UNIV 1000-010

Accelerated Calculus I

This is the information sheet for Accelerated Calculus I, UNIV 1000–010, for the Fall Semester 2007. It is your responsibility to acquaint yourself with all the information in this handout, and with any modifications to it that may be announced in class.

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Course Web Page: http://math.ou.edu/~nbrady/teaching/f07-1000 Class Times and Venue: MWF 12:30pm-1:20pm in 224 PHSC. Discussion Section Times and Venue: TR 12:30pm-1:20pm in 100 PHSC. Office Hours: Prof. Brady's office hours are held in 521 PHSC at the following times: Tu&Th 11:00am-noon, W 9:30am-10:30am.

**Text and Course Outline:** We shall cover Chapters 1 through 6 of the textbook, *Calculus* (6<sup>th</sup> Edition), by James Stewart.

The core topics that we shall encounter this semester are the notions of *derivative* and *integral*. These two notions are related by the *Fundamental Theorem of Calculus*, which essentially says that differentiation and integration are mutually inverse operations.

The *derivative* of a function has two different sounding interpretations; an analytic and a geometric interpretation.

- 1. Analytic Interpretation. The derivative of a function is the rate at which the output of a function changes with respect to its input.
- 2. Geometric Interpretation. The derivative of a function at a point is the slope of the tangent line to the graph of the function at that point.

These two interpretations of the derivative combine together nicely to give a wide range of theoretical and practical applications. One of the major objectives in this course is to understand these two interpretations as well as their applications.

The definite *integral* of a function over an interval crops up in very natural circumstances. For example, when one is computing average values, when one is computing areas and volumes, when one is determining work done when a force moves an object along some path, etc. The definite integral has lots of applications in mathematics and the sciences. Understanding these mathematical and physical applications, and being able to use the Fundamental Theorem to explicitly work out many examples, is another major objective of the course.

Attendance: You are required to attend all lectures and discussion section meetings, and you are responsible for all information given out during them. In fact, given the accelerated nature of this course, I will often present lectures during the discussion sections.

**Grading Scheme:** Grades will be assigned by weighting your totals from Homeworks, Quizzes, Midterms, and a Final Examination as shown in the chart below. The Grade scale is:

A = 85% - 100%; B = 70% - 84%; C = 55% - 69%; D = 40% - 54%

Component	When/Where	Percentage
Homework	Hwk due at start of class every MWF	18%
Quizzes	In Discussion Section	4%
Midterm I	Friday, Sep 21, 12:30pm–1:20pm, 224 PHSC	18%
Midterm II	Friday, Oct 19, 12:30pm–1:20pm, 224 PHSC	18%
Midterm III	Monday, Nov 19, 12:30pm–1:20pm, 224 PHSC	18%
Final Examination	Wednesday, Dec 12, 1:30pm–3:30pm, 224 PHSC	24%
TOTAL		100%

Homework/Discussion: Homework will normally be due at the start of class on Mondays, Wednesdays, and Fridays. You are responsible for ensuring that your homework gets turned in on time. Late homework will not be accepted; it upsets the grading process and is unfair to other students. The homework will account for 18% and your participation (and performance on Quizzes) in Discussion Section will account for the remaining 4%.

The homework assignments are there to provide you with a **minimum** level of exposure to the materials outside of class time. You will need to do many more problems before you feel comfortable with the concepts involved. Take it from experience (of generations of students!) that the way to succeed in a math course is to work (and understand) a large number of problems.

Taking Examinations: Here are a few notes on taking Examinations.

- You are required to bring your OU issued photo-id to all examinations in this course.
- You cannot use calculators/computers, books or any type of notes during the examinations.
- All examinations must be taken at scheduled times, except in *very extreme circumstances*. So be careful not to make travel arrangements that conflict with examination times. In particular, note that Midterm III is scheduled for the Monday before Thanksgiving Break. If you cannot take an examination at a scheduled time, you should contact me well in advance of the test time with a documentable reason, and we will set up a time for a make-up examination. Otherwise, an absence at an exam will result in a score of zero.

**Policy on W/I Grades:** If you drop this course on or before Friday, September 28, you will receive an automatic grade of "W". If you drop this course after this date, your grade will be "W" or "F", according to your standing in the class. However, note that dropping the course from October 29 on requires a petition to the College Dean.

Students who are failing the course should not expect to receive an "I" grade in place of a "W" grade. I will only consider assigning an "I" grade if the situation satisfies the following criteria.

- 1. the student is already maintaining a passing grade,
- 2. the student has completed most of the course work, and
- 3. the student can demonstrate that he/she is unable to complete the work at this time due to circumstances beyond his/her control.

Academic misconduct: Visit http://www.ou.edu/provost/integrity for the rules governing cases of academic misconduct. See also the *Academic Misconduct Code*, which is part of the *Student Code* and can be found at http://www.ou.edu/studentcode.

Accommodation of Disabilities: The University of Oklahoma is committed to providing reasonable accomodation for all students with disabilities. If you require special accomodation in this course you are requested to speak with me as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accomodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone (405) 325-3852 or TDD only (405) 325-4173.

**Religious Holidays:** It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

Students who plan to observe a religious holiday which may conflict with a class time, should notify me as soon as possible (preferably within the first week of the semester), so we can make appropriate arrangements.