Math 466/506: Lattice Theory, Spring 2011

Meetings: MWF 11:30–12:20 in SH 116

Instructor: Guram Bezhanishvili  
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Office Hours: MWF 12:25–01:25

Prerequisites: C or better in Math 331 or Math 332 or consent of instructor.


Objectives: The main goal is to give a concise introduction to partially ordered sets and lattices. We will cover modular, distributive, and Boolean lattices, as well as complete lattices and Galois connections. We will also discuss MacNeille completions of partially ordered sets. If time permits, we will introduce the main ideas of representation of distributive lattices.

Material: We will cover portions of chapters 1, 2, 4, 6 and 7. For the most part, these will be covered in the order they appear. Additional material (such as chapters 10 and 11) will be covered as time permits.

Grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>30 %</td>
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<tr>
<td>Midterm</td>
<td>30 %</td>
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<tr>
<td>Final</td>
<td>40 %</td>
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Homework: Homework will be assigned routinely and a sample of exercises will be collected periodically for grading. Homework must be written up in a comprehensible way. I expect students to show some mathematical maturity in the work they turn in. I will not accept late assignments without a medical certificate or other university approved excuse.

Midterm: The midterm exam will roughly consist of 4 problems, and will cover material from the first half of the semester. It will be given sometime in late February or early March.

Final: The final exam will take place on Wednesday, May 4th, 10:30–12:30 in SH 116. It will roughly consist of 8 problems.
Missed Test Policy: Students must notify the instructor before an exam is missed in order to qualify for a make-up exam. Failure to do so will result in a “0” for any missed exam. 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 Tuesday, March 8th. 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.

Policies: Students are expected to attend every class and show up on time.

Important Notes:

- At the end of the final examination, the course is over, and there are no more opportunities to submit additional work.
- No extra credit assignments will be composed for students who want to try to compensate for poor results in another component of the course.

Disabilities and Discrimination: Feel free to call Diana Quintana, 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.

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.