

**2-Year M. Sc Economics Curriculum and Syllabus, TIU, WB
First Semester**

Course Code	Course Title	Contact Hrs. / Week			Credit
		L	T	P	
TIU-PEM-T101	Microeconomics I	3	1		3
TIU-PEM-T103	Macroeconomics I	3	1		3
TIU-PEM-T105	Econometric Methods I	3	1		3
TIU-PEM-T107	Statistics I	3	1		3
TIU-PEM-T109	Mathematics I	3	1		2
TIU-PEM-T111	Indian Economic Analysis	2	1		2
TIU-PEM-T113	Corporate Finance and Financial Institutions	3	1		3
TIU-PEN-S103	Career Advancement and Skill Development			2	2
TIU-PEM-L115	Computer Fundamentals and Application Lab	1		2	3
Total Credit					24

Microeconomics I

1. Theory of consumer behaviour, under Certainty, Preference orderings, utility functions, Theory of revealed preference; Aggregation of individual demand curves; Theory of the Firm Production sets, cost minimization, profit maximization, supply curves. Duality theory, Aggregation of individual supply curves.
2. General equilibrium in a pure exchange economy and with production: Walrasian and Edgeworthian foundations of perfect competition, Welfare theorems.
3. Uncertainty- preferences over lotteries, expected utility, risk aversion, measures of absolute and relative risk aversion, equivalence theorems, stochastic dominance.
4. Market Structure with Monopolistic Competitions and Oligopoly.

Suggested Readings:

1. Varian, H, Microeconomic Analysis, W.W. Norton, 3rd Edition, 1992
2. Gravelle, H and R. Rees: Microeconomics, Pearson Education, 3rd Edition, 2004
3. Mas-Colell, A. , M. Whinston and J Green: Microeconomic Theory, Oxford University Press, 1995
4. Cowell, F. : Microeconomics, Oxford University Press, 2006
5. Jehle, G. and J. Reny: Advanced Microeconomic Theory, Pearson Education, 2000
6. Mukherji, A.: Walrasian and Non-Walrasian Equilibria: An Introduction to General Equilibrium Analysis, Clarendon Press, Oxford, 1990
7. Hildenbrandt and Kirman: General Equilibrium

Macroeconomics I

1. Keynesian Macroeconomics: effective demand and the multiplier - IS-LM model - aggregate demand and supply curves.
2. Open Economy Macroeconomics: Balance of payments, Exchange rate systems, Mundell Fleming model, Asset markets, expectations and exchange rates, Monetary approach to BoP.
3. Aggregate demand and Aggregate supply Models of aggregate supply, Phillips curve, Adaptive and rational expectations, Policy evaluation and the Lucas critique, New classical analysis, Real business cycles, Test of rational expectations, New Keynesian approach, Coordination failure.
4. Consumption behavior Permanent Income and Life cycle theories, Random walk hypothesis.
5. Investment behavior: Neoclassical theory, Tobin's q, Imperfect information and investment.

Suggested readings

1. Blanchard and Fischer (1989): Lectures on Macroeconomics
2. Dornbusch, Fischer and Startz: Macroeconomics (Latest Edition)
3. Montiel (2003): Macroeconomics in Emerging Markets
4. Romer (1996): Advanced Macroeconomics

Econometric Methods I

1. The Scope and Methodology of Econometrics
2. Simple Correlation and Regression Analysis
3. Multiple Correlation and Regression Analysis; concept of partial correlation coefficient
4. Heteroscedasticity
5. Autocorrelation
6. Multicollinearity
7. Dummy variables in the regressors

Suggested Readings

1. D. Gujarati, D. C. Porter and M. Pal: *Basic Econometrics*, 6th Edition, McGraw Hill, 2020.
2. J. W. Wooldridge: *Econometric Analysis of Cross section and Panel data*
3. A Collin Cameron and Pravin K Trevedi (2005): *Micro Econometric Methods and Applications*, Cambridge University Press.
4. G.S. Maddala: *Introduction to Econometrics*, John Wiley & Sons Ltd, 2009.
5. Jack Jhonston: *Econometric Methods*, 3rd Edition
6. Jan Kmenta: *Elements of Econometrics*, Macmillan Publishing Company, 1991.

