INTERMEDIATE MICROECONOMIC THEORY (ECON 3070-020 AND 3070-030)
Department of Economics, University of Colorado
Spring 2020

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|---|---|---|
| Professor: | Charles de Bartolome | Recitation instructor: |
| Office hours: | M 2:00-2:50 pm; Tu 1:30-2:30pm | Recitation time: |
| | F 2:00 - 2:50pm. | Recitation place: |
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*Textbook*:    Austan Goolsbee, Steven Levitt and Chad Syverson, (2020), *Microeconomics* (3$^{rd}$ Edition) WITH SAPLING ACCESSS. Worth Publishers.

Buying textbooks is expensive. I recommend that you do NOT buy the textbook and Sapling Access separately. It is almost-always much cheaper to buy a bundle of the textbook plus Sapling Access than to buy these two products separately. I have negotiated with Worth Publishers for a competitive price, so I recommend that you buy the bundle at the CU Bookstore.

When you have bought the textbook with Sapling Access, you need to register your Sapling access code WHILE INSIDE  the course's website on Canvas. Do NOT register your code on the MacMillan or Sapling websites.

For instructions on how to register the access code within Canvas:
Go to the course website on Canvas.
Click on module MacMillan Learning,
        then on the sub-module: Student Registration - Start Here

*Sapling Learning*:
Each student must enroll in Sapling Learning which contains two electronic learning systems:  (2) Learning Curve is a weekly assignment which is designed to encourage you to read the material before class and (2) End of Chapter Problem Set is a set of problems on material after it has been covered in class. Both activities are graded.

Learning Curve assignments are posted on Thursdays at 4pm and are due on the following Wednesday at 10am.  The first Learning Curve assignment is for practice only and is due at 2E0@xion Wning

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*"Clickers"*

*Attendance at class*:

The final exam will be held as:

FINAL:                    For Section 20: Sunday 3 May 7:30-9:00pm
Location:  ECON 119

For Section 30: Monday 4 May 4:30 - 7:00 pm
Location:  ECON 119

You must bring three blue-books to each exam.

*Failure to be present at an exam:*

If you fail to be present at an exam (unless you are ill and have a medical note from your doctor, or unless before the exam I have granted you permission to take a make-up exam), you will earn a score of 0 in the exam.

*Grading*:      There are two midterm exams, a final exam, in-class clicker questions, assignments associaated with LaunchPad, and recitations.  The grade of the student will be determined as:

| | |
|---|---|
| 22% | First Midterm, |
| 26% | Second Midterm, |
| 27% | Final |
| 8% | In-class clicker questions |
| 8% | Learning Curve/End of Chapter Problem Sets |
| 9% | Recitations |

*Concerning in-class clicker questions.* I use clicker questions to reinforce the main point of a lecture. A correct answer receives 1 point and an absence or an incorrect answer receives zero points.

In calculating your total score for all in-class clicker questions, I will sum your scores for all days, omitting your three lowest daily scores.

*Concerning recitations*: At the recitation, you are required to hand in an answer to the Recitation Problem Set which show evidence of effort (your answer need not be correct). If you are present and if your answer shows evidence of effort, you will receive a score of 1 for that week. If you are not present at the recitation and do not hand in an answer, you will receive a score of zero for that week. Your recitation leader will determine how you will be treated if (1) you are present but the answer which you hand in shows no evidence of effort or if (2) you are not present but submit in advance to your recitation leader an answer showing evidence of effort. You may not ask somebody else to hand in an answer on your behalf.

In calculating your total score for recitations, I will omit your two lowest weekly scores.

*Classroom courtesy:*

Please turn your cell 'phone off prior to the start of class.

I believe that learning is enhanced if there is full concentration by both the instructor and the student. Therefore, usage of laptop computers in class is restricted to following the course notes. To facilitate this, laptops may only be used in the front two rows of the classroom.

*Drop-in Tutorial Lab:*

The Department of Economics provides a free drop-in tutorial lab for undergraduates enrolled in Economics 3070 and other courses.
Information about the lab is available at:
 www.colorado.edu/Economics   > undergraduate > drop-in tutorial lab

*Tutors*:

The Department of Economics keeps a list of tutors. Please contact the department's Main Office if you would like to review the list. The Main Office is in Room 212 in the Economics Building.

