MATH 151—Calculus and Analytic Geometry I

Sections 0201, 0202, 0203, and 0204

Fall 1997

Instructor: Matthias K. Gobbert

- Office hours: M 2–3, W 11–12, F 2–3, and by appointment
  Please, note that some of these times may need to be cancelled, if there are faculty meetings (Monday) or colloquia (Friday).
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Lectures: MWF 08:45–09:50, LH 5 (Engineering/Computer Science)

Discussion sessions: The discussion sessions will be led by the teaching assistant. Four discussion sessions are scheduled:

1. schedule number [2539], section 0201, M 10:00–10:50, CP 209
2. schedule number [2540], section 0202, W 10:00–10:50, FA 015
3. schedule number [2541], section 0203, F 10:00–10:50, MP 101
4. schedule number [7921], section 0204, M 11:00–11:50, FA 018

Prerequisite: MATH 150 (Precalculus Mathematics) or qualifying score on the mathematics placement test.

Textbook: James Stewart, Calculus, third edition, Brooks/Cole Publishing Company, 1995/1997. This course will cover chapters 1 through 5 of the textbook. There are two versions of this book available at the bookstore:

1. Full book: The full book encompasses a total of 15 chapters and includes all material covered by the sequence of Calculus classes offered at UMBC. The book is available as a new book and as a used book. I would strongly suggest purchasing this book, if you plan on taking the complete Calculus sequence.
2. Abridged version: This paperback edition specially prepared for the Math department at UMBC includes only Chapters 1 through 5. Its figures are only black-and-white and lacks some of the reference material of the full version. The book is only available as a new book. I would suggest using this book, if this Calculus class is the last math class you will take *and* you do not plan on using mathematics in your major later on.

Study suggestion: While I realize that you have only a limited amount of time available for this class, the following strategy has proven very successful in studying for math classes, and I strongly advise its use: Prepare for the lecture by reading the scheduled section(s) in the textbook; even if you do not understand everything, you will have an overview of what to expect in class. At this point, you should review any section, which might be needed as background for the new material. Then attend the lecture and take your own notes. Afterwards, you should review the textbook and your notes as much as necessary to understand the material; test yourself by working out the examples in the text! At this point, you are ready to do the homework problems for this section as a final test of your understanding.

You should realize that this approach actually saves time over the whole semester, since it is easier to do homework problems right after studying the material, and thus reinforcing the lecture. Also, by starting all homework problems as early as possible, you have the opportunity to get additional help before the due date.

Discussion sessions: The discussion sessions form an integral part of the learning experience of this course. There, you will have the opportunity to work problems under the guidance of the teaching assistant. You are encouraged to work in groups on these problems, since it is vital that you learn to communicate mathematical ideas; also, this offers the opportunity of interacting with other people in general, a valuable part of the college experience. Finally, the graded homework will be returned in the discussion sessions.

Homework: The purpose of homework is to reinforce concepts introduced in class. Mathematics can only be learned by applying these concepts yourself. Only as a secondary purpose is the homework designed to help your self-evaluation and to prepare you for the tests!

Homework will be announced in class and on the course's webpage. Homework will be due in the last lecture of each week, usually the Friday lecture (except when the Wednesday before Thanksgiving is the last day of class during that week). Several problems (but normally not all of them) will be graded and the homework returned in the discussion sessions during the following week.

Make sure the pages are securely fastened together, for instance by staples. The first page must contain your full name and social security number as well as the section number you are registered for; all following pages should contain at least your last name, in the event that the pages become separated.

Please note again that the homework is due in class. I will accept late homework at my office only in exceptional situations and if I have not turned the homework over to the grader yet. Moreover, I discourage leaving homework at my office, if I am not present, as it can get lost or the grader might not receive it in time. Also note that the department does not have sufficient resources to accept homework, so do not try to turn in homework to the department secretary, please.

Tests: There will be three (3) in-class tests of one (1) hour each during the semester; see the syllabus for the dates. There will be one final exam of two (2) hours. Unless otherwise announced, the tests will cover the sections in the text, whose contents have been covered by homework that has been already returned prior to the test. In other words, tests generally cover material up to about one-and-a-half week before; see the syllabus. The final exam is comprehensive and will cover all sections covered in the lectures.

According to university policy, attempts at cheating are considered a serious offense againgst the student honor code and will be looked upon seriously. The right is reserved to check a picture identification during any of the exams.

Grading: Weights for the various items will be distributed approximately according to the following schedule:

Homework	Test 1	Test 2	Test 3	Final
10%	20%	20%	20%	30%

You can expect the two (2) lowest homework scores to be dropped (i.e., not to be counted). While the grading scale will be adjusted later to some degree to reflect the level of difficulty of the exams, the following may serve as a guideline based on prior experience:

Score above	90%	80%	65%	50%	otherwise
Letter grade	A	B	C	D	F

Both the weight distribution and the grading scale are subject to change by announcement in class. In particular, if it is found that additional reinforcement of material is needed, quizzes might be used both in class and in the discussion sessions.

Syllabus: This syllabus is the plan for the whole semester to give you an idea of the material to be covered. It is subject to change as needed.

Week	Monday	Wednesday	Friday
09/01–09/05 1	Labor Day, no class	Organization and review (0.1–0.2)	section 1.1 homework 1 due
09/08–09/12 2	section 1.2	section 1.3	section 1.4 homework 2 due
09/15–09/19 3	section 1.5 (last day to register)	section 1.6	section 2.1 homework 3 due
09/22–09/26 4	section 2.2	section 2.3	section 2.4 homework 4 due
09/29–10/03 5	review	Test 1 (homework 1–3)	section 2.5 homework 5 due (—)
10/06–10/10 6	section 2.6	section 2.7	section 2.8 homework 6 due
10/13–10/17 7	section 2.9 (Columbus Day) (—)	section 2.10	section 3.1 homework 7 due (—)
10/20–10/24 8	section 3.2	section 3.3	section 3.4 homework 8 due
10/27–10/31 9	review	Test 2 (homework 4–7)	section 3.5 homework 9 due
11/03–11/07 10	section 3.6	section 3.8	section 3.10 homework 10 due
11/10–11/14 11	section 4.1 (last day to drop)	section 4.2	section 4.3 homework 11 due
11/17–11/21 12	section 4.4	section 4.5	section 5.1 homework 12 due
11/24–11/28 13	section 5.2 (—)	section 5.3 homework 13 due	Thanksgiving break, no class
12/01–12/05 14	review	Test 3 (homework 8–12)	section 5.4 homework 14 due
12/08–12/12 15	section 5.5	catch-up	course review
12/15–12/19 16	Finals week, no class	Final exam: 10:30–12:30	Finals week, no class