

**Revised and Updated Curriculum  
MPhil (Economics) Program  
2024**



**DEPARTMENT OF ECONOMICS  
UNIVERSITY OF KARACHI  
KARACHI-75270, PAKISTAN**

### **Coursework Requirements:**

- MPhil candidates are required to complete 24 credit hours of coursework, and 6 credit hours dedicated to research work/thesis. Alternatively, candidates may opt to complete 30 credit hours of coursework; however, upon completion of 30 credit hours, they will be awarded an MS (Master of Science) degree instead of an MPhil degree.

### **Coursework Composition:**

- The coursework must be relevant to the MPhil degree and should be offered through regular on-campus classes taught by full-time faculty members.
- The coursework should cover the foundational and advanced topics necessary for the field of study.

### **Research Component:**

- If the program includes a research component (thesis), the university must establish a policy for thesis defense and evaluation through its statutory bodies.

### **Degree Completion Timeline:**

- The MPhil degree should be completed within a minimum of **1.5 years** (three regular semesters) and a maximum of **4 years** (eight regular semesters). Extensions may be granted in cases of force majeure.

### **Additional Points:**

- Universities are allowed to transfer credits from other institutions following the HEC's guidelines, provided the coursework aligns with the program's requirements.

### **Eligibility Criteria:**

- Students who have completed their BS in the following fields are eligible to apply for MPhil admission: Economics, Economics and Finance, Commerce, Business Administration, Public Administration, Mathematics, Statistics, and Physics

### **Passing Criteria:**

- A minimum CGPA of 2.6 is required for successful completion.

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Semester</b>
ECO701	Advanced Microeconomics	3	Semester I
ECO703	Advanced Macroeconomics	3	Semester I
ECO705	Advanced Econometrics	3	Semester I
ECO707	Elective I	3	Semester I
ECO702	Economic Development	3	Semester II
ECO704	Research Methodology	3	Semester II
ECO706	Economic Issues of Pakistan	3	Semester II
ECO708	Elective II	3	Semester II
	Thesis	6	
<b>Total</b>		<b>30</b>	

<b>List of Elective Courses for MPhil</b>		
<b>Serial No. 707 &amp; 708</b>	<b>Course Title</b>	<b>Credit Hours</b>
1	Human Resource Management	3
2	Environmental Economics	3
3	Monetary Policy Analysis	3
4	International Economic Issues	3
5	Urban Economics	3
6	Agricultural Economics	3
7	Industrial Economics	3
8	Migration Economics	3
9	Health Economics	3
10	Project Management	3
11	Public Sector Economics	3
12	Portfolio Management	3
13	Financial Markets and Institutions	3
14	Islamic Banking & Finance	3
15	History of Economic Thought	3
16	Economics of Technologies	3
17	Economics of Cooperative Societies	3
18	Tourism and Hospitality	3

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Advanced Microeconomics**  
**Course No. ECO701**

**Course Description:**

This course provides an in-depth exploration of microeconomic theory, focusing on advanced topics that build upon foundational knowledge. Designed for MPhil students with a solid understanding of undergraduate microeconomics, it covers the theoretical underpinnings of consumer and producer behavior, market structures, game theory, general equilibrium, and welfare economics. The course also incorporates contemporary research and applications of microeconomic theory, with a strong emphasis on mathematical modeling and analysis.

**Course Topics:**

1. **Review of Basic Microeconomic Concepts**
  - Preferences, Utility, and Choice Theory
  - Budget Constraints and Consumer Optimization
  - Demand Functions and Comparative Statics
2. **Advanced Consumer Theory**
  - Duality in Consumer Theory: Expenditure and Indirect Utility Functions
  - Revealed Preference Theory
  - Intertemporal Choice and the Life-Cycle Hypothesis
  - Uncertainty and Consumer Behavior: Expected Utility Theory
3. **Production and Cost Theory**
  - Production Functions and Returns to Scale
  - Cost Minimization and Profit Maximization
  - Duality in Production: Cost and Profit Functions
  - Economies of Scope and Scale
4. **Theory of the Firm and Market Structures**
  - Perfect Competition: Efficiency and Welfare Implications
  - Monopoly and Monopolistic Competition
  - Price Discrimination and Market Power
  - Oligopoly Models: Cournot, Bertrand, and Stackelberg
  - Entry, Exit, and Market Dynamics
5. **Game Theory and Strategic Behavior**
  - Introduction to Game Theory: Nash Equilibrium and Dominant Strategies
  - Sequential Games and Subgame Perfect Equilibrium
  - Repeated Games and Collusion
  - Evolutionary Game Theory and Applications
  - Auctions and Mechanism Design

