# TRIBHUVAN UNIVERSITY INSTITUTE OF SCIENCE AND TECHNOLOGY

# SCHOOL OF MATHEMATICAL SCIENCES Bachelor in Mathematical Sciences (B.Math.Sc.)

# **Course of Study**

Code No.: MSEC 401 Full Marks: 75
Paper: **Principle of Economics II (Macro)** Pass Marks: 30

Nature: Theory Credit: 3

Course Description:

The course covers to Government, Markets and Firms, International Trade, Macroeconomic environment, Balance of Payments and Exchange Rates, Money and Interest Rates, Business Activity, Unemployment and Inflation, Demand-Side and Supply-Side Macroeconomic Policies

# Learning Objectives:

On successful completion of the course the student will be able to introduce the core economic principles and how these can be used in a business environment to help decision making and behavior. It provides the fundamental concepts of macroeconomics that explain how economic agents make decisions and how these decisions interact. It explores the principles underlying macroeconomics that explain how the economic system works, where it fails and how decisions taken by economic agents affect the economic system.

# *Mode of Delivery:*

The course will be taught by lecture (48 hrs), and problem solving and class discussion (24 hrs). The use of spreadsheet software for problem solving will be encouraged.

#### **Contents:**

#### **Unit 1 Government, Markets and Firms**

9 hrs

Reasons for government intervention in the market, The Extent to which businesses meet the interests of consumers and society in general, Perfect markets, Social efficiency, Externalities and inefficient markets, Ways and drawbacks of government intervention in markets, Taxation and regulation for correcting markets' shortcomings. Relationship between the government and individual firm, Targets of "competition policy", Extent to which competition policy is effective, Failure of a free market in achieving the optimal amount of research and development, Various forms of intervention for encouraging technological advance and innovation.

# Unit 2 International Trade 6 hrs

Globalization and multinational business, Impact of globalization on business, Driving force of globalization process, Importance of international trade, The growth of international trade and its benefits to countries and firms, Advantages of specialization, Trade restriction and protection of domestic industries, Role of the World Trade Organization (WTO) in international trade.

#### **Unit 3 Macroeconomic Environment**

8 hrs

Macroeconomic environment of the business, Main macroeconomic variables that governments seek to control, Determining force for the business climate, Effect of stimulating economy on

business output, Actual and potential growths, Economic growths, Relationship between economic growth and environmental sustainability, Periods of boom and periods of recession in economy, Determining factors which influence the length and magnitude of the phases of a business cycle, Causes and costs of unemployment, Unemployment and the level of business activity, The price level in economy and a simple AS-AD model, Causes and costs of inflation, Inflation and the level of business activity, GDP and its measurement, Simple model of the circular flow of income representing the economy.

# **Unit 4 Balance of Payments and Exchange Rates**

5 hrs

Balance of payments and effect of trade and financial movements on it, Exchange rates, Effect of changes in exchange rates on business, Balance of payments and exchange rates, Advantages and disadvantages of fixed and floating exchange rates, Governments and/or central banks intervention on the exchange rates, Implications of such actions for other macroeconomic policies and business, Monetary union and single currencies with reference to the European Economic and Monetary Union, Exchange Rate Mechanism and creation of a single currency.

### **Unit 5 Money and Interest Rates**

7 hrs

Role of money and interest rates in the economy, Function of money, Amount of money in economy and causes of its growth, Concept of money multiplier in the real world, Methods of determining interest rates, Money and interest rates, Role of central banks in the functioning of economies, The impact of change in the money supply and/or interest rates on the level of business activity, Role, structure and stability of the financial system, Evaluation of different financial systems with reference to the UK and China, Financial markets and a nation's objectives, Different participants in the financial markets, Development of financial systems, Factors affecting the stability of financial systems.

# Unit 6 Business Activity, Unemployment and Inflation

4 hrs

Level of business activity and its impact on unemployment and inflation, Equilibrium level of income in a simple Keynesian model, Concept of multiplier and calculation of its value, Effect of a rise in money supply on output and prices, Unemployment and inflation, Business and consumer expectations, Policy of targeting inflation, Course of a business cycle and its turning points.

#### **Unit 7 Demand-Side and Supply-Side Macroeconomic Policies**

9 hrs

Demand-side Policy: Macroeconomic policy and its types, Fiscal policy and economic fluctuations, Fiscal rules, Monetary policy in the UK and the Euro zone, Roles of the Bank of England and European Central Bank, Targeting inflation, Interest rates and economic activity, Merits of following a simple inflation target as a rule for determining interest rates, alternative rule to the inflation target.

Supply-side Policy: Supply-side policy and its impact on businesses and economy, Types of supply side policies that can be pursued and discuss their effectiveness, Impact on business of a policy of tax cuts, Major types of policy open to governments to encourage increased competition.

#### **Text Book:**

J., Hinde, K., and Garratta, D. Sloman, Economics for Business, Fifth edition (2010), Prentice Hall

#### References

- 1. Begg, D. K. H.; Fischer, S.; Dombusch, R., Economics, eighth edition (2005), Mc Graw-Hill.
- 2. Lipsey, R. G.; Chrystal, K. A., Economics, 11th edition (2007), Oxford University Press.
- 3. Mankiw, N.G.; Taylor, M.P. Thomson, Economics, 2006.
- 4. Parian, M, Powell, M.; Matthews, K., Economics, 7th edition (2007), Pearson Education.
- 5. Sloman, J., Essentials of economics, 4th edition (2006), FT Prentice Hall.