

## BA (Prog.) with Economics as Major

### INTRODUCTORY MACRO ECONOMICS

#### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Duration (per week)			Eligibility Criteria	Prerequisite
		Lecture	Tutorial	Practical/ Practice		
Introductory Macroeconomics ECON004	4	3	1	0	Class 12th	NIL

#### Learning Objectives

- To introduce students to the basic concepts of macroeconomics
- To discuss the preliminary concepts associated with determining and measuring aggregate macroeconomic variables like GDP, savings, investment, money, inflation, unemployment and the balance of payments.
- To introduce the simple analytical framework (e.g., the IS-LM Model) for analysing the relationships among key macroeconomic variables.

#### Learning Outcomes

- The students would be able to familiarise the broad macroeconomic concepts like GDP, inflation, money supply, interest rate and their inter-linkages and their interrelationships.
- By studying the course, the students will be able to critically evaluate various macroeconomic policies and their effects on output and interest rate in the economy.

**Suggested number of lectures: Unit 1 and 2 combined - approximately 11; Units 3 - approximately 23; Unit 4 - approximately 11.**

#### Readings:

1. Andrew B. Abel, Ben S. Bernanke and Dean Croushore (2011). *Macroeconomics*, 7<sup>th</sup> edition, Pearson.
2. Oliver Blanchard and David R. Johanson (2013). *Macroeconomics*, 6<sup>th</sup> edition, Pearson
3. Rudiger Dornbusch, Stanley Fischer and Richard Startz (2011). *Macroeconomics*, 11<sup>th</sup> edition, McGraw-Hill.

## Topic-wise Readings:

### **Unit 1. Introduction: What is macroeconomics? Macroeconomic issues in an economy**

Basic issues studied in macroeconomics.

(i) Abel, Bernanke and Croushore: Chapter 1 (Sections 1.1 and 1.3)

### **Unit 2. National Income Accounting**

Measurements of gross domestic product - income, expenditure and the circular flow; related aggregates; real versus nominal GDP; price indices and real interest rate.

(i) Abel, Bernanke and Croushore: Chapter 2

### **Unit 3. Simple Theory of Income Determination**

Simple Keynesian model of income determination; Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; Concept of multiplier; government sector and impact of changes in government expenditure and taxes.

(i) Dornbusch, Fischer and Startz: Chapter 9

(ii) Abel, Bernanke and Croushore: Chapter 4 (Section 4.1 and 4.2 – till page 121)

### **Unit 4. Money in a Modern Economy**

Concept of money in a modern economy; monetary aggregates; functions of money; demand for money; money supply and credit creation; monetary policy tools.

(i) Abel, Bernanke and Croushore: Chapter 7 (Section 7.1)

(ii) Blanchard: Chapter 4

### **Assessment:**

1. Internal Assessment (IA): **30 marks** - one class test, another test or presentation (12 marks each), and six marks for attendance.
2. Continuous Assessment (CA): **40 marks** - projects, presentations etc. (35 marks) and 5 marks for attendance.
3. The end semester exam: **90 marks** will comprise numerical and other questions.

### **Suggested Weightage for each unit in the final examination**

Unit 1 and 2 - 25 marks

Unit 3 - 40 marks

Unit 4 - 25 marks

## BASIC STATISTICS FOR ECONOMICS

### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Duration (per week)			Eligibility Criteria	Prerequisite
		Lecture	Tutorial	Practical/ Practice		
Basic Statistics ECON 022	4	3	1	0	Class 12th	NIL

The details of the Course Content, Topic-wise Reading list, recommended textbooks are given below:

Topic	Readings	Section specific instructions
<b>Unit – I: Introduction and Overview (09 Hours)</b> <ul style="list-style-type: none"> <li>• Populations and Samples; Sample Statistics</li> <li>• Descriptive Statistics</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et. al: Ch 1 (except Sec 1.4)</i></li> <li>• <i>McClave et. al: Ch 2.1-2.5,</i></li> <li>• Anderson, Sweeny, et.al.): Ch 3.2(<i>only coefficient of variation to be done</i>) (pp121-122)</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis should be placed on the concepts of mean, median, mode, standard deviation, variance and coefficient of variation</li> <li>• In graphical methods emphasis should be placed on histograms and pie charts.</li> </ul>
<b>Unit – II: Basic Concepts of Probability (12 Hours)</b> <ul style="list-style-type: none"> <li>• Spaces and Events; Probability Concepts, Conditional Probabilities</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et.al: Ch 3</i></li> </ul>	<ul style="list-style-type: none"> <li>• Questions should be simple in conceptual and numerical calculations.</li> </ul>
<b>Unit – III: Probability Distributions and Sampling (12 Hours)</b> <ul style="list-style-type: none"> <li>• Random Variables – Discrete and Continuous,</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et.al: Ch 4 (except Sec 4.4)</i></li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis should be placed on binomial, normal and uniform distributions.</li> </ul>