6. **General Equilibrium Theory**
  - Walrasian Equilibrium: Existence, Uniqueness, and Stability
  - Edgeworth Box and Core Concepts
  - Welfare Theorems: Pareto Efficiency and Market Failures
  - Arrow-Debreu Model and Its Extensions
7. **Welfare Economics and Social Choice**
  - Measures of Social Welfare: Utilitarian and Rawlsian Approaches
  - Market Failure and Externalities
  - Public Goods and Collective Decision-Making
  - Theories of Justice and Fair Allocation
8. **Behavioral Economics**
  - Bounded Rationality and Heuristics
  - Prospect Theory and Loss Aversion
  - Time Inconsistency and Behavioral Models of Intertemporal Choice
  - Nudges and Policy Implications
9. **Contract Theory and Incentives**
  - Principal-Agent Models and Moral Hazard
  - Adverse Selection and Signaling
  - Contract Design and Incentive Compatibility
  - Applications in Labor Markets, Corporate Governance, and Regulation
10. **Information Economics**
  - Asymmetric Information and Market Signaling
  - Screening and Self-Selection Mechanisms
  - Market for Lemons: Adverse Selection in Markets
  - Information Cascades and Herd Behavior
11. **Auctions and Market Design**
  - Types of Auctions: Sealed-Bid, English, Dutch, and Vickrey
  - Auction Theory: Revenue Equivalence and Bidding Strategies
  - Design of Online and Spectrum Auctions
  - Matching Markets and Kidney Exchange
12. **Public Economics and Regulation**
  - Taxation and Public Goods Provision
  - Externalities and Environmental Regulation
  - Optimal Taxation Theory
  - Regulation of Natural Monopolies and Public Utilities
13. **Recent Advances in Microeconomic Theory**
  - Network Economics and Social Networks
  - Behavioral Contract Theory
  - Market Design in the Digital Economy
  - Experimental and Empirical Microeconomics
14. **Advanced Mathematical Techniques in Microeconomics**
  - Convex Analysis and Duality
  - Fixed Point Theorems and Applications in General Equilibrium
  - Comparative Statics and Envelope Theorem

- Optimal Control Theory in Economics
- 15. **Research Applications in Microeconomics**
  - Applying Microeconomic Theory to Policy Analysis
  - Case Studies in Market Design and Regulation
  - Research Methodologies in Microeconomics
  - Developing a Research Proposal in Microeconomic Theory

### **Textbooks:**

1. **Mas-Colell, A., Whinston, M.D., & Green, J.R.** (1995). *Microeconomic Theory*. Oxford University Press.
2. **Jehle, G.A., & Reny, P.J.** (2011). *Advanced Microeconomic Theory* (3rd ed.). Pearson Education.
3. **Varian, H.R.** (2014). *Microeconomic Analysis* (3rd ed.). W.W. Norton & Company.

### **Reference Books:**

1. **Kreps, D.M.** (1990). *A Course in Microeconomic Theory*. Princeton University Press.
2. **Fudenberg, D., & Tirole, J.** (1991). *Game Theory*. MIT Press.
3. **Myerson, R.B.** (1991). *Game Theory: Analysis of Conflict*. Harvard University Press.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Advanced Macroeconomics**  
**Course No. ECO 703**

**Course Description:**

This course provides MPhil students with an in-depth understanding of advanced macroeconomic theories and their applications. It covers key concepts such as economic growth, business cycles, monetary and fiscal policies, and international macroeconomics. The course emphasizes both theoretical models and empirical evidence, preparing students to critically analyze macroeconomic issues and policies in a global context.

**Course Topics:**

1. **Introduction to Macroeconomics**
  - Overview of macroeconomic concepts and goals
  - Key macroeconomic indicators: GDP, inflation, and unemployment
  - Basic models of the macroeconomy
2. **Economic Growth Theory**
  - Classical and neoclassical growth models
  - Endogenous growth theory
  - The role of technology, human capital, and institutions in growth
3. **Business Cycles**
  - Theories of business cycles: Real Business Cycle (RBC) theory
  - Keynesian perspectives on business cycles
  - Empirical methods for analyzing business cycles
4. **Aggregate Demand and Supply**
  - Aggregate demand and its components
  - Short-run and long-run aggregate supply
  - The AD-AS model and its implications
5. **Monetary Policy**
  - The role of central banks and monetary policy tools
  - Interest rates and their impact on the economy
  - Inflation targeting and its effectiveness
6. **Fiscal Policy**
  - Government spending and taxation
  - The effects of fiscal policy on output and employment
  - The concept of the fiscal multiplier
7. **Open Economy Macroeconomics**
  - Exchange rates and balance of payments
  - The Mundell-Fleming model
  - International capital flows and their implications
8. **Macroeconomic Policy in the IS-LM Framework**
  - The IS-LM model and its applications

