## Math 2153: Calculus II

## MWF 9:30 - 10:20, CLB 213

Instructor: Jeff Mermin

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Course web page: http://www.math.okstate.edu/~mermin/2153/

Webassign: http://www.webassign.net/login.html

Desire2Learn: https://oc.okstate.edu (then log in and find our course).

## Office Hours TBA or by appointment.

Subject matter This course studies integral calculus and infinite series. Both deal with the addition of infinitely many infinitely small numbers. We are interested in objects whose global properties can be determined from their microscopic behavior.

Relationship to other courses Math 2144 (Calculus I) is a prerequisite for this course.

Math 2163 (Calculus III) is the usual sequel course, but strong students sometimes take linear algebra (Math 3013) or differential equations (Math 2233) next.

Textbook Calculus: Early Transcendentals (Second edition) by Jon Rogawski.

Grading Your course grade will be out of 1000 points, assigned as follows:

- 300 WebAssign Homework, Quizzes, and Written Work
- 150 Midterm, Friday, February 13
- 150 Midterm, Friday, March 13
- 150 Midterm, Friday, April 24
- 250 Final exam, Wednesday, May 6, 8:00-9:50 AM

A total score of 900 will guarantee you an A, an 800 will guarantee a B, etc.

Quizzes 15-minute quizzes will be given almost every Friday. They will be open-book, open-notes, and open-calculator (but not open-internet or open-classmate). My expectation is that quizzes will be worth 100 points, but I reserve the right to change this number to anything between 50 and 150 if it should become necessary.

If there are ten quizzes or fewer, I will drop your lowest quiz grade. If there are more than ten quizzes, I will count only your ten highest grades.

Webassign Homework You should self-enroll in WebAssign; you will need the class code

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There will be homework due on Webassign almost every class day. Typically these assignments will be due roughly one class day after their material is introduced; however, you will find it much easier to succeed if you start them as early as possible.

Most problems will offer you five attempts, and will give you full credit for a correct answer on the first or second attempt, with increasing deductions for each subsequent error.

WebAssign grades will be curved at the end of the year. Historically, it has been rare for this curve to affect any student's grade by more than five points in either direction. My expectation is that WebAssign will be worth 100 points, but I reserve the right to change this number to anything between 50 and 150 should it become necessary.

Written Work Most Mondays, I will distribute a written assignment due the following Monday, collect the previous week's assignment, or both. Many if not all of these assignments will permit you to work in small groups and turn in jointly written solutions; I encourage you to identify a group of classmates that you can meet with on a regular basis. If there is a course grader, I will probably also collect written solutions to the WebAssign homework roughly once a week.

The written assignments will not be a simple collection of practice problems like WebAssign, but will ask you to investigate the material more deeply. Thus, you will not succeed unless you start early and work steadily on these assignments throughout the week.

The written homework is chosen not only to help you master the material, but also to help you practice communicating your understanding in a clear, logical way. Thus, if there is a grader, he or she will be primarily concerned with how easily he or she can follow your reasoning, rather than the numerical correctness of your answers. Consequently, the grader's decisions about partial credit will be final.

For some ideas about what I (and the grader) am looking for in written homework, see "Instructions for the grader" and "Guidelines for good mathematical writing" on the course web page.

Late policy. Because the course builds on itself, it is important that you not fall behind. Thus late homework will not be accepted under any circumstances. However, subject to the grader's agreement, I will allow you ten "grace days" in case of illness or other circumstances.

For technical reasons, I cannot implement a similar policy in WebAssign. However, it should be possible for you to grant yourself 24-hour extensions for a 10% penalty.

Collaboration. Mathematics is a collaborative venture; you are encouraged to work together with friends and/or classmates on homework, including

written homework. However, you must write up your work yourself and acknowledge anyone or anything who helped you. For your own protection, you should insist that both you and your collaborators truly understand everything you claim.

Illness policy If you cannot attend one of the exams due to illness or another emergency, you must provide documentation to arrange a make-up.

If you cannot attend a regular class due to illness or another emergency, no documentation is necessary. If you aren't sure whether or not you're too ill to attend class, please see a doctor. If you need to miss *several* classes, let me know as soon as possible, so that I may plan how to accommodate the situation.

Calculators Calculators will be neither necessary nor allowed on exams. You are welcome to use calculators (or more advanced computer algebra systems) on any other work for the course, though I strongly recommend that you practice without them. In any event, do not make the mistake of allowing the computer to do your understanding for you.

Where to go for help You have many resources for this course. I hope you will bring questions to me in office hours. Most students find it helpful to talk to classmates and work problems together. I encourage you to post and answer questions in the Discussion section of Desire2Learn. Finally, there is free tutoring available in the MLSC (See http://www.math.okstate.edu/mlsc for details).

Academic integrity Don't cheat, or help other students cheat. Please read my "rules for written assignments" at

http://www.math.okstate.edu/~mermin/2153/airules.pdf. (I also consider this document part of the course syllabus.)

If, after reading this, you aren't sure whether or not something is allowed, ask me before you try it.

Don't violate academic integrity in any other way, either. 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 according to the OSU academic integrity process. If you have further questions, contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627, http://academicintegrity.okstate.edu.

Links and attachments The course syllabus consists of three documents; please read them all.

This course information sheet may be found at

http://www.math.okstate.edu/~mermin/2153/admin.pdf

The document on academic integrity is available at  $http://www.math.okstate.edu/{\sim}mermin/2153/airules.pdf$ 

Finally, the OSU syllabus attachment is on the web at

 ${\it http://academicaffairs.okstate.edu/images/Patty/FacultyandStaffResources/Syllabus/spring} \\ 2015\ syllabus.pdf$ 

This has a lot of important information, including instructions about disability accommodations. Please contact me privately during the first week of the course if you need accommodations as the result of a disability.