonietto  
RebeccaTonietto2008@u.northwestern.edu  
office hours: M 2:00-3:00 pm and Th 3:00-4:00 pm in Hogan 6-160

**COURSE MATERIALS:**

- Stern, K., J. Bidlack, and S. Jansky. 2008. *Introductory Plant Biology*, 11e. McGraw-Hill, New York. ISBN 0-07-283067-5
- Notebook: You will need a notebook for recording observations of your study site. It must be larger than pocket size, bound (not looseleaf) and something you can turn in every other week. Examples of acceptable notebooks will be shown on the first day of class.

**COURSE OBJECTIVES:**

By the end of this course you will understand:

- how plants are like other organisms
- how plants are unique
- the role of plants in world ecosystems

**GRADING:**

Class meets for lecture 3 times per week. Attendance at all class periods is expected. You will have the following assignments in this class:

**1. Aerogarden blog. 20 pts**

We will be starting seeds the first week that you will observe weekly and post your observations on our NUBlog site. More information will be given in class.

**2. short summaries of in-class questions. 10 pts each**

You will periodically be given a question to answer outside of class. Your book may provide some of the information, but you will have to dig into the primary literature to find the entire story. More information will be given in class.

**3. three in-class exams Apr. 17<sup>th</sup>, May 8<sup>th</sup>, and June 1<sup>st</sup>. 100 pts each**

Information about format will be given before the first exam.

**4. field trip to CBG. 10 pts**

Dates are 5/2 or 5/16. Students unable to attend either date should contact me as soon as possible about alternatives.

**5. notebook due June 1<sup>st</sup>. 25 pts**

Your observation notebook is due with your paper.

**6. paper due June 1<sup>st</sup>. 100 pts**

You will write a 5-10 pp paper on the observations you have made at your study site (see below for more information).

Grades will be assigned as follows: A 92% and up; A- 90 to 92; B+ 88 to 90; B 82 to 88; B- 80 to 82; C+ 78 to 80, C 72 to 78; C- 70 to 72; D 60 to 70; F below 60. There is no curve. You can calculate your grade in the class at any time by dividing your point total by the total points possible at that time.

**OTHER POLICIES:**

- Missed classes: You are expected to attend all class periods. Students who stop attending class will receive an F.
- Late assignments: Assignments submitted late lose 5 pts per **calendar** day **including** the day they are due. The last day to turn in any assignment is June 12<sup>th</sup> at 5:00 pm. Any assignments turned in after this time will not be graded and will receive a zero.
- Cheating: Cheating, including plagiarism, will not be tolerated. Any assignments which show evidence of cheating will be forwarded to the Dean’s office.
- Students with disabilities: Please contact the SSD Office **and** me **early** in the quarter about any needed accommodations.

**Study Site Observations**

You will make observations every week of a 5m-long strip of the area around the lagoon. It includes shrubs and herbaceous plants, as well as a variety of microhabitats. Your primary interest is documenting the changes you see in the plants or plant communities over time. **This is observation only** – you may not add or remove anything from your site. Your observations may be qualitative, quantitative, or a mixture of the two. You might choose to look at your entire study site and record general observations, or you could select a subset of the site and observe it in more detail. For example, you may wish to examine the growth and development of a few plants, plant-animal interactions throughout the site, plant community composition, a combination of these or something else entirely. For each observation also record: date, time of day, and weather conditions. You may observe the site at the same time/day each week, or vary the times/days, but each observation period should last at least 40 minutes. You may also include other measurements of interest to you, such as temperature, relative humidity, and the amount of sunlight; however, this is not necessary. All work, including observations, must be done independently by each student.

Record your observations in a notebook that can be turned in periodically to check for completeness (don’t use the notebook for your other classes or your Plant Bio lecture notes!). Turn in your notebook according to the schedule below. Put it on the top shelf of the cabinet under the fridge outside my office (Hogan 6-110B). Becky will check it and make comments, and put it on the bottom shelf of the cabinet for pickup. Notebooks turned in on M can be picked up on W, W notebooks on F, and F notebooks on the following M.

<b><u>last name A – J:</u></b>	<b><u>last name K – Z:</u></b>
after your first observation	after your first observation
" " third "	" " second "
" " fifth "	" " fourth "
" " seventh "	" " sixth "
" " ninth "	" " eighth "