

MATH 2207, Linear Algebra
Semester 2, 2018

Webpage: <http://www.math.hkbu.edu.hk/~amypang/2207>

Class:

- Monday 15:30-17:20 @ AAB706
- Tuesday 9:30-11:20 @ AAB707

Each class contains a mixture of lecture and exercises (see below).

Instructor: Dr. Amy Pang, FSC 1108, amypang@hkbu.edu.hk .

Teaching Assistant: HOU Liangshao, 16484096@life.hkbu.edu.hk .

Office hours: with Dr. Pang in FSC 1108. No appointment is necessary, come whenever you have questions. The times may change slightly from week to week; please check on the webpage.

- Monday 18:00-19:00 (you can also ask questions directly after class)
- Wednesday 14:30-17:30
- Friday 10:30-12:30

Textbook: *Linear Algebra and its Applications, Global Edition (5th Edition)*, by David C. Lay, Steven R. Lay and Judi J. McDonald, Pearson, ISBN 1-292-09223-2. This is for reference only; you may use any edition, but any page and section numbers referred to in course materials will be from the fifth edition. We will cover roughly chapters 1.1-1.5, 1.7-1.9, 2.1-2.3, 3.1-3.3, 4.1-4.7, 5.1-5.4, 6.1-6.6, 7.1.

In-class exercises: Roughly one-quarter of class time will be spent doing problems. You are encouraged to discuss the problems with your classmates and the TAs.

Homework: Homework will be released roughly every two weeks on the course webpage. It is the student's responsibility to check the webpage for new homework postings. Homework is due 15 minutes after the start of class on the due date. **No homework will be accepted after the due time, and no extensions will be granted under any circumstances.** You are encouraged to work with your classmates, but you must write up your solution by yourself.

Exams:

- Quizzes: 15-20 minutes, in class. Dates will not be announced in advance.
- Midterm: 1 hour, at the start of class: 15:30 Monday 12 March @ AAB706
- Final: 2 hours, between 4-16 May. Exact date and location to be announced.

As in previous years, **no calculators** will be allowed in any exam.

Assessment: Your overall course mark will be computed from:

- 30% Continuous Assessment:
 - <15% In-class exercises and homework - these aren't really assessments; their purpose is to give you practice with the class material, so you can find out what you don't understand and prepare for the exams accordingly. The grade is a little reward for your effort.
 - >15% Quizzes and midterm.

The exact proportion of each component will not be announced.

- 70% Final Exam.

Some advice:

- This class involves concepts and proofs as well as calculations. Solving the questions will involve writing words, not just formulas. It is important to understand the theory and not just memorise a list of steps.
- This class involves lots of new mathematical words, and having heard them before class will help you follow the class much better. Please download the lecture slides from the webpage and read them quickly before class.
- Every class is very connected to the previous class. Make sure you understand each class before the next, or you will be lost very soon. A good way to do this is to do the “check your understanding” problems on the class webpage.
- Doing problems will help you understand the material; it is much more useful than re-reading the slides. The class webpage lists all textbook problems that are within the syllabus, separated by difficulty level. I recommend doing problems that look unfamiliar or difficult to you (no need to spend time on problems you already find easy). For more problems, you can find many class websites online - just search for “linear algebra” on Google. If you want solutions, you can email the instructor or TAs, or bring them to office hours.
- Study with a friend. Talking about the mathematics (explaining a solution, asking questions) will force you to think about it and make sure you really understand. To know if your proofs are good, give them to a friend to read, and ask if he/she is convinced.
- The lecture slides contain important uses of colour. If you are printing them in black and white, you should highlight them in the correct colours.
- The vertical pages of the lecture slides contain blank spaces that will be filled in in class. These are not available after class.