

Introductory Botany
Spring 2007
Rowan University

Lectures : Tuesdays and Fridays 8:00 – 9:15 a.m. (252 Science Building)
Laboratories: Thursdays 8:00 – 10:40 a.m. (252 Science Building)

Instructor: Dr. Terry O'Brien
Office: 201H Science Building

***Office Hours:** Tuesday: 9:30 - 10:30 a.m.
Wednesday: 9:30 -10:30 a.m.

Phone: 856 256-4500 ext. 3587

****e-mail:** obrien@rowan.edu

*Note that these are times I am guaranteed to be here, not the only times I am available. Appointments are available on request (ask!).

**Please use e-mail as your last option, when the phone or office hours are unavailable. Many questions are more efficiently answered by phone or by visiting me in person.

Read this syllabus and the Schedule-at-a-Glance carefully before the second class meeting. You're responsible for all stated or implied requirements described in both. You're also accountable for understanding all Policies and Procedures described in the current Rowan University Undergraduate Catalog or Schedule of Courses.

Bring the last page of this syllabus, with your signature signed and date, to the second class meeting.

Course Objectives: This laboratory course considers the biology of plants. It is a broad survey of plant nutrition, physiology, development, anatomy, morphology, reproduction, evolution and ecology. An emphasis is placed on the structure and function of plants and the relevance of plants to humanity and the global environment. Students who complete this course will better understand the chemical and structural features of plants, how plants survive, their roles in the environment, and the impacts of plants on humans.

Course Prerequisite: Biology 4: Global Ecology (BIOL 01.204), or Biology II (BIOL 01.101)

Who Should Take This Course? This course is designed for science majors. Majors from other disciplines are welcome, but should be advised that it is assumed that anyone who enrolls in this course already has some understanding of plants from Biology 1-4 or comparable college-level introductory biology courses. This course satisfies the botany bank for biology majors, and satisfies a portion of the science requirements for majors in elementary or secondary education.

Required Textbook:

Graham. L., L. Wilcox and J. Graham. 2005. Plant Biology (2nd Edition). Prentice Hall Publishers. ISBN: 0131469061

Available immediately at the Rowan Bookstore. Approximately \$127 new.
Also available from half.com or amazon.com

Please bear in mind that we will begin reading immediately; if you order the book from an online source, be certain that it will arrive promptly. Also, be careful to order the correct edition (use the ISBN number).

Role of the Textbook in this Course: The textbook provides details about many of the topics considered in lectures and labs. As such, the text is an essential for class meetings and exams. However, there will be some topics considered in class that are sparsely or not discussed in the text. The text and class meetings as complementary but not mirror images of each other, and you should not view one as a substitute for the other.

Required e-mail Account: From the first week of the course onwards, each student is required to use either their Rowan e-mail account or a forwarding e-mail address to receive information and handouts for the course. Please note that if you wish to use an e-mail address other than your Rowan e-mail account, it is your responsibility to arrange automatic forwarding of your e-mail to that account. Information on how to arrange automatic forwarding is available at:

<http://www.rowan.edu/toolbox/email/student/>

Supplementary Handouts: In most cases, these will be distributed as .pdf files via e-mail and posted in the course website. All e-mails will be sent to your Rowan student e-mail address. If you want your course e-mails sent to a different e-mail address, you can arrange this through the Student Campus Portal on the University's web page (see the web address above).

In some cases, printed handouts will be provided, at no cost to you.

A printable .pdf file of each Powerpoint presentation will be posted in the course webpage. This is a resource for you, but should not be seen as a complete reference to class discussions.

If You Need an Extra Handout: Check the course webpage first. Otherwise, a limited number of extra handouts will be in bin next to the instructor's office door. See the instructor only if you have first looked for the handout in the webpage, or in the bin.

Course Web Page: accessible via www.rowan.edu/biology/faculty/obrien
Assignments and web links will be posted here, in an effort to conserve paper and provide you with additional resources for the course.

Saturday Fieldtrip: There is one required Saturday fieldtrip to Longwood Gardens in late April, either April 21 or 28 (the exact date to be determined closer to April). Because the experience cannot be reasonably repeated or reproduced, there will be no make-up opportunities or extra-credit, should you not attend the trip.