7. William H. Green: *Econometric Analysis*, 7th Edition, Prentice Hall, 2011.
8. Mukherjee, C, H. White & M. Wuyts: *Econometrics and Data Analysis for Developing Countries*, Routledge, 1998.

Statistics I

1. Types of investigation and collection of data: Different types of Data, Sampling Vs. Census, Different steps in collection of data, Simple Random Sampling, Use of Random Number Table to draw samples.
2. Descriptive Statistics: Types of observations, Tabular and graphical presentation of data, Summarization of univariate data, Measures of central tendency, Measures of dispersion, Higher order moments, Skewness and Kurtosis
3. (a) Probability: Sample space, Events, Methods of counting, Classical and axiomatic definition of probability, Conditional probability, Independence, Bayes' formula, (The statement of) central limit theorem and its implications.
 (b) Discrete and Continuous distributions – Binomial, Poisson and other common discrete distributions, and Uniform, Normal and other common continuous distributions.
 © Expectations and moments: Moment Generating Functions, Functions of Random Variables.

Suggested Readings

1. Goon, AM; Gupta, MK and Dasgupta, B.: *Fundamentals of Statistics*, Vol. 1
2. Gupta, SC and Kapur, VK: *Fundamentals of Mathematical Statistics*
3. Rohatgi, VK and Saleh, AKME: *An Introduction to Probability and Statistics*
4. Hogg and Tanis: *probability and statistical inference*
5. Devore, JL. *Probability and Statistics for Engineering and the Sciences*.
6. Rukmangadachari, E. & Reddy, EK. *Probability and Statistics*

Mathematics I

1. Linear algebra, set theory, functions, limits, curvature
2. Static and dynamic optimization
3. Differential Equations and Stability Issues: Differential Equations, Stability Theory, Phase Diagrams.

Suggested Readings

1. Dixit (1976): *Optimization in Economic Theory*
2. Beavis & Dobbs (1990): *Optimization and Stability Theory for Economic Analysis*, CUP
3. Intrilligator (1971); *Mathematical Optimization and Economic Theory*, Prentice Hall
4. Hadley (1960): *Linear Algebra*, Addison-Wesley, Massachusetts

5. Chiang (1992): Dynamic Optimization, McGraw Hill Inc.
6. Kamien & Schwartz (1981): Dynamic Optimization, North Holland

Indian Economic Analysis

1. Brief review of the Indian Economy and planning in the pre-liberalisation period.
2. Alternate Strategies of Development: State vs. market; Import substitution vs Export Promotion; Rationale of Economic Reforms in India; Political Economy of Reforms in India and the typology of reforms.
3. Fiscal Reforms in India- Issues relating to deficit and growth, FRBM Act and fiscal prudence, Reforms with respect to State Finances, Central –State financial relations, VAT, Issues relating to public debt.
4. Financial Sector Reforms in India –reforms in banking, insurance, pensions, exchange rate and capital market.
5. Employment, Poverty and Inequality in India; Recent debates on poverty and employment during reforms, Issues relating to rural employment, livelihood security and NREGA.

Suggested Readings

1. Ahluwalia, I.J. and I.M.D. Little.ed. 1998. India's Economic Reforms and Development: Essays for Manmohan Singh. Oxford University Press: New Delhi.
2. Sachs, J D., Varshney, A. and Bajpai, N.ed. 1999. India in the Era of Economic Reforms. Oxford University Press: New Delhi.
3. Chakrabarti, A. and Cullenberg, S. 2003. Transition and Development in India. Routledge: New York.
4. Krueger, A.O. (ed). 2002. Economic Policy Reforms and the Indian Economy. New Delhi: OUP.
5. Joshi, V. and I. M. D. Little. 1996. India's Economic Reforms (1991- 2001). New Delhi: OUP.
6. R. Chakravarty, The Financial Sector in India, New Delhi: OUP, 2006.
7. P. Balakrishnan. Economic Growth in India, New Delhi: OUP, 2010.
8. A. K. Karmakar. BoP Theory and Policy – The Indian Experience, Deep & Deep Publications, New Delhi, 2010.
9. K. Pushpangadan and N. Shanta. The Dynamics of Competition: Understanding India's Manufacturing Sector, New Delhi: OUP, 2009.
10. Sebak K. Jana and Asim K. Karmakar (ed). Financial Sector Liberalisation in India: Theory and Emperics, Regal Publications, New Delhi, 2015.