- Policy implications of the IS-LM model
- The impact of fiscal and monetary policy in the IS-LM context
- 9. Inflation and Unemployment**
  - The Phillips curve: historical and modern perspectives
  - NAIRU (Non-Accelerating Inflation Rate of Unemployment)
  - The role of expectations in inflation dynamics
- 10. Dynamic Macroeconomic Models**
  - Introduction to dynamic programming and optimal control
  - Solow model with endogenous growth
  - Overlapping generations models
- 11. Macroeconomic Aspects of Financial Markets**
  - The interaction between the real economy and financial markets
  - Financial frictions and their impact on macroeconomic stability
  - The role of banks in the macroeconomy
- 12. Behavioral Macroeconomics**
  - Incorporating behavioral aspects into macroeconomic models
  - The role of psychology in economic decision-making
  - Implications for policy design
- 13. Advanced Topics in Macroeconomics**
  - New Keynesian economics and price stickiness
  - The role of expectations and forward guidance
  - Macroeconomic implications of climate change
- 14. Macroeconomic Modeling and Forecasting**
  - Techniques for macroeconomic modeling
  - Structural econometric models
  - Forecasting methods and their applications
- 15. Recent Developments in Macroeconomics**
  - Current trends in macroeconomic research
  - The impact of globalization on macroeconomic policies
  - Post-COVID-19 macroeconomic challenges

### **Textbooks:**

1. **Blanchard, Olivier, & Johnson, David R.** (2013). *Macroeconomics* (6th ed.). Pearson.
2. **Mankiw, N. Gregory.** (2021). *Macroeconomics* (10th ed.). Worth Publishers.
3. **Romer, David.** (2018). *Advanced Macroeconomics* (4th ed.). McGraw-Hill.

### **Reference Books:**

1. **Taylor, John B., & Uhlig, Harald.** (2008). *Handbook of Macroeconomics*. Elsevier.
2. **Sargent, Thomas J., & Wallace, Neil.** (1981). *Rational Expectations and the Theory of Economic Policy*. Journal of Monetary Economics.
3. **Woodford, Michael.** (2003). *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton University Press.
4. **Acemoglu, Daron.** (2009). *Introduction to Modern Economic Growth*. Princeton University Press.

5. **Chari, V. V., & Kehoe, P. J.** (2007). *Models of Distortions in Intertemporal Trade*. Journal of Political Economy.
6. **Friedman, Milton, & Schwartz, Anna J.** (1963). *A Monetary History of the United States, 1867-1960*. Princeton University Press.
7. **Krugman, Paul, & Wells, Robin.** (2018). *Microeconomics* (5th ed.). Worth Publishers.
8. **Barro, Robert J., & Gordon, David B.** (1983). *A Positive Theory of Monetary Policy in a Natural Rate Model*. Journal of Political Economy.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Advanced Econometrics**  
**Course No. ECO 705**

**Course Description:**

This course offers an in-depth exploration of econometric theory and its applications, designed for MPhil students who have a solid foundation in basic econometrics. It covers advanced topics including time series analysis, panel data models, instrumental variables, generalized method of moments, and limited dependent variable models. The course emphasizes the development of skills necessary to conduct empirical research in economics, with a strong focus on the application of econometric methods to real-world data and the interpretation of results.

**Course Topics:**

1. **Review of Basic Econometrics**
  - Overview of the classical linear regression model (CLRM)
  - Assumptions and properties of OLS estimators
  - Hypothesis testing and confidence intervals
2. **Advanced Regression Diagnostics**
  - Detection and correction of multicollinearity
  - Heteroscedasticity and autocorrelation: consequences and remedies
  - Model specification errors and their impacts
3. **Generalized Least Squares (GLS)**
  - Concept and application of GLS
  - Feasible Generalized Least Squares (FGLS)
  - Applications in dealing with heteroscedasticity and autocorrelation
4. **Instrumental Variables (IV) Estimation**
  - Endogeneity and its consequences
  - Identification strategies using IV
  - Two-stage least squares (2SLS) estimation
5. **Generalized Method of Moments (GMM)**
  - Introduction to the method of moments
  - GMM estimation: theory and application
  - Testing over-identifying restrictions
6. **Simultaneous Equations Models**
  - Identification problem in simultaneous equations
  - Estimation methods: Indirect Least Squares (ILS), 2SLS, and 3SLS
  - Structural and reduced-form equations
7. **Panel Data Models**
  - Introduction to panel data and its advantages
  - Fixed effects and random effects models