<ul style="list-style-type: none"> <li>• Various Probability Distributions – Functions and Characteristics;</li> <li>• Commonly used Distributions – Uniform, Binomial, Exponential, Poisson, Hypergeometric and Normal Random Variables</li> <li>• Joint Distributions – Conditional Distributions and Expectations, Covariance and Correlation:</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et.al: Ch 4.5, 4.6, 4.8 (only uniform distribution)</i></li> <li>• <i>Anderson, Sweeny, et.al: Ch 5.4</i></li> </ul>	
<p><b>Unit – IV: Estimation and Hypothesis Testing (12 Hours)</b></p> <ul style="list-style-type: none"> <li>• Properties of estimators</li> <li>• confidence intervals;</li> <li>• defining statistical hypothesis</li> <li>• distributions of test statistics</li> <li>• Testing hypothesis related to population parameters; Type I and Type II parameters;</li> <li>• Power of test</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et. al: Ch 6.1-6.3</i></li> <li>• <i>McClave et. al: Ch 7.1-7.5, 7.8</i></li> </ul>	<ul style="list-style-type: none"> <li>• Methods of Moments and Maximum Likelihood estimation are to be excluded as these topics involve rigorous mathematics and students are not formally trained in these concepts.</li> <li>• Only applications and interpretations of the important formulas and concepts to be done.</li> </ul>

### Notes

1. Teachers suggested that from the suggested readings in the syllabus, McClave, Benson and Sincich (2017) and Anderson, Sweeny, et.al. (2019) could be used as core textbooks. Sheldon Ross (2017) and Larsen and Marx (2011) could be uses as a suggested reading for the teachers.
2. Specific instructions are mentioned against each question which should be taken care of while setting the question paper.
3. Applet exercises are to be avoided in each text.
4. Numerical Questions involving integration should not be done.

### Recommended Readings:

1. James McClave, P. George Benson, Terry Sincich (2017), *Statistics for Business and Economics*, Pearson Publication.

2. Anderson, D. R, Sweeny, D. J, et. al (2019), *Statistics for Business and Economics*, 13<sup>th</sup> edition, Cengage Learning.

**Recommended Readings for teachers:**

1. Sheldon Ross (2017), *Introductory Statistics*, 4<sup>th</sup> edition, Academic Press.
2. Larsen, R., Marx, M. (2011), *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall.

**End semester examination and Internal Assessment:**

- The end semester exam would be of 90 marks. The following distribution of topics, indicative weightage, and the amount of choice within each section, was agreed upon:
  - Section 1: Unit 1 (weightage 30 marks) – Three questions of 10 marks each. Internal choice in these units should be given as three out of four questions
  - Section 2: Unit 2 (weightage 20 marks) – Two questions out of three of 10 mark each.
  - Section 3: Unit 3 (weightage 20 marks) – Two questions out of three of 10 mark each.
  - Section 4: Unit 4 (weightage 20 marks) – Two questions out of three of 10 mark each.
- There would be no compulsory question in any of the sections and each question should have limited number of sub-parts.
- The internal assessment would comprise of 12 marks Class test, 12 marks Class test/assignment. Attendance will carry 06 marks. Problem solving during tutorials/ interpretation of results pertaining to a set of data should be the preferred medium for continuous assessment of 35 marks out of 40 (Five marks for attendance in tutorials).

## BA (Prog.) with Economics as Non- Major/Minor

### INTRODUCTORY MACRO ECONOMICS

#### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Duration (per week)			Eligibility Criteria	Prerequisite
		Lecture	Tutorial	Practical/ Practice		
Introductory Macroeconomics ECON004	4	3	1	0	Class 12th	NIL

#### Learning Objectives:

- To introduce students to the basic concepts of macroeconomics
- To discuss the preliminary concepts associated with determining and measuring aggregate macroeconomic variables like GDP, savings, investment, money, inflation, unemployment and the balance of payments.
- To introduce the simple analytical framework (e.g., the IS-LM Model) for analysing the relationships among key macroeconomic variables.

#### Learning Outcomes

- The students would be able to familiarise the broad macroeconomic concepts like GDP, inflation, money supply, interest rate and their inter-linkages and their interrelationships.
- By studying the course, the students will be able to critically evaluate various macroeconomic policies and their effects on output and interest rate in the economy.