Corporate Finance and Financial Institutions

1. A brief introduction of Corporate Finance and Financial Institutions

2. Corporate Finance-

a. Theories of Capital Structure (Modigliani-Miller Hypothesis revisited; Agency Cost theories; Theories relating to Asymmetric Information: Pecking order hypothesis and Signaling).

b. Dividend policy- forms of dividends –Lintner model-dividend irrelevance hypothesis- role of taxes, transaction costs, agency problems and asymmetric information.

c. Corporate finance and product markets

3. Valuation of Companies-

a. Alternative methods of valuation of companies

b. Use of financial statements in valuing a company

4. Market for corporate control-

a. Financial structure and issues relating to corporate governance

b. Takeovers and Mergers

5. Financial Intermediation and other financial Intermediaries

a. A brief discussion of theories about necessity of financial intermediation in general.

b. Bank Intermediary-Special role of banks, Industrial Organization approaches to banking.

c. Bank runs, role of deposit insurance, role of banking regulations, role of prudential norms.

d. A discussion of Basel Accord in this context.

e. Mutual Funds, Insurance, Venture Capital Funds

6. Financial services as networks

Suggested Readings

1. Brearly & Myers Brealey - Principles of Corporate Finance. Tata McGraw Hill
2. Tirole , J The Theory of Corporate Finance. Princeton University press.
3. Bebczuk, R.N. Asymmetric Information in Financial markets Introduction and Applications. Cambridge.
4. Allen, F. & D, Gale Comparing Financial Systems. The MIT press.
5. Xavier, F. & Rochet. Microeconomics of Banking
6. Benninga, S. Financial Modeling. MIT press
7. Brooks, C. Introductory Econometrics for Finance. Cambridge University Press.
8. Lengwiler, Y. Micro foundations of Financial Economics. Princeton University press.

CASD

1. Concepts in Communication- Communication as sharing; context of communication; the speaker/writer and the listener/ reader; medium of communication; barriers to communication; accuracy, brevity, clarity and appropriateness in communication; Non-verbal skills, Paralanguage and Body language.
2. Semantics- A selected list of synonyms; antonyms; form and functions of words; syntax; sentence structures; verb patterns and their usages.
3. Writing Skills- Types of Writing (Expository, descriptive, analytic, argumentative, narrative etc.) and their main features. Resumes and CV'S and cover letters. Memos and Notices. Basics of formal reports.

Computer Fundamentals and Application Lab

1. Computer Basics: Introduction, Characteristics of a Computer, Criteria for Using Computers, History / Generations of Computer, Classification of Computers, Applications of Computer, Basic Components of PC, Computer Architecture.
2. Block Diagram of a Computer, Functions of the Different Units Input unit, Output unit, Memory unit, CPU (ALU+CU), Memories [Memory hierarchy].
3. Number Systems: Introduction, Classification of Number System, Types of Number System, Conversions from One Base to Another, Conversion using Shortcut Method.
4. Concept of E-mail / Internet / Extranet, World Wide Web (WWW): Familiarity with internet browsers (e.g. Internet Explorer, Firefox, Opera, Safari, and Google Chrome etc.), Introduction of IP address, subnet mask and default gateway, Introduction to Network Media, topology and protocol.
5. Software-System Software with example, Application Software, Computer Languages like Machine language , Assembly language , High level language.
6. Lab- MS Office (Microsoft Word, Microsoft Excel, Microsoft Power Point)

