

MATH 2E MULTIVARIABLE CALCULUS, WINTER QUARTER, 2015

Course Information.

- Instructor: Long Chen
- DBH 1600. MWF 11:00 am - 11:50 am;
- Office hours: Rowland Hall 510F, Wed 4:00 pm - 5:00 pm.
- Course webpage:
<http://www.math.uci.edu/~chenlong/Math2E2017Winter.html>

Contact Information.

- Instructor: Long Chen.
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Course Outline. The differential and integral calculus of vector-valued functions. Change of variables in multiple integrals, line and surface integrals, divergence and curl, theorems of Green, Gauss, and Stokes. Prerequisite: 2D.

Text Book. *Multivariable Calculus: Math 2D/2E*, James Stewart, 8th Edition/UCI Custom Edition:

- 15.7 Triple Integrals in Cylindrical Coordinates
- 15.8 Triple Integrals in Spherical Coordinates
- 15.9 Change of Variables in Multiple Integrals
- 16.1 Vector fields
- 16.2 Line Integrals
- 16.3 The Fundamental Theorem for Line Integrals
- 16.4 Green's Theorem
- 16.5 Curl and Divergence
- 16.6 Parametric Surfaces and Their Areas
- 16.7 Surface Integrals
- 16.8 Stokes' Theorem
- 16.9 The Divergence Theorem

Exam.

- Mid Exam 1: Fri. Feb 3. Lecture time. Ch 15.8-10; Ch 16.1, 2.
- Mid Exam 2: Wed. Mar 1. Lecture time. Ch 16.3 - 6.
- Final Exam: Cumulative. Ch 15.8-10; Ch 16.1-9
Fri. Mar 24, 8:00 - 10:00 am.

Please bring your student ID – if you are unable to produce the student ID you will be denied to take the exam.

No makeup for Midterm or Final Examinations

Homework. Homework will not be collected, but you are supposed to do them all. REMEMBER: the more problems you do, the better you understand the material. Students are encouraged to work together on homework sets. There will be approximately one quiz per week in the discussion session on Thursday. There are two to three short questions in one quiz. The quiz problems will be either the same as, or very similar to those from the homework. Thus, if a student has made a good attempt at the homework, he/she should do well on the quiz. Two lowest quiz grades will be dropped from the final grade calculation.

Grading.

- Homework: 5%
- Quiz: 20%
- Mid Exam I: 20%
- Mid Exam II: 20%
- Final Exam: 35%

Note: 5% is for the completeness of homework. Please show me your homework in the last week during the office hour.

Related Information.

- [Mathematics Add/Drop and Waitlist Policy](#)
- You are responsible for the content of all course emails sent to your UCI account. These course emails could contain urgent information regarding new facts for a lecture or change of dates in the schedule. Once sent these become part of our contract of expectations. All students are required to activate their UCI netIDs. You can go to this website to activate your netID:
<https://ucinetid2.nacs.uci.edu/activate/menu.html>
- This professor stonily adheres to the University's Academic Honesty policy, and cheating will NOT be tolerated. A student caught cheating may receive an F for the course and/or suffer other serious disciplinary action. Information for students regarding the UCI Academic Honesty policy can be found at:
<http://www.editor.uci.edu/09-10/appx/appx.2.htm>.