- Dynamic panel data models: Arellano-Bond and Arellano-Bover/Blundell-Bond estimators
- 8. Limited Dependent Variable Models**
  - Binary choice models: Probit and Logit
  - Multinomial and ordered logit/probit models
  - Tobit models for censored data
- 9. Time Series Econometrics: Stationarity and Unit Roots**
  - Properties of time series data: stationarity and ergodicity
  - Unit root tests: Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests
  - Deterministic vs. stochastic trends
- 10. Cointegration and Error Correction Models**
  - Concept of cointegration
  - Engle-Granger and Johansen cointegration tests
  - Error Correction Models (ECM) for long-run equilibrium relationships
- 11. Vector Autoregressions (VAR)**
  - Introduction to VAR models
  - Impulse response functions and variance decompositions
  - Structural VAR (SVAR) models
- 12. Forecasting with Time Series Models**
  - Univariate time series models: AR, MA, ARMA, and ARIMA
  - Forecast evaluation: RMSE, MAE, and Theil's U
  - Forecasting with VAR and ECM models
- 13. Volatility Modeling: ARCH/GARCH Models**
  - Introduction to volatility and financial time series
  - ARCH and GARCH models for modeling heteroscedasticity
  - Extensions: EGARCH, TGARCH, and multivariate GARCH models
- 14. Advanced Topics in Nonlinear Econometrics**
  - Nonlinear least squares (NLS) estimation
  - Threshold regression models
  - Quantile regression
- 15. Structural Equation Modeling (SEM)**
  - Path analysis and SEM basics
  - Estimation methods in SEM
  - Applications in economics and social sciences
- 16. Advanced Econometric Software Applications**
  - Practical sessions using software (e.g., Stata, R, EViews)
  - Implementing econometric techniques on real-world datasets
  - Interpretation and presentation of empirical results
- 17. Empirical Research Applications**
  - Designing and conducting econometric research
  - Application of advanced econometric techniques in empirical studies
  - Critical review of applied econometric research
- 18. Recent Developments in Econometrics**
  - Introduction to Bayesian econometrics
  - High-dimensional data and machine learning in econometrics
  - Advances in causal inference

## **Textbooks:**

1. **Wooldridge, Jeffrey M.** (2019). *Econometric Analysis of Cross Section and Panel Data* (2nd ed.). MIT Press.
2. **Greene, William H.** (2018). *Econometric Analysis* (8th ed.). Pearson Education.
3. **Hamilton, James D.** (1994). *Time Series Analysis*. Princeton University Press.

## **Reference Books:**

1. **Cameron, A. Colin, & Trivedi, Pravin K.** (2005). *Microeconometrics: Methods and Applications*. Cambridge University Press.
2. **Baum, Christopher F.** (2006). *An Introduction to Modern Econometrics Using Stata*. Stata Press.
3. **Davidson, Russell, & MacKinnon, James G.** (2004). *Econometric Theory and Methods*. Oxford University Press.
4. **Enders, Walter.** (2014). *Applied Econometric Time Series* (4th ed.). Wiley.
5. **Stock, James H., & Watson, Mark W.** (2019). *Introduction to Econometrics* (4th ed.). Pearson Education.
6. **Verbeek, Marno.** (2017). *A Guide to Modern Econometrics* (5th ed.). Wiley.
7. **Hansen, Bruce E.** (2022). *Econometrics*. Princeton University Press.
8. **Johnston, Jack, & DiNardo, John.** (1997). *Econometric Methods* (4th ed.). McGraw-Hill.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Economic Development**  
**Course No. ECO 702**

**Course Description:**

This course provides an advanced exploration of economic development, suitable for MPhil students. It delves into the complexities of development economics, emphasizing modern empirical approaches and theoretical frameworks. Students will be introduced to recent research, methodologies, and debates in economic development, with an emphasis on advanced models, institutions, and policy implications. The course will help students understand development from multiple perspectives, including institutional, behavioral, and macroeconomic dimensions, while focusing on contemporary challenges faced by developing countries.

**Course Contents:**

**Topic 1: Theories of Economic Development and Growth**

- Advanced Theories of Economic Development
- Revisiting Classical Models: Structural Change and Lewis Model
- Endogenous Growth Theory and its Applications
- Institutions, Governance, and Development
- **Case Study 1:** Revisiting the Development Path of China and India

**Topic 2: Institutions and Economic Development**

- Institutional Quality and Development
- Property Rights, Rule of Law, and Economic Growth
- Colonial Legacies and Path Dependence
- Corruption and its Impact on Development
- **Case Study 2:** Institutions in Sub-Saharan Africa: Botswana vs. Zimbabwe

**Topic 3: Inequality, Poverty, and Development**

- Advanced Measurement of Inequality: Lorenz Curve, Gini Coefficient, and Theil Index
- Multidimensional Poverty Indices
- Inequality of Opportunity vs. Inequality of Outcomes
- Policies to Reduce Inequality and Poverty
- **Case Study 3:** Success and Failures of Conditional Cash Transfers: The Case of Latin America

**Topic 4: Behavioral Approaches to Development**

- Behavioral Economics and Development Policy
- Poverty Traps and Behavioral Biases
- Nudges and Improving Policy Effectiveness

- Experimental Approaches to Development (RCTs)
- **Case Study 4:** The Use of RCTs in Development Policy: Evidence from J-PAL

### **Topic 5: Human Capital, Health, and Education**

- Human Capital Accumulation and Economic Growth
- Returns to Education and Health in Developing Countries
- Gender Inequality in Education and Health
- Public vs. Private Investments in Human Capital
- **Case Study 5:** Assessing the Success of Universal Health Coverage: Case of Thailand

