MATH 110001, Calculus I  
Summer, 2015  3 Credits

Instructor: Diana Hubbard  
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Office: Carney 347
Office Hours: MWTh 8:15-8:45am and 2-3pm
Note: These office hours are tentative and subject to change based on the needs and schedules of students in the class.
Schedule: MWTh 9-11:30AM  
Room: Devlin Hall 010

Boston College Mission Statement
Strengthened by more than a century and a half of dedication to academic excellence, Boston College commits itself to the highest standards of teaching and research in undergraduate, graduate and professional programs and to the pursuit of a just society through its own accomplishments, the work of its faculty and staff, and the achievements of its graduates. It seeks both to advance its place among the nation's finest universities and to bring to the company of its distinguished peers and to contemporary society the richness of the Catholic intellectual ideal of a mutually illuminating relationship between religious faith and free intellectual inquiry.

Boston College draws inspiration for its academic societal mission from its distinctive religious tradition. As a Catholic and Jesuit university, it is rooted in a world view that encounters God in all creation and through all human activity, especially in the search for truth in every discipline, in the desire to learn, and in the call to live justly together. In this spirit, the University regards the contribution of different religious traditions and value systems as essential to the fullness of its intellectual life and to the continuous development of its distinctive intellectual heritage.

Course Description
This is a first course in the calculus of one variable intended for biology, computer science, economics, management, and premedical students. It is open to those who are qualified and desire a more rigorous mathematics course at the core level. Topics include a brief review of polynomials and trigonometric, exponential, and logarithmic functions, followed by discussion of limits, derivatives, and applications of differential calculus to real-world problem areas. No previous exposure to Calculus is assumed or necessary.

Course Objectives
1. The student will learn what a derivative is, how to calculate it in several situations, and how to use it for graph sketching and solving real-world optimization problems.
2. The student will improve her or his ability to communicate ideas in mathematics effectively and precisely, in both written and verbal forms.

Grading
There will be two midterms and one final exam, as well as daily homework and a participation grade. The midterms each contribute 23% to the final grade, the final exam 30%, the homework 20%, and the participation grade 4%.

WCAS Grading System
The undergraduate grading system consists of twelve categories: A (4.00), A- (3.67), excellent; B+ (3.33), B (3.00), B- (2.67), good; C+ (2.33), C (2.00), C- (1.67), satisfactory; D+ (1.33), D (1.00), D- (.67), passing but unsatisfactory; F (.00), failure; I (.00), incomplete; F (.00), course dropped without notifying office; W (.00), official withdrawal from course. The graduate grading system is A (4.00), A- (3.67), Excellent; B+ (3.33), B (3.00), good; B- (2.67), C (2.00), passing but not for degree credit; F (.00), failure.

Grade Reports. All students are required to log into the web through Agora to access their semester grades. Students must utilize their BC username and password to log on. If your username or password is not known the HELP Desk located in the Campus Technology Resource Center (CTRC) in O’Neill Library will issue a new
one. The CTRC requires a valid picture ID (a BC ID, driver’s license or passport) to obtain your password.

Text

*Single Variable Calculus, Early Transcendentals, Second Edition*, by Jon Rogawski, published by W.H. Freeman. You can buy a copy from the campus bookstore or you can buy an electronic copy directly from the publisher. Both come with access to the online course system *CalcPortal*, which we will be using for homework.

Calculator

No calculator is required for this course, but you may find a graphing calculator useful during homework assignments. You are also welcome to use web tools such as Wolfram Alpha to help with graphing and calculations. However, no calculator use will be permitted during the exams.

Exams

The first midterm will take place on May 27th from 9-10am. The second will take place on June 10th from 9-10am. The cumulative final exam will take place on June 18th during the entire class period.

Homework

Homework will be assigned each class meeting and due the next. Homework assignments will be partially online, using *CalcPortal*. The *CalcPortal* sets will be designed that you can attempt them a maximum of three times, and the final grade will be the best out of your attempts. There will also be a written portion to the homework, using some problems out of the book and some written by me. I will grade a subset of these problems.

