INTRODUCTORY BOTANY (BIOS 109)
FALL 2009

COURSE INFORMATION AND SYLLABUS

Instructor: Dr. Sabrina Russo
208 Manter Hall
472-8387, srusso2@unl.edu

Office hours: By appointment

Course website: Blackboard – *Please check your email and Blackboard account **daily** for course information and updates.*

Lectures: MWF 09:30-10:20 am in 128 Manter Hall

Required textbook:

Nabors, Murray W. 2004. Introduction to botany. San Francisco, CA, Pearson/Benjamin Cummings.

Additional required readings as noted in the course schedule are from the following books, posted as PDFs on Blackboard:

Gurevitch, Jessica, Sheiner, Sam H., Fox, Gordon A. 2006. The Ecology of Plants. Sunderland, MA, Sinauer Associates, Inc.

Mauseth, James D. 1998. Botany: An Introduction to Plant Biology. Sudbury, MA, Jones & Bartlett Publishers.

Raven, Peter H., Evert, Ray Franklin, and Eichhorn, Susan E. 2005. Biology of plants. New York, NY, Worth Publishers.

Goals of this course:

(1) To introduce you to the study of plants, including their ecology, anatomy & morphology, growth & development, and genetics & evolution.

(2) To gain experience with important laboratory and greenhouse skills used in the study of plants

(3) To demonstrate the importance of plants to all aspects of our lives and to the functioning of the Earth System.

(4) To gain an understanding and appreciation for how science is done and to gain practice in library research and scientific writing.

(5) To perfect important skills, such as how to communicate effectively, work together in teams, and understand and explain complicated concepts.

Blackboard & Communication: I will post course materials (including course announcements, the syllabus, Lecture Companions, practice exam questions and keys, and your grades) on the course Blackboard site. Blackboard is course management software used by UNL (and lots of other universities). Through Blackboard I may also occasionally send emails to the entire class. To get to Blackboard go to the UNL main page (http://www.unl.edu/) and click on Students and then Blackboard. The main Blackboard page has instructions for new users. *Please check your email and Blackboard account **daily** for course information and updates.*

If you have any questions about any aspect of this course or about biology in general please come see me. You can talk to me after class or by appointment. If you have a simple question you can email me (srusso2@unl.edu). If you email, please put BIOS 109 in the subject line. I get lots of spam and I might delete your message if I don't immediately recognize your name or the subject doesn't seem relevant.

It is especially important for each of you to take responsibility for your own learning. ***This includes getting in touch with me when you need help or to discuss any aspect of the course. I want to help each of you succeed, but I can only help if you come to me. Please do!!***

Expectations & Attendance: ***My job is to help you learn botany!*** Therefore, I expect that you will attend all course meetings, complete all assignments, take all exams & quizzes, do all required reading listed in the *Course Schedule*, attend all laboratory meetings, and ask me questions during or outside of lecture. If there is any disruptive activity, including use of cell phones or laptops, I will ask you to stop or leave the class.

During lecture, I expect you to pay attention, take notes, and ask questions. You are adults and are paying your own money to enroll in this class. It only makes sense that you would use this money wisely and come to class. Many studies have documented high correlations between class attendance and grades - these correlations are much higher than correlations between grades and the amount of studying you do. Not all of the material that I cover in the lecture is found in the book nor will the book cover material with my particular slant. It pays to come to class!!

I will post *Lecture Companions* on the course Blackboard site, usually by 5:00pm the day before lecture. These outlines are not intended as a substitute for class attendance. Instead, they are intended to provide a framework for the lecture, and to make your note-taking easier. Also, in lecture I elaborate on the points made in the notes. For these reasons total reliance on the *Lecture Companions* will mean that you miss a significant portion of the material.

You are responsible for all of the material presented in lecture, readings, and assignments. I will assess attendance based on pop-quizzes and will periodically take attendance in class. If you are not present or late, you will be counted as absent. Help outside of class may only be available to students who do not miss class regularly.

You are expected to abide by the Student Code of Conduct (http://stuafs.unl.edu/ja/code/three.shtml).