### **Topic 6: Structural Transformation and Industrial Policy**

- Structural Transformation in Developing Economies
- Industrial Policy: Theory and Practice
- Informal Sector and Development
- Strategies for Rural-Urban Migration and Urbanization
- **Case Study 6:** Industrial Policy in East Asia: Lessons for South Asia

### **Topic 7: International Trade and Development**

- New Trade Theory and Economic Development
- Global Value Chains and Industrial Upgrading
- Trade Policy, Export Promotion, and Import Substitution
- International Trade Agreements and Developing Economies
- **Case Study 7:** The Impact of Trade Liberalization on Vietnam

### **Topic 8: Sustainable Development and Climate Change**

- Economic Development and Environmental Sustainability
- Impact of Climate Change on Developing Economies
- Adaptation and Mitigation Strategies in Low-Income Countries
- Sustainable Development Goals (SDGs): Progress and Challenges
- **Case Study 8:** Climate Change Adaptation Policies in Bangladesh

### **Recommended Books:**

- Acemoglu, Daron, and James A. Robinson (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Publishing Group.
- Banerjee, Abhijit, and Esther Duflo (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. PublicAffairs.
- Ray, Debraj (1998). *Development Economics*. Princeton University Press.
- Todaro, Michael P., and Stephen C. Smith (2015). *Economic Development* (12th ed.). Pearson.
- Stiglitz, Joseph E., and Shahid Yusuf (2001). *Rethinking the East Asian Miracle*. World Bank and Oxford University Press.

- **Naqvi, Syed Nawab Haider.** *The Evolution of Development Policy: A Reinterpretation.* 2010, pp. 1-37.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Research Methodology**  
**Course No. ECO 704**

**Course Description:**

This course provides MPhil students with a comprehensive understanding of research methodologies in economics, covering the entire research process from problem identification to data analysis and report writing.

**Course Topics:**

- 1. Introduction to Research Methodologies**
  - Importance of research in economics
  - Overview of research techniques in social sciences
  - Limitations of social science research
- 2. Theoretical and Empirical Research**
  - Distinction between empirical and theoretical research
  - Basis of research: Theory vs. Empiricism
- 3. Stages of the Research Process**
  - Overview of the research process
  - Identifying research problems and issues
  - Role of data, theory, and estimation
- 4. Problem Identification in Research**
  - Techniques for identifying research problems
  - Developing research questions
- 5. Research Design: Field Research**
  - Introduction to field research design
  - Exploratory research
  - Causal inference
- 6. Developing a Research Proposal**
  - Components of a research proposal
  - Steps in preparing a research proposal
- 7. Survey Methods in Research**
  - Overview of survey methods
  - Vision surveys and communication techniques
- 8. Art of Asking Questions**
  - Developing effective questionnaires
  - Techniques for obtaining quality information
- 9. Measurement and Scaling Techniques**
  - Introduction to measurement scales
  - Characteristics of sound measurement
- 10. Development of Measurement Tools**
  - Steps in creating measurement tools
  - Scaling techniques and response methods
- 11. Scale Construction and Validation**

- Nature of scaling
- Methods of constructing and validating scales
- 12. Survey Instrument Design**
  - Designing effective survey instruments
  - The survey instrument development process
- 13. Field Procedures in Data Collection**
  - Overview of field procedures
  - Personal and telephone interviewing techniques
- 14. Interviewing by Mail and Observations**
  - Mail surveys
  - Observation techniques in data collection
- 15. Experimentation in Research**
  - Introduction to experimentation
  - Experimental research design
- 16. Simulation Techniques in Research**
  - Overview of simulation techniques
  - Application of simulation in economic research
- 17. Secondary Data: Types and Sources**
  - Understanding secondary data
  - Types and nature of secondary data sources
- 18. Evaluating and Using Secondary Data**
  - Statistical sources of secondary data
  - Methods for evaluating the quality of secondary data
- 19. Observation in Research**
  - Designing effective observation studies
  - Techniques for data collection through observation
- 20. Data Collection Methods**
  - Overview of various data collection methods
  - Choosing the appropriate method for research
- 21. Data Preparation for Analysis**
  - Preparing data for analysis
  - Handling special data problems
- 22. Tabulation and Data Presentation**
  - Techniques for tabulating data
  - Effective presentation of research data
- 23. Data Analysis Techniques**
  - Overview of data analysis methods
  - Elements of data analysis in research
- 24. Interpretation of Research Results**
  - Techniques for interpreting research data
  - Drawing conclusions from research
- 25. Writing the Research Report**
  - Structure and format of a research report
  - Writing the executive summary and abstract
- 26. Organization of Research Papers**
  - Organizing content in a research paper

- Formatting and citation styles
- 27. **Editing and Refining Research Reports**
  - Techniques for editing research reports
  - Ensuring clarity and coherence in writing
- 28. **Finalizing and Submitting Research Reports**
  - Final checks before submission
  - Preparing for oral presentations of research

