Syllabus: 22M:016 Calculus for the Biological Sciences [MATH:1460], Fall2012

(Section 072) 7:30A - 8:30A TTH 143MLH and (Section 082) 8:30A - 9:30A TTH 730MLH

Instructor: Dr. Isabel Darcy
Office: B1H MLH
Phone: 335-0778
Email: idarcy.math@uiowa.edu

Tentative Office Hours: M 11:30am - 12:30 in B1H MLH, W 3:30 - 5:20 in , and by appointment.

Course WWW site: http://www.math.uiowa.edu/~idarcy/COURSES/16Fall2012.html

Check this for a list of assignments, possible changes in the course schedule, and electronic copies of course handouts.

Discussion section
TA: Aarati Mahat
Office: 269MH
Phone: 353-2526
Office Hours: TH 3:30-4:30P
Email: aarati.mahat@uiowa.edu

Discussion section attendance is required.

Free tutoring is also available at the Mathematics Tutorial Laboratory (125 MLH)

Text: Calculus for the Life Sciences by Marvin L. Bittinger, Neal Brand, John Quintanilla

Description of Course: This course is a one-semester survey of calculus primarily for students in the biological or life sciences. It includes a non-theoretical treatment of differential and integral calculus and a brief introduction to differential equations, with applications to the life sciences. Three lectures given weekly by a faculty member are complemented by two small group discussions led by a TA. Students desiring a one-semester terminal calculus course may take this course; life science students wanting a more thorough course or planning to take mathematics beyond first-year calculus should take 22M:025-026 (traditional calculus sequence) instead of this course. Students are encouraged to use the Math Tutorial Laboratory for additional help. The courses in this category are eligible for Courses In Common Options. GE: quantitative or formal reasoning.

Goals and Objectives of the Course: By the end of this course, you should
1) be an expert at pre-calculus.
2) have learned calculus
Poor performance on Calculus AP test, 22M:002 or 22M:003, or three or more high school years of mathematics, including analytic geometry and trigonometry.

Grading system:

<table>
<thead>
<tr>
<th>HW</th>
<th>15%</th>
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<tbody>
<tr>
<td>Quiz</td>
<td>20%</td>
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<tr>
<td>Exam</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Final</td>
<td>25%</td>
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Grading & Exams: The above exam dates are tentative. All work must be shown in order to receive credit. This holds for all exams including the final, all quizzes, and homework. Important note: If no work is shown, you may receive zero credit even if you answer is correct.

You are required to bring identification to all exams. You are required to pick up your exams and keep them until the end of the semester. The final exam will be cumulative.

You must staple your HW. For each n, we will deduct (1.9)^n points from the nth HW you turn in unstapled. HW will be graded quickly based upon neatness, completeness, and correctness. You are responsible for checking your answers. Odd problem answers can be found in the back of your textbook. Even problem answers will be provided either in discussion section or via HW grading.

You are required to pick up your exams and keep them until the end of the semester. The final exam will be cumulative.

Your lowest HW grade can be replaced by a participation grade. For more info on the participation grade click here.

Except for the double quizzes, we will drop your lowest quiz score. The double quizzes will be worth double a normal quiz and cannot be dropped.

There is no curve in this class, but improvement may be taken into consideration.

If there is a mistake in grading, you must report this mistake within one week from when the exam, homework, etc. has been handed back to the class (whether or not you picked up your exam, homework, etc.). Your grades will be posted on ICON.

Sections to be covered: Our main focus will be ch 2 - 5, 8. We may also briefly discuss parts of 7 and 9 if there is time. I will assume students are familiar with the material in ch 1; however, the TAs will review ch 1 material during discussion and questions relating to ch 1 material will appear on exams and HW. You should read all sections/handouts/web material corresponding to covered material and/or assigned problems. There may be test questions related to this reading even if not covered in class.

Attendance and absences: Your attendance at each scheduled class meeting and discussion section is expected. You are responsible for material covered in class and announcements made during class; these may include changes in the syllabus. Absences from exams will require a compelling reason, and must be arranged with your instructor in advance.

You may collaborate with other students on the homework; however, each individual student is responsible for turning in your own homework in your own words. Copying is not collaboration and will be prosecuted under scholastic dishonesty. Any significant collaboration should be acknowledged.

The University policies on scholastic dishonesty will be strictly enforced.

The College of Liberal Arts and Sciences Policies and Procedures

Administrative Home

The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Academic Policies Handbook at http://clas.uiowa.edu/students/handbook.

Electronic Communication

University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences (Operations Manual, III.15.2, 4.11).

Accommodations for Disabilities

A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See www.uiowa.edu/~sds for more information.

Academic Honesty

All CLAS students have, in essence, agreed to the College's Code of Academic Honesty: "I pledge to do my own academic work and to excel to the best of my abilities, upholding the IOWA Challenge. I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS Academic Policies Handbook).
CLAS Final Examination Policies

The final examination schedule for each class is announced around the fifth week of the semester by the Registrar. Final exams are offered only during the official final examination period. No exams of any kind are allowed during the last week of classes. All students should plan on being at the UI through the final examination period. Once the Registrar has announced the dates and times of each final exam, the complete schedule will be published on the Registrar's web site.

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS Academic Policies Handbook).

Understanding Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Department of Public Safety website.