Syllabus for CS/MATH 278
Discrete Mathematics for Computer Science
Fall 2009

Meetings: TTH 02:35PM–03:50PM in SH 113

Lab: M 3:30PM–5:20PM in SH 118B

Instructor: Inna Pivkina
Office: SH 173
Office Hours: T 4:00PM–5:00PM, TH 10:00AM–11:00AM, and by appointment
Phone: 646-6237
Email: ipivkina@cs.nmsu.edu

Instructor: Guram Bezhanishvili
Office: SH 245
Office Hours: W 3:00PM–4:00PM, F 12:00PM–1:00PM, and by appointment
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Teaching Assistant: Mai Abo Shakra
Office: SH 131
Office Hours: MW 12:20PM–1:20PM
Phone: 646-6229
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Teaching Assistant: Wes Fussner
Office: WH 34
Office Hours: TBA
Phone: 646-6266
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Course webpage:

Information about this course (syllabus, assignments, grades, additional material, useful links, etc.) will be available online at http://www.cs.nmsu.edu/~mshakra/cs278. More information will be posted as the course progresses.

Prerequisite: C or better in Math 121 and CS 171.

**Course content:** The course will cover some of the basic discrete mathematics required for Computer Science. The topics to be covered include parts of chapters 1–8, which cover basics of logic, number theory, and set theory. The basics of logic and induction will be studied via two multi-week projects based on original historical sources, as well as readings from the textbook. The labs will be used for programming assignments related to the materials covered in class.

**Grades:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Homework and projects</td>
<td>40 %</td>
</tr>
<tr>
<td>Lab</td>
<td>20 %</td>
</tr>
<tr>
<td>Midterm</td>
<td>15 %</td>
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<tr>
<td>Cumulative Final Exam</td>
<td>25 %</td>
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**Homework:** Homework will be assigned routinely. Assignments will be from the textbook and from the two projects we will cover in the course. To succeed in this course, daily work on practice problems must be done. A student who can complete all homework problems will have a good grasp of the course material, and many of the questions on the midterm and final exams will be of a similar nature to those assigned as homework.

**Projects:** We will study basics of logic and induction via two multi-week projects based on the original historical sources. The projects will contain excerpts from primary sources for students to read along with a sequence of directed questions which illuminate how the source develops key ideas. Particular advantages of the historical approach include providing context and direction for the subject matter, reading the original work of some of the greatest minds in history, and the rediscovery of the conceptual roots common to discrete mathematics and computer science.

**Lab:** Lab assignments will be programming assignments in Java. To do the assignments you need to know your CS user ID and password. If you have not had a CS user ID in a previous semester or have forgotten your user ID or password, see Matt Hulin in SH 138. Matt will ask for a photo ID to verify your identity before issuing a user ID or password. There will be approximately 10 lab assignments in the course. You should expect to have a lab assignment every week. Practice shows that students who attend labs perform much better than students who do not attend. TAs will be available to assist you with programming assignments during labs.

**Exams:** The midterm will cover material from the first half of the semester. It will be given sometime in October. The final exam will be cumulative. It will take place on Thursday December 10, 3:30PM–5:30PM in SH 113.

**Missed Test Policy:** There will not be any make-up exams unless there is a valid documented excuse. The only valid excuses for missing an exam are documented illness, death in the family, or required participation in any university related function. Supporting documentation is required.
Withdrawals and Incompletes: You have the primary responsibility for withdrawing from the course. The last date to drop with a “W” is Wednesday, October 14. Under University policy, an I grade is allowed only if a student has passed the first half of the course, and is precluded from completion of the second half of the course by a documented illness or family crisis.

Class Policy: Both intentional and unintentional plagiarism is prohibited. It is expected that students follow the code of conduct stated in the Student Code of Conduct available at http://www.nmsu.edu/~vpsa/SCOC/misconduct.html. Any violations of the code will result in a grade of F for the course, in addition to any further sanctions imposed by the university. Unless explicitly stated by the instructor, you are assumed to perform the assigned work by yourself, without any external collaboration. Cheating in all forms is prohibited. Note that a person copying an assignment is guilty of a violation of academic conduct, as is the person from whom the assignment was copied.

Important Notes:

- At the end of the final examination, the course is over, and there are no more opportunities to submit additional work.
- We will not compose extra credit assignments for students who want to try to compensate for poor results in another component of the course.
- You are encouraged to ask questions in class.

ADA: Feel free to call Jerry Nevarez, Director of Institutional Equity, at 575-646-3635 with any questions you may have about NMSU’s Non-Discrimination Policy and complaints of discrimination, including sexual harassment.

Feel free to call Michael Armendariz, Coordinator of Services for Students with Disabilities, at 575-646-6840 with any questions you may have on student issues related to the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.