Math 410.0401- Advanced Calculus 1 Fall 2015 TuTh 12:30 - 1:45, Math Building 0407

Instructor: Dr Swarnava Mukhopadhyay

Office: Mathematics Building 4416 E-mail: swarnava@umd.edu

Office Hours: Tentatively Tuesday 11-12, Wednesday 12-12:50, Thursday 1:45-2:45 and by appointment In addition to my office hours Mr Bhatia (Room: 1104 Math Building) has office hours for Math 410: Monday-Thursday 1:00-1:50. To get help from Mr Bhatia, you need to make a appointment by email (mbhatia@math.umd.edu).

Course Website: http://www.terpconnect.umd.edu/~swarnava/410Fall2015.html

Text: Advanced Calculus, 2^{nd} edition, by Patrick Fitzpatrick, Thomson Brooks Cole, 2006. ISBN: 0-534-37603-7.

Course Descriptions: Math 410 is the first of a two-course sequence that presents a rigorous analysis of calculus concepts. Math 410 focuses on functions of one variable, including convergent sequences, limits and continuous functions, differentiable functions and application of derivatives, integrations, Taylor polynomials, sequence of functions. There will be an emphasis on carefully proving the results. Our discussions will be centered around the concepts, related proofs and many examples.

Homework: There will be graded homework assignments that will be collected every class period. You are encouraged to work and learn together via homework, but it is important to make sure that you have a personal mastery of the material. You may work together, but the work you turn in must be your own. In particular, copying answers from an outside source (another student, solutions manual, tutor, the internet, etc.) is forbidden. No late homeworks will be accepted. No homework will be dropped but your lowest grade in each homework will be dropped.

Quizzes and In-class work: There may be short quizzes. No make up quizzes will be given. Two lowest quiz grades will be dropped.

Tests: There will be three tests in addition to the final. No make up tests will be given. The three tests together count for 250 points. The three tests will be given, in class, on the following: *approximate* dates (subject to change):

- Test 1: October 1, Thursday
- Test 2: November 5, Thursday
- Test 3: December 8, Tuesday

These tests will be of 50 minutes and will be given in the beginning of the class.

Final: Cumulative final is on Friday, December 18 from 1:30-3:30 AM. Under no circumstances will the final exam be given early.

Grading(tentative): All grades will be assigned by the standard 10-point scale. Pluses and minuses will be assigned at the instructor's discretion. The breakdown of your final grade in the course will be as follows:

Homework 50 points
In-class work 50 points
Test (Top two scores and 50% of the lowest) 250 points
Final Exam 150 points

Makeup Policy No makeups for quizzes, homeworks, tests. I will not accept late homeworks.

Classroom Etiquette: Students are expected to attend every class meeting with all communication devices turned off. Please make sure your cell phone does not ring during the lectures and distract others. Please do not use headphones, laptops during the class.

I would like to encourage everybody to ask questions. Without questions, the lectures could feel uninteresting and monotonous. Maintaining a perfect learning atmosphere is a responsibility of every student in the class. Please refrain from carrying on conversations during the lectures. This type of private conversations can be distracting to me and every one else in the class.

Resources: Course materials, announcements, and homework assignments will be posted on the course website. You should take advantage of the instructor's office hours and Mr Bhatia's office hours.

Honor Code: It is expected that each student will conduct himself or herself within the guidelines of the UMD Honor System. All academic work should be done with the high level of honesty and integrity that this university demands. For more information, please visit http://shc.umd.edu/code.html.