

Essex County College
Division of Mathematics and Physics
Syllabus for MTH 121 — Calculus I, Sections 002
Fall 2004

Lecturer: Ron Bannon

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Course Blog:	http://mth-121-002.blogspot.com/
Office Hours:	Monday, Wednesday, and Fridays 7:30–8:20; 11:35–12:10
Office Hours by appointment:	Tuesday, and Thursday 1:00–2:15

- **General Education Goals:** The aggregate of the core courses will have the following goals:
(Note: Each core course need not address all four goals.)
 - **Cultural awareness** – To enable students to become more aware of the different perspectives emanating from a culturally diverse population;
 - **Critical thinking and problem solving** – To emphasize critical thinking and problem solving; to the extent possible, to include quantitative reasoning and research skills, including accessing information from a variety of sources and media;
 - **Communication** – To enable students to increase proficiency in writing, reading, speaking, and listening skills;
 - **Computers** – To require students to prepare and present information with the use of computers.
- **Prerequisites:** MTH 119 and MTH 120 with a “C” or better, or by departmental placement test. I expect a good working knowledge of pre-calculus in general, however, you may review pre-calculus topics as needed.
- **Text:** *Calculus*, James Stewart, Fifth Edition.
- **Material to be Covered:** This is a first course in calculus. In the first semester we will learn about derivatives, integrals and the fundamental theorems of calculus, which give the connections between integrals and derivatives. We will begin with a brief review of pre-calculus mathematics, and will continue forward by introducing the notion of a limit, which is essential to defining derivatives and integrals. By the end of the semester students should have an intuitive idea of these objects. We will also give an indication of the sorts of problems that can be solved using calculus and discuss the interpretations of the derivative as velocity or slope of a tangent line and the integral as area or distance traveled. The first five chapters of Stewart’s book will be covered in varying detail, and you should attend all classes to fully appreciate the required detail.
- **Homework and Quizzes:** Homework will be assigned on a regular schedule. You should read the text before doing the assignments and it is your responsibility to complete each assignment in a timely manner. Quizzes will be given frequently and you will not be given

a make-up. The general format of the quiz will be a problem similar to the homework assignment which was assigned in the previous week(s). I expect you to do the homework, and if you don't understand something you should ask questions. The quizzes will be an effective way of monitoring your performance.

- **Exams:** There will be two full-period exams and a cumulative two-hour final. The material on these exams will be similar to the homework.
- **Attendance:** Attendance is required, and I will keep track of it. Excessive absences will result in failure.
- **Grading Policy:** 25% is based on quizzes, 40% is based on the full-period exams and 35% will be based on the final exam. Tentative Exam/Quiz Schedule:

Quiz 1	9/17/04	Friday
Quiz 2	9/24/04	Friday
Quiz 3	10/1/04	Friday
Quiz 4	10/8/04	Friday
Quiz 5	10/15/04	Friday
Quiz 6	10/22/04	Friday
Test 1	10/29/04	Friday
Quiz 7	11/5/04	Friday
Quiz 8	11/12/04	Friday
Quiz 9	11/19/04	Friday
Quiz 10	12/3/04	Friday
Test 2	12/10/04	Friday
Final	12/20/04	Monday

- **Calculators:** Students may use a graphing calculator on exams and homework. Students may not use a machine with symbolic manipulation capabilities on exams. Thus, no TI-89's, TI-92's, HP-48's or laptop computers may be used on exams. Please see me if you have any questions.
- **Working Together:** It is okay to work together on homework. However, when it comes time for you to write up the solutions, I expect you to do this on your own, and it would be best for your own understanding if you put aside your notes from the discussions with your classmates and wrote up the solutions entirely from scratch. Working together on exams, of course, is expressly forbidden.
- **Communication:** Blogging is a new addition (<http://mth-121-002.blogspot.com/>), and I'd like to see if people are willing to participate — so please feel free to post comments. Also, more traditional (phone, email, office hours, lecture, etc.) ways of communication are encouraged.
- **Civility:** You are expected to act in an adult manner at all times. Here's a partial list of things that I don't want to see:
 - **Sleeping:** It is the single most *offensive* behavior.
 - **Slouching:** Pay attention and look alert.
 - **Being Late:** You're expected to be on time and stay the full period.
 - **Interruptions:** Personal business does not belong in any classroom.