Mathematics 0540: Honors Linear Algebra, Spring 2010

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Office Hours: (tentatively) Monday and Thursday 4-5 PM

Text: “Linear Algebra Done Wrong” by Brown University Professor Sergei Treil, exclusively available on his homepage as a PDF file. It is still work in progress, so if you find mistakes or typos, please tell me. The table of contents of the book will give you a good idea of the material we are going to cover.

Course Materials You will be able to find a syllabus, course outline, homework assignments, announcements and so forth on my course webpage:
http://www.math.brown.edu/~tahulse/ma0540.html,
Some material (solutions) will be put on MyCourses.

Grading: There will be two midterms, each 20% of your grade and a final worth 45%. Homework and quizzes together will be worth 15%. Just to give you an idea what to expect: the cutoff point for an A is usually about 90% , the score below 50% usually means failing. Other cutoff points are distributed more or less uniformly. Other factors such as: effort, attitude, and improvement over time may figure into your final grade. I may also assign less weight to a single exam grade that is out of line with the others.

Homework: Homework will be assigned each lecture and discussed at the beginning of the next lecture. It will be collected weekly in class for grading purposes. Although not all problems will be graded, it is extremely important to do all the homework. The best way to learn math is by doing math, and philosophically you should be doing homework as its assigned to keep up with the material. More practically, exam and quiz problems will often be modeled after the homework problems or problems discussed in class.

Note that you are not done with a problem just because you got the right answer. You are only done when you understand why the methods you used had to have worked. If all you are doing is blindly applying formulas and mimicking examples, get extra help. The problems should make sense to you. You should be able to solve the problem and similar ones with closed book and notes.

So to summarize, if you don’t put the necessary time and effort into doing and understanding the homework, it’ll be difficult to follow what’s happening in class and you’ll have a rough time on the tests.

Collaboration: You can talk to each other about any of homework problems, but when you write up the problems to be handed in, you must work alone.

Submitting Homework: The following rules will be strictly enforced:

1. Write your name clearly at the top of every page.
2. Put the problems in order, indicating clearly what you have skipped.
3. Staple your homework. Paperclips and folded corners are accursed and unacceptable.
4. Turn in assignments on time. Late homework won’t generally be accepted.
5. Write neatly. If your homework is too messy, the grader may choose not to grade it.
Requests for homework extensions need to be made to me a few days in advance and I reserve the right to deny them (though it really doesn’t hurt to ask). Otherwise late homework will only be accepted in the situations when your story is accompanied by a note from the health center or a dean.

**Quizzes:** The quizzes may be given if necessary. They will be closed book, closed notes, and will consist of problems modeled after the homework assigned since the previous quiz. Each quiz is worth 10 points (the same as a homework assignment). **Exams:** There will be two in-class exams during the semester, the dates will be announced later. Exams are closed book and without notes. Make-ups will not be permitted except for a severe medical problem or dire family emergency. A written note from an appropriate person (doctor, parent, etc.) is required. If at all possible, you should notify me *well before* the missed exam.

**Calculators:** You can use computers/calculators when doing homework. However they are **not** permitted on the tests and quizzes. **Questions:** Mathematical questions are encouraged at any time during the class.

**Learning Differences:** If you have a documented learning difference that needs to be accommodated, regarding the exams or otherwise, you should let me know about it as early as possible and provide a note from the requisite authorities on the matter.

**Notes:** Taking good notes is essential for advanced mathematical classes, in particular for this class. While I’ll be following Professor Treil’s textbook, you will see that the blackboard presentation differs somewhat from the book. Lectures and the textbook will augment each other, so it is essential to get good notes. In this course I would like you to learn basics of mathematical note-taking as well. For each lecture I’ll assign persons responsible for note-taking. They should take notes, check them after the lecture, and present a neatly written (or typed) version before the beginning of next class. I’ll check the notes, correct if necessary, and post it on my home page. This way, at the end of the course, you will have a complete collection of notes, in addition to your own.

Everyone will be a note-taker for one of the lectures.

**Attendance:** Many college students treat class attendance as optional. This may be fine for some classes. However, in math classes in general and this class specifically you can fall behind very fast. I can’t penalize you for non-attendance, but you should come to class every time unless you are seriously ill.

And remember: office hours are not replacements for missing classes.

Cheers,

Tom