MAS 251 Discrete Mathematics Fall 2008
Course Syllabus

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Course Description

This course is an introduction to language, concepts and techniques fundamental to mathematics and computer science. Topics include logic, sets and sequences, matrices, combinatorics, induction, relations and finite graphs. The course also serves as an introduction to mathematical proof. In addition to the development of mathematical skills, the course seeks to build analytical skills in reading and clarity of expression in writing.

Prerequisites

MAS 112 or MAS 162, or permission by the instructor

Text

Ross and Wright, Discrete Mathematics, 5th edition

Homework

Homework consists of reading sections in the text and solving problems from the Reading and Problem List that accompanies this syllabus. You should expect homework to require two hours outside of class for each hour in class. When you do not understand some part of the assigned reading or problems, bring your questions to class or to office hours.

In order to get the greatest benefit from homework problems, and also to practice for exams, write your homework solutions so that you show not just final results, but also demonstrate with appropriate supporting work and short verbal comments that you understand the procedure(s) you use. For problems that ask for an explanation, use one or more complete sentences that are as clear and precise as possible, and are not longer than necessary.

Grading

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Graded Exercises</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm Exams</td>
<td>50%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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Your cumulative average is determined by graded work in the categories listed above with the indicated weights. Letter grades are assigned based on your cumulative average, class attendance and participation. The lowest of your scores may be dropped from your cumulative average if you show improvement on the final exam. See the course web page for more details about grade calculation, including how low scores may be dropped. Grading policy is subject to adjustment at the discretion of the instructor.

Graded Exercises

Graded exercises consist of homework problems and other exercises collected in class. Graded exercises will sometimes be open-book and sometimes closed-book. Prepare for graded exercises by doing the assigned reading and completing the homework problems before class on the dates indicated on the Coursework Schedule.
Exams

Exam problems are based on, but not limited to, the assigned reading and exercises. The subject matter of each exam will be announced in advance. The final exam will be comprehensive, including material from the entire course.

For full credit, exam solutions must show not just final results, but also demonstrate with appropriate supporting work and short verbal comments that you understand the procedure(s) you use. Illegible work or a final answer given without supporting work shown receives no credit. Some exam problems will require you to explain your reasoning using complete sentences. These problems will be graded not only for mathematical correctness, but for clarity of writing.

No calculators, computers, cell phones, music players, or any electronic devices with wireless or network capability are allowed during exams.

Collaboration versus Plagiarism

You are encouraged to collaborate with classmates and ask questions of the instructor for homework assignments and in-class exercises. You must work hard to avoid plagiarism, which is presenting someone else’s ideas or work as your own. The work you submit must be your own. Your writing must be your own voice and your own understanding. You must use proper academic citation for any material created by others. Plagiarism is a serious academic offense; penalties range from failing the course to expulsion from the college.

Attendance

Class attendance is expected. Absences may be excused, at the discretion of the instructor. If you miss a class for any reason and wish to have the absence excused, you must give the instructor written notice, on paper or by email, at least a week before the absence. In the case of illness or emergency, the written notice should be made as soon as possible.

Email

The instructor expects to be able to communicate with every student via LVC email accounts. If you do not normally use your LVC email account, please arrange to have your email forwarded to whatever email account you use regularly.

Honor Policy

It is expected that each student in this class will conduct him or herself with academic integrity. Instances of academic dishonesty will be pursued as described in the College Catalog and Student Handbook.

Disabilities Services

Please inform the instructor of any physical, medical, psychological, or learning disability that impacts your attendance or requires accommodation. You will need to provide documentation of your disability or medical condition to the Director of Disability Services in Humanities 206-D, 867-6071.