Plant Sciences 240 - Fall 2008

PLANT BIOLOGY

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Course web site and electronic materials:

The web page for this course is located within the University’s D2L course management system. To access this page:

1. With a connection to the Internet established, open up an Internet browser (i.e., Firefox, Safari, Opera, Internet Explorer)
2. Go to http://d2l.arizona.edu
3. Click on the NetID button in the upper left corner of the screen
4. Log in using the same information you use for UA Webmail

Once you successfully access the D2L MyHome page by logging in with your NetID, look for the box labeled My Academic Courses in the middle of the screen.

1. Click on the plus sign (+) beside the current semester.
2. Click on the plus sign (+) beside the department name, and then
3. Click on your course name.
4. You should now be at your D2L Course Home page

Once logged on you’ll be able to locate the link to our page in the section entitled “My Academic Courses.” You must be registered in the course to access the D2L page. This page will provide you with access to news and lots course content (e.g., lecture and lab materials and supplementary reading) and its contents will periodically change. Note that many of the files accessible from the page will only be available for downloading until 7 days after the information they contain is covered in lecture or laboratory. After this time, it will not be possible to access the files. Download early!

Some helpful Tips for using D2L:

- The browser ‘Back’ button does not work well in the D2L environment. Get in the habit of using the links located on the navigational tool bar to move around inside your course.
- When exiting your D2L course, be sure to click on the Logout link AND close the browser window. This is especially important if you are using a computer in a public lab.
- Mac users: Please take 3-5 minutes to read through the Mac Users Tip Sheet. Useful information is provided to assist you with potential issues within D2L.

Where can you get more help if I need it?

Go to http://help.d2l.arizona.edu and click on the ‘Students’ (purple) tab to access online help materials.

If you need to access a protected document from the site the username is green and the password is plant (both all lowercase).

To be able to view many of the electronic files associated with this course (those with endings of “.pdf”), you will need to have Adobe Reader version 5.0 installed on the computer you are using. This free program may be downloaded from:
Course description:

This course deals with plant form and function from an evolutionary point of view and is intended for majors in all fields of biology. Emphasis is placed on understanding basic processes of metabolism, evolution, reproduction, growth, development, and physiology of nonvascular and vascular plants. These processes are considered within the context of the environments plants inhabit and human activities that affect or depend upon plants.

Students completing PL S 240 will:

1. Understand the basic structures and processes involved in plant growth and development;
2. Appreciate the diversity found among plants and understand the basis for and significance of this diversity;
3. Understand how plants interact with their environment and the critical roles that plants play in all ecosystems;
4. Use scientific terminology to communicate effectively about plants;
5. Develop critical thinking skills by evaluating information from multiple perspectives, drawing reasonable conclusions, and defending them rationally; and
6. Have assumed complete responsibility for their performance in the course and actively worked to improve their organizational and time management skills.

Major Topics:

I. Cells: Structure and Energy
II. Form and Function
III. Genetics and evolution
IV. Regulation of Growth and Development
V. Evolution of Diversity
VI. Ecology and the Human Prospect

Texts: Biology of Plants. Peter Raven, Ray Evert and Susan Eichhorn; and Laboratory Topics in Botany, 1999 (6th edition), 2005 (7th edition), Ray Evert and Susan Eichhorn (electronic copies of appropriate topics are provided on line).

Student Evaluation:*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm examinations (50 min.)</td>
<td>3 @ 100</td>
</tr>
<tr>
<td>Final examination (2 hr.)</td>
<td>1 @ 200</td>
</tr>
<tr>
<td>Laboratory exercises</td>
<td>14 @ 15</td>
</tr>
<tr>
<td>Citizenship/participation</td>
<td>60</td>
</tr>
</tbody>
</table>

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* Changes may be made to this list of graded activities during the semester.

** Best two scores of the three midterm exams count. No make-up exams are given so a missed exam (score=0) will represent the omitted score.

