Linear Algebra and Probability

School of Economics and Management

Wuhan University

Spring 2017

Instructor

Zhe Yuan

Email: yyyuanzhe@gmail.com

Office Hours: Wednesday 4:30pm-5:30pm

Location: TBA

Teaching Assistant

Yan Gao

Email: 2629894223@qq.com

Office Hours: TBA

Location: TBA

Email policy

I will respond to email within 24 hours on a weekday, 48 hours on a weekend, according to these policies:
a) I only respond to emails posing questions that can be answered in 1-3 sentences. For detailed questions, please come to my office hours.
b) I do not respond to emails that request information that can be found on the website or the syllabus.
c) For the results of the graded materials, please come to my office hours.

Website

TBA

Schedule

Morning class lectures will on Wednesdays from 10am-12:15pm.

Afternoon class lectures will be held on Wednesdays from 2:05-4:20pm.

(Tentatively) Term Test will be held on Wednesday, Apr. 27th, Location: TBA

Final Exam: During the exam period, to be announced.

Grading

Term Test will cover all materials before the term test and worth 30%. Final exam will be cumulative and counts for 60%. There will be two homeworks which worth 5% each.

Grade appeals must be submitted within two weeks of the date the work is returned. The specific reason for the appeal must be in writing. The test in question will be reviewed in its entirety and the final grade may go up or down.

Text

D. Cherney, T. Denton, R. Thomas and A. Waldron: Linear Algebra
Downloadable at https://www.math.ucdavis.edu/~linear/

P. Bertsekas and John N. Tsitsiklis: Introduction to Probability
Downloadable at http://vfu.bg/en/e-Learning/Math--Bertsekas_Tsitsiklis_Introduction_to_probability.pdf

Academic (and non-academic) Misconduct

Students should note that I do not tolerate any form of academic misconduct. Any student caught engaging in such activities will be subject to academic discipline ranging from a mark of zero to dismissal from the university as outlined in the academic handbook. Any student abetting or otherwise assisting in such misconduct will also be subject to academic penalties.

Topics

Weeks	Date	Content		Textbook
1	Feb. 23			
2	Mar. 2	L1:linear equations	L2:echelon form	Ch2
3	Mar. 9	L3:vectors	L4:matrix I	Ch4,7
4	Mar. 16	L5:solution sets	L6:applications	Ch2
5	Mar. 23	L7:linear independence	L8:linear transformation	CH10,6
6	May. 30	L9:matrix II	L10:matrix inverse I	Ch7
7	Apr. 6	L11:matrix inverse II	L12:determinants I	Ch7,8
8	Apr. 13	L13:determinants II	L14:vector spaces	Ch8,Ch11
9	Apr. 20	L17:coordinates	L18:dimension and rank	Ch11
10	Apr. 27	Term Test		
11	May. 4	L19:eigenvalue I	L20:eigenvalues II	Ch12
12	May. 11	L21:diagonalize	L22:inner product	Ch13,14
13	May. 18	L23:orthogonal sets	L24:least squares	Ch14,17
14	May. 25	L25:data description		Ch1 and 2
15	Jun. 1	L27:introduction of		Ch3

		probability		
16	Jun. 8	L29:discrete random variables		Ch4
17	Jun. 15	L31:continuous random variables		Ch5
18	Jun. 22	L33:sampling distribution		Ch6