

COURSE DESCRIPTION
CALCULUS I
MA 125–8A, 55422
FALL 2015

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF ALABAMA AT BIRMINGHAM

Course Instructor: Dr. Carmeliza Navasca
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Office Hours: Mon 10:00–11:00 AM, Tue 9:30 –10:30 AM, Thu 9:30 –10:30 AM (or by appointment)

Course Info

Meeting times: TueThu, 11:00 AM –12:45 PM
Meeting location: HHB 126
Prerequisite: Grade of C or better in MA 106, MA 107 or equivalent. *Any student who has not fulfilled the prerequisite will be dropped from the class.*
Credits: 4 semester hours
Textbook: *Essential Calculus, Second Edition* by James Stewart, Thomson-Brooks/Cole, 2013, 2007; ISBN-13: 978-1-133-11229-7. Topics to be covered: Chapters 1-5.3.

Important Dates

First day of our class: August 25, 2015
Last day to drop without paying full tuition: August 31, 2015
Labor Day Holiday: September 7, 2015
Last day to withdraw with a “W”: October 23, 2015
Thanksgiving: November 23–27, 2015.
Last day of our class: December 3, 2015.
Major exams (tests): Test I: approximately Tue, Sept 22, Sections: 1.1–1.6, 2.1-2.4
Test II: approximately Thu, Oct 15, Sections: 2.5, 2.8, 3.1–3.5
Test III: approximately Thu, Nov 5, Sections: 3.7, 4.1-4.5
Test IV: approximately Thu, Nov 19, Sections: 3.6, 5.1-5.3
(These dates are approximate and may be slightly shifted due to unforeseen circumstances.)
Final exam: Wed, Dec 9, 2015, 1:30–4:00 PM (Location to be announced.)

Course Policies

- Please make sure that you are able to receive e-mail through your Blazer-ID account. Official course announcements may be sent to that address.

- If you are contacted by the Early Alert Program, you should consider taking advantage of the services it offers. Various services to assist you are also listed in the *Student Resources* section of the *Blazernet* (<http://uab.edu/blazernet>) website.
- If you wish to request a disability accommodation please contact DSS at 934-4205 or at dss@uab.edu.
- The two lowest quiz grades and the two lowest homework grades will be dropped to account for any missed assignments due to illness or any other circumstance. If a test is missed due to a serious verifiable circumstance or official university business, the test grade will be replaced with the properly rescaled final exam score. You must contact the instructor of such circumstances **before** the exam takes place.
- Calculators (without internet access) will be allowed during any of the tests or quizzes. In addition, students can bring one quick reference card to tests (i.e., a standard size 5" × 8"-index card; both sides can be used).

Objectives of the Course

Upon successful completion of the course, a student

- (1) understands limits from a numerical, graphical, and analytic point of view;
- (2) can use limits to define the concepts of continuity and differentiability;
- (3) can demonstrate a solid understanding of the major results of differential calculus;
- (4) can apply the rules of differentiation;
- (5) is able to apply derivatives to problems related to rates of change, linear approximations, optimization, and curve sketching; and
- (6) knows the concepts of antiderivatives;
- (7) can handle beginning distance and area problems.

Methods of Teaching and Learning

- Class meetings of 100 minutes consisting of lectures and discussions of examples and homework problems. Time also includes quizzes and four in-class tests.
- Some time will be devoted to Labs where students work practice problems.
- Students are expected to undertake at least 10 hours of private study and homework per week.
- The online homework system WebAssign (<http://www.webassign.net/>) will be used (look for more information below).
- The online class management system Canvas (<http://www.uab.edu/online/canvas>) will be used to post important handouts, class announcements, practice exams, grades and other pertinent links. Students should log in to Canvas at least once a week!

Assessment Procedures

- Student achievement will be assessed by the following measures:
 - **Regular online homework.** Homework will be due on most Thursdays. There will be no extension of deadlines for any reason (however, the lowest two grades will be dropped). Feedback is provided when wrong answers are given. Students are encouraged to retake the homework problems (with randomly changed parameters) until they obtain correct answers. A limited number (at most 7) of takes is allowed during the week in which the set is available. Homework contributes 5% to the course average. Problems

on tests are modeled after homework problems. Staying on top of homework is therefore extremely important.

