

Syllabus for MTH 201

Multivariable Calculus and Differential Equations

Semester 1, 2014-15

Classroom: Lectures: L4; Tutorials: L1, L3, L6 & L7

Meeting times: Lectures: Mon, 12:00 - 12:55 PM; Wed & Thu, 9:00-9:55 AM;

Tutorials: Tue, 6:00 - 6:55 PM

Contact information:

Instructor: Dr. Kashyap Rajeevsarathy

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Phone: 669-2364

Office: AB2 124

Office hours: Wed, 4:00 - 5:00 PM

Tutor 1: Dr. Prahlad Vaidyanathan

E-mail: prahlad@iiserb.ac.in

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Office: AB2 013

Office hours: Mon, 3:00 - 4:00 PM

Tutor 2: Dr. Gururaja H.A.

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Phone: 669-2423

Office: AB2 123

Office hours: Tue, 10:00 - 11:00 AM

Tutor 3: Dr. Abhik Ganguli

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Phone: 669-2366

Office: AB2 328

Office hours: Wed, 3:00 - 4:00 PM

Course Webpage: http://home.iiserb.ac.in/~kashyap/MTH_201/mth201.html

Topics: Please see page 97 of the 2013-14 Course Contents manual. Note that the topics covered might not directly follow the sequence in the manual. A lesson plan will be made available in the course webpage which will be updated regularly.

Suggested Reading: Since no single prescribed textbook will be followed in this course, it is not necessary for students to purchase any books. It is strongly advised that students attend class regularly and take notes. However, for additional reference, the following textbooks are suggested.

Textbooks

- T. M. Apostol, *Calculus (Volume II)*, Wiley, 2007.
- G. B Thomas & R. L. Finney, *Calculus and Analytical Geometry (9th Edition)*, Addison Wesley, 1995.
- J. Stewart, *Multivariable Calculus (7th Edition)*, Thomas Brooks/Cole, 2011.

Class participation: There are a total of 5 percentage points set aside for class participation. So you are expected to attend all lectures and are responsible for all information given out during them. Excessive absences will result in the loss of points. Your class participation grade will be calculated as follows:

- If the total number of lectures missed is six or less, you will receive the full 5 percentage points of class participation credit.
- Beginning with the seventh, each additional absence will result in the loss of 1 percentage point.

Activities such as conversing with other students, eating, sleeping, reading the newspaper, listening to headsets, using cell phones, computers, or other electronic devices, and so on do not constitute class participation.

Homework: Homework assignments will be due every other week during the tutorial class. The problems to be turned in will be announced on the course webpage or emailed to you. If you must miss the class, try turning in your assignment in advance or have someone else turn it in for you. **Late homework will not be accepted.**

Problems written should be should be legible and must clearly indicate the steps used to arrive at the solution. Just giving the answer to a problem is not worth any credit on the written homework assignments, as giving an answer is not giving a solution. Homework assignments will be checked for completeness, and a few selected homework problems will be graded. You may consult with other students or take help of your tutor during the tutorial session every week. **However, you should write up the solutions in your own words.**

Quizzes: A short quiz will be given every other week during the tutorial class on the same days when assignments are turned in. Since the quiz will be based on the questions in the submitted assignment, students are advised to take their assignments seriously. Please also bear in mind that the homework assignments will be graded based on the performance in the corresponding quiz.

Mid Sem and End Sem Exams: The exams will be given in the regular classrooms. The exact dates for the exams will be ocially announced later in the semester. Many of the problems on the exams will be similar to the homework and quiz problems. The End Sem will be comprehensive with emphasis on topics that are discussed after the Mid Sem exam. **No books, notes, or electronic devices of any kind may be used during exams.**

When graded exams are returned, please check them carefully for any grading errors. All grading issues should be brought to my attention as soon as possible. Test scores are not renegotiable after final grades are submitted.

Do not make travel plans that might prevent you from taking any scheduled exam. **If you have a verifiable reason why you cannot be present at an exam, you must contact me in advance to make an alternative arrangement.**

Grading Scheme: A total of 100 percentage points will be distributed as follows:

- Class participation: 5%.
- Homework and Quizzes: 20%.
- Midterm: 25%
- Final Exam: 50%.