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<tr>
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**Total Credit** 15 **Total Credit** 15

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<td>565 (B)</td>
<td>Financial Economics</td>
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<td>Research Methodology</td>
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<td>Nepalese Economics</td>
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### Optional (Any two: Six credit)

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<td>562</td>
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<td>568</td>
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<td>Natural Resource Economics</td>
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<td>International Economics</td>
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<td></td>
<td>International Finance and Economic Cooperation</td>
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<td>564</td>
<td>Economic Demography</td>
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<td>Managerial Economics</td>
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<td>Applied Statistics</td>
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<td>Industrial Economics</td>
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<td>Economics of Energy</td>
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<td>History of Economic Thought</td>
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**Optional (9 credit form the following)**

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**Total Credit** 15 **Total Credit** 18
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

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:

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
Say's 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


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
MA First Semester

Econ. 554 Economics of Development and Planning-I

Total Credits: 03
Teaching Hrs: 48

Course Objective
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.

Unit 1. Perspectives on Development (15 Lectures)

Schultz; Lewis; Rostow; Balanced; Unbalanced; People's Participation; Alternative Concepts of Development-Income based and Capability based; New Development Paradigm

Unit 2. Contemporary Development Issues (07 Lectures)

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

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

Measuring Poverty and Inequality; Assessment of Policies Geared towards Poverty Reduction; Measurement, Types, and Consequences of Unemployment; Impacts of Liberalization, Globalization and Privatization, and the Role of State; The Debt Crisis

Unit 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 Literature


**Supplementary Readings**


9
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:


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

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

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

Unit III: Growth Theories

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

Unit IV: Business Cycles Theories

Kaldor Model, Samuelson Model and Hicks Model

Unit V: Macro Distribution Theories

Ricardo, Kalecki and Kaldor Models

Unit VI: Macroeconomic Stabilization


Unit VII: Macro Policies

Structural Adjustment, Market Failure and Government Intervention
REFERENCES


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


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.


Damodaran, A. (2010). Encircling the seamless India, climate change, and the global commons. OUP.


