

SPRING 2008
MAT 331 : FIRST COURSE IN LINEAR ALGEBRA

- Course Supervisor:** Professor Uday Banerjee; 206C, Carnegie; banerjee@syr.edu; X-1460
- 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, 3rd 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. Homework will be collected for grading and/or weekly quizzes will be given. Projects may also be assigned.
- Grading Policy:** The course grade will be based on three hour exams (20% each), the comprehensive final exam (25%), and homework/quiz/project (15%). The semester grade will be given according to the following rule:
A (93 and above), A- (90-92), B+ (87-89), B (83-86), B- (80-82),
C+ (77-79), C (73-76), C- (70-72), D (60-69), F (<60)
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 Monday, May 5, 2008. The exact time will be notified later. Do not plan to leave the campus before 2:30 pm on this day.
- Attendance Policy:** Attendance is mandatory in this course.
Warning: The material in this course builds upon itself more than in most courses you have taken so far . So keeping up with it on a daily, rather than weekly, basis is **crucial** for success.
- 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:** A student with disabilities, for which special considerations are necessary, should contact the instructor in the first two weeks of the class.

Please inform your instructor of any problems that you have with the course. Problem 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 |