University of Colorado at Boulder, Fall 2015 Econ 2010-280/281R Principles of Microeconomics Libby Residential Academic Program Instructor: Vijaya R. Sharma, Ph.D.

Lectures: MWF 11:00 – 11:50 A.M. @ Room 103 Recitations: F 12:00 – 12:50 P.M @ Room 103

Office Hours:

• Mon 9:50 A.M. – 10:50 A.M. @ Kittredge Central N216

• Mon 12:30 P.M. – 1:30 P.M. @ Libby Room 140A

• Tue 12:30 P.M. – 1:30 P.M. @ Sewall Room 172

• Fri 1:00 P.M. – 2:00 P.M. @ Farrand Room 201

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Course Description

The course introduces principles of economics with emphasis on choice behavior of individual households, firms and similar small economic entities. It discusses supply, demand, and the method of price determination and analyzes performance of markets in efficiently allocating society's resources. There are four major sections of the course:

- Basic economic concepts and economic way of thinking
- Buying behavior of consumers, economic costs of production, selling behavior of producers, and determination of market prices in a free competitive market
- Various market structures, their successes and failures in efficient allocation of society's resources, and any need of public policy interventions
- Analysis of resource markets, determination of resource prices, and uneven distribution of income

This course uses model-based analytical learning method. Students learn concepts, theories and models to help interpret data, facts, and experiences in order to answer questions, solve problems and resolve issues. The course requires students to practice applications through a number of assignments and clicker questions during lectures and recitations. Students need to be aware that economists make many assumptions for building models that are mathematically tractable for analyzing complex economic problems; therefore, they need to also understand and question the real world validity of those underlying assumptions.

Textbook, Readings and Clickers

Required textbook is the packet of course notes prepared by the instructor, which is available from the campus bookstore. Bring the textbook to both lectures and recitations. Any other assigned readings shall be separately made available at appropriate times. Bring your clicker also to lectures and recitations. Clickers are available at CU Bookstore, if you do not have one already with you.

Classroom Etiquettes

Do not engage in private conversations in the class. Use of laptops, iPads, Notebooks and cell phones are prohibited in the class, unless permitted by the instructor in specific circumstances. Frequent walking in and out of classroom is not an accepted classroom behavior.

Grading Policy

Your course grade is determined from your performances in three tests (85%), a number of assignments (12.5%) and a number of clicker questions (2.5%). The standard grading scale is used for letter grade. Ninety three and above is A, 90-92 A-, 87-89 B+, 83-86 B, 80-82 B-, 77-79 C+, 73-76 C, 70-72 C-, 67-69 D+, 63-66 D, 60-62 D- and below 60 is F.

Tests

Three tests are given and together they count for 85%. The worst test counts for 15% and the remaining two for 35% each. The following are the test dates; they are firm.

- Exam 1: Sep 28 Monday
- Exam 2: Nov 2 Monday
- Exam 3: Dec 17 Thursday @ 4:30 P.M.

Assignments

Problems are assigned, collected and graded. No late submission is accepted and no makeup is offered for missed assignment. If you know you are going to be absent on the due date of an assignment, you are advised to submit your answers on the due date through a classmate. Of the 14 or 15 assignments that shall be assigned, two worst performance ones shall be dropped and the remaining assignments shall together count for 12.5% of the course grade.

Clickers

Clicker questions are given during lectures and sometimes during recitations and are graded for both participation and accuracy. If you miss a lecture, you miss the clicker questions given that day and there is no makeup. Of all the clicker sessions, the four worst clicker sessions shall be dropped and the remaining ones shall together count for 2.5% of the course grade.

Course Outline and Tentative Schedule

First Part

COURSE INTRODUCTION: Aug 24

CHAPTER I – SCARCITY, OPPORTUNITY COST & PPC: Aug 26, 28, 31

Scarcity of resources, opportunity cost, study of micro versus macroeconomics, production possibilities curve (PPC), nature of opportunity cost and the shapes of PPC, the law of rising opportunity cost, regions inside and outside PPC, factors that shift PPC, the law of comparative advantage and gains from trade

CHAPTER II – ECONOMIC WAY OF THINKING: Sep 2, 4

Economizing behavior or way of thinking, marginal analysis, the law of diminishing marginal returns, exercises on economizing behavior, the law of rising marginal cost, a general graphical representation of economic choices

CHAPTER III – BUYER'S CHOICE AND DEMAND: Sep 9, 11

The law of diminishing marginal willingness to pay, individual buyer's demand, its shape and optimal choice rule, the law of demand, consumer surplus or welfare, demand v.

quantity demanded, factors affecting demand, market demand – the horizontal summation, possible shapes of demand curve and interpretations

CHAPTER IV - SELLER'S CHOICE, AND SUPPLY: Sep 14, 16

Availability, marginal cost of supply, and the shape of individual seller's supply curve, the law of rising marginal cost (MC), seller's choice rule, the law of supply, producer surplus or welfare, supply v. quantity supplied, factors affecting supply: factor prices, technology, shocks; industry supply – the horizontal summation, uniqueness of individual's labor supply curve, possible shapes of supply curve and interpretations

