1. Instructor Details:

Instructor	Dr. Avinash Sathaye
Office:	703 POT (Phone 257-8832)
Office Hrs.	MWF 9:30-10:30 (Mathskeller or office) or by Appt.

- 2. Course Web page: http://www.msc.uky.edu/sohum (then follow the link to ma213). All current announcements, lecture notes and general information about course related activities will be posted on this web page. Be sure to check it often.
- 3. Course Structure. Three weekly 50 minute lectures and two weekly 50 minute recitations.

Regular attendance in class as well as recitation is expected. Excessive absence will result in a diminished attendance grade.

Recitation details are on the course web page.

4. Course Details. MA 213 is a course in Multivariable Calculus, i.e. the calculus of functions of two or three variables. The main topic covered are:

Rudiments of Analytical Geomerty (line, planes, quadric surfaces in the 3-space) Functions of several variables, partial derivatives, chain rule(s), maxima and minima Integration in 2 and 3 dimensions, including integration in polar, cylindrical, and spherical coordinates Vector Calculus, Line Integrals, and Green's Theorem.

- 5. **Projects.** The Honors version of the course expects the students to complete three challenging projects during the semester. These will be announced early and will be due a week after each midterm exam.
- 6. Learning Outcomes. By the end of the semester, MA 213 students are expected to know the main theorems and techniques covered in Calculus III and be able to use them when and where appropriate. Successful students will be able to use these results in new situations and will demonstrate a degree of independent thinking.
- 7. **Textbook.** James Stewart, Calculus: Single and Multi-Variable (Custom edition for UK). This is a version of the full James Srewart's Calculus, 8th edition. You can use the full version, but the UK custom edition maybe somewhat cheaper. If you bought your textbook from the UK bookstore, you have access to Stewart's eBook version.
- 8. Homework. We plan to use Webwork. Detailed instructions will be posted on the course web page. The homework is an integral part of the course and it is essential that it is done on time. There is no way to make up homework once it expires. The homework is posted even before the class discussions start and you must try to finish it at the earliest opportunity. Computer and Network problems arising in the last few hours before the deadline will not create a valid excuse for missed homework.

9. Exams. There will be three midterm evening exams:

at 5:00-7:00 pm on Wednesdays, Feb. 7, Mar. 7 and Apr. 11.

Note that these are longer than a typical class and given at night. We will follow University regulations governing such exams.

The Final Exam is on Monday May 2 from 6:00 to 8:00 PM. Note the change in timing.

General Exam policy: Calculators are permitted, however, any device capable of electronic communication such as a cell phone or computer must be turned off and put away out of sight during all examinations.

10. **Recitation.** Besides the three class periods, you have two recitation periods each week. Your recitation instructor will announce the recitation policy. The instructor will award a grade worth 55 points (out of the total 500 points).

The recitation grade will be split as 30 points for three written projects (one at the end of each exam period) and 25 points for attendance and participation in the recitations. The recitation instructors will provide further details of this.

11. **Grade.**

- Each exam shall be worth 90 points, giving a total of 360 points.
- The WebWorks homework will be worth a total of 60 points.
- 30 points based on the three projects as described above.
- 25 points based on the attendance and participation in the recitation.
- 25 points based on the attendance and participation in the class.
- Either of the attendance grades may be partially based on quizzes, if necessary.
- The net grade will be based on a total of (360+60+30+25+25)=500 points. Thus the final grade will use the scale:

 $500 \ A \ 450 \ B \ 400 \ C \ 350 \ D \ 300 \ E$

Course Policy on Academic Accommodations due to disability:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center. Check the site: http://www.uky.edu/DisabilityResourceCenter/ for further information.

Course Policy on Academic integrity:

Students may work together on homework, but should not submit solutions to WebWorks until they understand how to obtain the answers. All other course work on projects and exams must be the student's own work.Useful information about students' rights and responsibilities can be found at the following website: http://www.uky.edu/Ombud . You are advised to consult it as needed.