MATH 2144, Calculus I, Syllabus Section 003, MWRF 10:30-11:20, HSCI 316

Instructor: Kedar Nepal Office: MSCS 431 Phone: 744-8412 Email: kedar.nepal@okstate.edu Office Hours: MR 12:30-2:00 or by appointment

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 (<u>http://www.webassign.net</u>)

Cell phones: Cell phones MUST be turned off and OUT-OF-VIEW during class. Cell phones cannot be used during class for any purpose; this includes, but is not restricted to, making or receiving phone calls, sending or receiving text messages, taking photographs during class, or using a cell phone for calculations.

Goals and expectations for the course:

- Calculus deals with functions, mathematical objects 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. Our goal in this course is to ensure that you understand the concepts and tools of Calculus, that you master the skills required to use those tools, and that you will be able to apply those ideas to solve problems in many disciplines.
- Thinking and reasoning with mathematics
- Written and oral explanations
- Rule of Four: representing mathematics algebraically, graphically, numerically, and verbally
- Learning how to learn mathematics:
 - Reading the text;
 - Taking notes to highlight things that are important and things that you want to make sure to remember;
 - Learning from your mistakes;
 - Practicing, i.e., doing homework: Sophocles (497 406 BCE) captured the value of "practice" in mathematics when he said "One learns by doing the thing; for though you think you know it, you have no certainty until you try";
 - Asking questions;
 - Learning from and with peers.

Graphing Calculator Usage: Graphing calculators can be a valuable tool for investigating, learning, and applying the ideas of calculus throughout the sciences and engineering. However, facility with 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, January 8. Exams in this course will consist of free response questions that will require you to show all steps in your solutions and to fully justify your conclusions. We strongly recommend that your best exam preparation will be to write out homework solutions by hand, in a manner that is consistent with exam expectations using your calculator for numerical steps and for checking your work.

Final Grade for the Course: The Course Final Grade will be based on the following requirements:

Exams, worth 70% of your grade, consist of 3 hourly exams and a comprehensive final exam. Course grades are determined in one of two ways, whichever produces a higher average:

Option 1: Hourly exams 15% each, Final exam 25% Option 2: Hourly exams 10% each, Final exam 40% Exam 1, Wednesday, Febraury 6; Chapters 1, 2, and Sections 3.1 and 3.2; Exam 2, Wednesday, March 13; Chapter 3 and Sections 4.1, 4.2, 4.3, and 4.4; Exam 3, Wednesday, April 17; Chapter 4, Chap. 5 Sections 1-8; Final Exam: Wednesday, May 1, 4:00--5:50 PM in **CLB 101**

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.

The class key for Math 2144, Section 003 in WebAssign, our online homework system, is: **okstate 0145 8317.** Students should set up their account and self-enroll for access to our section during the first week of class at https://www.webassign.net/login.html.

Written Assignments and Quizzes will be worth 20% of your grade. Quizzes will be over the content covered in class, in the text, and from the WebAssign online system. At a minimum 12 quizzes will be given, each worth a maximum of 10 points. The ten highest scores will be used as the Quiz Score and will count for 10% of your grade. There will also be about 8-10 written assignments that will count for 10% of your grade. Many of these written assignments will be Group assignments.

The Course Grade: The course averages given below guarantee the stated grade. These cutoff scores may be lowered if circumstances warrant:

90% guarantees the grade of A in the course,

80% guarantees the grade of B,

70% guarantees the grade of C,

60% guarantees the grade of D.

Attendance Bonus: Up to 2% of maximum possible points. If you attend all the classes, I will add 2% of your maximum possible points to your overall grade after the final. For example, if your overall grade is 88% and you missed less than 4 class periods, then your final grade will be 90%. You will receive 1.5% bonus points for 5 absences, 1% bonus points for 6 absences, 0.5% points for 7 absences. You will not receive any bonus points if you miss 8 or more than 8 class periods. This bonus points can be earned only for attending classes. You will not receive this bonus even if you have excused absences.

Make up Policy: If you have to miss a quiz or exam for a serious reason, and you are able to *provide acceptable documentation* verifying that reason, then you will be allowed to make up the missed work. If you have a scheduled University activity (like a field trip or sporting event) then it is normally best to do this beforehand. I try to be flexible and fair, so if you encounter an unusual circumstance then it is worth at least asking about make-up work, although I might say no.

D2L and E-mail: I use OSU's online classroom (D2L) to post important information about the class such as syllabus, course schedule, OSU syllabus attachment, exam solutions and other announcements. I suggest that you add a little basic information to your D2L profile, particularly if you are interested in studying with other students in the class. I use email to contact individual students and the class as a whole. This means that you must check your OSU email regularly.

The Mathematics Learning Success Center (MLSC) is on the fourth floor of the Classroom Building and on the first floor of the Edmon Low Library. The MLSC has tutors who are able to work with students from Calculus I and help you with your questions. 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 1:00 PM until 5:00 PM.

Note: <u>You should read the syllabus attachment for Fall 2012</u>, which I shall post on D2L. This is a document that outlines some of the general academic policies of the University, as well as listing important dates.

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/

Special Accommodations for Students:

If you think you have a qualified disability and need special accommodations, you should notify me as soon as possible and request verification of eligibility for accommodations from the Office of Student Disability Services. For more information, read OSU Spring 2013 syllabus attachment.

Important Dates:

Monday, January 14, 2013: Last day to drop a course with no grade and no fees. Friday, January 18, 2013: Last day to drop a course with 50% fees and grade of "W" Monday, January 21, 2013: MLK Day. Tuesday, February 19, 2013: Six-week grades are due Spring Break Week: March 18-22, 2013 Friday, April 5, 2013: Last day to drop or withdraw with an automatic grade of "W" Friday, April 19, 2013: Last day to drop with an assigned grade of "W" or "F." April 22-26, 2013: Pre-Finals Week April 29 – May 3, 2013: Finals Week