

**SOUTHEAST MISSOURI STATE UNIVERSITY**

**Department of Mathematics**  
**Title of Course: Analytic Geometry and Calculus III**

**Course No.: MA240**  
**DATE: Fall 2008**

**I. Catalog Description:**

Vectors, solid analytic geometry, partial differentiation, multiple integrals, and topics in vector calculus. (3 hours)

**II. Prerequisites:**

MA145 with a minimum grade of 'C'.

**III. Objectives of Course:**

MA140, MA145, and this course form a three course sequence designed to give students a working knowledge of analytic geometry, limit, the derivative, and the integral.

**IV. Expectations of Students:**

The students are expected to attend classes, participate in classroom activities, do homework, and pass examinations.

**V. Course Outline:**

Sections	Topics	Class Hours
12.1 – 12.6	Vectors and the Geometry of Space	13
14.1 – 14.8	Partial Derivatives	14
15.1 – 15.9	Multiple Integrals	15
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Total		45

**VI. Textbook:**

Stewart, James (2008) Multivariable Calculus: Early Transcendentals (Sixth Edition), Belmont, CA: Brooks/Cole-Thomson Learning.

**VII. Basis of Student Evaluation:**

- A. Hourly examinations
- B. Quizzes, homework, class participation
- C. Final examination