Course instructor

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Office hours: TBA on the course website

Website for Math 250, Section 1


The course website contains all the relevant information about the course (e.g. syllabus, homework assignments, exams info, grading scheme with details). You are expected to be familiar with the website content so please visit it today and on a regular basis during the whole course. Updates will be made throughout the semester.

Grading Scheme

homework=15%, first midterm=25%, second midterm=25%, final=35%

There will be no curve. Your letter grade will be determined as follows: A=90% or more; B+=85%-89.99%; B=80%-84.99%; C+=75%-79.99%; C=70%-74.99%; D=60%-69.99%; F=0-59.99%

A number of unannounced extra credit quizzes will be given during some of the lectures. These will be closed textbook.

Requirements

1. Read the material in the textbook before it is taught in the lecture; see the schedule of lectures on the course website for the reading assignments.

2. Hand in the homework assignment by the due date (typically 1:10pm on Wednesdays); see the schedule of lectures and assignments on the course website. Late assignments will not be accepted. If reasons beyond your control (e.g. illness, family emergency) prevent you from handing in the homework by the due date, please contact the course instructor. The course instructor may decide to drop the respective homework from your score based on appropriate documentation.

3. Solve all assigned homework problems (not just the ones that you are supposed to hand in).

4. Pass the three exams (two midterms and a final).

5. Attend each of the two weekly lectures. Follow carefully all arguments/ideas/examples presented and ask related questions if anything feels unclear.

6. Analyze the graded homework assignments/midterm exams carefully and make sure that you know why points were taken off and what the correct solution in each case is.

7. Do not interrupt the lecture with administrative questions. Instead ask those questions when explicitly invited to do so.

You are encouraged to:
Ask questions during office hours. Ask relevant Math questions throughout the lectures, especially whenever invited to do so.
Exams

There are three websites, one for each of the three exams. You can access these three websites from the course website, more specifically from the table of lectures.

Each of the three exams may only contain at the most the following three types of questions:

I. Questions chosen [up to a change in notation] from a list available on the website ahead of time\(^1\)

II. Questions similar to the ones in the homework (each homework will typically have two parts: one that you are supposed to hand in and one that you are not supposed to hand in);

III. Questions which will verify your understanding of ideas/examples presented during the lecture.

Questions of type I and II above will definitely be on each of the three exams.

The websites for each of the three exams already contain the type I questions. The website for the first midterm also contains a practice midterm.

Textbook


Insight into the course

This is an introductory course in linear algebra. The central object of study are matrices and linear subspaces of \(\mathbb{R}^n\).

Any system of linear equations can be written in a matrix form \(Ax = b\). The set of solutions of a system of linear equations of the form \(Ax = 0\) is a linear subspace of some \(\mathbb{R}^n\) (for instance, the space of solutions of the system formed of only one linear equation \(2x + y = 0\) is a linear subspace of the plane \(\mathbb{R}^2\)). Matrices define linear transformations between linear subspaces [the map sending \((x, y)\) to \(x\) defines a linear transformation from the plane \(\mathbb{R}^2\) to the line \(y = 0\).] Linear subspaces of \(\mathbb{R}^n\) have dimension; for instance, the line \(2x + y = 0\) has dimension 1, while the plane \(\mathbb{R}^2\) has dimension 2. Linear subspaces of \(\mathbb{R}^n\) are endowed with extra-structure: angles and lengths can be measured.

Office of Disability Services for Students

If you have a physical, medical, or learning disability that may affect your course work, please contact the Office of Disability Services for Students, [http://disabilityservices.rutgers.edu](http://disabilityservices.rutgers.edu)

dsoffice@rci.rutgers.edu, phone: 848-445-6800


The course instructor should be informed as soon as possible, but no later than the end of the second week of the course. All information and documentation of disability is confidential.

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\(^1\)The actual exam questions may be a combination of the questions on the list on the website.

\(^2\)This paragraph is only intended to give you an idea about the object of study in this class. It is not a syllabus.
**Academic Integrity**

The course instructor and the grader are required to minimize academic dishonesty and to respond appropriately to violations of academic integrity. Please see the [University Code of Student Conduct](#) and [Rutgers University Academic Integrity Policy](#).

**Administrative questions/concerns?**

Please visit the course website first. If the course website does not contain a clear answer to your question, then please e-mail the course instructor at alexandra@math.rutgers.edu.

**Math questions?**

- Come with them to office hours.
- Ask them whenever invited to ask questions during the lectures.
- Please do not e-mail Math questions. Due to the big number of students currently registered in this class, I will deal with such questions only in class or during office hours.

**E-mail communication**

Occasionally, I will be communicating with you via e-mail. A test e-mail will be sent to you by the end of Wednesday, January 23. If you do not receive it, then please e-mail me at alexandra@math.rutgers.edu with your full name and student ID number.

*The first homework assignment is now available on the course website. It is due on Wednesday, January 30 at 1:10pm.*