### **Textbooks:**

1. **Waheed, A. (2020).** *Quantitative Research Methods: A Practical Approach*. Royal Book Company.
2. **Neuman, W. Lawrence. (1997).** *Social Research Methods: Qualitative and Quantitative Approaches*. Allyn and Bacon; Boston.
3. **Uma, Sekaran. (1992).** *Research Methods for Business: A Skill Building Approach*. John Wiley & Sons, Inc.
4. **Zikmund, William G. (1994).** *Business Research Methods*. The Dryden Press.
5. **Waheed, A. (2020).** *Quantitative Research Methods: A Practical Approach*. Royal Book Company

### **Reference Books:**

1. **Lambert, P. (1985).** *Advanced Mathematics for Economists: Static and Dynamic Optimization*. Basil Blackwell.
2. **Cooper, Donald R., & Schindler, Pamela S. (2014).** *Business Research Methods* (12th ed.). McGraw-Hill Education.
3. **Creswell, John W. (2014).** *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.
4. **Yin, Robert K. (2018).** *Case Study Research and Applications: Design and Methods* (6th ed.). SAGE Publications.
5. **Miles, Matthew B., Huberman, A. Michael, & Saldaña, Johnny. (2014).** *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). SAGE Publications.
6. **Babbie, Earl. (2016).** *The Practice of Social Research* (14th ed.). Cengage Learning.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Economic Issues of Pakistan**  
**Course No. ECO 706**

**Course Description:**

This course examines the key issues and challenges facing Pakistan's economy. It provides MPhil students with an in-depth understanding of the historical, political, and economic factors that shape the country's economic landscape. The course covers topics such as poverty, inequality, unemployment, fiscal policy, monetary policy, trade, and economic growth, with an emphasis on empirical analysis and policy evaluation.

**Course Topics:**

- 1. Introduction to Pakistan's Economy**
  - Overview of Pakistan's economic history
  - Key economic indicators and performance measures
  - Structural characteristics of the economy
- 2. Poverty and Inequality**
  - Measurement and trends of poverty in Pakistan
  - Socio-economic factors contributing to inequality
  - Government policies aimed at poverty alleviation
- 3. Unemployment and Labor Market Issues**
  - Types and causes of unemployment in Pakistan
  - Labor force participation and demographics
  - Policy responses to unemployment
- 4. Fiscal Policy and Public Debt**
  - Overview of fiscal policy in Pakistan
  - Revenue generation and tax structure
  - Analysis of public debt and sustainability
- 5. Monetary Policy and Inflation**
  - Role of the State Bank of Pakistan in monetary policy
  - Causes and consequences of inflation
  - Recent monetary policy measures and their impacts
- 6. Economic Growth and Development**
  - Trends in GDP growth and sectors contributing to growth
  - Role of human capital and education in development
  - Challenges to sustainable economic growth
- 7. Trade and External Sector Issues**
  - Overview of Pakistan's trade policy and performance
  - Balance of payments and exchange rate dynamics
  - Regional trade agreements and economic integration
- 8. Energy Sector Challenges**
  - Overview of Pakistan's energy crisis
  - Energy production, consumption, and policy responses
  - Renewable energy prospects and challenges

## 9. Agricultural Sector Issues

- Importance of agriculture in Pakistan's economy
- Challenges in agricultural productivity and food security
- Agricultural policies and reforms

## 10. Industrial Development and Policy

- Overview of industrialization in Pakistan
- Challenges facing the manufacturing sector
- Role of small and medium enterprises (SMEs)

## 11. Health and Education in Economic Development

- Impact of health on productivity and economic growth
- Education policy and human capital development
- Social welfare programs and their effectiveness

## 12. Political Economy of Pakistan

- The role of governance and institutions in economic policy
- Political stability and its impact on economic performance
- Corruption and its economic implications

## 13. Regional Disparities and Development

- Economic disparities among different regions of Pakistan
- Policies to address regional inequalities
- Case studies of successful regional development initiatives

## 14. Current Economic Challenges and Policy Responses

- Analysis of recent economic challenges (e.g., COVID-19 pandemic)
- Government and institutional responses to economic crises
- Future prospects for Pakistan's economy

## 15. Future Directions for Economic Policy

- Long-term strategies for sustainable economic growth
- Policy recommendations for addressing key issues
- The role of international organizations and foreign aid

### Textbooks:

1. **Siddiqui, R. (2020).** *Pakistan's Economy: A Global Perspective*. Oxford University Press.
2. **Zaidi, S. A. (2015).** *Issues in Pakistan's Economy*. Oxford University Press.

