Information about MATH 1151

Course and Number: MATH 1151 Calculus I    Credits: 5    Class Hours Per Week: 5
Prerequisites: MATH 1149 or 1150 with a C or higher


SPECIAL COURSE REQUIREMENTS: None

COURSE GOALS: To introduce the student to the concepts, methods, and applications of differential and integral calculus necessary for further study in calculus, science, and engineering; to promote the further development of the student's algebraic, numerical, graphical, and communication skills; to develop student’s mathematical thinking and problem solving ability; and to facilitate student's progression from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

GENERAL EDUCATION GOALS: Critical Thinking and Quantitative Literacy

TEXTBOOK, MANUALS, REFERENCES, AND OTHER REQUIRED MATERIALS:
• A graphing calculator is recommended. However, symbolic manipulators (e.g. TI-89, TI-92) are not permitted.

UNITS OF INSTRUCTION
• Limits and Continuity (Sections 2.1-2.5 and 4.5)
• The Derivative and Methods of Differentiation (Sections 3.1-3.6)
• The Derivative in Graphing and Applications (Sections 3.7, 3.8, 4.1-4.4, and 4.6-4.8)
• Integration (Sections 5.1-5.9)

GENERAL INSTRUCTIONAL METHODS:
Classroom lecture, discussion, recitation, and/or problem solving explorations supplemented by visual and/or computer aids.

STANDARDS AND METHODS FOR EVALUATION:
The final examination will be weighted between 25% and 35% of the course grade. The remainder of the course grade will be determined by the instructor.

GRADING SCALE:
Letter grades for the course will be awarded using a 90% - 80% - 70% - 60% scale. Grades will NOT be curved, skewed, or otherwise inflated.