

MATHEMATICS FOR ECONOMICS II

Summer 2018

MATH-UA.0212-001

Instructor:	Liming PANG
Email:	liming@cims.nyu.edu
Lecture Time:	Mo Tu We Th 11:10–13:15
Classroom:	194 Mercer Street Room 305

Course Web Page: <http://cims.nyu.edu/~liming/MAEC2/2018.html>

Office Hours:

Mon. and Wed. 14:30– 15:30
Room 720, Courant Institute of Mathematical Sciences

Textbook:

Knut Sydsæter, Peter Hammond, Arne Strøm, Andrés Carvajal
Essential Mathematics for Economic Analysis, 5th Edition, Pearson

Grading Policy: Homework (20%), Midterm (40%), Final (40%).

Exam Schedule:

Midterm JUL 19 2018
Final Exam AUG 09 2018

Class Policy:

- There will be five sets of homework in total. When calculating your course grade, one lowest score among the five will be dropped.
- Homework will be released each Tuesday and Thursday on the course web page, and due on the following Monday during class. Late homework or emailed version shall NOT be accepted.
- You may discuss with your classmates about homework, but you should organize and write your solutions by yourself.
- You can check your homework and exam scores on NYU Classes.
- We will not be able to accommodate out-of-sequence exams for purposes of more convenient travel, including already purchased tickets. Please note again the date of the exams and plan your travel accordingly.
- Exams will be close book. Books, paper or electronic material, calculator or electronic devices are NOT allowed during exams.

Tentative Course Schedule:

Week one

07/02: Vectors, Directional Derivatives and Gradient

07/03: Level Set and Constraint

07/04: No Class (National Day)

07/05: Brief Review of Optimization

Week Two

07/09: Lagrange Multiplier

07/10: Applications of Lagrange Multiplier

07/11: Antiderivative and Riemann Sum

07/12: Definite Integral

Week Three

07/16: Fundamental Theorem of Calculus

07/17: Integration Techniques

07/18: Review

07/19: Midterm

Week Four

07/23: Integration Techniques

07/24: Applications of Integration

07/25: Double Integrals

07/26: Applications

Week Five:

07/30: Matrix and Matrix Operations

07/31: Gaussian Elimination

08/01: Determinant and Inverse Matrix

08/02: n Equations in n Variables

Week Six

08/06: Ordinary Differential Equations

08/07: Applications

08/08: Review

08/09: Final Exam