Suggestions For Success in this Course:

- Complete all readings BEFORE class meetings. Read carefully: skimming the reading before class is neither rewarding or effective. As you do the readings, write your thoughts down. Writing is a tool of reinforcement and relational thinking. Annotate (add new comments to) your notes as you review them.
- Ask questions or share your thoughts in class. Forcing yourself to formulate a question is as important to learning as the answer (science is not just answers, it's also how to ask questions). Learning is interactive, not just what you can “soak in”. You all have experienced life differently, and each of you can contribute something unique to lecture and lab meetings. If you find yourself reluctant to speak, try preparing a few points or questions in advance, so you’re prepared.
- Attend class faithfully and on time.
- Meet all deadlines, and give yourself time to complete work.
- Turn in professional quality written work, as if you are applying for a job or promotion. For example, proofread carefully, staple neatly, and follow instructions. These sorts of details may seem insignificant, but in the real world of employment, they are difference makers.
- Make accurate and detailed notes during lectures.
- Learn terminology. (There’s often no clear substitute for it).
- Try to synthesize the material (be comparative) and ask yourself questions that require more than just memorization. I suggest that you regularly spend some time reviewing earlier material, and the rest of your time relating it to and working with new material.
- Most learning occurs outside the classroom. So, expect to spend more time on the course outside class meetings than in them. And do spend more time on the course outside class meetings.
- Balance your study time between time alone and time with others. Going solo may seem easier, but it lacks some of the benefits of group work.
- Get help from an authority, such as your professor. I have experience and am trained to help you, and can see things that might be invisible to you or your classmates.

If You Have a Disability: If you have a documented disability that may have an impact upon your work in the class, please contact the instructor during the first week of classes. You are not required to disclose your disability to the instructor, but you must provide documentation of your disability to the Academic Success Center in order to receive University services and accommodations. The Academic Success Center can be reached at 856 256-4234, and is located in Savitz Hall. The Center staff will assist you with accommodations and meeting your learning goals.

Evaluation: Everyone in this course *could* receive an A, provided that everyone is outstanding in all course aspects. On the other hand, this is unlikely. It is only fair to those who achieve the most in the course that a course grade of A is a meaningful reward. An A should be a grade a grade reserved for students who clearly distance themselves from an average level of achievement in the course.

Course grades are determined by a point total from all of the components listed below, weighted as indicated. Neither a “scale” or “curve” is used to determine grades; instead substantial gaps in point totals of all students will be used to determine differences in final course grades. So, your course grade is assigned by comparing your score to the distribution of other scores, not from a preconceived score standard (a scale) or a preconceived grade distribution (a curve).

Meaning of Grades (as defined by the University):

- A - Excellent; Outstanding in All Course Aspects
- B - Good; Above Average but not Outstanding
- C - Fair; Average
- D - Below Average
- F – Failure; No Credit

Point Distribution:

Exam I:	80 points (11%)
Exam II:	80 points (11%)
Exam III:	80 points (11%)
Final Examination:	80 points (11%)
Independent Project:	100 points (14%)
Lab Exercises and In-Class Assignments (approximately):	100 points (14%)
Quizzes:	40 points (6%)
Class Participation:	70 points (10%)
Attendance:	70 points (10%)
TOTAL:	700 points (100%)

Exams and Quizzes:

All exams will have a format of short answer questions, true/false questions, fill-in-the-blank questions and multiple-choice questions. The quizzes will be modeled after the exams, and will serve as examples of the types of questions that will appear on the exams. A set of review questions will be distributed about one week before each exam.

To ensure a fair process for all students in the class during exams and quizzes, you are obligated to cover completed answers. Any student observed not covering completed answers during an exam or quiz will be: 1) first given a verbal warning, and 2) for subsequent infractions have five points deducted from the exam or quiz score.

Is the final exam comprehensive? Not exactly. The final exam will emphasize material from the last quarter of the course. However, key concepts from earlier in the course will be the basis for understanding the last quarter of the course. You won't be able to “black out” the first three sections of the course and do well on the final exam.

As noted in the Undergraduate Catalog, "students are expected to be present at each scheduled class". Makeup exams or quizzes are not available, except: 1) by approval before the scheduled exam or quiz; or 2) if in the judgment of the instructor providing a makeup is fair to the remaining students in the course.

