Math 300 (§001) – Transition to Advanced Mathematics

Instructor  
Professor Doug Meade  
Office Hours: MTR 10:00–11:00 AM, and by prior appointment  
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WWW URL  
http://www.math.sc.edu/~meade/math300-S14/

Meeting Times  
Lecture TR 1:15 PM–2:30PM LC 310

Text  

Prerequisite  
Grade of C or better in Math 142.

Description  
The primary objective for this course is to expose you to the rigors of mathematical thinking and proof writing via logic, sets, and functions. Even though we will not talk explicitly about calculus, you should recognize that some of the principles we will learn were present in the details that so often get overlooked in calculus. You will see the application of the ideas learned in this course when you take upper-level Math courses like Discrete Mathematics, Linear Algebra, Abstract Algebra, and Analysis.

You should also be working to become an independent learner. You should not expect that every detail and nuance will be covered in the lectures, or recitations. The lectures are designed to introduce ideas and to provide you with a foundation from which to develop a more complete understanding (typically by completing the assigned homework exercises. You should work additional exercises, particularly on topics that you find difficult.

Grading  
Your grade in this course will be based on your performance on class participation, homework, three (3) mid-term exams, and a final exam. The weights assigned to each of these components will be:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Class Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Mid-term exams (3)</td>
<td>45%</td>
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<tr>
<td>Final exam</td>
<td>25%</td>
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Course grades will be determined according to the following scale:

A 90 –100  B 80 –89  C 70 –79  D 60 –69  F 0 –59

The deadline to drop this course with a grade of W is Monday, March 3, 2014.

Class Participation  
This course is as much about writing proofs as it is about understanding proofs and being able to explain your own proof. The best way to practice this is with each other. I expect each student to present and explain some homework problems to the class. I also expect each student to ask questions — of me and of your fellow classmates.

Homework  
Homework will be assigned, and collected, as we work through the material. As mentioned above, you will be expected to present some homework problems to the class.

Exams  
Tentative dates for the mid-term exams are:

Thursday, February 13
Thursday, March 20
Thursday, April 7

Make-up exams will be given only for documented reasons of illness, family emergency or participation in a University sponsored event. Excuses such as oversleeping, forgetting the time or location of the exam, and lack of studying are explicitly noted as unacceptable grounds for the administration of a make-up exam.

A comprehensive final will be given at 12:30PM on Thursday, May 1, 2014.

Attendance  
Attendance at every class meeting is important – and expected. Students missing more than 10% of the class meetings (4 days) can have their grade lowered.

Academic Honesty  
Cheating and plagiarism will not be tolerated. You may discuss homework problems with others, but do not copy work from another student or from a book. Violations of this policy will be dealt with according to University guidelines.