- **Unannounced/announced quizzes.** Quiz problems are similar to the homework problem sets. This allows students to gauge whether they are ready to work problems in a test situation. Quizzes contribute 10% to the course average. Lowest two quiz grades will be dropped.
- **Four in-class tests** including short questions for which either full credit or no credit is awarded (Part I) as well as problems requiring in depth understanding (including word-problems) for which partial credit is awarded where appropriate. Each test contributes 12% to the course average.
- **A 150-minute comprehensive final examination** including Part I and Part II type problems. The final contributes 37% to the course average.

Grading Scheme: 5% homework, 10% quiz, 12% test 1, 12% test 2, 12% test 3, 12% test 4, 37% final exam

- Your course performance is your course average (including the final exam score). This is a number between 0 and 100.
- Your final grade is determined according to the following table:

Course performance:	88-100	75-87	62-74	50-61	below 50
Final Grade:	A	B	C	D	F
- In addition your grade maybe raised by a strong performance on the final exam (normally at most one letter grade).
- Additional points on tests can be earned by presenting solutions to specific problems in class. These problems (and the number of points) will be announced separately from normal homework problems.

Tips

- Past tests are available at <http://www.uab.edu/cas/mathematics/2013-05-09-13-21-12/calculus-testbank> (under student resources and then testbank)
- Help is available in the Math Learning Lab (HH 202); M–Th 9–8, F 9–5. Here’s a direct link to the Math Learning Lab Schedule (<http://www.uab.edu/cas/mathematics/ml1/math-learning-lab-schedule>) and to the Calculus Tutoring Schedule (<http://www.uab.edu/cas/mathematics/ml1/tutoring-schedule>). Note that all tutors in the room HHB 202 are capable of answering Calculus problems.
- By working steadily and regularly, you will increase your chances to succeed in this course.
- Remember, being a full-time student is a full-time job.

How to get started on Enhanced WebAssign

- (1) Go to <http://www.webassign.net> and click on *I HAVE A CLASS KEY* in the *signin* link.
- (2) Enter the following course key:

uab 7233 5298

- and proceed. (If prompted for your institution, enter *uab*)
- (3) When prompted to purchase an access code, select “... **trial period**” (Do not purchase an access code at this time. However, you must purchase an access code within two weeks for you to continue using the system beyond the two-week trial period. The system will prompt

you to enter your access code when the deadline approaches. Your book may have an access code bundled with it. You must use it.)

- (4) After your first registration, you can sign in as returning user.
- (5) Should you run into technical problems Enhanced WebAssign provides technical support online and/or by phone.

Sections to be Covered

Essential Calculus — Early Transcendentals, Second Edition, by James Stewart, Thomson-Brooks/Cole, 2013.

- Chapter 1: 1.1 – 1.6.
- Chapter 2: 2.1 – 2.5 and 2.8.
- Chapter 3: 3.1 – 3.7.
- Chapter 4: 4.1 – 4.5.
- Chapter 5: 5.1 – 5.3.

Academic Honor Code

The University of Alabama at Birmingham expects all members of its academic community to function according to the highest ethical and professional standards. Academic misconduct undermines the purpose of education. Such behavior is a serious violation of the trust that must exist among faculty and students for a university to nurture intellectual growth and development. Academic dishonesty and misconduct includes, but is not limited to, acts of abetting, cheating, plagiarism, fabrication, and misrepresentation. Candidates are expected to honor the UAB Academic Honor Code as detailed in the most current UAB Student Catalog. Please consult this resource (<https://www.uab.edu/students/academics/honor-code>) for additional information regarding the specific procedures to be undertaken when a student violates the UAB Academic Honor Code.

Non-harassment, non-hostile Work/Class Environment

UAB is an institution dedicated to tolerance, diversity, and respect for differences. Central to that commitment is the principle of treating each UAB community member and those we serve with respect. UAB community members are expected to: be respectful, fair, and civil; value diversity of opinion and contributions of others; avoid all forms of harassment, illegal discrimination, threats, or violence; provide equal opportunity for access to programs, facilities, and employment; and promote conflict resolution. See more here (<http://www.uab.edu/policies/content/Pages/UAB-AD-POL-0000691.aspx>).
