

Math 273: Calculus III Summer 2013

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Office hours: TuWeTh 7:00am-9:00am

Course Description

In this course we will study functions of several variables. We will cover the following topics: Vector functions and vector curves, curvature, motion in space, functions of several variables, limits and continuity, partial derivatives, tangent planes, directional derivatives, maximum and minimum values, Lagrange multipliers, double and triple integrals, change of variables in such integrals, line integrals, Greens Theorem, parametric surfaces, surface areas, Stokes Theorem, and Divergence Theorem.

Required Text

Stewart, James. (2013). Essential Calculus: Early Transcendentals, 2nd Ed. Brooks/Cole: Belmont, CA.

Homework

Homework will be assigned daily. Because this course is taught at an accelerated pace for summer session, I will not accept late homework. Homework will be due at the beginning of the class period when it is due (see schedule for due dates). All work is to be shown on every homework problem. A full explanation of the processes is required for full credit. Yes, this means you must use words and not just symbols to show your work. Any problem just worked out with no explanation will receive no credit. Because I expect this level of completeness, I expect that you will work through many more problems than I ask to be turned in. Homework is worth 20% of your grade.

In Class

There will be daily (or almost daily) in class activity worth points. There will be no make up for these points for any reason. The point of in class activities is to give both the student and me the picture of where s/he is relative to the course material. Because I expect students to put an effort into their own education, in class activities are worth 20% of your grade.

Exams

There will be a total of three exams. You can expect to see old material as well as new on every exam. This way there is no need for a final. No make up exams will be given. If you miss an exam for any reason, you need to contact me as soon as possible. If I believe your absence should be excused, we will discuss an individual path for your continuation in the course. No individual plan will be made for a student that misses more than one exam. In this case, withdrawing from the class or failing are the only two options. No notes, books, or electronic devices will be allowed on the exam. Exams are worth a total of 60% of your grade (20% each).

Note from instructor

As a student in this class, it is your responsibility to learn and understand all material. It is my responsibility as your instructor to present to you the material in the way I think is best way. It is your responsibility to read ahead in the text, attend class daily, ask questions for better understanding, and work through many more exercises than those required to be turned in for credit. If you know in advance that you will be unable to attend class daily, you should probably rethink taking this course. The material will be gone through very quickly and so it will take some serious effort on the part of every student. Plan to set aside 10-20 hours outside of class to study each week.

The Mathematics Learning Center is a source of assistance for you. The hours are 10am-5pm daily. They have tutors staffing the center throughout the day.

WSU Safety Measures

Access the Campus Safety Plan and emergency information at <http://safetyplan.wsu.edu> and <http://oem.wsu.edu/emergencies>.

Students With Disabilities

Reasonable accommodations are available for students with a documented disability. If you have a disability and require accommodations to fully participate in this class, visit the Access Center. All accommodations MUST be approved through the Access Center (Washington Building, Room 217). Stop by or call 509-335-3417 to make an appointment with an Access Advisor.

Academic Integrity

I take seriously the University's policy on the need for academic honesty in all of your work. Any form of dishonesty will lead to a zero on that assignment or for the category in which the assignment falls and I reserve the right to assign a grade of F for the course. Visit the Office of Student Standards and Accountability <http://www.conduct.wsu.edu> for more information.

Class Schedule

week 1 Homework Due	June 17 §10.6:9,13,23,27,31 §10.7: 9,23,33,45,67 6/18	June 18 §10.8:3,13,19,25,49 §10.9:17,23,25,27,35 6/19	June 19 §11.1: 21,23,27,35,47 §11.2:5,9,11,13,23 6/20	June 20 §11.3: 23,31,41,59,75 §11.4: 5,11, 23,31,37 6/24
week 2 Homework Due	June 24 §11.5:7,9,19,31,45 §11.6:5,9,17,43,51 6/25	June 25 §11.7:7,9,25,31,47 §11.8:7,15,19,25,43 6/26	June 26 Review	June 27 Exam 1
week 3 Homework Due	July 1 §12.1:5,13,23,29,35 §12.2:9,15,23,29,45 6/2	July 2 §12.3:9,15,19,25,29 §12.4:5,9,15,19,23 6/3	July 3 §12.5:4,10,14,20,30 6/8	July 4 Independence Day!
week 4 Homework Due	July 8 §12.6:6,18,24,28,30 §12.7:6,22,24,28,38 6/9	July 9 §12.8:4,8,16,18,26 6/10	July 10 Review	July 11 Exam 2
week 5 Homework Due	July 15 §13.1:4,12,24,26,30 §13.2:6,12,20,32,44 6/16	July 16 §13.3:10,12,16,24 6/17	July 17 §13.4:4,8,12,18,26 §13.5:6,12,24,32,36 6/18	July 18 §13.6:20,32,36,42,52 6/22
week 6 Homework Due	July 22 §13.7: 6,16,20,24,42 6/23	July 23 §13.8:2,6,8,12,16 6/24	July 24 §13.9:2,10,12,18,30 6/25	July 25 Exam 3

Be sure to follow directions given above in the homework description for full credit.