

**Code: ECON-402**

**Title: Growth Theories and Models**

**Credit Hours: 03**

**Prerequisite: Advanced Macroeconomics, Development Economics-II**

**Objectives:**

This course aims at developing understanding of economic growth models and theories at graduate level. The goal of this course is to comprehend the foundations and principles to make countries successful in economic terms. It focuses on both the historical experience of countries that are currently rich and are in the process of catching-up.

**Course Contents**

**Introduction and Overview**

This section includes discussions on the facts about economic growth, differences in the level of income among countries, differences in the rate of income growth, growth before and after 19th century, the production function and the lessons from data.

**Factors of Production**

**Physical Capital**

The nature of capital, capital's role in production, the Solow growth model, the relationship between investment and saving, and exogenous versus endogenous factors.

**Population and Economic Growth**

Population and output in the long-run, the Malthusian model, population growth in the Solow model, demographic transitions, future population trends, and the economic consequences of demographic change.

**Human Capital**

Human capital in the form of health, human capital in the form of education, modeling the interaction of health and incomes, changes in the level of education, education and variation in income across countries.

**Productivity and Technology**

Measuring productivity, differences in productivity and growth rates of productivity among countries, the role of Technology in growth, the nature, transfer and determinants of technology, research and development, patents, modeling the relationship between Technology creation and growth, barriers to technology transfers, the cutting edge technology, the industrial revolution, the technology production function, differential technological progress, efficiency, differences in efficiencies, types of inefficiencies, misallocation of factors.

**Growth in the Open Economy**

Autarky versus openness, Globalization, the effect of openness on economic growth, effects of geographical barriers, openness and factor accumulation, growth with capital mobility, openness and productivity, trade as a form of technology, openness and technological progress, and opposition to openness.

## **Fundamentals behind Economic Growth**

### **Government**

Government's role in economy, governance and rule of law, taxation, efficiency and the size of government, planning and policies, corruption and Kleptocracy, democracy and economic growth, causation from government quality to income.

### **Income Inequality**

Facts about income equality, the Kuznets Hypothesis, effects of income inequality on the accumulation of physical and human capital, and economic growth.

### **Culture**

The effect of culture on economic growth, openness to new ideas, hard work, saving behaviour, trust, social capital, cultural change, determinants of cooperation.

### **Geography, Climate and Natural Resources**

Location, trade and growth, geographic concentration and spillovers, climate and productivity, climate and disease, natural resource endowment and economic growth, the curse of natural resources, incorporating natural resources into the analysis of economic growth.

### **Recommended Books:**

- David N. Weil, Economic Growth, (2012). Third Edition. Pearson Addison-Wesley.
- Charles I. Jones and Dietrich Vollrath. (2013). Introduction to Economic Growth, Third edition, W. W. Norton & Company.
- Elhanan Helpman, The Mystery of Economic Growth, (2010). Belknap, Press of Harvard University Press.
- William R. Easterly. (2008). The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics. The MIT Press