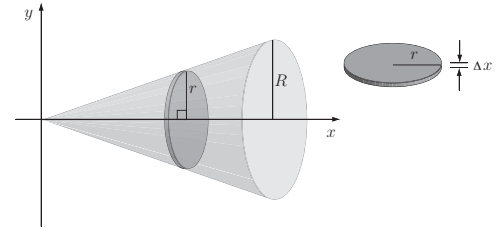


Spring 2009

Daily 11:10 – 12:00 (Section AB/BH)

Instructor:

Jon Freedman
 Office: 7216
 Phone: 738 – 7032
 e-mail: freedmanj@smccd.edu
 Website: www.smccd.edu/accounts/freedmanj/



Office Hours: MF 8 – 9; W 1:45 – 2:30; Tu Th 12:30 – 2; and by arrangement

Prerequisite:

Math 251 with C or better, or appropriate score on placement test.

Important Details:

- (1) Math 252 is a prerequisite for majors in Engineering, Mathematics, and Physics. Check yours.
- (2) Transfer: CSU (B4); UC (credit limit).

Text:

Hughes-Hallett, Gleason, McCallum, et al. *Single Variable Calculus*. 4th ed. New York: John Wiley & Sons Inc. 2005. (red cover). If you plan to take Math 253 (multivariate calculus), buy the blue covered book, *Single and Multivariable Calculus*.

Materials:

A TI-84 (or TI-83+) graphing calculator is required for this course. Other graphing calculators may perform the same functions and may be acceptable but see me about this. If you have a TI-89, TI-92, or other technology that can perform symbolic manipulations you may not be allowed to use it on some forms of assessment.

Important Dates:

Last day to Add this course:	Monday, February 2
Last day to Drop this course without a W:	Tuesday, February 17
Last day to Withdraw from class:	Thursday, April 30
Holidays:	2/13 – 16; 3/11; 4/6 – 4/12; 5/25
Last regular class:	Thursday, May 21
Final Exam (comprehensive):	Wednesday, May 27 11:10 – 1:40 pm

Assignments:

Homework will be assessed in one of three ways to be announced throughout the course. By direct collection; homework quiz consisting of 1 to 6 problems taken directly from the homework (you will have ten minutes to answer the questions by transcribing your solutions from your homework); or by group presentation.

Grading:

Assignments (homework, classwork, quizzes) (30%)
 3 – 5 Tests (50%)
 Final (20%)

I will drop your worst test score (Not the final). There will be no makeup tests. If you are late for a test you will have only the remaining time to complete the test (so don't be late). If you know you are going to miss a test date, contact me at least three days in advance and we can arrange an alternate test to be taken in advance of the class test date.

I will excuse your worst score from each category (HW, tests, quizzes) but will not give makeup work. I will give quizzes often. I will drop your worst quiz. There will be no makeup quizzes.

Grading Scale:

A ≥ 90%
 80% ≤ B < 90%
 70% ≤ C < 80%
 60% ≤ D < 70%
 F < 60%

- Attendance: Your involvement in class and your participation in the process of discovering concepts are fundamental in your understanding of math. I try not to lecture directly from the book but rather to provide experiences enhanced by the book. You will miss a lot of material if you do not attend and it is unlikely that you will pass the course.
- Withdrawal Policy: If you decide to drop this class you must do so formally either by using WebSMART or by filing the correct form with the registrar's office. The likelihood of you passing the class after ten absences is almost 0. If you miss more than 10 hours of class and still desire to remain in the class you must meet with me and convince me that you can learn the material necessary to pass the class.
- Course Contents: We will cover the majority of Chapters 6 through 11, as well as some supplemental materials. By the completion of the course you should have a clear understanding of three BIG ideas:
1. The definite integral is a tool for determining accumulation.
 2. Differential Equations model the behavior of dynamic systems.
 3. Taylor Series provide the means of approximating (1) and (2).
- And an equally clear understanding of these smaller ideas:
- ◇ You will demonstrate your understanding of the definite integral through (correct) numerical approximation, contextual application and the Fundamental Theorem of Calculus.
 - ◇ The First and Second Fundamental Theorems of Calculus and their applications.
 - ◇ Integration by applying substitution. By parts, and by applying the table of integrals.
 - ◇ Numerical approximations of integrals and error significance with applications.
 - ◇ Solutions to applied problems in integration including geometry, physics, economics, and probability.
 - ◇ Understanding of sequences and series, tests for convergence and their applications through Maclaurin and Taylor series.
 - ◇ Setting up and solving differential equations through a variety of methods including numerical, separation of variables, and Taylor series.
 - ◇ Analysis through slope fields.
 - ◇ Solutions to systems of differential equations.
- Honors Section: We will meet briefly once for each section to discuss the honors assignment. Honors assignments comprise single or multiple problems designed to broaden your understanding and insight into integral calculus. Each assignment is due exactly one week after the exam for that unit. There will be 5 honors assignments in all.
- Tutoring: Think seriously about joining MESA. If you have any interest in Mathematics, Engineering, or the Sciences you should join MESA and make use of their many support resources. The Learning Center (TLC) is a good resource for semi-free tutoring in all of your classes. You should visit TLC at the slightest sign of confusion or just as a place to sit and work in a supportive environment.
- Assistance: In Coordination with the DSP&S office, reasonable accommodations will be provided for qualified students with disabilities. If you have an accommodation letter, please meet with me during my office hours to discuss your needs. For more information, please contact DSPS office in building 2 at 738-4280.
- Academic Dishonesty: I strongly encourage you to form study groups and to work together to understand the material covered in this class. Explaining a concept is a valuable way for you and another to develop your insight and your skills. Copying work is of no value to you academically. Consequently, if I find that you are submitting any part of another's work as your own, you will not receive credit for it. The same holds true for any other kind of academic dishonesty. There is no situation that could arise in this class that would justify risking expulsion. If you are having any difficulty, PLEASE see me about it so that we can work together in resolving the issue.