

Math 2163: Calculus III
Fall 2016

Instructor: Dr. Michael Oehrtman
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MSCS 426

Office Hours: MWF 10:30 am – 11:20 am
or by appointment

Class Times: MWF 9:30 am – 10:20 am

Location: Physical Science 153

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

Homework: <https://www.webassign.net/login.html>. Class key: okstate 7438 5740

Prerequisite: C or better in MATH 2153 or equivalent AP exam credit

Required Text: *Calculus* (Early Transcendentals, Third Edition), by Jon Rogawski

You must have access to WebAssign to complete the online homework assignments. If you have purchased this access for a previous semester, you will still have access and do not need to purchase it again. You can also save significant money by purchasing the e-book version of the text with WebAssign.

Course Description: This course extends the basic ideas of differentiation and integration to functions involving several variables. This includes analytic geometry in three dimensions and basic notions of vectors and vector calculus. We will cover Chapters 12-17 in the text (with slight deviations).

Class Participation: I expect everyone in the class to contribute constructively to the class and group discussions. This can take several forms from clearly articulating points of confusion to uncovering problems with previous lines of reasoning to providing key ideas and breakthroughs. I will regularly expect you to work on challenging problems in small groups to develop a deep understanding of the most important concepts and techniques in the class. If your entire group becomes stuck and/or confused (there is something wrong if this doesn't happen on a regular basis, by the way), you should not give up and wait for me to come around, but you should be resourceful in trying to find new ways to attack the problem or on uncovering what is wrong with your previous attempts. You should also look for ways to draw other students into the conversation. You are not participating fully if you are at either extreme: either never talking or doing all of the talking. There may be topics covered in class that are not in the text. You are responsible for all material covered. I don't take attendance for credit, but there is a strong correlation between attendance and final grades. Missing class more than once or twice during the semester is likely to affect your grade, either directly or indirectly. If you do miss class, you should get notes and/or handouts from your classmates and/or see me during office hours.

Homework: You should budget significant time to spend on the homework for this class well in advance of the due dates. 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. The best way to ensure that you are developing the appropriate insights and on the right track is to talk to other students about the problems. I encourage you to work together, but you must complete your solutions on your own. 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.

WebAssign: The majority of the homework must be completed in the online system WebAssign. There will be roughly two assignments per week, and you must devote regular effort to keep up. There will be opportunities to make up lost or missed work by completing more problems on later assignments, and so there will be no extensions to due dates. You should immediately enroll at www.webassign.net using the class key **okstate 7438 5740**. If you have not registered with WebAssign before, please give your full name and Campus Wide ID in the enrollment form. *I strongly recommend that you use the **Notifications service** within WebAssign to send you an email 24 or 48 hours in advance of assignment due dates as a reminder.* The default setting on most WebAssign problems in this class is that a correct answer on the *first 2 submissions* will receive full credit, and then credit will be reduced by 25% on each submission needed after the first 2. There are 477 points available in WebAssign throughout the semester, but your grade is computed out of 400. This buffer should be more than sufficient for you to make up for any circumstances that cause you to lose points, so I will not grant extensions of any kind.

Labs and Quizzes: Approximately once/week, we will work in small groups on labs that develop the central concepts in the course. Attendance and participation is especially crucial on these days. I will typically give quizzes to cover lab material but may also ask you to turn in write-ups of these activities present your work to the other groups in the class. Quizzes and written work deadlines will be announced in class. Adjustments due to any excused absences must be worked out with me *in advance*.

Exams: I will give three in-class exams throughout the semester. Before each exam, I will provide an overview of what will be covered. You may use a calculator without a QWERTY keyboard, Internet connection, and symbolic manipulation capabilities on exams. (That is, I won't allow calculators that can compute derivatives and indefinite integrals for you.) You may also refer to notes written on both sides of a 3"×5" notecard during exams. Adjustments due to any excused absences must be worked out with me *in advance*.

Final: The final exam will be comprehensive and administered at the officially scheduled time, **Friday, December 9 from 8:00am - 9:50am**. As with the exams, a calculator and notecard are allowed during the final. 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 21, 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>
WebAssign	400	A	900-1000
Quizzes / Written HW	100	B	800-899
Chapters 12-13 Exam	100	C	700-799
Chapter 14 Exam	100	D	600-699
Chapter 15 Exam	100	F	0-599
Final	200		
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.

Portable Electronic Devices: Please extend courtesy to your instructor and fellow students by turning your portable electronic devices to silent or vibrate, and putting them away in your bag during class. If you know that you may need to accept an emergency phone call during class or if you have children in childcare or school, please let me know in advance. If you need to take a phone call during class, please step out of the classroom while you place and complete your call.

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. You're encouraged to post questions and answers in the Discussion section of the Online Classroom. For quick questions, you can send me e-mail if you're really too shy to post there, and you should certainly come see me in person during office hours if you have something more than a quick question. Finally, there is free tutoring available in the MLSC. See <http://www.math.okstate.edu/mlsc> for details. Above all, see me early if you have questions. Good luck.

Syllabus Attachment: Please read the OSU syllabus attachment, linked on the web at <http://academicaffairs.okstate.edu/sites/default/files/Fall%202016%20Syllabus%20Attachment.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 a result of a disability.