*Accommodations for Disabilities:*

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to me in a timely manner so that your needs can be addressed.  Disability Services determines accommodations based on documented disabilities in the academic environment.  Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or

important with respect to individuals and topics dealing with race, color, national origin, sex, preg

COURSE OUTLINE

| Date | Topic | Section |
|------|-------|---------|
| *Date* | *Topic* | *Section* |

13 Jan          INTRODUCTION                                             1.1, 1.2
                Scarcity and Markets                                     pp. 11-12
                Normative and Positive

15 Jan          REVIEW                                                   2
                Rationality
                Marginal Analysis
                Decision-Making using Marginal Analysis
                Use of Models

## 1.  HOUSEHOLDS

17, 22, 24 Jan  REPRESENTING TASTES
                Utility                                                  4.1
                - marginal utility
                - diminishing marginal utility
                Indifference Curves                                      4.2
                - marginal rate of substitution
                - bowed-in
                Ordinal or cardinal?
                Substitution and Income effects
                New Welfare Economics

27 Jan          BUDGET LINE                                              4.3

29 Jan          CHOICE AND  QUANTITY DEMANDED
                Review: Rationality
                Individual consumer choice                    4.4,  4.Appendix  (pp. 130-132)
                - rule: "marginal rate of substitution = good price ratio"

| 31 Jan, 3, 5 Feb | COMPARATIVE STATICS | 5.1 |
| | Income changes | |
| | - income expansion path | |
| | - normal and inferior goods | |
| | Price changes | 5.2 |
| | Individual demand curves | |
| | Income and substitution effects | 5.3 |
| | Changes in price of other goods | 5.4 |
| | Market demand curve | 5.5 |

| 7 Feb | LABOR CHOICE | |
| | Labor Supply | 13.2 |
| | Savings | |

| 10 Feb | In-class Review | |
| | 7-9 pm  FIRST MIDTERM | |

| 12, 14, 17 Feb | VALUING GOODS MARKET ACTIVITIES | |
| | Individual Benefit | 3.1 |
| | Marginal Benefit | |
| | Marginal benefit curve $\equiv$ Individual demand curve | |
| | Net Benefit from Buying $\equiv$ Consumer Surplus | |
| | | |
| | Society's Marginal Benefit | |
| | Marginal Social Benefit Curve $\equiv$ Market Demand Curve | |
| | Society's net benefit from buying | |

| 19, 21 Feb | VALUING LABOR MARKET ACTIVITIES | |
| | Individual's marginal cost of labor | |
| | Individual's marginal cost of labor $\equiv$ individual's labor supply curve | |
| | Individual's net benefit from working | |
| | | |
| | Society's Marginal Cost of labor | |
| | Social Marginal Cost Curve $\equiv$ Market labor supply curve | |
| | Society's net benefit from working | |

## 2. FIRMS

| | | |
|---|---|---|
| 24, 26, 28 Feb | PRODUCTION | |
| | Production Function | 6.1, 6.2, 6.3 |
| | - marginal product | |
| | - diminishing marginal product | |
| | Iso-quant | 6.4 (pp. 189-193) |
| | Marginal rate of technical substitution | |
| | Returns to scale | 6.5 |
| | Short-run and long-run | 6.2 |
| | Short-run production | 6.3 |

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| 2 Mar | CHOOSI&1bD@n |

## 3. "MARKET" INTERACTIONS: HOUSEHOLDS AND FIRMS TOGETHER

| 13, 16 Mar | THE BENCHMARK | |
|---|---|---|
| | Producer Surplus | 3.1 |
| | Net Benefit Created = Consumer Surplus + Producer Surplus | |
| | The Planner | |
| | Maximum Possible Net Benefit Created (Efficiency) | |

| 18 Mar | In-class review |
|---|---|
| | 7 - 9 pm SECOND MIDTERM |

| 30 Mar, 1 Apr | THE BENCHMARK (CONT.) |
|---|---|
| | Deadweight loss |
| | Equity Concerns |

| 3, 6, 8 Apr | "MARKET"  IS MONOPOLY | |
|---|---|---|
| | Market Power | 9.1 |
| | Marginal revenue | 9.2,  pp. 335-338 |
| |    - downward sloping | |
| | Choosing quantity to maximize profit | 9.3,   pp 334-335 |
| |    - rule: "marginal revenue = marginal cost" | |
| | Comparative statics | 9.4 |
| | Well-being lost with monopoly | 9.5 |
| | Barriers to entry | |
| | Government regulation | 9.6 |

| 10, 13 Apr | STRATEGIC ANALYSIS: GAME THEORY | |
|---|---|---|
| | Game | 12.1 (pp. 419-421) |
| | Extensive Form | |
| | Information Set | |
| | Strategy | |
| | Normal Form | |
| | Nash Equilibrium | 12.2 (pp. 423-429) |

| 15, 17 Apr | "MARKET" = DUOPOLY | |
|---|---|---|
| | Cournot Quantity Competition | 11.4 |
| | Welfare properties of duopolistic markets | |

| 20, 22 Apr | "MARKET" = OLIGOPOLY AND MARKET ENTRY |
|---|---|
| | Perfect competition as a sequence of successful entries |

| 24 Apr | "MARKET" = COMPETITIVE MARKET | |
| | Price-taking | 8.1, 8.2 |
| | Firm's choice of quantity | |