



AN INTRODUCTION TO MICROECONOMICS

PROF. VIMAL KUMAR

Department of Economic Sciences
IIT Kanpur

PRE-REQUISITES : Class 12 level maths

INTENDED AUDIENCE : Undergraduate Economics Students, Professionals from other stream interested in learning Economics

INDUSTRIES APPLICABLE TO : All Banking Enterprises

COURSE OUTLINE :

Microeconomics is the study of the allocation of scarce resources among individuals. Economic theories are based on the assumption that individuals as well as firms have well defined objectives; utility maximization for individuals and profit maximization for firms and they act systematically according to the incentives and constraints of their economic environment. It is this framework that allows the economist to gain a fundamental understanding of the human puzzle in an economic setting. This course in the fundamentals of economics covers consumer theory, producer theory as well as the market structures through which individuals and firms interact.

ABOUT INSTRUCTOR :

Prof. Vimal Kumar received his Ph.D. in Economics from the University of California Irvine in 2008 and B. Tech. in Mechanical Engineering and M. Tech in Thermal Fluid Engineering under a dual degree program from the Indian Institute of Technology Bombay in 2003. After finishing his Ph.D. program in July 2008, he joined the Delhi office of Watson Wyatt Worldwide, a multinational consultancy organization. He worked for one year as a Consultant/Economist in the Global Research Division of the firm. In June 2009, he joined the Indian Institute of Technology (IIT) Kanpur as Assistant Professor. In June 2015, he became Associate Professor, and in December 2019, he became a Professor. Currently, he is the head of the Department of Economic Sciences at IIT Kanpur. He is also a coordinator for NPTEL program at IIT Kanpur. He is the recipient of several awards and fellowships, including the class of 1982 research fellowship given by IIT Kanpur, the best research paper award for the year 2011 by the American Political Science Association, the Social Science Merit fellowship from the University of California Irvine for years 2003 to 2008, and National Talent Search Scholarship (NTSE) from NCERT, India. He has participated in 5 sponsored research grants and organized more than 15 workshops in Game Theory and Power System Economics. He has delivered more than 25 guest lectures.

COURSE PLAN :

Week 1 : What is Economics, Demand, Supply, Equilibrium, Change in Supply and Demand, Elasticity

Week 2 : Comparative Statics, Consumer Theory, Preferences, Utility Maximization, Substitution and Income Effect, Fiffin Goods

Week 3 : Compensated Demand, Producer Theory, Type of Firms, Production functions and Isoquants, Factor Substitutions, Return to Scale and Economies of Scale

Week 4 : Cost Curves, Cost Functions, Cost Minimization, Profit Maximization, Market Structures, perfect and Imperfect Markets

Week 5 : Perfectly competitive firm, Monopoly, Market Power, Price discrimination, Taxation, Introduction to Game Theory

Week 6 : Cost Curves

Week 7 : Market Environment 1, Perfectly Competitive Market, Short Run vs. Long Run

Week 8 : Equilibrium Analysis, Social Surplus, Dead weight Loss

Week 9 : Market Environment 2- Monopoly, Profit Maximization

Week 10: Price Discrimination, First Degree, Second Degree, Third Degree

Week 11: Introduction to Game Theory, Nash Equilibrium

Week 12: Market Environment 3- Oligopoly, Cournot Game, Bertrand Game