Advanced Linear Algebra (Math 725)

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Office Hours: MF3:00-4:00

Class Meeting: MWF12:10-1:00, TH428

Prerequisite: Math 335 with a grade of C or better.


Syllabus: My tentative plan is to cover most of Chapters 1-8.

Attendance: Attendance will not be taken, but you are responsible for all announcements made in class and for all material covered in class. Please avoid late arrivals and early departures.

Examinations: There will be one in-class examination and a final examination.

   In-class       Wednesday, Oct. 13
   Final          Wednesday, Dec. 15, 10:45-1:15.

There will be no make-up exams for any of the exams. Missing an exam results in a 0 grade for that exam. The only exception is verified serious illness or accident. The final exam is comprehensive.

Homework: Weekly assignments will be given in class and will be collected at the beginning of the class a week later.

Attendance: Attendance will not be taken, but you are responsible for all announcements made in class and for all material covered in class. Please avoid late arrivals and early departures.

Grading: The grade will be based on a midterm (30%), a final (40%) and homework (30%). The grade distribution is as follows: A (90%-100%), B (80%-89%), C (70%-79%), D (60%-69%), F (0%-59%).

Course Description: The study of abstract linear algebra has great value for any student who wishes to go beyond the routine manipulations of formulas to solve standard problems, since the ability to think deductively and analyze complicated examples is essential to modifying and extending concepts to new contexts. Linear algebra focuses on abstract vector spaces and linear transformations. We will study inner product spaces, the finite-dimensional spectral theorem, eigenvalues, the singular-value decomposition, the characteristic polynomial, and canonical forms.
Here is a short version of the University calendar for Fall, 2004. Note that the Mathematics Department strictly enforces the deadlines for CR/NCR grading and withdrawals.

September 10 Last day to add classes
September 22 Last day to drop classes online
October 20 Last day to select CR/NCR grading
November 15 Last day to withdraw from a course
November 25-28 Thanksgiving Break
December 1 Advising Day. Classes cancelled.
December 10 Last day of instruction

CR/NCR Grading
Most Mathematics classes allow CR/NCR grading, but many majors—including Mathematics—do not count CR/NCR grades towards the major. Mathematics majors should not take their Mathematics classes CR/NCR. All other majors should check with their academic advisors before deciding to take a Mathematics class CR/NCR.

If—after checking with your advisor—you want to apply for CR/NCR grading, you must log onto the web site www.sfsu.edu/student and sign up for CR/NCR grading before the October 20 deadline. Your instructor will not pass out a CR/NCR sheet in class.

Incompletes
The Incomplete grade (I) is assigned only to students doing satisfactory work until the last few weeks of a course, when events beyond the students’ control prevented them from completing the course. If this happens to you, discuss with your instructor the possibility of taking an Incomplete rather than withdrawing from a class that you cannot finish.

Late and Retroactive Withdrawals
Petitions for withdrawal from a class after the November 15 deadline, either before the end of the semester (late withdrawal) or after the semester ends (retroactive withdrawal) must be justified by events that occurred after the deadline. In general, only petitions for withdrawal from all courses will be approved. Late withdrawal from your math course alone is usually not approved.

Students with Disabilities
Students with disabilities needing reasonable accommodations must bring an official written request to their instructor from the Disability Programs and Resource Center (Student Services Building, Room 110, (415) 338-1041, drc@sfsu.edu). The DPRC is available to facilitate the reasonable accommodations process.

Religious Holidays
Reasonable accommodations will be made for you to observe religious holidays when such observances require you to be absent from class activities. It is your responsibility to inform the instructor during the first two weeks of class, in writing, about such holidays.