Time and Place Tu-W-F 10 am-12 pm, 1372 EH.

Professor Karl Liechtv

> Contact info: 1847 East Hall kliechty@umich.edu

Office Hours: Tuesday and Wednesday 2–3 pm (EH 1847)

Thursday 10 am–12 pm (EH 1847)

When emailing me, please write Math 217 somewhere in the subject.

Web Pages Course Page: http://www-personal.umich.edu/~kliechty/Math217/

> Written HW page: http://www-personal.umich.edu/~kliechty/Math217/homework.html

Web Homework: instruct.math.lsa.umich.edu/webwork2/ma217-s14/

The course web page contains most of the information on this page, as well as the day-to-day syllabus for the course. You should check the course page regularly for course announcements and updates to the schedule.

Textbook

LINEAR ALGEBRA AND APPLICATIONS by Otto Brescher, 5th Edition, Pearson, 2013.

Course description This course is designed to give potential math majors, and those interested in the theory behind the mathematics, a rigorous introduction to linear algebra. The topics to be covered are: systems of linear equations; matrix algebra; vectors, vector spaces, and their subspaces; geometry of  $\mathbb{R}^n$ ; linear dependence, bases, and dimension; linear transformations; eigenvalues and eigenvectors; diagonalization; inner products. In addition to being a course in linear algebra, this is also a course in mathematical rigor and the methods of mathematical proof. Consequently, this course is a prerequisite for most higher level math courses. Students should leave this course prepared both to use linear algebra and to succeed in further theoretical courses in mathematics. This is a difficult course, and those interested only in the computational side of linear algebra should consider Math 214 or 417.

Tutoring help

The Science Learning Center (SLC) is located in Chem 1720. The general hours during the Spring term are:

Monday – Thursday, 9 am to 7 pm

Friday, 9 am to 4 pm

Specifically, math tutors will be available:

Monday - Friday, 11 am to 4 pm

Exams

We will have two exams: one midterm and one final exam.

Midterm Exam Friday, May 30, 4:00pm-6:00pm East Hall 1360 Final Exam Tuesday, June 24, 4:00pm-6:00pm Location TBA

**Exam Policies** 

- No calculators, note cards, books, or other outside materials are allowed on any exam.
- There are very few acceptable reasons to reschedule an exam. Mark the above dates in your calendar. If you foresee a problem with an exam time, let your instructor know well in advance of the exam date (like today).
- If you need any special arrangements for the exams, you should let your instructor know during the first two weeks of the semester.

Quizzes

There will be weekly quizzes on Wednesdays, beginning May 14. Quizzes will be short in-class assignments to test comprehension of recent material. A quiz could involve a computation or exercise, a short proof, or both.

If you must miss class on a quiz day, I need to know about it in advance to schedule a time to make up the quiz.

Written Homework Written homework will generally be due on Tuesdays and Fridays at the beginning of class. See the day-to-day schedule on the course website for the exact due dates. These assignments can be downloaded from the course website at least six days before their due dates. The lowest homework score will be dropped.

> You are strongly encouraged to talk to your classmates about the homework assignments. However, each student must write her own solutions! Solutions should be written neatly using complete sentences (English or mathematical), and should clearly explain all reasoning at each step. Developing excellent written communication skills is one of the objectives of this course.

## Web Homework

In addition to the written homework assignments, there will be a web homework assignment each week. These assignments are due each Sunday at 11:59 p.m. A link to the web homework page is on the course website, or you can go there directly via the above URL for the WebHW webpage.

Even More Homework Even though you have three graded assignments per week, your textbook has many many more problems for you to do. You should do them. It is vital that you practice problems from the book, even when they are not to be collected for a grade. Consider doing some odd problems from the book (for which you can check the answers in the back of the book) before starting your written homework assignment each week.

Course Grade

The final course grade is determined according to the following scheme:

Midterm Exam	25%
Final Exam	30%
Web Homework	10%
Written Homework	20%
Quizzes	15%

Class Policies

To be respectful of everyone in the classroom, please adhere to the following policy:

- Cell phone use is strictly prohibited (that includes texting). Please turn off your cell phones.
- Newspaper reading after 10:10 is equally prohibited.
- Please be as quiet as possible during class and if you come in late or have to leave early.

Thank you for your help!

## Last but not least!

Some words of advice:

- During the compressed Spring term, it is absolutely vital that you attend all lectures. Missing one lecture during the Spring term will set you back quite a bit.
- You should read the relevant material in the textbook before lecture. If you have questions about materials that were covered in lecture, please take advantage of office hours.
- Start all assignments early –ask questions early. We cannot guarantee that we will be able to answer last-minute questions.
- The professor is here to help you. Please do not hesitate to contact me, earlier rather than later. I sincerely hope you'll find this course interesting and that you'll have a good experience with it.
- If I catch you cheating, you will fail. Please do not cheat.

Have a great term!