Assignment of final grades is not based on any preconceived thresholds for letter grades, but roughly follows: >90% = A; 80-89% = B; 70-79% = C; 60-69% = D; <60% = E.
Citizenship/participation:

We evaluate participation to encourage everyone to become engaged in the course. Each student begins the semester with the full 60 points of participation credit. When students fail to meet participation/citizenship requirements, points will be deducted. For example, the cornerstone of participation is good attendance and we will periodically administer pop quizzes as a means to record attendance on any one day. Participation also involves asking or answering questions in lecture or laboratory, speaking with or otherwise communicating with the instructors outside of class, actively helping your fellow students to learn, and being good citizens of the classroom. The balance of your participation grade is based on the instructors' objective and subjective evaluation of these activities.

Staying in contact:

Ask Dr. Smith and Kandres for clarification whenever you need it (with one exception, noted below)—in class, lab, during office hours, or by e-mail. Students are sometimes reluctant to ask for help because they think it's an imposition on the instructor. This is nonsense. The main reason why instructors are here is to answer your questions! The other reason students are reluctant to ask for help, especially in class, is that they sometimes think they're "the only one who doesn't get it." This is rarely true, so ask away. The exception mentioned above is this: Instructors will not be available to answer your questions in the 24 hours before an exam. You'll really have to plan ahead to get help.

You may be required to submit some assignments electronically as part of this course. Text should be submitted only in the body of your e-mail message. No attachments will be accepted!

Absences and classroom conduct:

You are expected to attend all lecture and laboratory sessions. If an absence is anticipated, you must inform the instructor of the time and reason for the absence in advance. Absences pre-approved by the University's Dean of Students (or Dean's designee) will be honored so long as official notice of absence is provided at least seven days in advance. Any in-class graded activity (e.g., examination) scheduled for day you will be absent (for whatever reason) must be rescheduled for an earlier day. Under any circumstances, should an emergency arise that makes it impossible to contact the instructor prior to a class meeting you will miss, you must do so as soon as possible and explain the situation and why earlier notification was not possible. Supplementary presentation of lecture or laboratory materials will not be made, regardless of the circumstances of the absence. While in class you are expected to conduct yourself in a manner conducive to learning and in a way that does not interfere with other students' concentration.

Missed activities/late work:

There are no make-ups for any in-class graded activity. Exceptions may be made in rare circumstances, such as death in family, serious illness, or attending a University sponsored function out of town. As soon as you realize that you will be unable to attend a regularly scheduled exam, contact Dr. Smith immediately (e-mail is OK) and explain your situation. He will determine whether a make-up exam will be permitted and will inform you of the make-up date and any penalties that will be applied to your grade for the work.

Assignments turned in late will be penalized by subtracting 10% of the total possible points for each day late. For example, if an assignment worth 15 points is due at 11:00 AM on Tuesday 2 Sept, but is turned in at 11:45 AM on that day, 1.5 points will be subtracted from the final score before grading. Negative scores (e.g., an 11-day late assignment in the previous example) are not possible.
Changes in graded activities:

During the semester, instructors may modify the list of graded activities (e.g., exams, projects, etc.) that will be required or used to assign final grades in the course. If this occurs, all students will be informed of the changes early enough to allow sufficient preparation. Likewise, there may be occasional opportunities for extra-credit work. These opportunities will be defined by the course instructors, and the results of this work will be incorporated into calculation of final grades. Personal requests for supplementary extra-credit opportunities will not be granted under any circumstances.

Special needs and accommodations:

Students who need special accommodation or services should contact the SALT (Strategic Alternatives Learning Techniques) Center for Learning Disabilities (SALT Center, 1010 N. Highland Ave., P.O. Box 210136, Tucson, AZ 85721, 520 621-1242, http://www.salt.arizona.edu/, and/or the Disability Resources Center, 1224 East Lowell Street Tucson, Arizona 85721, Ph: 621-3268, Fax: (520) 621-9423, e-mail: uadrc@email.arizona.edu, http://drc.arizona.edu/). The appropriate office must document the need for accommodations.

Academic integrity:

You are encouraged to share intellectual views and discuss freely the principles and applications of the course materials. However, all examinations and quizzes must be executed independently, except as specifically noted by the instructor. This course operates under the Code of Academic Integrity as described at http://catalog.arizona.edu/policies/974/acacode.htm

It is unacceptable in this course to submit work without complete citation describing its source(s). For example, it is considered a violation of the Code of Academic Integrity to use work that was previously generated in another course (by you or someone else) to meet an assignment in this course without acknowledgment of this fact as part of the assignment.