As University of Nebraska students, you can pride yourselves on a reputation for integrity. I expect that you will each maintain a high standard for honesty, genuine effort, and pride in your own work. I will not tolerate cheating in my class. I will follow up any cheating episodes to the

university limit if I catch you. So, please do not cheat. University Policy on this issue is not gentle. Please do not put either of us in a position where we must deal with this.

Grading:	Exams (3):	35%
	Pop Quizzes:	20%
	Homework Assignments:	20%
	Laboratory:	25%

No incomplete grades (I) will be given without prior arrangement. Consult http://www.unl.edu/regrec/acadserv/AcademicServicesHandbook.pdf for the University policies regarding I, pass/No Pass, Drop and W grades. These policies will be observed. Consult http://www.unl.edu/regrec/calendar/calendar_main.shtml for important ending dates for pass/NoPass, Drop and W options. *Important*: After certain dates in the semester, these grades are no longer options.

Periodically during the semester, I will update you on your performance, but you can monitor it using Blackboard. All scores will be posted on Blackboard. It is your responsibility to check to see that the information is correct. This should be done within a week of the posting. All exams, quizzes, and assignments will be returned. You should make a point of collecting graded material, not only to have a record but also to help you prepare for exams.

Final Grade: If you earn >90% of course points you are guaranteed an A-; 80-90% you are guaranteed a B-; 70-80% you are guaranteed a C-; 60-70% you are guaranteed a D-. However, the course will be graded on an adjustable scale, and grades may be curved. Depending on exam averages and grade distributions, the scale may be lowered (for example, 88% might earn an A- instead of a B+). Before finals week I will provide you with your tentative cumulative letter grade going into Exam 3.

Statute of Limitations: All grades are final after January 15, 2010. This means that any grade corrections must have been cleared by that date.

Exams: There will be no comprehensive final exam. There will be three exams. Two exams will be held in-class on the dates noted in the *Course Schedule*. The third exam will be given in the first hour of the designated final exam period **(10:00am – 12:00noon, Tuesday Dec 15, 2009)**. Exams will be graded on a 100-point scale, usually with opportunities for bonus points. They will consist of short- and long-answer questions. Practice exam questions will be handed out before each exam.

Exams will be given only during the designated times at proctored locations as arranged for students enrolled in the course. Examinations will not be given before or after the scheduled examination. There are no makeup examinations. Permission to miss an exam will be given only in cases involving extreme or extenuating circumstances. Request for permission to be excused from an exam will be considered only if the request is made *prior* to the exam, not after or during the exam and requires appropriate documentation (for example, a letter from the doctor). If you are

on an official athletic or other University team, please arrange to see me immediately at the beginning of the semester. Unexcused, missed exams will count as zero points.

Students who have been excused from an exam will be required to take a comprehensive final exam during the second hour of the final exam period (that is, after taking the third exam during the first hour of the final exam period). Students who have taken the two in-class exams as scheduled will only be required to take the third exam during the first hour of the final exam period. That is, there will not be a comprehensive final for students who take the two in-class exams as scheduled in the *Course Schedule*.

Sweepstakes: If each exam score is higher than the previous one, I will add 2 sweepstakes points to your accumulated total percentage points at the end of the semester. In other words, if your score goes up on every exam or stays the same (if you achieved a perfect score), you will earn an additional 2 percentage points.

Pop Quizzes: There will be 12 pop-quizzes in class. Quizzes will have different formats, but will be similar to the kinds of short-answer questions that you may see on exams. Each quiz will be graded on a 10-point scale. Each student's two worst quiz grades will not be counted in his/her final grade (a total of 100 points). There are no make-up quizzes – if you miss a quiz, you will receive zero points for it.

Homework Assignments: There will be approximately weekly homework assignments. They may take the form of problem sets, writing assignments, or other learning exercises. Homework is due in class on the due date indicated. Late homework will not be accepted, except following the policy described above for Exams.

Other important information: Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

Other useful resources:

Esau, Katherine. 1965. *Plant anatomy*. Wiley, NY.

Raven, P.H., R.H. Evert, S.E. Eichhorn. 2005. *Biology of Plants*. Freeman & Co., NY.

