Math 170 B   Analytic Geometry and Calculus I   Fall 2008
M W F   8:50 a. m. – 10:00 a.m.
PPHAC 233

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.

Textbook: James Stewart, *Single Variable Calculus*, *Early Transcendentals*, sixth edition,
Thompson Learning Inc.

Graphing Calculator: You are expected to have a graphing calculator and bring it to class. We
recommend the TI-83; instructions will be provided on this calculator.

Course Content: This is a first course in calculus, and no background in calculus is necessary.
Three years of high school mathematics, including trigonometry, are assumed. The course will
cover most of Chapters 1 – 5 of the textbook. Topics included are: Functions and Models, Limits
and Derivatives, Differentiation Rules, Applications of Differentiation, and Integrals.

Course Goals: Upon successful completion of this course you will
  • be able to work with functions algebraically, graphically, numerically, and verbally, and
    use them to model quantitative problems;
  • understand the concepts of limit, continuity, derivative and integral, and the relationship
    between them;
  • know how to find limits and calculate derivatives using various techniques; and
  • improve communication and technical writing skills by discussing mathematical
    problems and presenting solutions.

Assignments and Quizzes: Daily reading and problem assignments will be given; you are
expected to come to class prepared to explain problem solutions and ask questions on the
material assigned for that day. Announced short quizzes will be given frequently in class and
also there will be a few take-home quizzes. The quizzes will include questions on the reading
assignments as well as problems similar to the exercises assigned for homework.

Exams and Proficiency Tests: There will be two in-class exams and a comprehensive final
exam. The dates of the two in-class exams are: **Monday, September 29** and **Wednesday,
November 5**. The final exam for this class is scheduled for **Tuesday, December 16**, 1:30 p.m.

In addition to the regular exams, there will be two *Proficiency Tests*: Limit Proficiency Test and
Derivative Proficiency Test. These are short tests (30 minutes) and are designed to test your
ability to find limits and compute derivatives, without the use of a calculator. Tentative dates for
these exams are **Friday, September 19**, and **Friday, October 24**. You need to pass these two
proficiency tests with a grade of 80% or more to complete this course. You will be able to re-
take these tests multiple times (outside class), but the maximum grade on repeated attempts is
80%. All re-takes of the Limit Proficiency Test must be done no later than October 17, and re-
takes of the Derivative Proficiency Test must be done no later than November 21.

Lab Projects: There will be some (3 or 4) group projects in which each student will work with 2 or three other students. These projects emphasize problem-solving and clear written communication. They will include an in-class experimental portion and a reflective write- up portion.

Culture Points: To help you develop an appreciation for the beauty and utility of mathematics, you are required to spend some time outside of class participating in mathematically oriented activities. Details on this will be provided on a separate handout.

Grading: Your grade in this course will be determined as follows:

Culture Points	5%
Quizzes	15%
Lab Projects	10%
Limit Proficiency Test	5%
Derivative Proficiency Test	10%
Two Exams	30% (15% each)
Final Exam	25%

Attendance: Class attendance is required. You are responsible for all work covered in class and all assignments, even if absent from class. If you must miss more than one class due to illness or emergency, you should notify the instructor. Also, common courtesy demands that you be on time and do not leave the room during class (unless you are ill.) 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: You are encouraged to see Dr. Sevilla during office hours or to arrange an appointment for extra help when needed. In addition, student tutors are available for assistance Monday through Thursday evenings every week. There is no charge for this help. Tutors may not help with projects, labs, take-home quizzes, or any other graded work.

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 following **Academic Honesty Policy Guidelines** 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 <u>must</u> 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.