As a student it is your responsibility to be completely familiar with and adhere to the rules for academic behavior discussed in the Code of Academic Integrity. If you have any questions whatsoever, ask one of your instructors before you act. The consequences of not doing so may be extreme.

Note that instructors in this course may at times express their opinions. These are entirely their own and should not be construed to represent accepted opinions of the University its Colleges, Departments or Schools, or any other group or organization.

Incomplete Policy:

Any incomplete grade given must be verified with a written agreement with the student that specifies the work to be done and a timetable for completion. Incomplete grades are assigned only in extreme circumstances when it is impossible for the student to complete a minor portion of the work required for a course. These grades are not to be used as a mechanism to retake a course because of generally poor performance. For more information see: http://www.registrar.arizona.edu/gradepolicy/incomplete.htm

Personal Privacy:

It may be impossible to completely maintain the anonymity of individual students taking this course relative to grades given on assignments, exams, or final grades at the completion of the
Students may be asked to provide an alias (e.g. last four digits of phone number) that can be used in place of their name in an attempt to maintain anonymity. It is the student’s responsibility to insure that this alias remains confidential as the possibility exists that this and the grade(s) associated with it will be available on bulletin boards in areas open to the general public.

Also, please note that Appendix D of the University Handbook for Appointed Personnel contains the following information regarding the release of student information as set forth by the Family Educational Rights and Privacy Act of 1974. Pertinent sections of this Appendix are reproduced below. This information may be important if you ask any of the instructors to write a letter of recommendation for you. Again, if you have any questions or concerns, ask the instructors first.

II. CONFIDENTIALITY OF STUDENT RECORDS

A. A student’s educational records (or personally identifiable information contained therein), other than directory information, shall not be accessible or released without the prior consent of the student unless authorized by law. Federal law recognizes that student educational records may be released, without prior consent of the student, under the following circumstances or to the following individuals:

1. Other officials of the University, including teachers, who have a legitimate educational interest in the information.

2. Officials of other schools in which the student seeks or intends to enroll, on the condition that the student upon request receives a copy of the record which has been transferred and has an opportunity to challenge upon request the content of the record.

More on downloaded files

You will want to print paper copies of at least some of the files you download to assist you in taking notes in lecture and lab. To save paper, you may wish to print multiple slides (pages) from pdf files on single pieces of paper. The default in the Adobe Reader is one slide per page. When in the reader you may change this by clicking on:

Mac -- File → Print → Copies & Pages → Layout and then select the number of slides that you would like to print per page (1, 2, 4, 6, 9 or 16).

Windows -- File → Print Setup → Properties and then select the number of slides that you would like to print per page (1, 2, 4, 6, 9 or 16).

SOME SUGGESTIONS ON HOW TO BE A BETTER STUDENT

1. Plan how you want to use your time. Use daily, weekly, and semester calendars to keep track of appointments and assignments. Write down important dates and times. Brains are for important tasks -- like thinking.
2. Review lecture and notes within 24 hours.
3. Keep your class materials in a 3-ring binder. Do it as you go.
4. Form a study group.
5. Establish a regular study routine. Study at the same time for the same duration at the same place.
6. Prepare for exams from the first day of class. Everything you do is exam preparation. Watch and listen for potential exam questions. Use the week before the exam to review NOT to learn.
7. Seek help when you need it (everyone does from time to time).
The University Learning Center (http://www.ulc.arizona.edu/) has lots of resources available to help you learn. Take a look.

*May your trails be crooked, winding, lonesome, dangerous, leading to the most amazing view. May your mountains rise into and above the clouds. May your rivers flow without end, meandering through pastoral valleys tinkling with bells, past temples and castles and poets towers into a dark primeval forest where tigers belch and monkeys howl, through miasmal and mysterious swamps and down into a desert of red rock, blue mesas, domes and pinnacles and grottos of endless stone, and down again into a deep vast ancient unknown chasm where bars of sunlight blaze on profiled cliffs, where deer walk across the white sand beaches, where storms come and go as lightning clangs upon the high crags, where something strange and more beautiful and more full of wonder than your deepest dreams waits for you—beyond that next turning of the canyon walls*

*Edward Abbey*