About grading exams: It is not feasible for the instructor to write detailed comments regarding every aspect of your answers on exams. Therefore, a set of suggested answers will be provided with each exam. The suggested answers serve as an explanation of how the exam was graded. If you find that the suggested answers are not a sufficient explanation, *it is your responsibility to consult the instructor* (learning is a two-way street, right?).

The usual time for exams to be returned is one to three weeks. They are rarely returned within a week.

If you have a concern about grading of your exam or quiz, you have one week from the day the exam or quiz was returned to the class to discuss your concerns with the instructor. After one week, no changes to your score will be made.

Note: The first exam will include one question about this syllabus.

Deadlines for Written Assignments: Not surprisingly, written work is due on its due date. Because turning in assignments late is unprofessional, and potentially unfair to both the instructor and other students in the class, the penalty for late assignments is 20% of the points possible, per day late. Late assignments will not be penalized if arrangements have been made with the instructor prior to the due date for the assignment. However, the instructor reserves the right to decide whether an assignment can be reasonably made up or turned in at a later date. Be advised that in some cases, should you miss a class meeting, even if for a valid reason (such as illness, family emergency, or a religious event), you might not be able to make up the assignment. For more information, please refer to the Attendance Policy in the University's Undergraduate Catalog.

Independent Project: Communicating is an essential part of the learning process and of many desirable jobs. A part of this course is an independent research project. You will develop and complete an interdisciplinary project on a topic of your choice (choose carefully). The project will include several components: 1) research using both the web and library resources; 2) development of an approved topic; and 3) an oral presentation to the class, using Powerpoint. A series of deadlines will be given for these during the middle portion of the semester.

Class Participation: To do well in this course, you will need to show that you are engaged in it by your participation during class meetings. Class participation includes questions you pose during class meetings, and your contributions to discussions during scheduled class meetings. Class participation is not a contest about how much you say compared to your classmates (aim for quality, not quantity). **Class participation is not attendance:** you could have perfect attendance, but receive nothing for participation. Woody Allen once said that 85% of life is just showing up on time. Woody would not do all that well in this course with this attitude, because being there (attendance) is only 10% of the points available in this course.

Note Well: Anyone with below average participation will receive no higher than a B+ in the course.

Note Well: Circumstances that will prevent you from participating in classes must be discussed with the instructor during the first three weeks of classes. Circumstances that

prevented you from participating throughout the course will not be considered later in the course and especially not in the final weeks of the course or after it is finished.

Points for participation will be awarded as follows:

excellent participation; contributed to class discussions steadily and in almost all class meetings:	70 points
above average participation; contributed to class discussions frequently, in clearly more than half of class meetings:	50 points
average participation; contributed to class discussions in about half of class meetings:	35 points
below average participation: contributed to discussions infrequently, in less than half of class meetings:	15 points
well below average; contributed to class discussions rarely, in very few class meetings:	0 points

In summary, points for participation will range from 0 to 70 points, with average participation earning 35 points. Class participation includes questions and comments you contributed during class meetings, and is in no way attendance. Class participation is not a competition among you and your students. Your points for class participation are based on your contributions compared to preset standards. It is your obligation to discuss any concerns you have about participation with the instructor during the first three weeks of the course.

Attendance Policy: The University's policy on attendance is published in the Rowan University Undergraduate Catalog, in the section on Academic Policies and Procedures. It is also published in the Schedule of Courses. You are accountable for reading and understanding this policy, which will be used in this course. As noted in the Catalog, "students are expected to be present at each scheduled class". What is implied in this is that absences may occur for justifiable reasons, but they should be rare and only when truly unavoidable. Would you regard an instructor highly if he showed up for class only 80% of the time, or regularly 5 minutes late for class meetings? Surely not. I have the same attendance expectations of you that you have of me.

Both attending class and arriving on time are part of attendance. As a rule of thumb, always contact the instructor at the **earliest opportunity** to discuss the possibility of making up any missed assignments. In general, earliest opportunity means before the class missed, not after. You will quickly lose the benefit of the doubt (see below) if you have a pattern of missing or arriving late for classes.