*More about CalcPortal*

Access comes with the text when you buy it new at the bookstore, or as part of the ebook package you may purchase from the publisher. To access *CalcPortal*, go to [http://courses.bfwpub.com/calculuset2.php](http://courses.bfwpub.com/calculuset2.php)

If you bought the book in the bookstore and have an activation code, click that link and enter the code, a username and password, and your email. From the pull down menu, select MA and Boston College and my name, click Next and you’ll be directed to the class page.

If you want to purchase access directly, click that link. From the pull down menu, select MA, then Boston College, then my name. Click next, and you’ll be asked to choose a length of time (presumably 180 days, the cheapest alternative) and enter username/password/email. After validating a credit card number, you’ll be directed to the class page.

*Important Policies*

[http://www.bc.edu/content/bc/schools/advstudies/guide/academicinteg.html](http://www.bc.edu/content/bc/schools/advstudies/guide/academicinteg.html)

Written Work

Students are expected to prepare professional, polished written work. Just as you would never hand in a rough draft of a paper for an English class, all mathematical work should be proofread and edited. This will have many added benefits, not least of which is that you will catch your mistakes and learn from them. You are encouraged to work together, but all work handed in is expected to be your own.

Scholarship and Academic Integrity

It is expected that students will produce original work and cite references appropriately. Failure to reference properly is plagiarism. Scholastic dishonesty includes, but is not necessarily limited to, plagiarism, fabrication, facilitating academic dishonesty, cheating on examinations or assignments, and submitting the same paper or substantially similar papers to meet the requirements of more than one course without seeking permission of all instructors concerned. Scholastic misconduct may also involve, but is not necessarily limited to, acts that violate the rights of other students, such as depriving another student of course materials or interfering with another student’s work.
Request for Accommodations
If you have a disability and will be requesting accommodations for this course, please register with either Dr. Kathy Duggan (dugganka@bc.edu), Associate Director, Connors Family Learning Center (learning disabilities or AHD) or Dean Paulette Durrett, (paulette.durrett@bc.edu), Assistant Dean for students with disabilities, (all other disabilities). Advance notice and appropriate documentation are required for accommodations. For further information, you can locate the disability resources on the web at http://www.bc.edu/content/bc/libraries/help/tutoring/specialservices.html.

Attendance
Class attendance is an important component of learning. Students are expected to attend all classes and to arrive by the beginning of and remain for the entire class period. When an occasion occurs that prevents a student from attending class, it is the student’s obligation to inform the instructor of the conflict before the class meets. The student is still expected to meet all assignment deadlines. If a student knows that he or she will be absent on a particular day, the student is responsible for seeing the instructor beforehand to obtain the assignments for that day. If a student misses a class, he or she is responsible for making up the work by obtaining a classmate’s notes and handouts and turning in any assignments due. If you miss class, you cannot make up participation points associated with that class. Types of absences that are not typically excused include weddings, showers, vacations, birthday parties, graduations, etc. Additional assignments, penalties and correctives are at the discretion of the instructor. If circumstances necessitate excessive absence from class, the student should consider withdrawing from the class. In all cases, students are expected to accept the decision of the instructor regarding attendance policies specific to the class.

Consistent with our commitment of creating an academic community that is respectful of and welcoming to persons of differing backgrounds, we believe that every reasonable effort should be made to allow members of the university community to observe their religious holidays without jeopardizing the fulfillment of their academic obligations. It is the responsibility of students to review course syllabi as soon as they are distributed and to consult the faculty member promptly regarding any possible conflicts with observed religious holidays. If asked, the student should provide accurate information about the obligations entailed in the observance of that particular holiday. However, it is the responsibility of the student to complete any and all class requirements for days that are missed due to conflicts due to religious holidays.

There may be circumstances that necessitate a departure from this policy. Feel free to contact the WCAS at 617-552-3900 for consultation.

Deadlines
Assignments are due at the beginning of the class period on the specified dates. Late assignments will generally not be accepted.

Out of class work and assignments

This course meets for almost 7 hours per week – this will be a very fast paced class! I will have a mix of activities each day (lecture, individual work, group work, group activities) to ensure that each session is engaging and educational. However, you will be expected to do a lot of practice and review on your own as well. Specifically, it is expected that out of class work will take you approximately 12 hours per week. Plan your days accordingly.

Again, there will be daily homework. Expect each homework assignment to take you roughly 3-4 hours.
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