MAT 512, Introduction to Real Analysis, Fall 2011

Instructor: Professor Claudia Miller
Office: 304D Carnegie Hall
Phone: 443-1493
Email: clamille@syr.edu

Course Web Page: phy.syr.edu/~clamille/512.html

Office Hours: Mon and Wed 4-5:30, and by appointment

Text: Introduction to Real Analysis, 3rd Edition, by Bartle and Sherbert

Prerequisite: MAT 412

Course Description:

Continuation of the foundations of real analysis begun in MAT 412, again with an emphasis on developing proof-writing skills. The sequence 412-512 contains the theoretical basis of what you learned computation versions of in calculus courses.

Topics (as time permits): continuity and its applications, uniform continuity, differentiation, Riemann integration, and sequences of functions.

Homework:

“What we have to learn to do, we learn by doing.” – Aristotle

★ The regular graded homework assignments are crucial to your development. Working independently on them will probably help you to learn much more effectively and to do better on exams. The first serious attempt you make on each problem set should be alone with time to think. After that, you may work with others on it provided that you write up your solutions completely independently – that is, in your own words. ★

Please do come see me for help!

Absolutely no late homework will be accepted.

Exams:

There will be three midterm exams and a cumulative final exam.

Dates will be announced in class. Calculators will not be allowed on any exams.

There will be no make-up exams. A missed midterm exam counts as zero unless the student presents a note from the doctor or from the deans office stating explicitly that the student was not able to attend. With the note, the final exam grade will be used in place of the missing grade. Everyone is required to take the final exam.

Final Exam:

The final exam is scheduled for Wednesday December 14, 2010, 5:15 – 7:15 pm.

This is the only time this exam can be taken.

Grading: The final grades will computed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Exams</td>
<td>50% total</td>
</tr>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Final</td>
<td>25%</td>
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</tbody>
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You should inform me in the first two weeks of class if

(1) you have any disabilities for which special considerations are necessary, or
(2) you have any religious or sports commitments which may affect your attendance on any days of the semester.

**Students with disabilities:** If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), http://disabilityservices.syr.edu, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations. Making arrangements with ODS takes time. Do not wait until just before the first test.

**Academic integrity:** The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see http://academic integrity.syr.edu

Complete academic honesty is expected of all students. Any incidence of academic dishonesty, as defined by the SU Academic Integrity Policy, will result in both course sanctions and formal notification of the College of Arts & Sciences.

**Religious Observances Policy:** Syracuse University’s religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice/Student Services/Enrollment/My Religious Observances from the first day of class until the end of the second week of class.