### Reference Books:

1. **Ghulam, S. (2012).** *Economic Growth and Development in Pakistan*. Springer.
2. **Mumtaz, A. & Khawaja, A. I. (2016).** *Pakistan: The Economy of a Developing Country*. Routledge.
3. **Khan, M. A. (2019).** *The Economy of Pakistan: Performance and Policies*. Sage Publications.
4. **Qureshi, M. S. (2014).** *Poverty, Inequality and Economic Development in Pakistan*. Palgrave Macmillan.
5. **Khan, H. (2018).** *Understanding Pakistan's Economic Challenges*. Cambridge University Press.

6. **Government of Pakistan. (Various Reports).** *Economic Survey of Pakistan.* Ministry of Finance.
7. **State Bank of Pakistan. (Various Publications).** *Annual Reports and Policy Statements.* State Bank of Pakistan.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Human Resource Development**  
**Course No. ###**

**Course Description:**

This course provides MPhil students with a comprehensive understanding of Human Resource Development (HRD) and its significance in organizational success. It covers the theories, principles, and practices of HRD, focusing on training, learning, and development strategies that enhance employee performance and organizational effectiveness. The course also addresses the role of HRD in promoting continuous learning, career development, and workforce planning in a dynamic economic environment.

**Course Topics:**

- 1. Introduction to Human Resource Development**
  - Definition and scope of HRD
  - Importance of HRD in organizations
  - HRD's role in achieving organizational goals
- 2. Theoretical Framework of HRD**
  - Learning theories: behaviorism, cognitivism, and constructivism
  - Adult learning principles (Andragogy)
  - Competency-based HRD
- 3. Training and Development**
  - Training needs assessment: methods and tools
  - Designing effective training programs
  - Evaluation of training effectiveness
- 4. Career Development and Planning**
  - Concepts of career development
  - Individual career planning vs. organizational career development
  - Role of mentorship and coaching in career growth
- 5. Organizational Development**
  - Understanding organizational culture and change
  - Strategies for organizational development
  - The role of HRD in managing organizational change
- 6. Learning Organizations**
  - Characteristics of learning organizations
  - Creating a culture of continuous learning
  - Knowledge management and its impact on HRD
- 7. Performance Management Systems**
  - Components of effective performance management
  - Goal setting and performance appraisal
  - Linking performance management with HRD initiatives
- 8. Strategic Human Resource Development**
  - Aligning HRD with business strategy
  - Role of HRD in organizational performance

- Measuring the impact of HRD on organizational outcomes
- 9. **Diversity and Inclusion in HRD**
  - Importance of diversity in the workplace
  - Strategies for promoting inclusion and equity
  - Addressing biases and barriers in HRD
- 10. **Future Trends in Human Resource Development**
  - Impact of technology on HRD (e-learning, online training)
  - Globalization and its effects on HRD practices
  - The future of work and emerging HRD challenges

### **Recommended Textbooks:**

1. **Noe, R. A. (2017).** *Employee Training and Development*. McGraw-Hill Education.
2. **Goldstein, I. L., & Ford, J. K. (2018).** *Training in Organizations: An Organizational Level Perspective*. Cengage Learning.
3. **Werner, J. M., & DeSimone, R. L. (2012).** *Human Resource Development*. Cengage Learning.

### **Reference Books:**

1. **Armstrong, M. (2016).** *Armstrong's Handbook of Human Resource Management Practice*. Kogan Page.
2. **Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006).** *Evaluating Training Programs: The Four Levels*. Berrett-Koehler Publishers.
3. **Noe, R. A. (2013).** *Fundamentals of Human Resource Management*. McGraw-Hill Education.
4. **Bratton, J., & Gold, J. (2017).** *Human Resource Management: Theory and Practice*. Palgrave Macmillan.
5. **Ulrich, D., & Dulebohn, J. H. (2015).** *Are We There Yet? What's Next for HR?* Human Resource Management.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Environmental Economics**  
**Course No. ###**

**Course Description:**

This course provides MPhil students with a comprehensive understanding of environment and natural resource management in economics, covering the foundational aspects, environmental problems, project appraisal, and natural resource exploitation.

**Course Topics:**

- 1. An introduction to environmental economics**
  - Three themes
  - The emergence of environmental economics
  - Fundamental issues in the economic approach to environmental issues
- 2. Ethics, economics and the environment**
  - Naturalist moral philosophies
  - Libertarian moral philosophy
  - Utilitarianism
  - Criticism of utilitarianism
- 3. Origins of sustainability problem**
  - Economy-environment interdependence
  - The drivers of environmental impact
  - Poverty and inequality
  - Limits to growth
  - The pursuit of sustainable development
- 4. Welfare economics and the environment**
  - Efficiency and optimality
  - Allocation in a market economy
  - Market failure, public policy and the environment
- 5. Environmental pollution**
  - Pollution control targets
  - Modelling pollution mechanisms
  - Pollution flows, pollution stocks, and pollution damage
  - The efficient level of pollution
  - A static model of efficient flow pollution
  - Modified efficient targets
  - Efficient levels of emissions of stock pollutants
  - Pollution control where damages depend on location of the emissions
  - Estimating the cost of abating pollution
- 6. Pollution control: Instruments**
  - Criteria for choice of pollution control instruments
  - Cost efficiency and cost-effective pollution abatement instruments
  - Instruments for achieving pollution targets
  - Economic incentive instruments
- 7. Pollution policy with imperfect information**
  - Difficulties in identifying pollution targets
  - Sustainability based approaches to pollution targets
  - Transactions costs
  - Environmental regulations
- 8. Economy-wide modelling**

