AMA1120: Basic Mathematics II –Calculus and Linear Algebra

1. Lecture: Wednesday 11:30–13:20, V322, Group 201

2. Instructor: Dr. ZHANG Zaikun, AMA
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3. Consultation Hours:
Regular (I will be waiting for you in office): Thursday 14:00–16:00
Supplementary (please **make appointments beforehand**): Monday 14:00–16:00
You are welcome to ask questions by emails.

4. Course Website: Blackboard eLearning System at https://learn.polyu.edu.hk/
Course ID: AMA1120_20162_A
Please check the course page regularly for course materials and announcements.

5. Textbook: Hung, K.F., Kwan, W. Pong, T.Y. Foundation Mathematics & Statistics, McGraw Hill 2013 (available at the Pao Yue-kong Library)
Reference books:
R. Larson, B. Edwards, Single Variable Calculus, Brooks/Cole 2012
R. Larson, Elementary Linear Algebra, Brooks/Cole 2013
You can also consult the Ebook named "Foundation Mathematics" in the blackboard system.

6. Grading Scheme:

Continuous Assessment	Midterm	24%
	3 quizzes	12%
	2 assignments	4%
Final Exam		60%

6.1. You must pass (D or above) BOTH the Continuous Assessment and the Final Exam to receive a passing grade for the whole course.
6.2. The Midterm examination will be held on Sunday March 26 (tentative). Precise time and venue to be announced later.

6.3. The quizzes will take place during the tutorial sessions around the 4^{th}, 8^{th}, and $11/12^{th}$ weeks. Precise dates to be announced.
6.4. The assignments are due around the 6^{th} and 11^{th} weeks**.** Precise time to be announced. **Late submissions will not be marked**. Assignments should be submitted through the Assignment Box of AMA on the 7^{th} floor of Building T. Please make sure to submit your assignment into the correct box (of group 201).

7. Material Covered:

The following table is only a guide. We may adapt our pace according to the progress.

Weeks	Contents	Remarks
1	Mean value theorem	
2	Application of differentiations I	Homework 1
3	Application of differentiations II	
4	Definite and indefinite integrals	Quiz 1
5	Fundamental theorem of calculus	
6	Techniques for integration I	Due date of homework 1
7	Techniques for integration II	Homework 2
8	Techniques for integration III, improper integrals	Quiz 2
9	Applications of integrals I	Midterm (March 26)
10	Applications of integrals II	
11	Matrices, linear systems, Gaussian elimination, inverse of a matrix	Due date of homework 2
12	Determinants, Cramer's rule	Quiz 3
13	Applications to geometry, review	

8. Important remark
My job is to make you succeed in this course, not to make you fail. We are a team, and we have to work together. I will be very happy to help you by any reasonable means that do not violate the university or department rules, yet you have to do your part of the job. **Attend the lectures and do your homework.**