Introduction:

701 is the Masters level microeconomics course at UMW. It covers the theory of the consumer, the theory of the firm, market structures, general equilibrium, and factor markets. Economics 506, or an equivalent mathematics background, and graduate status are the pre-requisites for the course.

Course Requirements:

There will be two exams, each worth 45%. 5% of your grade will be determined by problem sets. The remaining 5% is based on classroom and section attendance and participation. The midterm exam will cover sections I, II and III of the outline below. The final will cover the remainder of the material. The course begins Tuesday, September 5th and ends Thursday, December 14th. There is no class on Thanksgiving, Thursday, November 23rd. The midterm exam will be Thursday, October 19th during the regularly scheduled class period. The final exam is from 10 am to noon on Wednesday, December 20th. Both exams will be in Lubar S231.

The required text for this course is:
Microeconomic Theory: Basic Principles and Extensions, 9th edition, by Walter Nicholson. The ISBN is 0-324270-86-0. This is an old edition and the publisher will not supply old editions. They would prefer to sell you a new edition with the same material at a much higher price (The 11th edition list price is $324.95). You will need to find a (much cheaper) copy online and there is a copy on 2-hour reserve at the library. Last year students found old editions for around $20. You may use earlier editions of the text if you prefer.

Optional texts are:
The Structure of Economics: A Mathematical Analysis, 3rd edition, by Eugene Silberberg and Wing Suen.
Microeconomic Analysis, 3rd edition, by Hal Varian.
Microeconomic Theory, by Mas-Colell, Whinston and Green.
Mathematics for Economists, by Carl Simon and Lawrence Blume.
The problem sets will cover the material from the lectures and the text. Their purpose is to prepare you for the exams so they will emphasize short answers, problem solving and explaining the important topics. Please view the problem sets as an opportunity to increase your understanding of the material. With this in mind, the purpose of the problem sets can be accomplished even if an answer is incorrect. Therefore, problem sets will be graded with on a check, check plus, check minus scale. Answer keys will be provided. I encourage you to work with your classmates, but give credit where credit is due. Please turn in your own answers. No late problem sets will be accepted.

The material builds upon itself, so keeping up to date with the readings and lectures is very important. Typically, lectures will extend the results from the previous class. If there are concepts that you find confusing, please ask for help as soon as possible.

Policies and Procedures:
Please read the University’s policy on academic misconduct at: http://www.uwm.edu/Dept/Acad_Aff/policy/academicmisconduct.html
Accommodations will be made for students with disabilities and observance of religious holidays. The University’s calendar is at: http://www.uwm.edu/Dept/Acad_Aff/policy/ . Please inform me of this need as soon as possible so that we can make the appropriate arrangements. According to University regulations, students may drop the course until the end of the 8th week of classes.

Please turn off all cell phones before lecture.

Course Outline and Readings:
The following is a tentative outline. Readings in Nicholson are required, while those in Silberberg are an alternative explanation.

I. Overview
   A. Tools
   B. Methodology
   C. Models
   D. Positivism
   E. Marginalism


II. Mathematics
   A. Single Variable Optimization
   B. Multiple Variable Optimization
   C. The Envelope Theorem
   D. Lagrangian Approach to Constrained Optimization

   Readings: Nicholson Chapter 2. Silberberg Chapters 2, 3.

III. Consumer Theory
   A. Utility Functions
B. Consumer Optimum  
C. Demand Functions  
D. Indirect Utility Functions  
E. Expenditure Functions  
F. The Slutsky Equation  
G. Shephard’s Lemma and Roy’s Identity  
H. Market Demand  
I. Elasticity  
J. Consumer Surplus


Midterm Exam: Thursday, October 19th.

IV. Production  
A. Production Functions  
B. Homogenous and Homothetic Functions  
C. Marginal and Average Physical Product  
D. Returns to Scale  
E. Elasticity of Substitution  

V. Costs  
A. Cost Functions  
B. Cost Minimization and Duality  
C. Input Substitution  
D. Relationship Between Long-Run and Short-Run Costs Functions  
Readings: Nicholson Chapter 8 + Appendix. Silberberg Chapters 8, 9.

VI. Profit Maximization  
A. First and Second Order Conditions  
B. Supply Function  
C. Lerner Index  
D. Producer Surplus  

VII. Perfect Competition  
A. Partial Equilibrium  
I. Short-Run and Long-Run Equilibria  
II. Comparative Statics  
III. Short-Run and Long-Run Supply Elasticities  
IV. Welfare  
V. Tax Incidence
B. General Equilibrium
   I. Edgeworth Box and Contract Curve
   II. Production Possibilities Frontier
   III. Walras’ Law
   IV. Pareto Efficiency
   V. Violations of Competitive Assumptions


VIII. Monopoly
   A. Profit Maximization
   B. Welfare Effects
   C. Price Discrimination
   D. Two-Part Tariffs
   E. Regulation


IX. Imperfect Competition
   A. Cournot Model
   B. Stackelberg Model
   C. Chamberlin Model
   D. Bertrand Model

Readings: Nicholson Chapters 14 and 15.

X. Factor Markets
   A. Labor Markets
   B. Capital Markets

Readings: Nicholson Chapters 16 and 17.