• **Suggested number of lectures:** Unit 1 and 2 combined - approximately **11**; Units 3 - approximately **23**; Unit 4 - approximately **11**

#### Readings:

1. Andrew Abel, Ben Bernanke and Dean Croushore (2020): Macroeconomics (10th edition), Pearson
2. Olivier Blanchard (2017): Macroeconomics (7th edition), Pearson
3. Rudiger Dornbusch, Stanley Fischer and Richard Startz (2011): Macroeconomics (11th edition), McGraw-Hill

#### Topic-wise Readings:

#### **UNIT – I: Introduction (05 Hours)**

What is macroeconomics? Macroeconomic issues in an economy

**(i) Abel, Bernanke and Croushore: Chapter 1 (Introduction to Macroeconomics)**

**UNIT – II: National Income Accounting (10 Hours)**

Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; limitations of the GDP concept

**(i) Abel, Bernanke and Croushore: Chapter 2 (The Measurement and Structure of the National Economy)**

**UNIT – III: Determination of GDP (10 Hours)**

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier

(i) Dornbusch, Fischer and Startz: Chapter 1, Section 1.2, pages 14-16 (The Business Cycle and Output Gap) and Chapter 9 (Income and Spending)

(ii) Abel, Bernanke and Croushore: Chapter 4 (Consumption, Saving and Investment)

**UNIT – IV: National Income Determination in an Open Economy with Government (10 Hours) Income determination; Fiscal Policy: impact of changes in government expenditure and taxes; net exports function; net exports and equilibrium national income.**

**(i) Dornbusch, Fischer and Startz: Chapter 9 (Income and Spending)**

**(i) Abel, Bernanke and Croushore: Chapter 5, Section 5.2, pages 214-215 (Goods Market Equilibrium in an Open Economy)**

**UNIT – V: Money in a Modern Economy (10 Hours)**

Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy.

(i) Abel, Bernanke and Croushore: Chapter 7, Section 7.1, pages 274-281 (What is Money)

(ii) Blanchard: Chapter 4 (Financial Markets I)

**Assessment:**

**1. Internal Assessment (IA): 30 marks**

- (i) one class test (12 marks),
- (ii) one assignment (12 marks),
- (iii) class attendance (6 marks)

**2. Continuous Assessment (CA): 40 marks**

- (i) two class tests (adding up to 20 marks),
- (ii) A group research project with presentation, preferably looking at Indian data, especially for concepts and aggregates discussed in units 1, 2 and 5 (20 marks)

**3. End-semester (Final) Exam: 90 marks - will comprise numerical and other questions**

Weightage of each unit in the final examination: Unit I and II - 20 marks

Unit III - 20 marks

Unit IV - 25 marks

Unit V - 25 marks

**There will be internal choice within each section.**

## **GENERIC ELECTIVE: PRINCIPLES OF MACRO ECONOMICS 1**

**Subject: General Electives (GE-4)**

**Course: ECON026: Principles of Macroeconomics I**

**Credits: 4 (3L+1T)**

**Topic-wise Readings:**

### **Unit 1. Introduction: What is macroeconomics? Macroeconomic issues in an economy**

Basic issues studied in macroeconomics.

(i) Abel, Bernanke and Croushore: Chapter 1 (Sections 1.1 and 1.3)

### **Unit 2. National Income Accounting**

Measurements of gross domestic product - income, expenditure and the circular flow; related aggregates; real versus nominal GDP; price indices and real interest rate.

(i) Abel, Bernanke and Croushore: Chapter 2

### **Unit 3. Simple Theory of Income Determination**

Simple Keynesian model of income determination; Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; Concept of multiplier; government sector and impact of changes in government expenditure and taxes.

(iii) Dornbusch, Fischer and Startz: Chapter 9

(iv) Abel, Bernanke and Croushore: Chapter 4 (Section 4.1 and 4.2 – till page 121)

### **Unit 4. Money in a Modern Economy**

Concept of money in a modern economy; monetary aggregates; functions of money; demand for money; money supply and credit creation; monetary policy tools.

(iii) Abel, Bernanke and Croushore: Chapter 7 (Section 7.1)

(iv) Blanchard: Chapter 4

### **Assessment:**

4. Internal Assessment (IA): **30 marks** - one class test, another test or presentation (12 marks each), and six marks for attendance.

5. Continuous Assessment (CA): **40 marks** - projects, presentations etc. (35 marks) and 5 marks for attendance.

6. The end semester exam: **90 marks** will comprise numerical and other questions.