Instructor. Dr. Patrick J. Morandi. My office is Science Hall 237 and my office phone number is 646-3901. If you need to turn in an assignment or leave me a message you can do so in the math office. You can also reach me through email at pmorandi@nmsu.edu.

Office Hours. My regularly scheduled office hours are

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<th>Day</th>
<th>Time</th>
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<tr>
<td>Tuesday</td>
<td>1:00-2:00</td>
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<tr>
<td>Wednesday</td>
<td>10:00-11:00</td>
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<tr>
<td>Thursday</td>
<td>10:30-11:30</td>
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If you need or want to see me outside these hours, you may make an appointment with me before or after class, by phone, message, or by email. I understand that your schedule might not allow you to come to my office during the hours listed above; by all means talk to me if you wish to come to office hours but are unable to make the hours listed above.

Course Web Page. The web address for this course is sierra.nmsu.edu/morandi/math525. At this web site you will find the syllabus, handouts, and assignments.


Catalog Description. Rigorous treatment of vector spaces and linear transformations including canonical forms, spectral theory, inner product spaces and related topics.

Prerequisite. C or better in Math 331. More specifically, you should have some familiarity with algebraic structures and a good grasp of linear algebra at the level of Math 280.

Reading and writing mathematics. It is vital to read the textbook before coming to class, think about reading questions, and working homework problems. It is usually necessary to read mathematics repeatedly in order to understand the material. Do not expect to read a mathematics text like a novel. How class time is used will depend on your reading of the text and the questions you have. I do not plan to lecture on most of the material; our discussions will often be based on your questions.

Writing clear and complete solutions to the homework will be crucial for you to learn the material. On all assignments, your work needs to be neat and legible, and your reasoning must be clear. Writing mathematics well takes practice, and you will improve your ability to communicate mathematics from this course. It will be important to rewrite assignments in order to better learn the mathematics and to improve your writing.
Homework (30%). Homework will assigned each class period and due the following period. I will give several problems each week, but will specify one problem to be turned in each class period. The other problems are not to be turned in. You may turn in a revised draft of any homework assignment. A revision is due within one week of when the assignment was returned to you, and must be turned in with the original submission. Your homework grade on a problem will be out of 10 points; 5 points for the mathematics and 5 points for the writing. You thus need to give correct solutions and write them clearly and completely in order to get full credit. Homework assignments will often be differentiated between Math 481 and Math 525.

Projects (30%). There will be two longer homework assignments, called projects. You will have one week or more to work on each and you will not be allowed to revise these assignments. You are to work on them in groups of 2 or 3 students. Each group is to hand in a single paper, which must be typed, although the mathematics may be written by hand. Projects will be differentiated between Math 481 and Math 525. I encourage you to use Scientific Word/Workplace for this, which makes typing mathematics fairly easy. This program is available on departmental computers, including those in the SH 118 computer lab.

Exams (40%). There will be one in-class midterm exam and an in-class final exam. The midterm will count 15% of the course grade and the final 25%. The final exam is scheduled for Wednesday 9 December from 10:30-12:30.

Incomplete Grades. Incomplete grades may be given only if a student passed the first half of the course and is precluded from successful completion of the course by a documented illness or family crisis which genuinely precluded successful completion of the course.

Attendance. You will need to attend regularly in order to do well in this course. If you miss a class, you are responsible for making up the material that was missed. Missing a class is not an excuse for handing in late work. You may send me email to find out what assignment is due, and possibly find out from the course website.

Disabilities and Discrimination. Feel free to call Jerry Nevarez, Director of Institutional Equity, at 505-646-3635 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 505-646-6840 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.