

General Outline of Topics for Coordinated Class
 Math 156 & Econ 201; Preliminary — August 2005

Required Text & Related Materials:

- *The Economics of Women, Men, and Work* (5th edition) by Blau, Ferber, and Winkler (Econ 201 required text, hereafter referred to as EWMW)
- www.aplia.net (online economics required resource for exercises, hereafter referred to as Aplia)
- *Mathematics with Applications* (8th edition) by Lial & Hungerford (required Math 156 text, hereafter referred as MWA)

Schedule (First Draft)

	Topics	Associated Readings and/or Activities	Assessments
Week One	Definition and introduction of terms (opportunity cost, scarcity), measures of value, happiness Graphs, slopes, linear equations	EWMW pages 1-12 MWA 2.1- 2.4 Aplia Math Review	Form teams and first team assignment Math Quiz: Review
Week Two	Individuals, decisions, and decision rules; linear inequalities, functions and their graphs, linear modeling, methods for solving quadratic equations	MWA 2.4, 3.1-3.3, 1.7 EWMW Chapter 3** Data collection re: study time, work time, leisure time	Team Work: graphing collected data, looking for linear trends?
Week Three	Utility theory and family welfare; quadratic solution methods, quadratic functions and their applications, polynomial functions	EWMW Chapter 3 cont and add in 4 MWA 1.7, 3.4-3.6 Aplia or other online resource for Math and Econ Practice/Self-Assessment	Team Work: Census data update exercise from Figure 4-4 EWMW Math Quiz: Quadratic Skills
Week Four	Introduction of supply and demand, introduce the role of government; polynomial and rational functions	EWMW Chapter 4 cont, Practice Outline Exercise for Paper Draft MWA 3.6-3.7	Math Test 1: Linear and Quadratic Functions, Econ Vocabulary and Basic Skills Assessment

Week Five	Human capital market, present and discounted values; systems of linear equations, exponential functions	EWMW Chapter 6 & MWA systems in 3.3, 4.1-4.2 Team Work: Apply present value and discount rates to financial investing via formulas from Math 156 (MWA 5.1, 5.2)	
Week Six	Firms and Market Power; exponential and logarithmic functions	MWA 4.2-4.4	Draft Econ Paper Due Math Quiz: Functions
Week Seven	Market Failures and Government Solutions; sets, Venn diagrams, and basic probability	EWMW Chapter 7 & 10 MWA Ch. 8	Math Test 2: 3.6 (poly functions) – early Ch. 8
Week Eight	Market Failures and Government Solutions; conditional probability and begin matrix methods	EWMW Chapter 10 cont. MWA Ch. 8 cont, begin Ch. 6	Final Version Econ Paper Due
Week Nine	Public Policy and Individual Market—What works when? Matrix methods, operations, and applications	MWA Ch. 6 cont.	No class on Monday Math Quiz: Probability and Matrix Skills Labor Economist Guest Lecture
Week Ten	Systems of linear inequalities and linear programming	MWA 7.1-7.3	Math & Econ: Final Exam Review Assignment Due
Finals Week	No new course material introduced	Review Activities	Final Exams