Instructor: Dr. Paul Bankston, office 311 Cudahy Building

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Office Hours: MWF 11–11:50am, or by appointment


Prerequisites: MATH 2451 (Credit will not be given for both MATH 2105 and either MATH 2100 or MATH 2350.)

Exams/Homework:

- Three 60 point examinations will be given during our usual class time, each testing the material covered since the last exam. The class period immediately prior to each exam will be devoted to review, and the exam solutions will be posted on the course website. The two best of these three exams will count toward the final grade.
- There will be a number of homework problems to be handed in. Each one will be graded out of 3 points, and the twenty best of these will be counted as equivalent to one exam.
- There will be a takehome final exam given out on Friday, April 29 and due at class time on Friday, May 06.
- No makeup exams will be given without arrangements being made beforehand, and only extenuating circumstances will be considered.

Grading:

<table>
<thead>
<tr>
<th>Description</th>
<th>Points</th>
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<tbody>
<tr>
<td>Best twenty homework problems</td>
<td>60</td>
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<tr>
<td>Best two hour exams</td>
<td>120</td>
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<tr>
<td>Final exam</td>
<td>90</td>
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<tr>
<td>Total</td>
<td>270</td>
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Grading scale:
- A: 92–100%
- AB: 87–91%
- B: 78–86%
- BC: 73–77%
- C: 64–72%
- CD: 59–63%
- D: 50–58%
- F: 0–49%

Attendance and Deportment: You are expected to attend all lectures and to be on time. Excessive absences will be noted, and may result in a lowered grade. Norms for classroom conduct are based on respect for the instructor and your fellow students. Distractive behavior, such as using cell phones, reading newspapers, sleeping, surfing the web, or talking to your neighbor, is considered inappropriate.

Policy on Academic Honesty: This is laid out in the Undergraduate Bulletin.

Withdrawal Date: The final date for a voluntary withdrawal from class this semester is Friday, April 15, 2011.

Course Goals: This is a course that introduces the upper-division engineering student to what is commonly called discrete mathematics. Topics include: permutations, combinations and the binomial theorem; sets and Venn diagrams; mathematical induction, the division and euclidean algorithms; relations, functions and the pigeonhole principle; languages and finite automata; switching functions and gating networks; the principle if inclusion and exclusion; generating functions and recurrences; and graph theory. Since this is an upper-division course, there will be emphasis on how we know the mathematical assertions and formulas we say we know; i.e., we will prove stuff. Welcome aboard!