MATH 250 - ANALYTIC GEOMETRY & CALCULUS I

Instructor: Patrick Staley
　　　　Office: 390D
　　　　Office hours: 11:00-11:50am Mon Wed Fri; 9:00-9:50 Tue Thur
　　　　Website: www.mr-ideahamster.com
　　　　Email: pstaley@swc.cc.ca.us
　　　　Telephone: 421-6700, ext 5521

Text: Calculus with Analytic Geometry Seventh 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 2: 8:00-8:50am Mon-Fri in room 397
　　　　　　section 5: 10:00-10:50pm Mon-Fri in room 397

Graphing Calculator Required: Recommended calculator is the TI-83+. The 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

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 result in the student being dropped for 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.mr-ideahamster.com/classes/classes.htm contains current notes to students including information on exams, an updated syllabus, the current grade sheet (password protected), practice problems, practice tests, answers to practice tests, electronic tutorials, and other relevant information.

Exclusion Policy: A student may be dropped from the class for excessive absences, non-performance, cheating, or disruptive behavior.

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, dropping the class, or reinstatement of the score. This penalty also applies to any accomplice.

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 2 Monday December 19 8:00am-10:00am
                   section 5 Monday December 19 10:30am-12:30pm

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 36-37.