MATH 301, Spring 2008

MW 4:00-5:15 pm, Royal Hall 306

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Web page: http://s.web.umkc.edu/segal

Office hours: M: 10:00-11:00am, TTh: 10:30-11:30am and by appointment.

       2) D. Solow: How to Read and Do Proofs (Wiley)

Outline of the course: This class is designed to teach students to write and read mathematics. It provides the foundation needed for almost all higher level mathematics classes. We will cover, with some omissions, Chapters 1–10 in the text.

Homework: Homework will be collected every week; it will be announced in class and posted on the web. Before doing the homework, read and make sure you understand the lesson from the text and your class notes, including all the proofs. While you are free to discuss the problems with others, the writing up of the solutions should be done individually, in your own words. You need to write complete and logical solutions. Also, keep working on the list of suggested problems on the back.

Exams and quizzes: There will be two midterms and a final exam, and about 4 quizzes. The exam/quiz problems will be similar (but not identical) to those in the homework and those worked in class; also, there will be questions of conceptual nature, such as stating definitions, theorems, or providing the proof of a theorem. Tentative midterm dates: February 27th and April 21st.

Getting help: You are welcome to attend my office hours. Do not hesitate to schedule an appointment at a different time, if needed. You can also email me questions. Do not get left behind! Be prepared to allow time in your schedule for some visits to my office, when needed. Also, you are encouraged to collaborate with your classmates.

Your grade: The final grade will be computed out of 540 points as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>each midterm</td>
<td>100</td>
<td>18.5%</td>
</tr>
<tr>
<td>final exam</td>
<td>140</td>
<td>26%</td>
</tr>
<tr>
<td>homework</td>
<td>100</td>
<td>18.5%</td>
</tr>
<tr>
<td>quizzes</td>
<td>100</td>
<td>18.5%</td>
</tr>
</tbody>
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Tentative grading scales will be provided after midterms.
Important dates:
1) Monday Jan. 14 – Course Work begins
2) Friday Jan. 18 – Last day to change Audit to Credit
3) Monday Jan. 21 – Martin Luther King Birthday Observance (no classes)
4) Friday Feb. 8 – Last day to change Credit to Audit
5) Friday Mar. 7 – Last day to withdraw without assessment. Students withdrawing after this date may receive a "Withdraw Failing" if students are failing at the time of withdrawal.
6) Saturday Mar. 22 – Spring Break begins
7) Monday Mar 31 – Course Work resumes
8) Friday Apr 11 – Last day for undergraduates to withdraw with assessment
9) Friday May 2 – Last day of classes

Suggested Problems. Chapters and exercise numbers refer to the text by Chartrand et al, with supplementary problems from Solow as indicated. Each week (approximately), some of these problems will be assigned to be turned in and graded. This list is subject to change. You will not be able to do every suggested problem, but to be successful you should attempt a good many. Discuss them with your classmates!

- Chapter 1 - p.24: 1.1-1.3, 1.5, 1.7, 1.8, 1.10, 1.12, 1.14, 1.15, 1.17, 1.20, 1.22, 1.24, 1.28-30
- Chapter 2 - p.46: 2.2, 2.4, 2.5, 2.7, 2.10, 2.12, 2.14, 2.16, 2.20-2.23, 2.25-2.29
  Solow: 1.2, 1.4, 1.7
- Chapter 3 - p.64: 3.1-23 (all)
  Solow: 2.3, 2.10-12, 2.17, 2.19a, 3.16a
- Chapter 4 - p.80: 4.3-8, 4.12-14, 4.17, 4.19, 4.20, 4.23, 4.25, 4.27, 4.28, 4.30-35, 4.40, 4.42, 4.43
  Solow: 10.8
- Chapter 5 - p.90: 5.1, 5.2, 5.6, 5.8, 5.10, 5.12-5.15, 5.17-5.21
  Solow: 9.14, 10.15-16
- Chapter 7 - p.130: 7.3-5, 7.8, 7.11, 7.12, 7.14, 7.17, 7.19, 7.21, 7.22, 7.36, 7.39, 7.42-7.46
- Chapter 8 - p.150: 8.3-7, 8.10, 8.11, 8.13, 8.14, 8.16-20, 8.24, 8.25, 8.29, 8.30, 8.33
- Chapter 10 - p.194: 10.1-3, 10.5, 10.13-24, 10.30