

Math 4143/5043: Advanced Calculus I
Fall 2018

Instructor: Dr. Michael Oehrtman
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405-744-5790
MSCS 426

Office Hours: MWF 12:30 pm – 1:30 pm
in the MLSC
or by appointment

Class Times: MWF 10:30 am – 11:20 am

Location: MSCS 422

Website: <https://online.okstate.edu/d21/home> (then log in and find our course)

Prerequisites: C or better in MATH 3013 and 4023

Required Text: *Real Mathematical Analysis*, by Charles Chapman Pugh

Course Description: This course develops the content of calculus through rigorous definition and proof. We will cover Chapters 1-3 extensively. We will diverge from the text occasionally to cover slightly different material or the same content from a different perspective. Much of our class time will involve your work in groups as well as student presentations and class discussion of problems at the board. This work is aimed at learning to read and understand rigorous mathematics and to generate your own mathematical proofs.

Reading and Definitions: Reading assignments from the textbook will also be posted on the homework page. In order to understand what is being discussed in class you must have read the assigned material BEFORE coming to class.

Homework: You should allot significant time to spend on the homework for this class well in advance of the due date. Very few students will be able to earn much credit on an assignment worked just a day or two before it is due. You should also seek help in office hours well before the day an assignment is due, since it will take time to solidify and apply the ideas you take away from our discussions. All assignments and due-dates will be posted on the homework page of the class website, and you are responsible for keeping track of them. If you forget to bring your homework to class, you may submit it up to 24 hours later with a 20% penalty. No homework will be accepted later than this under any circumstances.

Type or write all of your work LEGIBLY on 8½"×11" paper with at least ONE-INCH margins on all sides free of writing except your name, date, and assignment number, and STAPLE all pages together

In order to earn an A or B for the course, I anticipate that most people will need to spend **8 to 9 hours per week** outside of class on homework, reading, and studying. If you are struggling in the class, you should discuss your situation with me immediately and will need to devote more time to studying each week.

Exams: I will give two in-class exams, one over each of Chapters 1 and 2 in class throughout the semester.

Final: The final exam will be comprehensive and administered at the officially scheduled time, **Friday, December 14 from 10:00am - 11:50am**. Requests to take the final examination at a time other than the published time will not be granted except in cases of conflict with the scheduled exam time for another course, having three or more exams scheduled in one day, personal emergencies, or for reasons of religious practice. In particular, nonrefundable plane tickets, weddings, work schedules, and the like are not acceptable reasons for rescheduling final examinations. Please keep this policy in mind when making end-of-semester plans. You must tell me in writing by Monday, November 24, if you have a university-approved conflict with the final exam time.

Grades: Course grades will be determined as follows:

	<u>Points</u>	<u>Grade</u>	<u>Points earned</u>
Homework	300	A	900-1000
Quizzes	150	B	800-899
Chapter 1 Exam	150	C	700-799
Chapter 2 Exam	150	D	600-699
Final	250	F	0-599
Total Possible	1000		

I reserve the right to use discretion if you are on the borderline between two grades, considering performance on the final exam, improvement or decline during the semester, attendance, and my subjective judgment of your effort.

Academic Honesty: Don't cheat. Don't copy off of other students, allow other students to copy your work, or present work you find in printed or electronic sources as your own. I encourage you to form study groups. Try the homework yourself, and then get together with a study group to go over questions, and to study for tests. You will learn a great deal from articulating your questions and explaining material to your peers. Discussion of assigned homework is encouraged, but you should be sure you fully understand the material by writing your solutions on your own. In this class, copying on quizzes or exams or allowing someone to copy off of you may result in an F! for the course. Copying or allowing someone to copy your work on homework carries a penalty of up to 10 percentage points off your semester homework grade in the first instance and an F! in the class in a second instance. For questions, contact the Office of Academic Affairs, 101 Whitehurst, (405) 744-5627, <http://academicintegrity.okstate.edu>. I deal with cheating very harshly; don't take any chances.

What if I need help? You have lots of resources for this course. Often students find it helpful to talk to each other and work through homework or practice problems together. For quick questions, you can send me e-mail, and you should see me in person during office hours if you have something more than a quick question. Above all, see me early if you have questions. Good luck.

Syllabus Attachment: Please read the OSU syllabus attachment, linked on the web at <https://academicaffairs.okstate.edu/content/resources-students>. 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 a result of a disability.