

Department of Economics

Programme Outcomes

- Identify the role of supply and demand in a market economy.
- Identify the necessary conditions for market economies to function well.
- Discuss market system advantages and pricing.
- Understanding of the economic role of government policy and the Federal Reserve
- Define and analyze economic problems using algebraic and statistical methods.
- Identify the benefits and costs of a global economy.
- Identify policy options and their effectiveness.
- Understanding importance of international relations to trade and finance.
- Understanding of economic theory and econometrics.
- Apply econometric tools to problems encountered in government and business.

Course Outcomes

Introductory Microeconomics

Upon successful completion of the course a student will be able to:

- Understand how households (demand) and businesses (supply) interact in various market structures to determine price and quantity of a good produced.
- Understand the links between household behavior and the economic models of demand.
- Represent demand, in graphical form, including the downward slope of the demand curve and what shifts the demand curve.
- Understand the links between production costs and the economic models of supply.
- Represent supply, in graphical form, including the upward slope of the supply curve and what shifts the supply curve.
- Understand the efficiency and equity implications of market interference, including government policy.
- Understand how different degrees of competition in a market affect pricing and output.
- Apply economic reasoning to individual and firm behavior.
- Understand the meaning of marginal revenue and marginal cost and their relevance for firm profitability.
- Understand the major characteristics of different market structures and the implications for the behavior of the firm.

Introductory Macroeconomics

Upon successful completion of the course a student will be able to:

- Understand why household, business, government and global behavior determine the aggregate demand for goods and services
- Understand why the behavior of businesses and the rest of the world determine the aggregate supply of goods and services
- Understand how aggregate demand and aggregate supply interact to drive a free market economy
- Understand the implications of interference in a market economy, including government policy
- Understand the basics of national income accounting
- Understand the causes and consequences of business cycles
- Understand the roles of fiscal and monetary policy in fighting recessions and inflation
- Understand factors that contribute to and detract from long-term economic growth
- Apply economic reasoning to understand the operation of an economy
- Understand the interaction between the domestic economy and the rest of the world
- Be able to apply basic international trade and finance concepts to global pricing issues, including working with exchange rates

Intermediate Microeconomics

Upon successful completion of the course a student will be able to:

- Make decisions using marginal analysis and opportunity costs.
- Use supply and demand to determine changes in market equilibrium (price and output), changes in welfare, and analyze the impact of government policies.
- Understand the relationship between marginal utility and price in equilibrium.
- Explain why firms exist.
- Develop cost functions from production functions.
- Be able to determine the profit maximizing price and output for a firm operating in a competitive environment.
- Determine profit maximizing price and output for a monopoly firm.
- Evaluate various policies for regulating monopolies.
- Be able to determine profit maximizing price and output for a firm in a quasi-competitive market (oligopoly or monopolistic competition).
- Develop and evaluate the impact of government regulations.
- Explain relationship between wages and productivity and apply the model to real-world businesses.
- Be able to apply the concepts of supply and demand to markets with external costs and benefits (understand market failure, implications for regulation, optimal pollution level).
- Use comparative static analysis (changes in supply and/or demand), measures of consumer and producer welfare, government intervention (price ceilings and floors).
- Understand the nature and consequences of general equilibrium (Pareto optimality).

Intermediate Macroeconomics

Upon successful completion of the course a student will be able to:

- Measure living standards, inflation, and unemployment for use as economic indicators.

- Understanding the perspective of classical economists on the nature and causes of the wealth of nations.
- Understand the factors determining gross domestic product, employment, the general level of prices, and interest rates.
- Explain the differences between the classical and Keynesian approaches to understanding the macro economy, including the political implications of each approach and the role of an activist fiscal policy in the Keynesian approach.
- Analyze the determinants of the relative strengths of fiscal and monetary policy for affecting gross domestic product.
- Understand the importance of wage flexibility and price expectations for the impact of spending behavior on gross domestic production, the unemployment rate, and the rate of inflation.
- Understand monetarist, supply-siders', and New Classical approaches to macroeconomic issues.
- Learn the determinants of long-term economic growth, including the role of saving and investment on the rate of growth.
- Understand the role of international trade, international finance and exchange rates in affecting living standards.
- Analyze the factors that determine currency exchange rates and the impact of changes in exchange rates on exports and imports.

Mathematical Economics

Upon successful completion of the course a student will be able to:

- Understand and replicate the connections between diagrammatic models and their underlying formal mathematical structures using algebra and calculus
- Develop numerical examples and algebraic models to illustrate a variety of theoretical economic results
- Understand and use the mathematical tools of algebra, calculus and probability in a variety of economic models
- Recognize the strengths and shortcomings of mathematical models in economics

Statistics

Upon successful completion of the course a student will be able to:

- Distinguish between different types of data.
- Interpret examples of methods for summarising data sets, including common graphical tools (such as histograms) and summary statistics (such as mean, median, mode and variance).
- Assess which methods for summarising a data set are most appropriate to highlight interesting features of the data.
- Identify the features that describe a data distribution.

