BRIEF SUMMARY OF IMPORTANT COURSE INFORMATION AND POLICIES

Course: Math 63 - Introduction to Real Analysis
Instructor: Dr. Nsoki Mavinga
Office/Hours:
   SC 155; Monday: 11:25 AM - 12:25 PM and Friday 2:00 PM – 4:00 PM
Phone: (610) 957-6197
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Lecture meeting times/locations:
- Section 1 MWF 9:30 AM – 10:20 AM, SCI L26
- Section 2 MWF 10:30 AM – 11:20 AM, SCI L26

Problem sessions:
- Section X M 3:00 – 4:00 PM, SCI 158
- Section Y M 4:15 – 5:15 PM, SCI 149
- Section Z M 6:15 – 7:15 PM, SCI 149

Other resources: These texts are on reserve at Cornell library

Website:

Aims of the course:
This course concentrates on the careful study of the principles underlying the calculus of real valued functions of one variable. The goal is to acquaint the student with basic concepts of rigorous proof and to set a firm foundation in real analysis. Therefore there will be a strong emphasis on the reading and writing of proofs. We will roughly cover chapters 1 - 7 of the text. Topics include elementary set theory, the real numbers, metric spaces, continuity, compactness, connectedness, uniform convergence, differentiation, and integration.

Grading:
- 2 midterm exams
  - Exam 1 (20%): Thursday, October 4, 7:00 PM – 8:15 PM, SCI 145
  - Exam 2 (20%): Thursday, November 15, 7:00 PM – 8:15 PM, SCI 145
- Comprehensive final examination (30%)
- Quizzes (10%)
- Homework (20%)
Quizzes:

Quizzes are given periodically; dates of the quizzes are not necessarily announced in advance. The quizzes will include definitions, examples, and statements of known results. There will be no make-up if you miss a quiz.

Midterm examinations:

There will be two midterm exams, given on Thursday, October 4 and on Thursday, November 15 from 7:00 pm to 8:15 pm, SCI 145. All the exams will include a combination of definitions, examples, and statements of known results, proofs of known results, and proofs of new results.

Final Examination:

The final exam is comprehensive and will be scheduled by the registrar later this semester. So, don’t buy a ticket home until the exam is scheduled!

Homework:

Mathematics cannot be learned solely by watching other people present solutions to problems or by reading examples and proofs in the text. You have to do problems. This is especially true in real analysis. As such, homework is the most important part of your grade.

Homework will be assigned weekly and posted to Moodle. Each Wednesday, I will assign two homeworks. Solutions of one assignment will be presented by the students in the problem sessions on the following Monday. The other assignment will be collected at the beginning of Wednesday’s class and will be graded. To get a full credit for a solution to a homework problem, you have to provide full, detailed and well organized proofs of all the statements made in the assignment. The homework problems that will be collected must be typed and each problem must start on a separate page. You may use TeX or any other text editor for this purpose. Since the homework grade constitutes 20% of your course grade, it is strongly recommended that you attend lectures and problem sessions on a regular basis and complete all homework assignments when due. Late assignments will not be accepted. So, your homework grade is determined by your total points on both written homework and problem session assignments.

Problem sessions:

Each student has been assigned to a problem session. You are expected to come to these sessions ready to present complete solutions to all of the problems of the assignment that are due on Monday of that week. You should come to the problem sessions prepared to explain your solutions to your classmates. In the session, I will call on students to present on each problem. The selected students will write their proofs on the board. The class will look at them as they are being written, perhaps copying some down. Then the students will go through their proofs, one at a time, answering questions from the class or from me. If no correct proof is given, I will ask for volunteers on this problem. A correct and complete recitation on one problem, including answers to all questions is worth two points. There will be no partial credit for incorrect or incomplete recitations.
In the session it is allowed to criticize the person at the board for flaws or incomplete arguments. This is for the sake of understanding mathematics and not to be mixed up with personal insults. By learning to stand up for your ideas or to accept that you made a mistake, you may get something out of this course which is of value not only in mathematics.

**Some tips on working on the homework:**

To learn the subject as well as possible, the following steps are suggested: first try the problems by yourself. Second, meet with a small group of classmates and discuss the problems. Third, on your own, write up the solutions to the problems. You may want to meet with me periodically during this process. I also suggest that you treat proofs like essays - you should work out an outline on paper before starting with any rigorous mathematics. You should expect to spend many hours on each homework assignment and should not expect to do homework assignments in one sitting.

**Getting help:**

(Other than office hours) The math/stat department runs a help clinic Sunday through Thursday night from 7 to 10 in the math/stat lounge.

**Special Accommodation:**

If you believe that you need accommodations for a disability, please contact Leslie Hempling in the Office of Student Disability Services, located in Parrish 130, or e-mail lhempli1 to set up an appointment to discuss your needs and the process for requesting accommodations. Leslie Hempling is responsible for reviewing and approving disability-related accommodation requests and, as appropriate, she will issue students with documented disabilities an Accommodation Authorization Letter. Since accommodations may require early planning and are not retroactive, please contact her as soon as possible. For details about the Student Disabilities Service and the accommodations process, visit http://www.swarthmore.edu/x7687.xml.