Discipline Specific Elective 27 (DSE-27): Introduction to Macroeconomic Dynamics

Semester	Course title & Code	Credits	Duration (per week)			Eligibility Criteria	Prerequisite
			Lecture	Tutorial	Practical/ Practice		
VI/VIII	Introduction to Macroeconomic Dynamics – ECON057	4	3	1	0	Class 12th with Mathematics	Advanced Mathematical Methods for Economics (ECON009) And Intermediate Macroeconomics

Learning Objectives

The Learning Objectives of this course are as follows:

- This is a course which introduces the student to the basics of macroeconomic modelling through dynamic optimization.
- This includes Bellman equation, Euler's equation, Hamiltonian techniques and optimal control approaches.

Learning outcomes

The Learning outcomes of this course are as follows:

- The student gets insights about the construction of abstract macroeconomic models.
- This enables appreciation of a good body of macroeconomic literature in different spheres.
- The course would prove to particularly useful for those interested in pursuing macroeconomicsasafieldofresearchandinquiry.

Syllabus

UNIT I: Dynamic Optimization (15 hours)
Difference equations; differential equations; phase plane analysis; dynamic optimization

UNIT II: Infinite Horizon and Overlapping Generations model (15 hours)
Optimal growth, Ramsey Cass Koopmans model; overlapping generations model, Diamond Dybvig Model

UNIT III: Optimal Control Theory (15 hours)

Recommended readings

- Hoy,Livernois,McKenna,Rees,Stengos(2011),*MathematicsforEconomics*,Addison- Wesley.
- Chiang,AlphaC(1992),*ElementsofDynamicOptimization*,McGrawHill.
- Romer, David (2019) *Advanced Macroeconomics*. McGrawHillIndia.
- Barro,RobertandSalaiMartin,Xavier(2004)*EconomicGrowth*.SecondEdition
- Blanchard, Olivier and Fischer, Stanley (1996), *Lectures on Macroeconomics*, Pren- tice Hall. Eastern EconomyEdition.

- Turnovsky, Stephen(1995) *Methods of macroeconomic dynamics* Prentice Hall In- dia. Eastern EconomyEdition.
- Heijdra, Ben (2017) *Foundations of Modern Macroeconomics*. Oxford.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Discipline Specific Elective 28 (DSE-28): Labour Economics

Semester	Course title & Code	Credits	Duration (per week)			Eligibility Criteria	Prerequisite
			Lecture	Tutorial	Practical/ Practice		
VI/VIII	Labour Economics– ECON058	4	3	1	0	Class 12th Pass	Introductory /Principles of Microeconomics

Learning Objectives

The Learning Objectives of this course are as follows:

- The curriculum is an introduction to labor economics, with an emphasis on applied microeconomic theory and empirical methods critical to microeconomic analysis, as well as the link between research and public policy.
- This course particularly focuses on some of the core theories on labor economics e.g.labor supply, labor demand, role of human capital, incentives, agency, efficiency wages, wage differential and discrimination. The main objective of this course is to enlighten students with some core topics in labor economics with some of the important empirical methods.

Learning outcomes

The Learning outcomes of this course are as follows:

- The students will be able to understand basic theories of labor markets, issues of un- employment, and forms of employment.
- They will learn to critically analyse labour markets in diverse settings including in the macroeconomic context.
- This course will enable the students to evaluate the government policies on labor market critically.

Syllabus

UNIT I: Labor Supply (Static and Intertemporal) (9 hours)
Measuring the Labor Force, Basic Facts about Labor Supply, The Worker's Preferences, The Budget Constraint, The Hours of Work Decision, To Work or Not to Work? The Labor Supply Curve, Estimates of the Labor Supply Elasticity, Labor Supply of Women, Labor Supply over the Life Cycle, Policy Application: Welfare Programs and Work Incentives, Policy Application: The Earned Income Tax Credit, Policy Application: The Decline in Work Attachment among Older Workers.

UNIT II: Labor Demand (9 hours)
The Production Function, The Employment Decision in the Short Run, The Employment Decision in the Long Run, The Long-Run Demand Curve for Labor, The Elasticity of Substitution, Marshall's Rules of Derived Demand, Factor Demand with Many Inputs, Overview of Labor Market Equilibrium, Adjustment Costs and Labor Demand, Trade and Labor Demand, Policy Application: Affirmative Action and Production Costs, Policy Application: The Employment Effects of Minimum Wages Application: Rosie the Riveter as