

Math 211 Analytic Geometry and Calculus III

Fall 2008

M W F 11:25 a. m. – 12:30 p.m.

PPHAC 113

Instructor: Alicia Sevilla

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Office hours: M W 1:30 p.m. to 2:30 p.m., Th 3 p.m. to 4 p.m.,
F 1:30 p.m. to 2 p.m. and 2:30 p.m. to 3 p.m., and by appointment.

Course Prerequisites: This course is a continuation of the study of differential and integral calculus covered in Calculus and Analytic Geometry I and II, and has as prerequisite the successful completion of both of those courses.

Textbook: James Stewart, *Multivariable Calculus* sixth edition, Thompson Learning Inc., 2008.

Course Content: We will cover most sections of chapters 12 through 16 of the textbook. Topics include: infinite sequences and series, convergence tests, power series, representation of functions as power series, vectors in the plane and three-space, parametric equations and space curves, calculus of functions of more than one variable, including limits, partial derivatives, directional derivatives, multiple integration and applications.

Course Goals: Students who successfully complete the course will:

- be able to work algebraically and analytically with infinite sequences and series,
- be able to visualize and solve geometric problems using vector analysis,
- understand the differential and integral calculus conceptually and be able to use appropriate computational techniques to solve problems.

Coursework: Daily reading and problem assignments will be given; students are expected to come to class prepared to explain problem solutions and ask questions on the material assigned for that day. Some homework assignments will be collected and graded. **All work that is to be collected and graded is to be done individually, unless otherwise noted by the instructor.** Students are encouraged to work together on ungraded homework.

Quizzes and Exams: There will be frequent announced quizzes, two in-class exams and a comprehensive final exam. The dates of the two in-class exams are:

Monday, September 29

Wednesday, November 5

The final exam for this class is scheduled for **Wednesday, December 17, 1:30 p.m.**

Computer Program and Calculators: Some class time will be devoted to computer activities using the program *Maple*. Most of these activities as well as occasional assignments that use Maple will be collected and graded. The computer labs on campus have Maple available; however you may choose to purchase a student license to work on your personal computer. Graphing calculators will be used frequently in class to illustrate concepts and to solve problems.

Grading: Course grade will be based on class participation (5%), quizzes and graded assignments (30%), in-class exams (20% each) and a comprehensive final exam (25%).

Attendance: Class attendance is required. Students are responsible for all work covered in class and all assignments, even if absent from class. If a student must miss more than one class due to illness or emergency, the instructor should be notified. In-class exams must be taken at the announced time; make-up exams will be given only in case of extreme emergency or serious illness. There will be no make-up quizzes.

Help: Students are encouraged to see Dr. Sevilla during office hours or to arrange an appointment for extra help when needed.

Accommodations: Students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.

Note: *This syllabus is a guideline for the course. It may be necessary to make changes during the semester. I will announce any changes in class.*

The **Academic Honesty Policy Guidelines**, stated below, are to be followed. Please read them carefully.

ACADEMIC HONESTY POLICY GUIDELINES

MATHEMATICS COURSES

The Mathematics and Computer Science Department supports and is governed by the ***Academic Honesty Policy of Moravian College*** as stated in the Moravian College Student Handbook. The following statements will help clarify the policies of members of the Mathematics faculty.

In all homework assignments, which are to be graded, you may use your class notes and any books or library sources. When you use the ideas or thoughts of others, however, you must acknowledge the source. For graded homework assignments, you may not use a solution manual or the help, orally or in written form, of an individual other than your instructor. If you receive help from anyone other than your instructor or if you fail to reference your sources you will be violating the ***Academic Honesty Policy of Moravian College***. For homework, which is not to be graded, if you choose, you may work with your fellow students. You are responsible for understanding and being able to explain the solution of all assigned problems, both graded and ungraded.

All in-class or take-home tests and quizzes are to be completed by you alone without the aid of books, study sheets, or formula sheets unless specifically allowed by you instructor for a particular test.