Math 253
CALCULUS III WITH ANALYTIC GEOMETRY
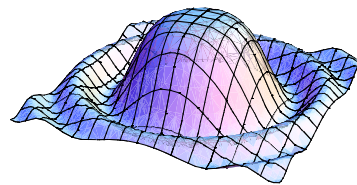
Spring 2020	Daily 12:10 – 1:00 (Section AB)

Instructor:
Jon Freedman
Office: 7325
Phone: 738 – 7032
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Website: www.smccd.edu/accounts/freedmanj/

Office Hours: M–F 1–2 and most times by arrangement – *ask*.

Prerequisite: Math 252 with C or better, or appropriate score on placement test.

Important Details: (1) Math 253 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 and Multivariable Calculus.* 6th ed. New York: John Wiley & Sons Inc. 2018. (red binding). Packaged with WileyPlus. OR you can purchase WileyPlus alone and access the book in pdf form for less than half the hardcopy price.
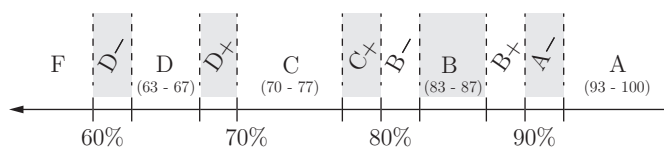
Materials: A TI–84 (or TI–83+) graphing calculator is required for this course. Other graphing calculators may perform the same functions and may be acceptable but see me about this. If you have a TI-89, TI-Nspire, or other technology that can perform symbolic manipulations you may not be allowed to use it on some forms of assessment.

Important Dates:

Last day to Add this course:	Monday, January 27
Last day to Drop this course without a W:	Sunday, February 2
Last day to Withdraw from class:	Thursday, April 23
Holidays:	1/20; 2/14 – 17, 3/5, 3/27, 3/28 – 4/4
Last regular class:	Friday, May 15
Final Exam (comprehensive):	Monday, May 18 8:10 – 10:40 am

Assignments: Homework will be assessed in one of four ways to be announced throughout the course. By **direct collection**; **homework quiz** consisting of 1 to 6 problems taken directly from assigned problems (you will have ten minutes to answer the questions by transcribing your solutions from your homework); **online** through WileyPlus (packaged with the textbook or available online); or by **group presentation**.

Grading:
Assignments (homework, classwork, quizzes) (25%)
Time By Arrangement (5% – WP pre-reading assignments with online discussion)
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:

F | $D^{\nearrow}$ | D (63 - 67) | $D^{\times}$ | C (70 - 77) | $C^{\times}$ | $B^{\nearrow}$ | B (83 - 87) | $B^{\times}$ | $A^{\nearrow}$ | A (93 - 100)

60%   70%   80%   90%

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.

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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 12 through 20, as well as some supplemental materials. By the completion of the course you should have a clear understanding of three BIG ideas (SLOs):

1. Students will develop their understanding of mathematical generalization through the process of adapting differentiation and integration in $\mathbb{R}^2$ to analogous concepts in $\mathbb{R}^3$.

2. Students will recognize and correctly apply methods of 3-dimensional calculus in developing mathematical models and solving problems in the physical sciences.

3. Students will develop techniques and habits of mind essential to becoming better problem solvers.

Tutoring: Think seriously about joining MESA (Room 7309 or contact professor Fredricks at fredrickss@smccd.edu). If you have any interest in Mathematics, Engineering, or the Sciences you should join MESA and make use of their many support resources and opportunities.

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 DRC 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 DRC (in building 5) 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.