Course Description: Prerequisites: 223 Calculus III, 307 highly recommended. Sequential. Prerequisite: Completion of 223 with a grade of C- or better; 307 is highly recommended. Real number system, sequences, series, set theory, continuity, differentiation, integration, partial derivatives, multiple integration, maxima and minima, convergence and uniform convergence, power series, improper integrals, transformations, line and surface integrals.

Text: Advanced Calculus, A Course in Mathematical Analysis, by Patrick M. Fitzpatrick.

Instructor: Dr. D.P. Story  
Home Page: http://www.math.uakron.edu/~dpstory/  
Office: CAS 252  
E-mail: dpstory@uakron.edu  
Phone: 972-7514  
Office hours: MTWF 2:00–3:00 p.m.  
Generally in office before class

Class Format: Informal combination of lecture and problem solving.

Grading: The course grade is based on 470 points, obtained as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>2 tests @ 100 pts each</td>
<td>200 pts</td>
</tr>
<tr>
<td>Homework</td>
<td>120 pts</td>
</tr>
<tr>
<td>Final Examination</td>
<td>150 pts</td>
</tr>
<tr>
<td>Total</td>
<td>470 pts</td>
</tr>
</tbody>
</table>

Grading Scale: Grades will be assigned according to the following percentages:

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

Homework: Homework will be assigned on a regular basis, collected, and some problems graded. Generally, it is expected that you do your own work. You may discuss ideas/approaches to a problem with classmates, but avoid specifics. Write up your own work. Don’t copy the work of others! Be neat, concise and well-organized.

Other Policies:

1. Make-up of a test will only be given to those students that have a valid excuse. You must have a letter from a person in authority: medical doctor, lawyer, judge, etc.
2. Plus/minus grades will be given on the final grade sheet to those students who are close to grade cutoffs.
3. Final week for withdrawals is April 5–9. See http://www3.uakron.edu/registrar/spring04wddates.html for other dates of interest.

Tentative Course Outline:

Selected topics, beginning with Chapters 5 (and beyond).