

## Math 1890 Syllabus Spring 2011

**Space-Time:** University Hall 4480 TR 12:30 pm - 1:45 pm

**Instructor:** Mao-Pei Tsui

**Office Hours:** TR 10-11 a.m. 3:30-5:00pm at UH2080B or make appointment

**Phone:** 419-530-2998   **Email:** Mao-Pei.Tsui@Utoledo.edu

**Homepage:** <http://www.math.utoledo.edu/~mtsui>

**Class homepage:** <http://math.utoledo.edu/~mtsui/1890sp11/MATH1890sp11.html>

**Syllabus:** <http://math.utoledo.edu/~mtsui/1890sp11/math1890sp11.pdf>

**Text & Syllabus:** We want to use the 6th edition of Elementary Linear Algebra by Larson & Falvo published by Cengage Learning in 2010 together with the associated online homework system using WebAssign. (There will be about 500 online homework problems.) There are two options.

Option 1:

Larson and Falvo, Elementary Linear Algebra, 6<sup>th</sup> Ed with WebAssign Student Access Code to Online Homework and Electronic Book (Enhanced Edition), Cengage Learning 2010, ISBN 1-4390-4400-7

option 2:

WebAssign Student Access Code to Online Homework and Electronic Book: Larson and Falvo, Elementary Linear Algebra, 6<sup>th</sup> Ed,

Only one option is required Option 2 does not provide you with a hardcopy of the book.

We will cover the following topics.

Chapter 1: SYSTEMS OF LINEAR EQUATIONS

Chapter 2: MATRICES

Chapter 3: DETERMINANTS

Chapter 4: VECTOR SPACES

Chapter 5: INNER PRODUCT SPACES

Chapter 6: LINEAR TRANSFORMATIONS

Chapter 7: EIGENVALUES AND EIGENVECTORS

**Prerequisites:** Passing grade in MATH 1840 or MATH 1860 or MATH 1930.

**Exams:** There will be two midterms exams 75 minutes each and one comprehensive final exam on Tuesday, May 3, 2011, 12:30-2:30. No calculators with symbolic or graphing capabilities are allowed on quizzes and exams.

**Homework:** There are two kinds of homework. The first one is the online homework. You need to go to <http://www.webassign.net/>. Follow the document at <http://math.utoledo.edu/~mtsui/1890sp11/webassign.pdf> to create an account using your access code. After you login, you will find your assignment. The other type of homework is the homework that you have to turn in. It can be found at <http://www.math.utoledo.edu/~mtsui/1890sp11/homework/hw.html>

Your solutions must be neat and show all work. If you do not show your work then you will not receive credit for your solution. I will drop your lowest homework score.

**Quizzes:** There will be weekly quizzes given on either Tuesday or Thursday. The date of the quiz will be announced in class and posted on the homepage of the class. Most of the materials on the quiz will be drawn from the homework assignment. The time of the quizzes can be found on the web. I will drop your lowest quiz score.

**Missed Quizzes and Exams:** To be eligible to make up a missed quiz or test with no grade penalty, be prepared to provide compelling documentary evidence that your absence was beyond your reasonable control. (Simply being unprepared is not a legitimate excuse.) See the university's policy statement on missed classes at [http://www.utoledo.edu/facsenate/missed\\_class\\_policy.html](http://www.utoledo.edu/facsenate/missed_class_policy.html) for more details about the kinds of excuses that may be considered legitimate. **Even if the excuse is legitimate, you must contact me and make arrangements for the makeup exam at the earliest possible date, preferably by e-mail or phone.** (If you have difficulty contacting me, leave a message and your telephone number with the department secretary at 419 530-2568 or slide it under my office door.) Excuses presented after the missed test has taken place (and particularly, those presented after the graded tests have been returned to the rest of the class) will receive especially critical scrutiny. Of course, in no case will a makeup exam be easier than the test it replaces.

**Grading:** The following percentages are assigned to the components of the student's grade.

Attendance and Class Participation	5%			
Quizzes	10%			
Homework and Project	15%			
Midterms	40%	Final Exam	30%	

In computing the quiz grade the lowest quiz score will be dropped.

Your final grade will be determined from the distribution of total points earned, on the following scale: 90-100% earns an A; 80-89% earns a B; 70-79% earns a C; 60-69% earns a D. If you have any question about your grade at any time please speak with me.

**Attendance and Classroom behavior:** Attendance at lectures will not play a direct role in the final grade computation. However, attendance is considered mandatory and may be recorded periodically. It may also be a factor (though a minor one) in my decision about whether to make a "discretionary adjustment" in a grade. Unless you have cleared it with me before the lecture or have a very compelling excuse, do not come to class late or leave early and expect to be recorded as attending. Cell phone or text messaging is allowed in class.

**Resources:** There are resources available for students who need extra help outside of my office hours. For this courses the most reliable source of tutorial help can be found at the Mathematics Learning and Resource Center located in the basement of Carlson Library(Lower Level, Rathbun Cove B0200).

**Using technology:** In this course we are going to use several computer softwares like Maple or Row reducer <http://www.dangries.com/Flash/RowReducer/RowReducer.html>. The computer is not there to hurt you, it is there to help. With the computer you will get a better and deeper understanding of linear algebra.

**Goals:** At the end of the course, students should be able to

- make calculations with agility, accuracy, intelligence and flexibility
- explain the basic concepts clearly and reason logically with them.

**Expectations :** To achieve these goals, students are expected to

- attend the lectures
- complete all homework assignments
- discuss mathematics with other students and the instructor

**Calendar:**

Last date to drop	Tuesday, January 18 , 2011
Exam I	Tuesday, February 8, 2011, at Newton Lab (UH1000)
Last date to withdraw	Friday, February 11, 2010
Spring break	March 7th to March 13th
Exam II	Tuesday, March 22, 2011, at Newton Lab (UH1000)
Final exam	Tuesday, May 3, 2011, 12:30-2:30, at Newton Lab (UH1000)