MA 3113: Introduction to Linear Algebra
Course Syllabus
Fall 2015

Section 01
TTH: 8:00 - 9:15 am
Allen 24

Instructor: Dr. Matt McBride
Office: Allen 419
Office Phone: 325-7139
Offic Hours: TTH: $9:30 - 10:30$ am or by appointment
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Textbook: David C. Lay, *Elementary Linear Algebra and It's Applications*, 4th Edition

Prerequisites: MA 1723

Objective: Linear algebra is an important topic and plays a significant role in mathematics as well as other sciences and engineering (STEM) courses. In this course we will learn about systems of linear equations, matrices and matrix algebra and their properties, eigenvalues and eigenvectors, some special vector spaces, and applications.

Withdrawl Date: The last day to drop the course with a W is October 8th

Student Honor Code: Mississippi State has an approved Honor Code that applies to all students. The code is as follows: "As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do." Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to acceept responsibility for learning, and to follow the philosophy and rules of the Honor Code. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Honor Code. For additional information, please visit: http://honorcode.msstate.edu/policy

Students with disabilities: Mississippi State University is committed to providing reasonable accomodation for all students with disabilities. If you require special accomodation in this course you are requested to speak with the instructor as early in the semester as possible. Students with disabilities must be registered with the Office of Student Support Services prior to receiving accomodations in this course. For further information please see `http://www.sss.msstate.edu`.

Title IX: Mississippi State University is committed to complying with Title IX, a federal law that prohibits discrimination, including violence and harassment, based on sex. This means that MSU's educational programs and activities must be free from sex discrimination, sexual harassment, and other forms of sexual misconduct. If you or someone you know has experienced sex discrimination, sexual violence and/or harassment by any member of the university community, you are encouraged to report the conduct to MSU's Director of Title IX/EEO Programs at 325-8124 or by emai to titleix@msstate.edu. Additional resources are available at `http://www.msstate.edu/web/security` or at `http://students.msstate.edu/sexualmisconduct/`.

Homework: As with any math course, homework is a vital component. One must practice newly learned facts, theorems, etc. through the assigned homework. Homework will be assigned daily, however it will be collected only once a week except during exam weeks. See the schedule for the due dates.

Exams: There will be three closed book, closed notes, and closed homework in-class exams. Students will have the whole class period to take the exams. All three exams will cover roughly nine sections, though this may be modified due to time and is left up to the discretion of the instructor. See the schedule for the exact sections covered.

Final Exam: The final exam is a comprehensive exam and will be held on **Wednesday, December 9$^{\text{th}}$** in the usual class location at **8:00 - 11:00 am**. This date can **not** be modified, so make sure one's calendar is free.

Make-up Policy: Make-up exams will be given **only** for reasons deemed acceptable by the instructor, and **only** with written documentation. Make-up exams must be taken within one week of the original date, and no make-ups may be taken after the final exam. Make-up exams are never easier than the original.

Calculator Policy: You may use any type of calculator when working on the homework assignments. When taking exams, a calculator is not really needed, however, if you wish, you may use a calculator that does not have any matrix capability while taking exams, just to check your arithmetic. The reason for the exclusion of matrix capability is the fact that we are learning about these manipulations. Given the nature of the problems you really won't need a calculator.

Grading Distribution:

> Homework................25%
> Exams.....................45%
> Final Exam..............30%
> Total......................100%

Grading Scale:

> **A:**....100% - 90%
> **B:**......89% - 80%
> **C:**......79% - 70%
> **D:**......69% - 60%
> **F:**......59% and below

Fall 2015 Tentative Schedule

Note: this may be modified and is left to the discretion of the instructor.

Date	Sections Covered/ HW Due	Homework Assigned
Tue, Aug. 18	1.1,1.2	**1.1:** 11-23 odd
		1.2: 7-13 odd, 21
Thu, Aug. 20	1.3,1.4	**1.3:** 11-15 odd, 24,25
Tue, Aug. 25	1.4,1.5	**1.4:** 9,11,12,15,16,23
		1.5: 7-12,38-40
Thu, Aug. 27	1.7,1.8 (**1.1-1.3 due**)	**1.7:** 1-7 odd, 11-19 odd
Tue, Sept. 1	1.8,1.9	**1.8:** 3,5,7,23,33,35,36
Thu, Sept. 3	1.9,2.1 (**1.4-1.7 due**)	**1.9:** 1-7 odd, 17,19,34
Tue, Sept. 8	2.1,2.2	**2.1:** 1,2,7-10,15,27,28
Thu, Sept. 10	2.2,2.3 (**1.8,1.9**)	**2.2:** 1,3,5,19,20,21,31,32
		2.3: 1-7 odd, 17,27,33,40
Tue, Sept. 15	Review for Exam 1	none
Thu, Sept. 17	**Exam 1**	**Covering: 1.1-1.9,2.1-2.3**
Tue, Sept. 22	2.4,2.8	**2.4:** 1,5,13
		2.8: 5,6,11,17,19,23,25
Thu, Sept. 24	2.9,4.1 (**2.1-2.3 due**)	**2.9:** 3,5,13,15,19-27 odd
Tue, Sept. 29	4.1,4.2	**4.1:** 5,6,8,9,11,12,20,21,22
		4.2: 1,3,7,30-35
Thu, Oct. 1	4.3,4.4 (**2.4,2.8,2.9 due**)	**4.3:** 1,5,15,26,31-34
		4.4: 3,23-29 odd
Thu, Oct. 8	4.5,3.1 (**4.1-4.4 due**)	**4.5:** 5,21,25,27,28
		3.1: 1-13 odd,43
Tue, Oct. 13	Review for Exam 2	none
Thu, Oct. 15	**Exam 2**	**Covering: 2.4,2.8,2.9,4.1-4.5,3.1**

Date	Sections Covered/ HW Due	Homework Assigned
Tue, Oct. 20	3.2,5.1	**3.2:** 5-11 odd,31,33,34,35 **5.1:** 1,3,9,11,25,26,27
Thu, Oct. 22	5.2,5.3 (**4.5,3.1 due**)	**5.2:** 1,3,9,11,19
Tue, Oct. 27	5.3,5.4	**5.3:** 7,13,15,27
Thu, Oct. 29	5.4,5.5 (**3.2,5.1,5.2 due**)	**5.4:** 5-7,22,23
Tue, Nov. 3	5.5,6.1	**5.5:** 1,3,23-26 **6.1:** 1,5,11,27,29,30,31
Thu, Nov. 5	6.2,6.4 (**5.3,5.4 due**)	**6.2:** 3,5,11,33 **6.4:** 1,3,5
Tue, Nov. 10	6.7	**6.7:** 4,5,13,14,16,21,23,25
Thu, Nov. 12	6.8 (**5.5,6.1,6.2,6.4 due**)	**6.8:** 5-10
Tue, Nov. 17	Review for Exam 3	none
Thu, Nov. 19	**Exam 3**	**Covering: 3.2,5.1-5.5,6.1,6.2,6.4**
Tue, Nov. 24	Review for Final Exam	none
Tue, Dec. 1	Review for Final Exam (**6.7,6.8 due**)	none
Wed, Dec 9	**Final Exam**	**8:00-11:00am in Allen 24**