MATH 1D: Winter 2015 Syllabus Multivariable Calculus

Instructor: Dr. Douglas Lublin

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Website: My Courses/Course Studio at MyPortal

Classroom: G2

Class Hours: MTWThF 8:30 – 9:20 am

Office: E37

Office Hours: Tuesday 9:30 – 10:20 am, Thursday 10:30 – 11:20 am; or by appointment

Final Exam: Wednesday, March 25, 2015, 7:00 – 9:00 am

Textbook: Calculus: Early Transcendentals, 7th edition, Stewart

Prerequisites: Math 1C with a grade of C or better.

OBJECTIVE

• Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.

- Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
- Synthesize the key concepts of differential, integral and multivariate calculus

ATTENDANCE

Attendance at the lectures is a required part of the course. You are expected to arrive on time, ready to learn and participate, and stay for the entire class period. No cell phone use during class. An attendance sheet will be circulated for your signature at the beginning of many lectures; do not sign in for any other students. If you will not be able to attend a class, email me before the class. If you miss more than four lectures (or any lecture the first week of class), you may be dropped from the course, but I do not have to take this action. Remember that it is your responsibility to officially drop or withdraw from the class. If you stop taking the course but you do not drop it, you will receive an official grade of F.

HOMEWORK

The homework represents a critically important part of your studying in math, complementing the lecture material and textbook readings. These problem sets develop critical thinking and problem solving skills, and they allow you to apply theory and to practice skills and techniques. This is how your brain really learns the material. You cannot successfully pass this course without hard work on the problem sets. Each of you studies differently, but a starting estimate is to plan on spending at least 2-3 hours of study time for each hour of lecture. Your work on the homework will be assessed with a quiz (see below), and the homework itself will not be collected. I reserve the right to collect and grade the homework instead of giving a quiz; I will announce that one class in advance.

QUIZZES

There will be six quizzes throughout the quarter, usually at the beginning of class on Fridays except exam weeks. If you arrive late in class, then you will have less time to complete the test; it is your responsibility to be in class on time. The material for the quiz will be based directly on the homework for that week, but it can include any material covered in the lecture and textbook. Some weeks there will be a take-home bonus problem that will be worth extra credit on the quiz. Anyone who wants credit for the bonus problem must turn in the solution at the time of the inclass quiz. The bonus problems are open-textbook and open-note, but you can get no other help. You MUST work on the bonus problem alone, and you CANNOT discuss it with other students and you CANNOT use other books or web resources. Any of those actions would constitute cheating. The bonus problems are meant to be hard and challenging; if you are struggling with the material, do not take time to do the bonus problems. Instead, you should concentrate on your overall studying. Remember, you can get an A in this class without doing a single bonus problem. There are no make-up quizzes, so if you miss class that day, you receive a zero on that quiz. If there is a critical reason for your absence that day, an illness or true emergency, then email me before the class with an explanation. I might require documentation of the situation in order to grant you an excused absence, in which case the grade on that quiz will be replaced with the average grade on your other guizzes. At the end of the guarter, I will drop your lowest guiz score.

EXAMS

There will be three in-class mid-term exams. These one-hour exams are tentatively scheduled to be given during the fourth, seventh, and eleventh weeks of the quarter, although I reserve the right to make shifts in those dates. Any changes in exam dates will be announced one week in advance. (You are responsible for any announcements of schedule changes that I make in class. If you are not present for a class, you should check with a classmate for information.) There are no make-up mid-term exams; if you miss the exam, you receive a score of zero. For excused absences (see above under quizzes), I will make an individual determination on your grading for that exam. The final exam, which is comprehensive, takes place on Wednesday, March 25, 2015, from 7:00 – 9:00 am. There are no make-up final exams; if you miss the final exam, you receive a grade of F for the course. For final grading, I will replace your lowest mid-term exam score with your score on the final exam, if that improves your overall grade.

STUDYING

There are many different styles of studying, and hopefully you have worked out an individual approach that is successful for you. If you need help in developing good study and time management skills, it would be a good idea to talk to the De Anza Academic Skills Center (deanza.edu/studentsuccess/academicskills). The following suggestions are not the only way to study, just some time-tested approaches. This is a hard course, and it takes commitment and effort to be successful. All of you can do it! First, keep up with the work every day; if you get behind even for a few classes, it becomes progressively harder to catch up. Each chapter makes use of material from earlier chapters, so you cannot just skip ahead and understand the material. Second, develop a regular pattern of studying. One suggestion is to start with a review of your class notes each day, then read/review the corresponding section in the textbook, then work problems, and finish by looking through the next section of the textbook for a first view before the next lecture. Third, consider working with a study partner or forming a study group. Discussing a problem with

other students, explaining your approach, is a great way to understand the material better. It is fine to work together on homework problems, but everyone in your group should be contributing and you must each write down your own answers. Fourth, ask questions. That includes during class time and at my office hours. Finally, make use of the De Anza Math, Science and Technology Resource Center, which is located in room S43. It is a great supportive environment for studying math. They have drop-in tutoring at any time, plus they can set up scheduled weekly individual or group tutoring sessions.

ACADEMIC INTEGRITY

The De Anza Honor Code, which can be viewed in full on the De Anza website, states that "As a student at De Anza, you join a community of scholars who are committed to excellence in the teaching/learning process. We assume that all students will pursue their studies with integrity and honesty; however, all students should know that incidents of academic dishonesty are taken very seriously. When students are caught cheating or plagiarizing, a process is begun which may result in severe consequences. It is vitally important to your academic success that you know what constitutes academic dishonesty." Examples of cheating are looking at another student's test paper, using notes or textbooks during a test (unless specifically allowed), sharing calculators during a test, or any use of cell phones during a test (if I see a cell phone during a test, you receive an automatic score of zero). If a test score of zero is given due to cheating, it will not be dropped in calculating the final grade. All instances of cheating will be referred to the Dean for action.

DISABILITY SUPPORT

Any student who feels that he or she may need some accommodation because of a disability should contact me during the first week to discuss their needs. We can then work with the De Anza Disability Support Programs and Services department to address the documented needs.

GRADES

Grades will be calculated based on the following 600 point total:

Quizzes 100 points Exams (3 @ 100 points) 300 points Final Exam 200 points

Overall percentages will be converted to letter grades as follow:

A+: 98-100 A: 92-97 A-: 90-91 B+: 88-89 B: 82-87 B-: 80-81 C+: 77-79 C: 65-76 D: 55-64

<55

F: