

Tribhuvan University
Faculty of Humanities and Social Sciences
MA Economics Courses
2070/71 (2014/15)

I Semester			II Semester		
Code No.	Courses	Credit	Code No.	Courses	Credit
551	Micro Economics - I	4	555	Micro Economics-II	4
552	Macro Economics - I	4	556	Macro Economics –II	4
553	Mathematical Methods	4	557	Statistical Methods	4
554	Economics of Development and Planning – I	3	558	Economics of Development and Planning – II	3
Total Credit		15	Total Credit		15
III Semester			IV Semester		
Code No.	Courses	Credit	Code No.	Courses	Credit
559	Monetary Economics	3	565 (B)	Financial Economics	3
560	Public Economics – I	3	566	Public Economics – II	3
561	Research Methodology	3	567	Nepalese Economics	3
Optional (Any two: Six credit)			Optional (9 credit form the following)		
Code No.	Courses		570	Thesis writing	6
562	Econometrics	3	568	Mathematical Economics	3
	Environmental Economics	3		Natural Resource Economics	3
	International Economics	3		International Finance and Economic Cooperation	3
564	Economic Demography	3	569	Economics of Human Resource Development	3
565 (A)	Managerial Economics	3		Applied Statistics	3
	Industrial Economics	3		Economics of Energy	3
	Economics of Agricultural Development	3		Economics of Tourism	3
563	History of Economic Thought	3		Health Economics	3
Total Credit		15	Total Credit		18

MA Economics
First Semester
Econ. 551 Microeconomics-I

Credit 4
Teaching Hours: 64

Course Objective:

This course intends to equip the students with the methods and tools of economic analysis for giving advanced knowledge of microeconomic theory and suggesting ways to apply the knowledge in formulating and analyzing economic models and theories.

- Unit 1. Methodological Concepts** **8 Hours**
Equilibrium: meaning and stability test; Analysis of equilibrium: static, dynamic, and comparative statics; Models in economics: definition, importance, types (economic and econometric), and choice between models; Methods of analysis: deductive, inductive, and hypothetico-deductive methods; Importance of assumptions, hypothesis, and empiricism in economics; Scientific paradigm of economics;
- Unit 2. Consumer Behavior** **16 Hours**
Preference ordering; the consumption decision; Consumer's equilibrium (with indifference curve approach); changes in prices and derivation of compensated and uncompensated demand curves; comparative statics of consumer behavior; types of goods; concept of duality in consumer theory; the expenditure function; the indirect utility function; estimating cost of living; Lancasterian demand theory and linear expenditure system; revealed preference theory
- Unit 3. Behavior under Uncertainty** **8 Hours**
Consumption and uncertainty; Expected utility; von Neumann-Morgenstern utility; The Allais paradox and the Ellsberg paradox; Gambling and insurance; The Friedman-Savage hypothesis; The insurance market: moral hazard and adverse selection; Reducing risk and uncertainty
- Unit 4. Technology** **14 Hours**
Measurement of inputs and outputs; Production function for a single product; Decision period related to production analysis; Elasticity of substitution; Production with one and two variable inputs; Producer's equilibrium: optimal choice of inputs, constrained output maximization, constrained cost minimization, profit maximization, effects of changes in outlay on equilibrium position; Homogeneous and homothetic technologies; Technical rate of substitution; Returns to scale; Calculation of these values in some standard production functions such as Cobb-Douglas, Leontief, and CES; Derivation of cost function from production function

Unit 5. Market**18 Hours**

The competitive firm, the profit maximization problem, the firm and the industry demand and supply functions, different types of cost and revenue functions, identical cost functions, market equilibrium, identical firms, short-run and long-run equilibrium, taxes and subsidies, monopoly, special cases of monopoly, comparative statics, welfare and output, quality choice, price discrimination, first-degree price discrimination, second degree price discrimination, third degree price discrimination, welfare effects, tying and bundling, monopolistic competition and cartel

References:

Cowell, F. (2006): *Microeconomics: Principles and analysis*. New Delhi: Oxford University Press

Gravell, H. and R. Rees (2004): *Microeconomics*, third edition, Pearson

Koutsoyiannis, A. (1979): *Modern microeconomics*, second edition, Macmillan.

Mas-Colell, A., Whinston, M.D. and Green J. (1995): *Microeconomic theory*. New Delhi: Oxford University Press

Salvatore, D. (2009). *Principle of microeconomics*, 5th edition. New Delhi: Oxford University Press

Varian, H.R. (2009): *Microeconomic Analysis*, third edition, first Indian edition, Viva Books

Econ. 552

**MA Economics
First Semester
Macroeconomics I**

**Credit 4
Teaching Hours: 64**

Course Objective

The objective of this course is to provide advanced knowledge on macroeconomic analysis. Upon the completion of this course, students will be able to understand analytical tools and apply them in formulating and analyzing economic models and theories.

Unit I: Basic Concepts 6

Macroeconomic variables; Economic models-Static and Dynamic; Aggregation and its Problems; Macroeconomic Policy Goals

Unit II: National Income Accounting 11

Key Concepts of National Income Accounting; Measurement of National Income: Expenditure Approach, Income Approach and Value Added Approach; Sector Accounting; Limitations

Unit III: Classical Theory of Income, Employment and Money 8

Says Law of Market; Quantity Theory; Complete Classical System; Application and Limitations

Unit IV: Keynesian Macroeconomics 8

Keynesian Model of Closed and Open Economy; Multiplier Analysis in Two, Three and Four Sector Economy

Unit V: Keynesian System with Money, Income, and Interest 14

Money in Keynesian System; Complete Keynesian System; IS-LM Model: Goods and Money Market Equilibrium; Policy Effects

Unit VI: Consumption Demand 8

Reconciliation of Short-run and Long-run Consumption Function; Consumption- Income Relationship: Absolute income, Relative income, Permanent income, and Lifecycle hypotheses

Unit VII Investment Demand 9

Basic Concepts; MEC and MEI schedules; Accelerator theory; Jorgensons Theory

REFERENCES

- Branson, W.H. (1983). *Macroeconomic theories and policy*, 2nd Edition. New Delhi: All India Book Seller
- Central Bureau of Statistics (2007). *Manual in national income accounts*. Kathmandu: National Planning Commission.
- Dornbush, R. & Fischer S. (1987.). *Macroeconomics*, 4th edition. New York: McGraw Hill Book Company.
- Froyen, R. T.(2003). *Macroeconomics: Theories and policies*, 7th Edition, New Delhi: Pearson Education.
- Levacic, R. (1978). *Macroeconomics*. London: Macmillan
- Ott, D.J., Ott, F.A., & Yoo, J.G. (1975). *Macroeconomic theory*. Tokyo: Kogakusa, McGraw Hill
- Shapiro, E.(Various edition). *Macroeconomic analysis*. New Delhi: Galgotia Publication, Pvt. Ltd.
- Surrey, MJC. (ed.). *Readings in macroeconomics*. London: Oxford.

MA First Semester
Econ. 553 Mathematical Methods

Credit: 4
Teaching Hours: 64

Course Objective

This course intends to acquaint the students with some mathematical tools used in economics

Unit I: Basic Concepts **9**

Logarithms; Multivariate differentiation; Implicit function; Integration; Set theory; Vectors: Concepts, spaces, and linear combinations

Unit II: Optimization **7**

Constraint and unconstraint optimization theories and their applications in production, cost and profit analysis

Unit III: Game Theory **8**

Strategic behaviors; Pay off matrix; Value of Game; Saddle point; Mixed strategy; Dominant strategy ; Computation of value of game; Nash equilibrium

Unit IV: Difference and Differential Equations **20**

Difference and differential equations of first and second order with constant coefficients, constant term, and variable term

Unit VI: Linear Programming **13**

Graphic method; Simplex method; Duality theorems; Application

Unit VII: Input-Output Analysis **7**

Closed and Open input-output model; Dynamic Input-output model; Application

REFERENCES

Archibald and Lipsey (). *An introduction to mathematical treatment of economics*, London: ELBS

Baumal W J (1959). *Economic dynamics*, New York : Macmillan

Chiang, A C (1974). *Fundamental methods of mathematical economics*. Tokyo: McGraw Hill Kogakusa

Dowling, E. T.(1992). *Introduction to mathematical economics*, McGraw Hill Schum's outline series

Yamane T, (1999). *Mathematics for economists: An elementary survey*, 2nd edition. New Delhi: Prentice Hall India

MA First Semester
Econ. 554 Economics of Development and Planning-I

Total Credits: 03

Teaching Hrs: 48

Course Objectives

This course offers advance learning with application perspective on Economics of Development and Planning. The course focuses on contributions to theories of development that account for sustained development. Particular attention is paid to the emerging issues and policies related to domestic and international measures of development, and problems of development and planning.

1. Perspectives on Development (15 Lectures)

Schultz; Lewis; Rostow; Balanced; Unbalanced; People's Participation; New Development Paradigm

2. Contemporary Development Issues (07 Lectures)

Transition for Planned Economy to Market Economy; Conflict, Peace and Development; Aid and Foreign Direct Investment Controversies

3. Policy Issues in Development-Domestic and International (11 Lectures)

Measuring Poverty and Inequality; Measurement, Types, and Consequences of Unemployment; Impacts of Liberalization and Globalization, and the Role of State; The Debt Crisis

4. Planning Implementation (15 Lectures)

Concept and Ideology of Planning; Estimation and Use of Capital-Output Ratio; Stage and Components of Project Appraisal; Criteria and Use of Cost-Benefit Analysis; The Choice of Technique for LDCs; Benefits, Monitoring and Evaluation; Development Planning in SAARC Countries with Reference to Priorities, Constraints and Achievements

Basic References

- Basu, K. (2002). *Analytical Development Economics*. New York and New Delhi: OUP.
- Chang, Ha-Joon (2003). *Globalization, Economic Development and Role of the State*. London: Zed Books.
- Chaubey, P.K. (1995). *Poverty Measurement : Issues, Approaches, and Indices*. New Delhi: New Age International (P) Limited Publishers.
- Dale Reidar (2004). *Development Planning*. New Delhi : Academic Foundation.
- Dallor, D and Paul Collier (2001). *Globalization, Growth and Poverty: Building an Inclusive World Economy*. Washington: The World Bank, OUP.
- Das, Gupta, Ajit K. and D.W. Pearce (1978). *Cost-Benefit Analysis: Theory and Practice*. London: ELBS/Macmillan.
- Hayami, Y. (1997). *Development Economics*. New York: OUP.
- Karna, Sohan Kumar (2007). *Economic Planning Theory and Practice*. Kirtipur: Quest Publication.
- Little, I.M.D. and J.A. Mirrless (1974). *Project Appraisal and Planning for Developing Countries*. London: Heinemann.
- Meier, G.M. and J.E. Rauch (2000). *Leading Issues in Economic Development*. New York: OUP.
- Potts, David (2005). *Project Planning and Analysis for Development*. New Delhi: VIVA Books Private Limited.
- Pyakuryal, Bishwambher and Rabi Sainju (2007). *Nepal's Conflict: A Micro Impact Analysis on Economy*. Kathmandu.
- Ray, D. (2003). *Development Economics*. New Delhi: OUP.
- Sen, A.K.(1992). *Inequality Reexamined*. Oxford: OUP.
- Stiglitz, J.E. (2002). *Globalization and Its Discontents*. Penguin Books.
- Subramanian, S. (2000). *Measurement of Inequality and Poverty*. Delhi: OUP.

- Thirlwall, A.P. (1999). *Growth and Development (6e)*. UK:Macmillan.
- Todaro , Michael P. and Stephen C. Smith (2004). *Economic Development*. New Delhi: Pearson Education.
- UNIDO (1972). *Guidelines for Project Evaluation*. Project Formulation and Evaluation Series, No.2. Vienna: United Nations Industrial Development Organization (UNIDO).
- World Bank (2002). *Globalization, Growth, and Poverty: Building an Inclusive World Economy*. New York: The World Bank and The Oxford University Press.

**MA Economics
Second Semester**

Econ 555 : Microeconomics II

**Credit 4
Teaching Hours: 64**

Course Objective:

This course intends to equip the students with the tools of economic analysis in analyzing and applying economic models and theories.

- Unit 1. Welfare Economics** **10 Hours**
Pigovian welfare economics; Criteria for social welfare: GNP growth, cardinalists criterion, Bentham's criterion; Kaldor-Hicks compensation principle; Scitovsky paradox, Bergson criterion; Social welfare function—properties and limitations; Pareto optimality; Theory of the second best; Arrow's impossibility theorem; Rawl's theory of social justice
- Unit 2. General Equilibrium** **16 Hours**
Walras model and its properties; Problem of existence, uniqueness and stability of equilibrium; Excess demand function approach to general equilibrium analysis; Absolute versus relative prices, perfectly competitive price and general equilibrium models, Edgeworth box, Pareto improvement and efficiency; Graphical treatment of the 2x2x2 general equilibrium model and interpretations
- Unit 3. Market Failure and Public Goods** **8 Hours**
Reasons for market failure—market imperfections, public goods, asymmetric information, externalities, macroeconomic factors; Theory of public goods—provision and pricing, government intervention, second-best solution, free riding, rent seeking and regulation; Types of externalities—production and consumption; Pigovian and Coasian solutions
- Unit 4. Input Markets** **14 Hours**
Demand and supply of inputs: Firm's and industry's input demand curves (perfectly and imperfectly competitive markets); monopoly and monopsony in input markets; Unions as monopolists; bilateral monopoly; Choice of optimal combination of inputs; Price of fixed factors: rents and quasi-rents; rent-seeking behavior
- Unit 5. Duopoly and Oligopoly Markets** **16 Hours**
Cournot's, Bertrand's, and Stackelberg's duopoly models; Chamberlin's oligopoly model; The kinked demand curve; Product differentiation; Cartels: joint profit maximizing and market sharing cartels; Price leadership models

References:

Cowell, F. (2006). Microeconomics: Principles and Analysis, Indian edition, Oxford.

Gravell, H. and R. Rees (2004). Microeconomics, third edition, Pearson

Henderson, James M. and Richard E. Quandt (2003). Microeconomic Theory: A Mathematical Approach, third edition. New Delhi: Tata McGraw-Hill Publishing Company Limited.

Koutsoyiannis, A. (1979). Modern Microeconomics, second edition, Macmillan.

Maddala, G.S. and Ellen Miller (2004). Microeconomics, second reprint. New Delhi: Tata McGraw-Hill Publishing Company Limited.

Mas-Colell, A., M.D. Whinston and J. Green (1995). Microeconomic Theory, Indian edition, Oxford.

Varian, H.R. (2009). Microeconomic Analysis, third edition, first Indian edition, Viva Books

Note: The instructor(s) may suggest additional references in the class.

MA II Semester

Econ 556. Macroeconomics II

Credit 4

Teaching Hours: 64

Course Objective

The objective of this course is to provide advanced knowledge on macroeconomic analysis. Upon the completion of this course, students will be able to understand analytical tools and apply them in formulating and analyzing economic models and theories.

Unit I: Keynesian Open Economy Model 6

Derivation of Balance of Payment Curve (BP), Policy Effects in Fixed Exchange Rate Regime, Policy Effects in Flexible Exchange Rate Regime (IS, LM and BP Approach).

Unit II: Recent Development in Macroeconomics 15

Price and output determination in Monetarism, New Classical Macroeconomics, Real Business Cycle Theory and New Keynesian Macroeconomics,

Unit III: Growth Theories 15

Basic Concepts, Harrod Model, Domar Model, Solow Model, Kaldor Model and Overview of New Growth Theory

Unit IV: Business Cycles Theories 8

Kaldor Model, Samuelson Model and Hicks Model

Unit V: Macro Distribution Theories 6

Ricardo, Kalecki and Kaldor Models

Unit VI: Macroeconomic Stabilization 10

Concepts, Economic Disturbances, Econometric Models for Policy Making, Lags in the Effects of Monetary and Fiscal Policies, Activist Policy, Rules vs. Discretions

Unit VII: Macro Policies 4

Structural Adjustment, Market Failure and Government Intervention

REFERENCES

- Barro, R.J. & Martin, X.J.(2004). *Economic growth*. Massachusetts: MIT Press.
- Branson, W.H. (1983). *Macroeconomic theories and policy*, (2nd ed.). New Delhi: All India Book Seller.
- Dornbush,R. & Fischer S. (1987). *Macroeconomics*, (4th ed.). New York: McGraw Hill Book Company.
- Froyen, R. T.(2003). *Macroeconomics: Theories and policies*, (7th ed.). New Delhi: Pearson Education.
- Gordon, R.J.(1990). What is new Keynesian economics?. *Journal of Economic Literature*, XXVII, 1115-1171.
- Hicks, J.R.(1950). *A contribution to the theory of trade cycle*. London: Oxford.
- Kaldor, N.A. (1940). Model of trade cycle. *The Economic Journal*, 50(197),78-92.
- Kaldor, N.A. (1957). A Model of economic growth. *The Economic Journal*, 67(268) ,591-624.
- Levacic, R. (1978). *Macroeconomics*. London: Macmillan.
- Ott,D.J., Ott, F.A., & Yoo, J.G. (1975). *Macroeconomic theory*. Tokyo: Kogakusa, McGraw Hill.
- Sen, A.K.(ed.)(1960). *Growth economics*. Harmondsworth : Penguin Books.
- Shapiro, E.(Various editions).*Macroeconomic analysis*. New Delhi: Galgotia Publication, Pvt. Ltd.
- Note: The instructor(s) may suggest additional references in the class.

M. A. Second Semester
Econ 557: Statistical Methods

Credit 4
Teaching Hours: 64

Course Objective

This course intends to equip the students with some of the statistical tools used in economics and economic analysis.

Unit 1: Probability and Probability Distributions **16 hours**

Review of Probability; Conditional Probability and Baye's Theorem; Random Variable (Discrete and Continuous); Probability Distribution and Density Functions (Uni-variate and bi-variate); Special Distribution Functions (Uniform, Binomial, Poisson, Hyper-geometric, Normal and log-normal distributions); Relationship between Binomial and Normal Distributions

Unit 2: Sampling Methods and Distributions **14 Hours**

Principle of Sampling; Population vs. Sampling; Probability and Non-probability Sampling, Sampling Techniques and Design; Sampling and Non-sampling Errors; Sampling Distributions of Means and Proportions, Standard Errors; Central Limit Theorem; Determination of Sample Size

Unit 3: Theory of Estimation **10 Hours**

Parameter and Statistic; Point and Interval Estimation; Properties of Good Estimators; Estimation Methods (Ordinary Least Squares Method, Maximum Likelihood Method and Method of Moments)

Unit 4: Hypothesis Testing **10 hours**

Formulation of Statistical Hypotheses (Null and Alternative); Types of errors (Type I and Type II); Confidence Interval and Level of Significance; Hypothesis Testing (z, t, F and Chi-square Tests)

Unit 5: Correlation and Regression **14 hours**

Review of Correlation Coefficients (Simple, Partial and Multiple Correlations); Concept of Least Squares Regression (Simple and Multiple Regressions); Interpretation of Regression Coefficients; Standard Error of Estimate; Test of Significances of the Regression Coefficients and the Model; Coefficient of Determination; Predictions from Regressing Equations

References

- Baltagi B. H. (2008). *Econometrics*. Fourth Edition, New York, Springer-Verlag Berlin Heidelberg
- Chau, Ya-lun (1969). *Statistical Analysis*. New York: Holt, Rinehart and Winston, Inc.
- Cochran William G. (1977). *Sampling Techniques*, Third Edition, New Work, John Wiley and Sons
- Croxton, F.E, D.J. Cowden abd S. Klein (1975). *Applied General Statistics*, Third edition. New Delhi: Printice-Hall of India P. Ltd.
- Hogg, R. and A. Craig (1970). *Introduction to Mathematical Statistics*, Third edition. New York: McMillian.
- Levin, Richard I. and David S. Rubin (1999). *Statistics for management*, Seventh edition. New Delhi: Prentice-Hall of India, Private Limited.
- Miller I. and M. Miller(2004). *John E Freund's Mathematical Statistics with Applications*, Seventh Edition, New York, Pearson Prentice Hall
- Speigel Murry R, J. Schiller and A. Srinivasan (2000). *Probability and Statistics*. New York. McGraw-Hill, Schaum's Outline Series.
- Spiegel Murray R. (2002). *Statistics*, Third edition. New York. McGraw-Hill, Schaum's Outline Series

M. A. Second Semester

Econ 558 : Economics of Development and Planning- II

Credit 3

Teaching Hours: 48

Course Objective:

This course offers opportunities for advanced studies with application perspective on development and planning with special focus on reshaping the economy, and dimensions in development and planning that account for sustained development.

1. Reshaping the Economy (12 Lectures)

Impacts of liberalization and globalization on growth and equity; Fiscal Federalism in the Refine of Liberalization and Globalization; Implications of Global Trading System on the Developing Countries; Governance and Globalization in the Context of LDCs like Nepal; Safety Nets; Corporate Social Responsibility; Special Economic Zones and its Impacts

2. Factors Affecting Development (16 Lectures)

Financing of Economic Development; Dimensions of Human Resource Development; Natural Resources, Technology and Development; Values, Institutions and Civil Society; Gender and Development; NGOs and the role of Private Sector in Development; Experience, Constraints and Prospects of Development in South Asia; Global Climate Change

3. Planning System (13 Lectures)

Planning in Socialist, Capitalist and Mixed Economies; Periodic and Perspective Plans; Local Development Planning; Regional Development Planning; Project Planning Growth Pole and Growth Center in Planning;

4. Case Studies (7 Lectures)

Various Case Studies

References

- Agrawal, A. (2012), *Social and economic impact of SEZ in India*, OUP.
- Ahluwallia, I.J. & John, W. (Eds.) (2003) *The South Asian experience with growth* OUP.
- Anand, S. & Sen, A. (1995). *Gender inequality and human development: Theories and measurement*. New York: Background papers for Human Development Report.
- Bagchi, A.K. & D'costa, A.P. (2012). *Transformation and development: The political economy of transition in India and China*. Oxford.
- Bardhan, K. & Klasen, S. (1999). UNDP's gender related indices: A critical review *World Development*, 27, 985-1010
- Basu, K. (2002). *Analytical Development Economics*. New York and New Delhi: OUP.
- Blakely, E.J. & Bradshaw, T.K. (2003). *Planning local economic development: Theory and Practice*, (3rd ed.), New Delhi: Vistar Publication.
- Chandna, R.C. (2004). *Regional planning and development*. New Delhi; Kalyani Publihers.
- Chang, Ha-J. (2003) *Globalization, economic development and role of the state*. London Zed Books.
- Choudhary, A.P. (2010). Inclusive growth and challenge of gender inequality in India. *The Indian Economic Journal*, Journal of the Indian Economic Association.
- Damodaran, A. (2010). *Encircling the seamless India, climate change, and the global commons*. OUP.
- Ghani, E. (Ed.). (2011). *Reshaping tomorrow is south Asia ready for the big leap?* OUP.
- Hayami, Y. & Yoshihisa, G. (2005). *Development economics*. (3rd ed.). New York: OUP.
- Karna, S.K. (2007). *Economic planning theory and practice*: Kirtipur: Quest Publication.
- Karna, S.K. (1992). A profile of SAARC experiences. *The Economic Journal of Nepal*, 18 (4).
- Kohli, H. (Ed.). (2011). *Asian 2050: Realizing the Asian century*. SAGE.
- Lamy, P. (2006). *Globalization and global governance*.
- Meier, G.M. & Rauch, J.E. (2000). *Leading issues in economic development*. (8th ed.) New York: OUP
- Nuna, S. (1990). *Women and development*. New Delhi: National Institute of Educational Planning and Administration.
- Potts, D. (2005). *Project planning and analysis for development*. New Delhi: VIVA Books Private Limited.

- Rangarajan, C. & Srivastava, D.K. (2011). *Federalism and fiscal transfers in India*. OUP.
- Ray, D. (2003). *Development economics*. New Delhi: OUP.
- Reidar, D. (2004). *Development planning*. New Delhi: Academic Foundation.
- Rustogi, P. (2003). *Gender biases and discrimination against women: What do different indicators say?*. New Delhi: UNIFEM.
- Smith, G. (2001). *Globalization and governance*. Annual meeting of the Trilateral commission in London.
- Stephen, H. & Rao, M.G. (Eds.) (2013). *Federal reform strategies*, OUP.
- Thirlwall, A. P. (1999). *Growht and development*. (6th ed.). Macmillan.
- Todaro, M.P. and Smith, S.C. (2013). *Economic Development*. (10th ed.) New Delhi: Pearson Education.
- The World Bank, Annual World Bank Conference on Development Economics, Various Years.
- The World Bank, *World Development Reports*, Related Issues.
- Utting, P. & Clapp J. (2008). *Corporate accountability and sustainable development*. OUP.
- Waltz, K.N. (1999). *Globalization and governance*. Columbia University.