CHAPTER V – FREE COMPETITIVE MARKETS: Sep 18, 21, 23

Concept of free and competitive market, market equilibrium price and quantity, rationing of goods by price under shortages and surpluses, social welfare – the sum of consumer and producer surpluses, issues of equitable distribution of goods and rationales of price ceiling and price floor; unintended consequences of government intervention incl income transfers, comparative statics of changes in price and quantity traded, price determinations in cases of vertical/horizontal shapes of demand/supply curves with interpretations and implications to distribution of welfares, applications of demand-supply model and introduction of the concept of scarcity rent and rarity value

EXAM 1: SEP 28 MONDAY

Second Part

CHAPTER VI – ELASTICITY: Sep 25, 30, Oct 2

Importance of elasticity and price elasticity of demand, ranges, formulas, price elasticity along demand curve, perfectly elastic/inelastic demand curves, determinants of price elasticity of demand, elasticity and revenue, slope and elasticity; price elasticity of supply; burden of tax on consumers and producers incl change in surpluses; income elasticity of demand and cross price elasticity of demand

CHAPTER VII - CONSUMER CHOICE THEORY: Oct 5, 7, 9

Utility and marginal utility, \$ measure of utility, demand and MU = P rule, Non-dollar measure of utility, general graphical representations of utility and marginal utility, Allocation of budget between two goods, budget constraint, effects of changes in income and prices on consumption possibilities, Allocation of budget between two goods and rule of equalization of marginal utility per dollar

CHAPTER VIII – PRODUCTION COST AND PROFIT CONCEPTS: Oct 12, 14, 16, 19

Concept of economic or full cost, contrast with accounting cost, accounting v. economic profits, short run v. long run, fixed v. variable costs, graphical representations of fixed and marginal costs, law of rising marginal cost, Law of diminishing marginal product, graphical representation of marginal product and total product, Calculations of output and costs and short-run cost curves

CHAPTER IX – PERFECT COMPETITION: Oct 21, 23, 26, 28

Characteristics, price taking behavior and demand for firm's output, profit maximization objective and rule, relation between marginal revenue and price, profit and loss situations, shut down decision, economic profit in the short run and long run, long-run equilibrium, long-run average cost curve, economies/diseconomies of scale, and economic efficiency of perfect competition

EXAM 2: NOVEMBER 2 MONDAY

Third Part

CHAPTERS X – MONOPOLY: Oct 30, Nov 4

Monopoly characteristics, price making behavior and demand for monopolist's product, relation between marginal revenue and price, optimal output rule, comparison with perfect competition, short-run and long-run economic profit and economic efficiency of monopoly, regulation of monopoly, natural monopoly, price discrimination

CHAPTERS XI – MONOPOLISTIC COMPETITION: Nov 6

Monopolistic characteristics and short-run choice, Long-run choice, excess capacity, variety of products, and no regulation

CHAPTER XII – OLIGOPOLY AND MONOPOLISTIC PRACTICES: Nov 9, 11, 13
Oligopoly characteristics, incentives to collude and form cartel, Prisoners' Dilemma problem, game theory, Nash equilibrium v. cooperative equilibrium, Game theory duopoly problems, dominant strategy and dominant solution, Monopolistic practices – collusion, predatory pricing or dumping, and bundling, Measures of market concentration – four-firm ratio and Herfindahl and Hirschman Index, Cost-less entry, Contestable market and Limit pricing

CHAPTER XIII – ABSENCE OF CLEARLY DEFINED PRIVATE PROPERTY RIGHTS: Nov 16, 18, 20

Define market failure, externalities – negative and positive, Negative externalities, market response, government intervention, Coase theorem, Positive externalities, market response, government intervention, Public good characteristics, examples, free riding, reluctance of private sector for public good provision, government intervention

CHAPTER XIV – INPUT MARKETS: Nov 30, Dec 2, 4, 7

Firm's demand for input and economizing behavior, marginal revenue product, and optimal choice rule, graphical presentation, numerical problem, factors that change demand for input, market demand for input, Firm's demand for combination of inputs, marginal benefit and cost of using one more unit one input over another input, optimal choice rule, numerical problem, Land market and economic rent, Labor supply and its backward bending shape, Loanable funds (capital) market and real interest rate, Equity capital investment – time value of money and return on capital

CHAPTER XVII – ECONOMIZING BEHAVIOR REVISITED: Dec 9, 11

Revisit the concepts of economic costs, the rule of economizing behavior, problems from various fields such as health, labor, and environment

EXAM 3: DEC 17 THURSDAY @ 4:30 P.M.

Accommodations for Students with Documented Disability

If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by email at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with your professor.

Absences due to Religious Observances

Campus policy regarding religious observances requires that faculty make every effort to

deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, if you have any such conflict, please inform the instructor at least two weeks in advance to make a reasonable arrangement or adjustment. See full details at http://www.colorado.edu/policies/fac relig.html

Classroom Behavior Policy

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Honor Code

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at http://www.colorado.edu/policies/honor.html and at http://www.colorado.edu/academics/honorcode/

Discrimination and Sexual Harassment

The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. CU-Boulder will not tolerate acts of discrimination or harassment based upon Protected Classes or related retaliation against or by any employee or student. For purposes of this CU-Boulder policy, "Protected Classes" refers to race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been discriminated against should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Student Conduct (OSC) at 303-492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at http://hr.colorado.edu/dh/