ECON 506 and 506G (Section 001)
MATHEMATICAL ECONOMICS I

University of Wisconsin - Milwaukee, Fall 2019

Bol B84 – M 5:30 – 8:10

Syllabus

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Office Hours: Wednesday(1:30PM–3:30PM)

OVERVIEW

Econ 506 is intended for advanced undergraduate students and first year graduate students. The course will continue to Econ 606 (Mathematical Economics II) in the Spring semester. Between these two courses, students will be exposed to the basic mathematical tools for higher level economic analyses. Econ 506 will cover differential calculus, optimization and basic linear algebra. Econ 606 will add integral calculus, differential equations and optimal control theory.

BOOK

Michael Hoy, John Livernois, Chris McKenna, Ray Rees, and Thanasis Stengos,
Mathematics for Economics, **MIT Press.**

EXAMS

Students will be required to bring an official photo identification card (e.g, a student ID card) to midterms and final exams. In addition, each student should also bring a pencil to the exam room.

You cannot take a make-up exam unless you have made prior arrangements or have an excused absence. To be accepted, any conflict or other reason for missing an exam or a quiz must be brought to my attention in advance or/and as soon as possible. If you miss a quiz, midterm or final exam due to illness or a recognized university function, provide a written excuse from your physician or the appropriate university official and make-up or other suitable action will be arranged. In case of important personal reasons, advanced consultation is required. **Also, any student requiring special conditions** (such as a quiet test environment or extra time) **during a quiz or exam, must notify me within 3 weeks after the beginning of the course.** If no advance notification is made, you will take the quiz or exam along with everyone else.

GRADING

Each of the components of the semester grade will be weighted as follows:

Exam I (October 14th)	**40 %**
Exam II (November 25th)	**40 %**
Final Exam (December 20th)	**40 %**
Quizzes, Homeworks, Participation	**20 %**

Only the best two of the three exams will count.

The exact cut-offs for letter grades will be decided on the basis of the mastery of key concepts and issues displayed at each overall course score level rather than by a curve dictating that a certain percentage of students must earn a certain letter grade.

Academic Policy

Cheating of any kind will not be tolerated and at a minimum will result in a failing grade for the exam in question. Other university sanctions may also be applied.

Campus Policies

http://www4.uwm.edu/secu/SyllabusLinks.pdf

Credit Hour Policy

This 3-credit course meets for 3 academic hours of lecture per week during the semester and 0 academic hours of lecture otherwise. Students are expected to put in additional 6 hours per week reading material, studying, and working on assignments to achieve the learning goals of this course. Students are expected but not required to use the remaining hours of the week doing something else.

Outline of Topics

Review of Fundamentals
    Logic
    Sets and Functions
    Sequences, Series, and Limits

Linear Algebra
    System of Linear Equations
    Matrices

Calculus for Functions of One Variable
    Continuity of functions
    Derivative and Differential
    Optimization of Functions

Calculus for Functions of n-Variables
    Derivative and Differential
    Optimization of Functions
    Constrained Optimization