
Prerequisites: C or better in Math 771, or consent of the Instructor.

Time and Place of Class meeting: MoWe, 11:30am–12:45am, CBC C210.

Instructor: Dr. Zhonghai Ding
Office: CDC Building 10, Rm1004, Phone: 895-0386, Email: dingz@unlv.nevada.edu
Office Hours: MoWe 10:00am–11:00am and 1:00pm–2:00pm, or by appointment.

Attendance: Class attendance in this course is mandatory, and an important component of the course requirements.

Homework: Homework will be collected for every two weeks. No late homework will be accepted. You are strongly encouraged to do homework every week. If you do homework, you will be rewarded on exams.

Grading: Course grades will be based on the following percentages.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Exam I</td>
<td>25%</td>
</tr>
<tr>
<td>Exam II</td>
<td>25%</td>
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<tr>
<td>Final exam</td>
<td>30%</td>
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</tbody>
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A: 91–100; B+: 86-90; B: 81–85; C+: 76–80; C: 71–75; D+: 66–70; D: 60–65; F: 0–59.

Remarks:

1. Grades: A−, B−, C− may be given on borderline cases, where class attendance and homework will be determinative factors.

2. Exams I–II will be given on March 7 and April 18. Each exam contains two parts. Part I is in-class and consists of conceptual, computational, and short-proof problems. Part II is take-home and consists of regular proof problems.

3. The final exam will be comprehensive, and contains two parts. Part I of the final exam will be given on May 2, 11:30am-12:45pm, and Part II will be take-home.

Make-up policy for exams: Make-up exam will be allowed only if the instructor is notified of the University-excused absence before the exam. See University Regulations for special guidelines.

Academic Accommodation: If you have a documented disability that may require assistance, you will need to contact the Disability Resource Center for academic accommodations. The DRC is located in the Reynolds Student Services Complex in Room 137. The DRC phone number is 895-0866, (TDD-895-0652).

Topics to be covered (tentative):

§§3.2-3.7, 4.2-4.10, 5.2-5.5, 5.8, 5.9, 9.2-9.6

The class lectures may not follow the order of sections listed above. Additional class materials will be provided during the semester.

Learning Outcomes: Upon completing this course, students are expected to be familiar with metric and normed spaces, contraction mapping principle, Banach space, Hilbert space, uniformly bounded theorem for linear mappings, orthogonal systems, projection operators, and the Riesz representation theorem.