I have a "no questions asked, no explanation needed" policy for attendance. This means that I do not ask you why you are late or absent for class, and that you do not need to offer me an explanation (unless you missed an exam, quiz, or in-class assignment). It is likely that at some point in the semester you will face illness, a family emergency, or some other event that will justifiably keep you from attending class or attending class on time. Therefore, you are

allowed up to three absences or late arrivals for any reason. Above the limit of three, you will receive fewer than the points possible in the course for attendance, regardless of the reason(s).

Points for attendance will be awarded as follows:

0-3 absences or late arrivals:	70 points
4-6 absences or late arrivals:	50 points
7-9 absences or late arrivals:	25 points
10 or more absences or late arrivals:	0 points

In summary, if you attend class on time about 95% of class meetings, you earn 70 points. If you attend class on time less than 80% of class meetings, you earn 0 points.

Note well:

- Attendance will be observed each class period. Each late arrival (tardiness) will also be observed.
- To be fair to those that always attend the class meetings on time, your fourth absence or late arrival may affect your course grade, regardless of the reason (even if it is a “good” reason).
- No absences or late arrivals are uncounted, however, the system of scoring takes into account that you may have as many as three absences or late arrivals for legitimate reasons, whether for illness, family emergency, or otherwise.
- If you are absent a day you are assigned to lead a discussion or make a presentation, you likely will not be able to make up the assignment. The instructor reserves the right to decide whether an assignment can be made up at a later date, and is not obligated to alter the schedule of the course, nor make special arrangements to permit you to makeup work.
- If you are absent a day that group work is completed during a lab, you may participate in the written assignment for the work, but will receive no more than half the points of those in your group that participated in all aspects of the assignment/project.
- **The attendance policies are not meant to permit absences or late arrivals for exams or quizzes. Makeup exams or quizzes are not available, except: 1) by approval before the scheduled exam or quiz; or 2) if in the judgment of the instructor providing a makeup is fair to the remaining students in the course.**
- **Ongoing circumstances that will prevent you from attending classes or arriving on time should be discussed with the instructor during the first three weeks of classes, or at the earliest opportunity. Such circumstances are not justification for absences or late arrivals if you fail to discuss them with the instructor at the earliest opportunity.**

Benefit of the Doubt: Everyone begins the course with the benefit of the doubt. You don’t have to earn it; it is something you have by default. You can only lose the benefit of the doubt by your lack of class participation, class absences or tardiness, or a decline in performance on written work as the semester goes on. Fortunately, you have some control over all of these. How does the benefit of the doubt affect your grade? If there is a question of two grades you might receive for the course, you would be given the higher of two grades unless you have lost the benefit of the doubt. The less you participate in class and the fewer classes you attend, the more your benefit of the doubt will evaporate into nothingness.

Academic Honesty: Few of you need to be told any of this because most of you are honest. But for those few who are unclear about the nature of academic dishonesty or tempted by it, please read carefully:

The University's policies on academic honesty, as written in the Student Information Guide and the Schedule of Courses, will be followed in this course. Please read this excerpt from the Guide carefully:

"Academic dishonesty, in any form, will not be tolerated. Students who commit an act of academic dishonesty may be subject to an F in the course, suspension from the University, or both.

Students are responsible for upholding University Academic Honesty standards, understanding what constitutes acts of academic dishonesty, understanding academic honesty procedures, and understanding what penalties can be imposed for acts of academic dishonesty."

Plagiarism and falsification are two examples of serious forms of academic dishonesty that could occur in this course. Plagiarism occurs when a student intentionally and knowingly represents the words or ideas of another as her or his own. Falsification occurs when a student intentionally fabricates or invents information or citations. **The penalty for plagiarism or falsification is an F for the course or a 0 (no credit) for the assignment, at the discretion of the instructor.**

All written work will be carefully evaluated for falsification and plagiarism. Should you have any concerns or questions about academic dishonesty, you should discuss them with the instructor.

Acknowledgment of Course Participant

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I have carefully read the entire syllabus for this course, and understand that all policies or guidelines described within it apply to me. I acknowledge that the instructor directed me to carefully read the syllabus on the first day of class. I acknowledge that I understand the policies regarding attendance and participation described in the syllabus. I also acknowledge that I have an obligation to promptly discuss with the instructor any questions or concerns I have about the syllabus or the course.

Your name (print)

Your signature

Date