

AAE635
Applied Microeconomic Theory
Syllabus

Fall 2017
Tuesday/Thursday, 11:00am – 12:15pm
(Section: 4:00 – 4:50pm, Monday)
B30, Taylor Hall

Instructor:

Guanming Shi, 329 Taylor Hall, Email: gshi@wisc.edu
OH: Tuesday and Thursday 12:15-1pm, or by appointment

Teaching Assistants:

Jie (Sunny) Feng, 304 Taylor Hall, Email: jfeng65@wisc.edu
OH: Wednesday 9:30 - 11:30am

Ziqi Qiao, 317 Taylor Hall, Email: zqiao7@wisc.edu
OH: Tuesday 2:30 - 3:30pm

Prerequisites:

Intermediate Micro (Econ. 301), one semester of calculus and one semester of linear algebra.

Overview:

Microeconomics studies systematically the economic decision rules followed by consumers and firms in solving their constrained optimization problems. It also evaluates the welfare consequence of such decisions in the context of a society or a sector. We will cover the following topics:

1. Economic modeling with optimization theory and price theory for firms and consumers;
2. Mathematical tools of duality in analyzing economic behavior;
3. Welfare consequences in terms of benefit and cost of economic decisions; and
4. General equilibrium quantitative analysis applying to a sector or an economy.

Course objectives:

- To acquaint students with formal models of economic problems such as production and consumption allocations and the efficiency consequences;
- To develop students' analytical and mathematical skills for conducting such analyses.

Primary Reference:

The primary “textbook” is the detailed lecture notes specifically designed for this class. They are posted on the class website (in a timely manner): <http://www.aae.wisc.edu/aae635/main.asp>

Optional References:

Some students found the following books useful in helping them walk through this course. It is your choice whether to refer to these books or not:

Eugene Silberberg and Wing Suen, "The Structure of Economics: A Mathematical Analysis," Third Edition, McGraw-Hill, 2001. (A review of basic mathematical tools is provided in chapters 2, 3, 5 and 14)

Hal R. Varian, "Microeconomic Analysis," Third Edition, Norton&Company Ltd., NY. (A nice feature of this book is the compactness of how the basic concepts are presented, although some may view it as its "weakness")

Another useful handbook you may consider:

Sydsater, K., A. Strom and P. Berck, "Economists' Mathematical Manual", Springer-Verlag Berlin, Heidelberg 1999. (Collection of mathematical and statistical formulas and definitions, as well as economic results and theorems, very handy and useful in and beyond this class)

Homework:

There will be a total of six problem sets. Students may form study groups to work out the homework, but each student must submit your own answers.

Grading:

Midterm Exam	30%
Final Exam	40%
Homework	30%

Grading Scale: 100-90 A, 89-85 AB, 84-76 B, 75-72 BC, 71-63 C, 62-56 D, 55-0 F