Online videos, animations, other resources: http://bcs.whfreeman.com/raven7e/default.asp

How to get an A in BIOS 109

During Class Meetings:

- Attend every lecture and lab meeting.
- Pick up the Lecture Companion for every lecture, distributed in class.
- Take notes in the spaces provided around the figures in the Lecture Companion.
- Bring additional note paper if you like to write a lot of words when you take notes and don't find enough space in the Lecture Companion.
- Raise your hand and ask questions during lecture or lab meetings if a point is not clear to you (in which case it's probably not clear to other students, either).
- Participate actively during labs and complete every lab assignment.

After Lecture:

- Sit down with the Lecture Companion and your text book and readings. Go over the lecture, filling in gaps in your notes by consulting the text book readings for details you missed during lecture.
- Look over all of the ***Questions*** and ***Terms*** at the end of each lecture and try to answer all of the questions and define and use all of the terms by consulting your notes and the textbook readings.
- If you still cannot make sense of something covered in lecture, stop Dr. Russo after lecture or arrange to meet with her to clarify anything that is unclear to you.

Before Exams:

- Read your lecture notes for every lecture covered by the exam, consulting the text book readings as needed to understand concepts and clarify the details.
- Go over each and every ***Question*** and ***Term*** in the Lecture Companions covered by the exam, making sure you can answer the questions and define and use the terms WITHOUT consulting your notes or the text book readings.
- Study with other students who are also taking the course.
- Do every practice exam question and review quizzes and homework assignments. If you got a question wrong, use your text book readings and lecture notes to figure out why you got it wrong and understand the correct answer. Ask Dr. Russo if you still cannot understand the correct answer.
- Get a good night's sleep and breakfast before the exam.

Other Tips for Doing Well in University Courses

The most common problem students have is that their study skills are not adequate for university-level classes. You should seriously evaluate your study habits and consider some of the suggestions below. I often find that students who are doing poorly are simply looking at their notes. Studying for any class requires more commitment than just reading notes or the text. Different individuals require different approaches, so you will have to tailor any suggestions to your own needs. Based on my own experience and recommendations from others, here are some suggestions for you to consider to help you achieve a good grade in this class. These ideas foster active, aggressive learning with a goal toward understanding rather than memorization.

- Prepare for class before coming. Read your text before coming to lecture, looking for general concepts rather than getting lost in the details. This will provide a framework on which the lecture will build.
- Go over your notes shortly after class. While the material is still fresh review your notes and use your text or a study partner to help fill in any gaps in your understanding.
- Memorizing the ***Terms*** in the ***Lecture Companions*** is a minimum requirement. Memorization is not a substitute for understanding and being able to use the ***Terms***.
- Be honest with yourself about your reading and study skills. Accurate assessment of your skills will help you develop a strategy for learning and understanding the course material. If you have already taken course covering plant biology, do not assume that you really understand the material at the level needed in this course.
- Sit in the front part of the lecture auditorium. Study after study has supported the contribution to overall success from this simple behavior.
- Take complete notes and work with them. Listen for the main points and organize the details around them. Edit your notes later to make them more coherent for future reference. Leave space in your notes to provide room for additional points or new ideas gleaned from discussion and reading, or what you remember from lecture but did not get down in writing. Reworking the notes into your own words will help you remember the material.
- Study frequently in small doses. Do not rely on a cramming session the night before to get you through. It just does not work well for most students. Spend some of your time studying, long before the exams. Cramming does not foster long-term understanding that will stick with you. Two hours of studying for each hour of lecture is good rule of thumb.
- Study with a team. Cooperative learning works best and promotes higher achievement than working alone. Studying with a team prevents you from becoming locked in your own mindset and requires that you express your ideas orally. Oral rehearsal promotes long-term retention of information. Stimulation and exchange of ideas within a study team will help you identify your level of mastery of the ideas and promote increased achievement level. You will not be able to fool yourself about what you know or do not know if you have to explain it to someone else. I recommend that you get together as a group once a week with a few other students for 1-2 hours each time. Make sure that everyone participates. Group sizes of about 4 work best.
- Understand the figures and diagrams from lecture and the text. These usually contain the most central parts of the topic and promote conceptual understanding of the material. Do not just concentrate on the text portion of the book or lecture. If you understand the figures and diagrams, you will have both concepts and details nailed down.
- If you are having problems with the material, ***get help early***. Do not wait until the end of the course.