



St. Xavier's College – Autonomous Mumbai

Syllabus for 7th Semester Core Courses in

Economics

(June 2022 onwards)

Contents:

Theory Syllabus for Courses:

AECO0701 Microeconomics

AECO0702 Macroeconomics

AECO0703 Mathematical Economics

AECO0704 Research Methodology

MA

Course: AECO0701

Title: Microeconomics

Learning Objectives:

1. To understand the core principles of Microeconomics
2. To understand the consumers and Producers' behavior
3. To understand the evolution of various market structures
4. To apply the theory in practical analysis

Number of Lectures: 60

UNIT I: The Market: Understanding demand and supply [15 lectures]

1. Objectives of Firm
2. Optimization
3. Equilibrium
4. Pareto Efficiency

UNIT II: Utility Maximization [15 lectures]

1. Demand Function; Inverse Demand Function
2. Consumer Preferences; Revealed Preferences: WARP and SARP
3. Lagrange Multiplier
4. Slutsky Equation

UNIT III: Profit and Cost theory [15 lectures]

1. Asset Markets
2. Demand for factors; MRTS
3. Uncertainty and Risk
4. Cobb-Douglas Production Function
5. Duality

UNIT IV: Understanding Market Structure [15 lectures]

1. Monopoly; Lerner's Monopoly power
2. Pricing Strategies; Social Costs of Monopoly power; Price Discrimination, Dumping and Bundling
3. Location Model of Product Differentiation
4. Monopsony, Bilateral Monopoly
5. Oligopoly: Price Rigidity, Strategizing, Price Leadership, Limit Pricing, Anti-trust Laws

Basic Reference Books:

1. Gravelle, H. and R. Rees, Microeconomics, Pearson Edition, 2004
2. Mas-Colell, A., M.D. Whinston, and J. Green, Microeconomic Analysis, Oxford University Press, 2005
3. Varian, H.R., Microeconomic Analysis, WW Norton & Co., 1992
4. Perfect Competition Efficiency in Perfectly Competitive Markets* Knutson, J. "Wheat on the Defensive in the Northern Plains." Agweek, Associated Press State Wire: North Dakota (ND). April 14, 2013.

MA

Course: AECO0702

Title: Macroeconomics

Learning Objectives:

1. To understand the core principles of Macroeconomics
2. To understand the relationship between unemployment and inflation
3. To understand the significance of Monetary and Fiscal policies
4. To apply the theory in practical application

Number of Lectures: 60

UNIT I: National Income Accounting [15 lectures]

1. Measurement of GDP, GVA, CPI and WPI
2. Components of GDP
3. Real vs Nominal GDP
4. GDP and welfare

UNIT II: Unemployment and Inflation [15 lectures]

1. AS-AD model
2. Inflation: Classical Theories of Inflation, Recession, Depression, Cost of Inflation
3. Identifying Unemployment, Job search, Efficiency Wages
4. Philip's Curve; Okun's Law

UNIT III: Monetary and Fiscal policy [15 lectures]

1. IS-LM analysis; Mundell-Fleming model
2. Central Bank and Monetary policy: Targets, Instruments and Indicators;
3. Uncertainty and Economic Policy; Expectation and Reactions; Taxonomy;
4. Stabilization policy; Rules versus Discretion; Policy lags

UNIT IV: Government Budget Constraints [15 lectures]

1. Investment Spending
2. National Debt: Current Account Balance, Foreign Exchange
3. Debt financing: Taxation, Bond Financing, Ricardian Equivalence

Basic Reference Books:

1. Mankiw, N. Gregory. Macroeconomics, 6e. New York: Worth Publishers, 2003.
2. D'souza, E. (2008), Macroeconomics, Pearson Education, New Delhi.
3. Dwivedi, D.N. Principles of Economics, Vikas Publishing House, New Delhi, 2008
4. Stiglitz, J. Economics of Public Sector, 3e. New York: W.W. Norton & Co, 2000

Learning Objectives:

1. To understand the basics of Mathematical Economics
2. To understand the significance of Linear and Non-linear Optimization
3. To understand economic application measuring consumer and producer surplus
4. To apply the theory in practical application

Number of Lectures: 60

UNIT I: Differential Calculus & Linear Algebra [15 lectures]

1. Partial and Total Derivatives with economic applications
2. Taylor's approximation
3. Convex sets, convex and concave functions
4. Properties of linear homogenous functions
5. Euler's theorem
6. Matrices
7. Simultaneous linear equations
8. Hawkin - Simon condition
9. Eigen roots and vectors

UNIT II: Optimization [15 lectures]

1. Introduction to quadratic forms
2. Unconstrained optimization, constrained optimization with equality constraints
3. Lagrangian method; Hessian and Jacobian matrices
4. Economic Applications: Utility maximization, Cost minimization, Profit – Output maximization

UNIT III: Linear and Non- linear optimization [15 lectures]

1. Duality theory
2. Constrained optimization with inequality and non-negativity constraints
3. Kuhn-Tucker formulation
4. Linear programming – formulation, primal and dual, solutions using graphical
5. Simplex methods

UNIT IV: Dynamics [15 lectures]

1. Definite and indefinite integrals
2. Economic Applications – measuring consumer and producer surplus
3. Continuous interest – discount calculations
4. Difference and differential equations; phase diagrams; Cobweb model; multiplier accelerator; Harrod-Domar model

Basic Reference Books:

1. Chiang, A.C., Fundamentals Methods of Mathematical Economics, McGraw-Hill, 2005
2. Sydsaeter, K and P. J. Hammond, Mathematics for Economic Analysis, 2002
3. Simon, Carl P. and Lawrence Blume, Mathematics for Economists, W. W. Norton & Company, Inc., 1994

Learning Objectives:

1. To understand the basics of Research Methodology
2. To understand the significance of Data Management and Analysis
3. To train students in report writing
4. To train students to interpret the data

Number of Lectures: 60

UNIT I: Introduction to Research [15 lectures]

1. Defining the research Problem
2. Formulating a research Design
3. Reviewing Literature

UNIT II: Methodology [15 lectures]

1. Sampling Design
2. Hypothesis Testing
3. Methods Data Collection

UNIT III: Data Management and Analysis [15 lectures]

1. Instrument of Data Collection
2. Processing and Analyzing Data
3. Use of Computer Applications

UNIT IV: Report writing/Interpretations [15 lectures]

1. Interpretation and Presentation
2. Writing a research proposal
3. Writing the research Report

Basic Reference Books:

1. C. R. Kothari, Research Methodology, New era Publication
2. William Goode and Paul Hatt, Methods in Social Research
3. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 4th Edition, by John W. Creswel
4. Qualitative Research: A Guide to Design and Implementation 4th Edition, by Sharan B. Merriam (Author), Elizabeth J. Tisdell
5. The Research Methods Knowledge Base, 3rd Edition, by William M. K. Trochim (Author), James P. Donnelly