- Recall rudimentary mathematical properties of probability.
- Describe the sample space for certain random experiments.
- Explain probability in terms of long—term relative frequencies in repetitions of experiments.
- Find probabilities of single events, complementary events and the unions and intersections of collections of events.
- Describe the main properties of probability distributions and random variables.
- Calculate the mean and variance of a discrete random variable.
- Apply general properties of the expectation and variance operators.
- Find the following for a Normal distribution: (i) the probability over a set of values, (ii) a percentile, (iii) the mean or variance given the other and either a percentile or a probability over a set and (iv) the mean and variance given probabilities over two sets.
- Recognize cases where the Binomial distribution could be an appropriate model.
- Recall characteristics of the Binomial distribution, such as the mean and variance.
- Compute probabilities for a Binomial distribution.
- Approximate Binomial probabilities using a Normal distribution, incorporating a continuity correction as appropriate.

Development Economics

Upon successful completion of the course a student will be able to:

- Identify and analyse key development economic theories affecting a number of contemporary development issues, such as economic growth, trade, and e-development.
- Review the policy implications of these key development economic theories.
- Reflect on and critically examine the links between various development economic theories and approaches.
- Critically analyse how the theory of development economics impacts upon practical implementation macro development policies in varying local and global contexts.
- Determine and apply the specialist knowledge and technical skills required to creatively solve problems, demonstrating expert judgment and ethical responsibility in your professional practice in international development.
- Critically analyse, synthesize and reflect on personal awareness and lived experience, theories and practices of development, both local and international, to extend and challenge knowledge and practice in the discipline.
- Critically reflect on the causes and impacts of poverty in global contexts and to evaluate the theories and practice of development institutions.

International Economics

Upon successful completion of the course a student will be able to:

- Understand the various reasons why countries engage in international trade, including the direction and volume of trade between nations.
- Use models of trade to demonstrate the gains from exchange as well as the effects on income distribution within countries due to trade with foreign nations.
- Understand how international factor mobility affects an economy.
- Analyze current issues and policies using the concepts of international trade theory.
- Understand the role key international institutions play in affecting trade flows across the world.
- Understand the accounting methods and concepts used by countries to keep track of international transactions.
- Understand the role of exchange rates and how they are determined in the short-run and long-run.
- Analyze how various policies, both domestic and foreign, may affect exchange rates and economic welfare.
- Understand the functioning of various exchange rate regimes, (such as gold standards and floating exchange rate mechanisms).
- Understand the role played by various international institutions with regards to exchange rate values and the flow on international assets.

Money and Banking

Upon successful completion of the course a student will be able to:

- Understand the importance of the financial sector in directing the use of scarce capital.
- Understand the concepts of present value and internal rate of return.
- Explain the determinants of interest rates.
- Understand the term structure of interest rates.
- Understand the likely path of interest rates in the aftermath of a change in monetary policy.
- Understand the impact of inflation on interest rates.
- Understand various concepts of yield or rate of return.
- Understand the concept of duration and its implications for the magnitude of changes in asset prices following changes in interest rates.
- Explain the various ways to hedge interest rate risk.
- Understand various money market instruments.
- Understand how monetary and fiscal policy affects the financial system.
- Explain the components of the balance of payments, the factors that determine currency exchange rates, and ways to cope with exchange rate risk.

Basic Econometrics

Upon successful completion of the course a student will be able to:

- Use the many variations of the multiple regression model to study the relationships between variables.

- Understand the concept of a random variable and probability distributions.
- Use various sample statistics to estimation population values.
- Interpret relationships using confidence intervals.
- Analyze economic data.
- Make effective use of the statistical tools used by economists.
- Understand the assumptions underlying those statistical tools.
- Apply the statistical tools that economists use to analyze data.
- Understand estimation issues and their implications including, biased selection, non-linearity, heteroskedasticity and multicollinearity

Environmental Economics

Upon successful completion of the course a student will be able to:

- Apply basic principles of economics to environmental issues.
- Explain how something can be both “environmentally destructive” and “economically optimal”; and how something can be environmentally beneficial and economically suboptimal.
- Understand the relationship between economic development and population growth; how population growth affects economic development; how economic development affects population growth; the economics of traffic congestion.
- Know basic economic models pertaining to the use of depletable resources; depletable vs. renewable resources.
- Understand risk-benefit analysis; the economics of nuclear power.
- Understand the economics of solid-waste disposal and recycling.
- Understand the economics of water conservation; the impact of alternative property rights structures.
- Understand the economics of forests and fisheries; whaling; bioeconomic models; applications to other forms of wildlife.
- Understand basic approaches to pollution control; “optimal” pollution and optimal pollution control.
- Understand the economics of controlling air pollution from stationary vs. mobile sources.
- Understand the economics of water pollution; toxic wastes.
- Understand the economics of climate change.

Public Economics

Upon successful completion of the course a student will be able to:

- Apply microeconomic theories to public decision making.
- Explain public goods, externalities, and government interventions using microeconomic theories.
- Critically assess Indian tax policy from practical and theoretical economic perspectives.
- Effectively communicate the rationales for government intervention in the economy and their shortcomings.

Political Economy

Upon successful completion of the course a student will be able to:

- Articulate how it is possible that even when a majority of voters is opposed to a policy, politicians will adopt the policy.
- Articulate the concepts of the form of government and the scope of government. For example, the form may be democracy, but if the scope is unlimited – i.e., if a majority can enact whatever it wants without constitutional restraint – we have what Jefferson called an "elective despotism."
- Articulate the historical and logical implications of different property rights regimes.
- Articulate the phenomenon called the "tragedy of the commons" and the implications of the variety of solutions that have been offered to this problem.
- Articulate how economic theory can be applied in a wide variety of areas other than business – e.g., crime, the family, education and traffic congestion.