

FINITE MATH. (MA103)

WINTER 2005, Dr. SUJAY DATTA
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SYLLABUS, RULES & REGULATIONS

- **Meeting time:** 7:00-8:40 P.M. (M.W.).
- **Textbook:** '*Finite Mathematics*' (Berresford & Rockett), Houghton Mifflin
- **Syllabus:** Chapters 1, 2, 3, 4 (only upto Section 4.2), 5 and 6 (only upto Section 6.3). If time permits, we may discuss a little bit about Section 4.3. We will start with Chapter 1, move to chapters 3 and 4, then come back to Chapter 2 and finish the course with Chapters 5 and 6.
- **Instructor's whereabouts:** Office in Seaborg Science Complex (Room # 1107), phone # 227-1584, email: sdatta.
- **Office hours:** M.W.Th.F. 9:15-11:00 A.M. and 1:00-2:00 P.M., Mondays and Wednesdays only 6:30-7:00 P.M., or by appointment.
- **Tools required:** A T.I.-series graphing calculator is recommended. If you have any other kind, it is your responsibility to read and learn from the manual. However, you can also use the TI-Interactive software (on your IBM Thinkpad) to avoid buying a new calculator. Questions regarding how to use these tools will, in general, *not* be addressed in the class, but you are free to discuss them as many times as you want outside the class (e.g., during the office hours).
- **Prerequisite:** A "C-" or better in MA100, or recommendation by the placement test.
- **Evaluation & grading:** (a) There will be 4 classtests (1 every month) and several short quizzes. Every other day, a few homework problems will be given and in a week's time, these homework problems will be discussed in the class. Sometimes, if necessary, the homework problems will be discussed the very next day. Homeworks will only be collected and graded two or three times a semester, but it is strongly recommended that you do all of them for your own benefit. At the end of the semester, there will be a final. The classtests will be worth 40 % of your final composite score, the quizzes will be worth 30 %, the graded homeworks will be worth 5 % and the final will be worth 15 %.
(b) The lowest classtest score and the lowest quiz score will be dropped. No classtest, quiz or homework will be individually curved. However, there may be a curve at the end of the semester when I have all the items from each of you. The final is a 'must'.
(c) The remaining 10% of your final composite score will be reserved for class participation (i.e. solving problems on the board in the class, answering questions thrown at you during the lecture, etc.) and attendance (i.e. how regularly you are coming to the lectures). Records of these will be kept for each of you individually.

- **Grade ranges:** A final composite score of 90 % or above is an 'A', at least 87 % and less than 90 % is an 'A-', at least 84 % and less than 87 % is a 'B+', at least 81 % and less than 84 % is a 'B', at least 78 % and less than 81 % is a 'B-', 75 % – < 78 % is a 'C+', 72 % – < 75 % is a 'C', and so on.
- **Automatic lowering of grades:** There are certain things which will *lower* your final composite grade by one or more level(s), no matter how well you do in the course. You will have your final composite grade **lowered by one full point** (e.g., an A- will become a B-, etc.) if (a) there are more than 4 days of unjustified absences over the semester (an 'unjustified absence' is one for which you show me no letter of excuse signed by a *verifiable authority with a contact phone number*— such as a doctor or a coach or a parent—on the first day you are back to class, or you show me no evidence—such as an automobile repair receipt if your car broke down. Simply an email or a letter from you or your room-mate will not do.), **or** (b) you fail to maintain at least a 'C' or 72 % in the category “class participation and attendance” all through the semester. Here’s how to compute your approximate grade in this category for yourself: divide the # days you have been in the class by the *total* # class-days until today, and convert it to a percentage by multiplying it with 100. Then divide the # times you have answered a question or solved a problem in the class *correctly* within the given time-limit by the *total* number of questions or problems you have been assigned, and convert it to a percentage. (Note: I am talking about questions that you are asked specifically by name, not the general questions thrown at the whole class). The average of these two percentages is roughly your grade in this category. But you can come and ask me anytime what your grade is, if you are not sure.
- **What you should expect from this course:** (a) a good *working knowledge* in the topics covered and an adequate preparation for courses such as MA171 (you may *not* have enough time to become *experts*, but we’ll try!) (b) a lot of problem solving in the class (mainly from the textbook, and occasionally from outside), (c) explanatory handouts and notes whenever necessary, (d) answers to all tests, quizzes and homework problems, (e) prompt grading of tests and quizzes (usually you will get the tests and quizzes back in the very next class), (f) plenty of help outside the class. Just see me during my office-hours or make appointments.
- **What you should NOT expect from this course:** (a) DON'T expect the tests and quizzes to be easy! They will be closed-book, will have questions from outside the book, will have questions not discussed in the class (just to encourage you to be innovative). In short, they will be *challenging* and sometimes *hard*— to really make you *think*. (b) DON'T expect that *everything* will be covered in the class. You will have to put in a lot of efforts at home to supplement what is done in the class. (c) DON'T expect the grading standard to be too easy or lenient. Usually I am a strict grader and don't give away A's easily. You'll have to earn your good grade! (But don't worry too much! I do give partial credits and second chances to improve upon low scores). (d) DON'T expect that we will *always* stick to the book. We will often go outside it and cover materials in a different order than it. (e) DON'T expect that “learning to use a TI-series calculator” is our main objective in this class. It is NOT! I'll often tell you how to solve problems on calculators, but you MUST also learn how to do them *by hand* using mathematical techniques (that's our primary goal!).
- **What I expect of you:** I hope you will (a) attend lectures regularly and keep yourself up-to-date, since it is *impossible* to catch up with the materials covered over a whole semester at the last moment, (b) ask a lot of questions in class whenever you have doubts (don't worry! No question is 'foolish'.), (c) not miss a lot of quizzes/class tests/homeworks (by the way, NO makeup quiz

is allowed at any time, and only makeup classtests for “justified absences” are allowed), and (d) come to the class prepared, so you can participate in the class discussion.

- **You shouldn’t be in this class if:** (a) you don’t have the prerequisite or a recommendation from the math. placement test, (b) you think you won’t be able to avoid the things (listed above) that will automatically lower your composite grade, (c) you think the items mentioned above under the headings “What you should expect from this course”, “What you should not expect from this course” and “What I expect of you” are unacceptable to you. **Good Luck & Thanks!**
- **Disability-related services:** If you have a need for disability-related accommodations or services, please inform the *Coordinator of Disability Services* in the Disability Services Office at 2001 C.B. Hedgcock (phone 227-1700; TTY 227-1543). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with proper documentation and according to Federal, State and University guidelines.
- **NOTE:** This course satisfies the *Foundation of Natural Science/Mathematics* requirement. Students who complete this course should be able to demonstrate a basic understanding of mathematical logic; use mathematics to solve scientific or mathematical problems in college classes; express relationships in the symbolic language of mathematics and appreciate the role of probability and statistics in analyzing natural phenomena.