

MA1200 Calculus and Basic Linear Algebra I
Semester A 2017/2018
Course Information

1. OBTL and course webpage of MA1200

- (a) MA1200 adopts OBTL practice.
- (b) Please visit the MA1200 Canvas regularly for any update (announcements, course materials, etc.)

2. Course content of MA1200

The course materials of MA1200 are divided into 8 chapters. Each of the chapter 1 to 5 is equivalent to a course of **4** lecture hours (From week 1 to week 6). Each of the chapter 6 to 8 is equivalent roughly to a course of **7** lecture hours (From week 7 to week 12).

The topics covered in the 8 chapters are:

Chapter 1 Coordinate Geometry and Conic Sections

Chapter 2 Sets and Functions

Chapter 3 Polynomials, Rational Functions and Partial Fractions

Chapter 4 Trigonometric Functions, Inverse Trigonometric Functions, Trigonometric Identities and Trigonometric Equations

Chapter 5 Exponential Functions, Logarithmic Functions and Hyperbolic Functions

Chapter 6 Limits, Continuity and Differentiability

Chapter 7 Differentiation

Chapter 8 Applications of Derivatives

3. Reference books, lecture notes and assignments

(a) Reference Books

- Frank Ayres, Jr. and Elliott Mendelson, *Calculus (Schaum's Outlines)*, 6th ed., Mc Graw Hill, 2013
- Fred Safier, *Precalculus (Schaum's Outlines)*, 3rd ed., Mc Graw Hill, 2013
- *Basic Calculus and Linear Algebra* (Compiled by Department of Mathematics, City University of Hong Kong), Pearson Custom Publishing, 2007 (Available at CityU Bookstore)
- Ron Larson and Bruce Edwards, *Calculus I with Precalculus: A One-Year Course*, 3rd ed., Brooks/Cole, 2012
- C. Henry Edwards and David E. Penney, *Calculus: Early Transcendentals*, 7th ed., Pearson Prentice Hall, 2008
- Robert A. Adams, *Calculus: A Complete Course*, 6th ed., Pearson Addison Wesley, 2006
- Glyn James, *Modern Engineering Mathematics*, 4th ed., Pearson Prentice Hall, 2008

(b) Lecture notes

- Only topics covered in the notes will be assessed.
- In case notations in notes differ from the corresponding ones in the reference books, we follow the notation in the lecture notes.

(c) Assignments

- For self-practice and demonstration in tutorials (Students are *not* required to submit their solution for grading).

4. Grading scheme and policy

(a) Coursework (30%): 2 tests (15% each)

Examination (70%)

(b) **Test** policy

- Each test takes about 1 hour. The first test starts in Week 7.
- Each student is required to take tests in his/her lecture session.
- The full mark of each test is 100.
- Score < 50 in a test
 - *The student is required to complete remedial work (and seek necessary assistance) to the satisfaction of the tutor.*
 - Test score, after submitting required work, remains unchanged.
 - *From the overall coursework score (100), 10 marks will be deducted for **each** failure of submitting remedial work.*

(c) **Examination** policy

- All students sit for the same three-hour examination paper, which consists of ten questions.
- All questions are compulsory.
- The full mark of the examination paper is 100.

(d) Passing the course

Total Mark (Coursework + Examination Scores)	Examination Mark	Outcome
≥ 40	≥ 35	Pass the course
< 40	--	Fail in the course