

## Math 171 Section A Analytic Geometry and Calculus II

Spring 2012

**Class time:** M W F 7:30 am - 8:40 am

**Location:** PPHAC 112

**Professor:** Dr. Alicia Sevilla

**Office:** PPHAC 217

**Telephone:** 610-861-1573 (office), 610-867-1787 (home);

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**Office hours:** Monday, Wednesday, and Friday, 11:30 p.m. to 12:50 p.m., and by appointment.

**Course Prerequisites:** This course is a continuation of the study of differential and integral calculus, and has Math 170, Analytic Geometry and Calculus I, or its equivalent as a prerequisite.

**Textbook :** Jon Rogawski, *Calculus: Early Transcendentals, Single Variable*, second edition, W. H. Freeman and Company, 2012

**Course Goals:** Upon successful completion of this course, a student will be able to use basic techniques of integration, will have a deeper insight into the power of calculus as a tool for modeling some real world situations, be able to work algebraically and analytically with infinite sequences and series, and will have basic expertise in the use of the computer program *Maple*.

**Course Content:** The topics to be covered are:

- Review of the definite integral and Fundamental Theorem of Calculus
- Applications of the integration
- Techniques of integration
- Infinite sequences and series
- Introduction to differential equations

We will briefly review chapter 5 and cover most sections of chapters 6, 7, and 10, and selected sections of chapter 8 and 9.

### Coursework and Assessment

- **Homework:** 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.
- **Outlines:** Students will be required to complete a one page outline of each section of the textbook covered in the course. These outlines will be collected at the beginning of each class.
- **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. In addition, students are expected to bring a graphing calculator to class. Graphing calculators will be used frequently in class to illustrate concepts and to solve problems. There will be some activities and quizzes that will be “no technology”. (You

will be told in advance when a quiz will be “no technology”). Unless otherwise directed, you are encouraged to use Maple and/or a graphing calculator as a resource for homework.

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

**Friday, February 10**

**Wednesday, March 14**

**Friday, April 13**

The final exam for this class is scheduled for **Friday, May 4 at 8:30 a.m.**

**Grading:** Course grade will be based on class participation (10%), quizzes and graded assignments (25%), in-class exams (15% each) and a comprehensive final exam (20%).

**Attendance:** Class attendance is required. Students should plan to arrive on time and stay in class during the full class period. 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. Student tutors are available for assistance Monday through Thursday evenings every week. There is no charge for this help. Tutors may not help with graded assignments.

**Accommodations:** Students who wish to request accommodations in this class for a disability should contact Mr. Joseph 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**, 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 that 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 that 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 solutions 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.