# 21-241: Matrix Algebra - Summer I, 2006 <br> Syllabus 

TIME: MTWRF 10:30AM-11:50AM
PLACE: PH A18C

INSTRUCTOR: Xiaohui Luo

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OFFICE HOURS: MTWRF 12:00PM-1:00PM
COURSE PAGE: http://www.math.cmu.edu/~xiaohuil/21241/
TEXT: Applied Linear Algebra, Peter J. Olver \& Chehrzad Shakiban.
This book is required reading. We will be covering most sections of Chapter 1-5, 8. Most homework problems are also chosen from the book. All supplemental materials will be posted on the Course Page or distributed in class on later dates.

HOMEWORK: Homework problems will be posted on every lecture day, normally covering the material in that day's lecture. Homework will be due at the beginning of next week's first meeting, except for the last week, it will be due on Friday, June 30 before the Final. "Mathematics is learned by doing, not by listening," and homework is an essential part of the course. You are encouraged to work in groups. However, you should individually write up the final version of your own homework. If two or more homework papers are found clearly duplicates of each other, the score will be split equally among those involved. Late homework is not acceptable without official documentations. You may be rewarded 5 point bonus if you finish all homework on time and get a score of 60 or above every week.

QUIZZES: There will be six 15-min quizzes given in class, which will be short versions of questions similar to what you will find in exams. If you have done and understood the homework, you will find the quizzes an easy way to boost your grade. The dates of the quizzes will NOT be announced in advance, so it's your interests to participate in every class. There will be NO make ups on quizzes. However, you may drop your lowest quiz score.

EXAMS: There will be three one-hour exams during the period of the course and a Final Exam in the end. All exams will be books and notes closed, and NO calculators allowed. Make ups will be arranged only if official documentations are provided. Partial credit is offered depending on your work shown on the exam papers. Correct answers without supportive work are meaningless. There will be some bonus questions on the exams. Successfully solving these questions will add to your total score. Bonus questions are more challenging than the others, and thus should be left for last.

GRADES: Your final score will be determined by the Homework, Quizzes and Exams using the following weights (left); And your final letter grade will be determined by the final score, according to the following scale (right).

| Homework | $15 \%$ | Score | Grade |
| :---: | :---: | :---: | :---: |
| Quizzes | $15 \%$ | $90+$ | A |
| Exam 1 | $15 \%$ | $80-89.99$ | B |
| Exam 2 | $15 \%$ | $70-79.99$ | C |
| Exam 3 | $15 \%$ | $60-69.99$ | D |
| Final | $25 \%$ | $60-$ | R |

