

## MATH 250 - ANALYTIC GEOMETRY & CALCULUS I

Instructor: Patrick Staley

Office: 390D

Office hours: 11:00-11:50am Mon&Wed; 3:30-4:20pm Tue&Thur; 10:00-10:50am Fri

Website: [www.staley-classes.org](http://www.staley-classes.org)

Email: [pstaley@swccd.edu](mailto:pstaley@swccd.edu)

Telephone: 421-6700, ext 5521

Text: Calculus with Analytic Geometry Eight Edition, by Larson, Hostetler, and Edwards.

Prerequisites: Both Math 101 and Math 104 or simply Math 244 (pre-calculus and trigonometry) or qualifying Mathematics Placement Test Score

Class Hours: section 01: 7:30-8:55am Mon Wed Fri in room 391

Section 05: 9:00-10:25am Mon Wed Fri in room 391

Graphing Calculator Required: Recommended calculator is the TI-83+. The TI-84+, TI-85, or TI-86 are also OK for this class. Calculators with symbolic algebra capabilities, e.g. TI-89 or TI-92, are not allowed for exams. Some of the exams are no-calculator exams.

Course Description: A study of the calculus of real valued functions including the following topics--

Limits and Continuity

Computation of Derivatives

Applications of the Derivative

Newton's Method

Extrema

Rolle's Theorem

Mean Value Theorem

Concavity

Horizontal and Vertical Asymptotes

Related Rates

Integration

Area

Definite Integral

Fundamental Theorem of Calculus

Change of Variables

Numerical Integration

Applications of the Definite Integral

Areas and Volumes

Calculus of Exponential and Logarithmic Functions

Calculus of Trigonometric Functions

Introduction to Differential Equations

Attendance Policy: Students are expected to attend all lectures. If a student misses excessive class time, he/she may be dropped. Attendance is taken with a seating chart.

Electronic Devices: During lecture please turn off all phones, pagers, music devices, tape recorders, etc.

Special Accommodations: Southwestern College recommends that students with disabilities discuss academic accommodations with their professors during the first two weeks of class. An alternate form of this syllabus is available upon request.

Homework: There will be homework due nearly every class period. Repeated failure to complete homework assignments will be identified as non-performance.

Grading Policy: Your final grade will be a composite of six chapter tests and a Final Exam. The Final Exam is weighted as two chapter tests. Letter grades of A,B,C,D, or F are assigned to each chapter test and Final Exam. These are incorporated into the final grade based on the weight assignments A=4, B=3, C=2, D=1, and F=0. Excessive F scores (two) will result in a lower class grade regardless of the weighted average score. The final exam is comprehensive. There will be no make up tests.

Knowing the correct answer to an exam question is insufficient—the correct answer must be written on the answer sheet. Exam answers that confuse the grader will be marked wrong.

Example of Grading Algorithm: Assume chapter test grades of B,D,B,C,B,A, and final exam grade of A. Then

Class Grade =  $(3+1+3+2+3+4+4*2)/8 = 3.0 = B$  (note that for the class grade A is 3.5 to 4.0, B is 2.5 to 3.5, C is 1.5 to 2.5, D is 1. to 1.5, and F is 0 to .99)

Website: [www.staley-classes.org](http://www.staley-classes.org) contains relevant information for this class including: homework assignments, current notes to students, information on exams, an updated syllabus, the current grade sheet (password protected), exam practice problems, practice tests, answers to practice tests, and other relevant information. You will need Adobe Reader (5.0 or higher; instructions for downloading Adobe Reader are on the website). So that you receive website update notifications please send an email message to [stserv@list.mr-ideahamster.com](mailto:stserv@list.mr-ideahamster.com) with "subscribe M250S08" in the body. If you are viewing this syllabus in electronic form you may click [here](#) to send the appropriate email message for the notification list.

Exclusion Policy: A student may be dropped from the class for excessive absences. A student may be excluded from the class for cheating or disruptive behavior. This class adheres to all misconduct policies as stated in the Southwestern College catalog.

Cheating: Behavior indicative of cheating will be handled by an oral exam, the outcome of which will be one of: F grade on the exam, F grade for the semester, student drops the class, or reinstatement of the score. This penalty also applies to any accomplice.

Tutorial Services: The MESA Center, located in room 396, provides free tutoring for this course. The Academic Success Center in room 420, also offers tutoring.

Projected Schedule:

week 1 --Preliminaries	week 10 --Chapter 4
week 2 --Chapter 1	week 11 --Chapter 4
week 3 --Chapter 1	week 12 --Chapter 4
week 4 --Chapter 2	week 13 --Chapter 5
week 5 --Chapter 2	week 14 --Chapter 6
week 6 --Chapter 2	week 15 --Chapter 6
week 7 --Chapter 3	week 16 --catch up or
week 8 --Chapter 3	week 17 --computer project
week 9 --Chapter 3	week 18 --Final Exam

Final Exam times: section 01 Monday May 19 8:00am-10:00am  
section 05 Wednesday May 21 8:00am-10:00am

Initial Assignment: Buy the textbook; obtain a calculator; read textbook sections P1, P2, P3, and 1.1; and do problems 1-31 and 37-41 on pages 37-38.