

**Fall 2011**  
**MAT 331-M004: FIRST COURSE IN LINEAR ALGEBRA**

**Course Instructor (and Supervisor):** Dr. Gregory Verchota, Professor of Mathematics; 229A Physics; [gverchot@syr.edu](mailto:gverchot@syr.edu); 3-1579

**Office Hours:** M 8-9:30, T 8:30-10 and by appointment.

**Course Information:** Course Description: Linear equations, Linear Transformations, Matrices, n-dimensional Euclidean Spaces, Geometric aspects.

Course Restrictions: Credit will not be given for both MAT 331 and MAT 485.

Prerequisites: MAT 286 or MAT 296

**Textbook:** Linear Algebra and its Applications, 4<sup>th</sup> edition.  
Author: David C. Lay  
Publisher: Addison-Wesley

**Calculator Policy:** Symbolic calculators, e.g., TI 89 or TI92 are not allowed. Standard scientific calculators are allowed in exams and quizzes, but students may need to show work for full credit.

**Homework/Quiz Policy:** Homework will be assigned in the class (see page 2). Quizzes will be given on the assigned homework at the beginning of the next class meeting. Homework may sometimes be collected for grading.

**Grading Policy:** The course grade will be based on two hour exams (25% each), the comprehensive final exam (25%), and homework/quizzes (25%). Please see page 3 for the dates on which the hour exams will be given.

**Final Exam Date:** The final exam will be given on Wednesday, Dec. 14, 2011. The exact time will be announced later. Do not plan to leave the campus before 2:30 pm on this day.

**Important Announcements:** *Cheating in any form will not be tolerated in this course. A student, who may miss an exam or a quiz due to religious commitments, should contact the instructor in the first two weeks of the class.*

**Disabilities** If you believe that you need accommodations for a disability, please contact the Office of Disability Services(ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

Syracuse University and I are committed to your success and to supporting Section 504 of the Rehabilitation Act of 1973. This means that in general no individual who is otherwise qualified shall be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity, solely by reason of having a disability.

*Please inform your instructor of any problems that you have with the course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the Course Supervisor (listed above) without delay.*

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- The course will cover portions of (or all of) Chapters 1, 2, 3, 5, and 6 of the text. If time permits, portions
- of Chapter 4 may also be included. The suggested homework problems are given below:

- **Section Suggested Problems**

- 1.1 11, 13, 15, 17, 19, 23, 24, 25
- 1.2 2, 5, 6, 11, 15, 19 (find all such values of h and k), 21, 23, 25
- 1.3 9, 11, 13, 15, 17, 21, 23(b-e), 25(b,c)
- 1.4 1, 3, 7, 9, 11, 15, 17, 19, 21, 23(b-e), 31, 33
- 1.5 1, 7, 11, 23, 29, 30, 31, 32
- 1.7 1, 5, 7, 9, 11, 15, 17, 19, 21, 31
- 1.8 1, 3, 5, 7, 8, 9, 13, 16, 17, 19, 21, 27
- 1.9 1, 3, 5, 7, 9, 17, 19, 23
- 2.1 1, 3, 5, 7, 11, 12, 15, 19, 20, 27, 28
- 2.2 1, 5, 9, 13, 15, 31, 32, 33, 35, 21, 22, 24
- 2.3 4, 8, 11, 13, 14, 15, 16, 17, 33, 35
- 2.7 2, 3, 5, 7
- 2.8 1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25
- 2.9 1, 3, 5, 9, 11, 13, 15, 16, 17, 19, 20, 21, 22
- 3.1 9, 11, 13, 15, 17
- 3.2 15, 17, 19, 29, 31, 34
- 3.3 19, 21, 23, 27, 28
- 5.1 3, 5, 9, 13, 15, 17, 18, 19, 21, 25, 29
- 5.2 1, 3, 5, 7, 13, 15, 16
- 5.3 7, 9, 11, 13, 17, 21, 23, 25
- 6.1 5, 7, 9, 11, 15, 17
- 6.2 1, 5, 9, 11, 13, 15
- 6.3 3, 5, 7, 9, 11, 13
- 6.4 3, 5, 7, 9, 11

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**Instructor:** Dr. Gregory Verchota  
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**Email:** [gverchot@syr.edu](mailto:gverchot@syr.edu)  
**Telephone:** X-1579  
**Office Hours:** M 8-9:30, T 8:30-10 and by appointment.

**Hour Exam Dates:**      **Exam 1 – Sept. 26 Monday**  
                                 **Exam 2 – Oct. 31 Monday**  
                                 **Final Exam – Dec. 14 Wednesday, Time to be announced later.**  
                                 *Do not plan to leave campus before 2:30 pm*