The Georgia Institute of Technology
Fall 2012
Math 4317 - Real Analysis I
Lecture: Room: Skiles 170 - Time: TTh 12:05pm – 1:25pm

Instructor: Brett D. Wick           Office: Skiles 235A
Office Phone: 404-864-4311        Office Hours: TTh 11:00am – 12:00pm
Email: wick@math.gatech.edu        or by appointment

Prerequisite and Description: Math 4317 is an introduction to undergraduate real analysis. Topics covered include: the real numbers, topology of Euclidean spaces, Cauchy sequences, completeness, continuity and compactness, uniform continuity, series of functions, Fourier series.

Prerequisites for the course are Math 2406 (Abstract Vector Spaces) or consent of the School.

Text: The assigned text for the course will be:

   Title: “Introduction to Analysis”
   Author: Maxwell Rosenlicht
   Publisher: Dover Books on Mathematics

Homework: This course will have regular homework which will be collected one week after assignment. Late homework will not be accepted. A subset of the assigned problems will be selected for grading. Solutions must meet the formatting requirements below. Illegible and/or unintelligible solutions will receive no credit.

   1. Be neatly and clearly written in complete, correct sentences.

   2. Be written on the front side of the page only.

   3. Be stapled together if having multiple pages.

Collaboration is allowed (and even encouraged) when working on homework problems. However, solutions must adhere to the following content guidelines.

   1. Be written independently in a students own words.

   2. Clearly acknowledge any person with whom any part of the assignment was discussed.

   3. Properly credit any outside resource consulted in completing the assignment.

Any solution which violates the content guidelines will receive no credit. Flagrant or repeated violations will be dealt with as a matter of academic integrity.

Exams: This course will have two mid-term exams, and a comprehensive final exam. The exams for the course will tentatively take place on:

Exam Dates:
Exam 1      Tuesday, September 25
Exam 2      Thursday, November 1
Final Exam  Tuesday, December 11 11:30am - 2:20pm

Grades: Grades will be based upon attendance, participation, exams and homework. Course grades will be assigned from the maximum of the following formulas:

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Alternate 1</th>
<th>Alternate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>30%</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm Exams</td>
<td>40%</td>
<td>20%</td>
<td>45%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
<td>50%</td>
<td>30%</td>
</tr>
</tbody>
</table>

On an individual basis, significant improvement over the semester will be taken into account. The usual ten-point scale will be used (A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: 0-59), however, if necessary, adjustments will be made to arrive at a standard grade distribution for the course.

Attendance: Regular attendance is expected for all lectures. The student who misses a class meeting is responsible for any assignments and/or announcements made. Office hours will not be utilized to re-teach material presented in class. However, questions to better understand the course are always welcome.

In the event of an absence that will impact your ability to complete your assignments due to travel representing Georgia Tech, you must notify the professor at least two weeks in advance to arrange an early test or other alternative. In general make-up exams will not be given except in the case of a documented medical emergency or travel to represent Georgia Tech.

Learning Disabilities: It is the right of any student with a certified learning disability to request necessary accommodation. Such requests must be made well in advance of the time that the accommodation is required and a letter of documentation from the ADAPTS office must be presented at the time of any request.

Academic Honesty: It is expected that all students are aware of their individual responsibilities under the Georgia Tech Academic Honor Code, which will be strictly adhered to in this class. Any violations must be reported directly to the Dean of Students.

Important Dates for Fall 2012:

- August 20     First day of classes
- August 24     Last day to register and/or make schedule changes
- September 3   School Holiday
- October 12    Last day to drop or withdraw with a grade of “W”
- October 13 - 16 Fall Break
- October 28    Last day to withdraw from school with a grade of “W”
- November 22-23 Thanksgiving Break
- December 7    Last day of classes
- December 11   Final Exam