## Math 2144, Calculus I Course Information

Instructor: Dr. Detelin Dosev, 531 MSCS

Course materials may be found on our course site at OSU's online classroom, oc.okstate.edu. Our online homework system is WebAssign, webassign.net.

Course Times: MWRF 15:30 PM - 16:20 PM in MSCS 101.

Office Hours: Monday, Wednesday, Thursday and Friday from 1:00–2:00 PM and by appointment.

Course Objectives: Calculus deals with functions that relate two varying quantities and the rules that govern the rates at which one of these quantities changes or accumulates with respect to the other. Understanding the calculus enables us to solve many problems in mathematics, science, and engineering. Our aim in this course is to ensure that

- 1. You understand the concepts and tools of Calculus.
- 2. You master the skills required to use those tools.
- 3. You will be able to apply those ideas to solve problems in many disciplines.

**Prerequisites:** A satisfactory score (minimum 70) on the ALEKS placement exam, or a grade of C or better in a college-level course in Trigonometry or Pre-Calculus.

Required Materials: (1) Textbook: Calculus: Early Transcendentals, 2nd edition, by Jon Rogawski, and (2) Online homework system WebAssign (http://www.webassign.net). Note that if you buy your book someplace other than one of our local bookstores, you may have to buy WebAssign access directly from WebAssign, which will cost at least \$38 per semester. Our bookstore sells the textbook bundled with life of the edition access to WebAssign for a reasonable combined price. You must go online and enroll yourself in WebAssign with access to our section as soon as possible:

• For Section 015 use WebAssign Class Key: okstate 8729 8506

Course content: This course covers most of chapters 1–6 in our text. Our presentation of Pre-Calculus review will be brief. We will most likely skip sections 2.8, 4.8, 6.4, and 6.5. Calculus II will begin in Spring 2013 with Chapter 7 of the text.

Calculator usage: Graphing calculators can be a valuable tool for investigating, learning, and applying the ideas of calculus throughout the sciences and engineering. However, calculator usage is not a substitute for your own conceptual understanding or procedural skill. In this course, graphing calculator usage will be permitted on exams as long as your calculator does not have wireless or internet capability, a QWERTY keyboard, or a camera. If you do not own an acceptable graphing calculator, you may borrow one from the Math Department office without charge, starting Tuesday, August 21. Free response exam questions will always require you to show all steps in calculations and to fully justify your answers. The best way to prepare for your exams exam will be to write out homework solutions by hand, using your calculator for numerical steps and for checking your work. Calculator usage on quizzes WILL NOT be allowed.

Course Requirements: Course requirements are distributed are as follows.

• Exams worth 70% of your grade, consisting of 3 hourly exams and a comprehensive final exam. Your exam grade is determined in one of two ways, based on which produces a higher average:

Option 1: Hourly exams 15% each, Final exam 25% Option 2: Hourly exams 10% each, Final exam 40%

Section 016 Exams: Midterms take place during class time in our classroom.

- Exam 1, Wednesday, September 19: covers up through section 3.2;
- Exam 2, Wednesday, October 24: covers up through section 4.4;
- Exam 3, Wednesday, November 28: covers up through chapter 5;
- Final Exam: Tuesday, December 11, 12:00-1:50 PM in BUS 018.
- WebAssign Assignments, worth 10% of your grade, are online homework assignments corresponding to all sections of the text, typically due a few days after each section is covered in class. You should download and print out each assignment, write solutions in a homework notebook (either loose leaf or spiral bound), and then enter solutions into the online system by the due date. I reserve the right to check your WebAssign Notebook for completion at various times.
- Quizzes, worth 20% of your grade. Quizzes may or may not be announced in advance. Missed quizzes may not be made up.

Grading: The course averages given below guarantee the stated grade.

- 90% guarantees an A in the course,
- 80% guarantees a B,
- 70% guarantees a C,
- 60% guarantees a D.

MLSC: The Mathematics Learning Success Center, or MLSC, is on the fourth floor of the Classroom Building and on the first floor of the Edmon Low Library. The tutors who work with students from Calculus I can help you prepare for class by reading your text in advance; they can help you understand class notes, complete WebAssign homework problems, or they can help a Team prepare their Team Homework. Hours for Calculus I will take place in the Library during the following hours:

- Monday through Thursday from 1:00 PM until 9:00 PM;
- Friday from 1:00 PM until 5:00 PM;
- Sundays from 3:00 PM until 9:00 PM.

Makeup exams: Makeup exams will be given only for very serious and unavoidable extenuating circumstances and **only** if you notify me before or as soon as possible after the missed exam. Documentation must be provided.

Drop Policy: The last day to drop the course with no tuition or fees is Monday, August 27. The last day to drop with a partial fee refund is Friday, August 31. The last day to drop the course with an automatic grade of W is Friday, November 9. The W/F deadline is Friday, November 30.

Academic Integrity: Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript (F!), and being suspended from the University. Carefully read the OSU policy at http://academicintegrity.okstate.edu/

Study Hints: Thousands of students in colleges across the country succeed in Calculus I every semester. You should be aware that college Calculus differs from a high school course in several ways. Developing good college-level study habits will help you succeed.

- Come to class having read that section of the text before hand, so you are prepared to ask questions on difficult topics and to work on problems on that topic.
- Attend all meetings of your homework team and contribute in your assigned role.
- Keep up with your work and ask questions as needed: of your homework team member, the MLSC tutors, and your instructor.
- Be responsible for your own learning. The University's guideline for a 4 credit course is that students should be spending a *minimum* of 2 hours outside of class working on course topics for every hour in class. This means that you should be spending a minimum of 8 hours per week reading the text, doing assigned problems from WebAssign, working with your homework team, and so on.
- Exams in college occur less frequently than high school exams and are more comprehensive. As you prepare for exams, make sure to master the big picture as well as the details of the subject. Make sure to identify the concepts and skills you need to tackle a problem you are working on.

## MATH 2144 MWRF Tentative Calendar, Fall 2012

Week of	Monday	Tuesday	Wednesday	Thursday	Friday
20-Aug	Course Intro, Functions		CCI, 1.5	1.5, 1.6	1.6
27-Aug	2.1		2.2	2.2	2.3
3-Sep	Labor Day		2.4	2.4	2.6
10-Sep	2.7		2.8	3.1	3.2 (end Ex 1 mat'l)
17-Sep	Review		EXAM 1	3.3	3.4
24-Sep	3.5/3.6		3.7	3.7, 3.8	3.9
1-Oct	3.10		3.10, 3.11	3.11	Fall Break
8-Oct	4.1		4.2	4.2	4.3
15-Oct	4.3		4.4 (End Ex 2 Mat'l)	4.5	4.6
22-Oct	Review		EXAM 2	4.6	4.7
29-Oct	4.7		4.9	5.1	5.1
5-Nov	5.2		5.2	5.3	5.4
12-Nov	5.5		5.6	5.7, 5.8	5.8 (End Ex 3 Mat'l)
19-Nov	6.1		Thanksgiving	Holiday	No Class
26-Nov	Review		EXAM 3	6.2	6.2, 6.3
3-Dec	6.3		CCI, Review	Review	Review
10-Dec		Final Exam 12- 1:50 PM			