### **Business Mathematics**

2014 Fall – Module 1

Monday & Thursday 8:30-10:20AM in Room 231

**Instructor:** Yilin Zhang

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Office Hours: TBA/By appointment

**TA:** Sunny Mewati (sunnymewati@sz.pku.edu.cn; Office Hours: TBA)

### **Contents and Objectives:**

This course provides introduction to and practice in using mathematical tools in economic and finance applications. It is intended to prepare MA students for more advanced courses in economics and finance. The class will start slowly from the simplest definitions and then move through topics including differential calculus and optimization, matrix algebra, probability theory and statistics, as well as the applications in financial economics. The proofs and deviations will be kept to a minimum but the class will still be mathematical in nature. For many students the material will not be completely new but please pay attention in class.

#### **Recommended Text:**

Carl P. Simon and Lawrence E. Blume, Mathematics for Economists

Alpha C. Chiang , Fundamental Methods of Mathematical Economics. 4th ed.

# **Grading:**

The course grade will be based on in-class quizzes (5%), homeworks (15%), one midterm (40%) and one final exam (40%). Homeworks need to be prepared individually.

#### **Contact:**

Please feel free to email me at <u>ylzhang@phbs.pku.edu.cn</u> if you need to make an appointment to discuss any course-related issues. Please include "**Fin500**" in the subject field to help me identify the emails.

# **Academic Integrity:**

Academic integrity is a cornerstone of the intellectual life of any university. Violations of academic integrity will be considered a serious offense. Any student who is judged to have violated academic integrity in this course will be subject to the penalties including, among others, failure for the course. Copying results on an exam, plagiarizing homework, or unauthorized use of materials from this course in previous years constitutes a violation of academic integrity.