- Input-output analysis
- Environmental input-output analysis
- Costs and prices
- Computable general equilibrium models
- 9. International environmental problems**
  - International environmental problems
  - Game theory analysis
  - Acid rain pollution
  - Stratospheric ozone depletion
  - The greenhouse effects
  - International trade and the environment
- 10. Cost benefit analysis**
  - Intertemporal welfare economics
  - Project appraisal
  - Cost benefit analysis and the environment
- 11. Valuing the environment**
  - Dimensions of value
  - The theory of environmental valuation
  - Environmental valuation techniques
  - The travel cost method
  - Contingent valuation
- 12. Irreversibility, risk and uncertainty**
  - Option price and option value
  - Risk and irreversibility
  - A safe minimum standard of conservation
- 13. Natural resource exploitation**
  - The efficient and optimal use of natural resources
  - A simple optimal resource depletion model
  - Extending the model to incorporate extractions costs and renewable resources
  - A numerical application: oil extraction and global optimal consumption
- 14. Non-renewable resources**
  - A non-renewable resource two-period model
  - A non-renewable resource multi-period model
  - Non-renewable resource extraction in perfectly competitive markets
  - Resource extraction in a monopolistic market
- 15. Renewable resources**
  - Biological growth processes
  - Steady-state harvests
  - Socially efficient resource harvesting
  - A safe minimum standard of conservation
  - Renewable resources policy
- 16. Forest resources**
  - The current state of world forest resources
  - Characteristics of forest resources
  - Commercial plantation forestry
  - Multiple-use forestry
  - Socially and privately optimal multiple-use plantation forestry
  - Natural forests and deforestation
  - Government and forest resources
- 17. Accounting for the environment**
  - Environmental indicators

- Environmental accounting theory
- Environmental accounting practice
- Sustainability indicators

**Textbooks:**

1. Tietenberg, T., & Lewis, L. (2018). *Environmental and natural resource economics*. Routledge.
2. Perman, R. (2003). *Natural resource and environmental economics*. Pearson Education.
3. Hanley, N., Shogren, J. F., & White, B. (1997). *Environmental economics: in theory and practice* (pp. 179-180). London: Macmillan.

**Reference Books:**

1. Pearce, D. W., & Turner, R. K. (1989). *Economics of natural resources and the environment*. Johns Hopkins University Press.
2. Sterner, T., & Coria, J. (2013). *Policy instruments for environmental and natural resource management*. Routledge.
3. Munasinghe, M. (1993). *Environmental economics and sustainable development* (Vol. 3). World Bank Publications.
4. Siebert, H., & Siebert, H. (1981). *Economics of the Environment* (pp. 16-17). Massachusetts: Lexington Books.
5. Kumar, P. N., Arivarasan, S., & Anbarassan, A. (2022). *Environmental Economics*. AG Publishing House (AGPH Books).

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Monetary Policy Analysis**  
**Course No. ###**

**Course Description:** This course provides MPhil students with a comprehensive understanding of monetary policy, focusing on the theoretical foundations, policy instruments, and real-world applications. It covers the macroeconomic implications of monetary policy, central banking practices, inflation targeting, and the role of monetary policy in financial stability. Emphasis will be placed on both advanced theoretical analysis and empirical case studies relevant to developing and developed economies.

**Course Topics:**

- 1. Introduction to Monetary Policy**
  - Definition and scope of monetary policy
  - Objectives of monetary policy
  - The role of central banks in monetary policy
  - Historical evolution of monetary policy frameworks
- 2. Monetary Policy Instruments**
  - Open market operations
  - Discount rates and reserve requirements
  - Interest rate targeting
  - Quantitative easing and unconventional tools
  - Transmission mechanisms of monetary policy
- 3. Theories of Monetary Policy**
  - Classical and Keynesian views on monetary policy
  - The Quantity Theory of Money
  - The IS-LM Model in a monetary context
  - The Phillips Curve and its implications for inflation and unemployment
- 4. Inflation and Monetary Policy**
  - The causes and consequences of inflation
  - Inflation targeting as a policy strategy
  - The role of expectations in inflation control
  - Measuring inflation and the impact of inflation expectations
  - The trade-off between inflation and unemployment (short-term vs. long-term)
- 5. Monetary Policy and Economic Growth**
  - The relationship between monetary policy and long-term growth
  - Endogenous growth theory and monetary policy
  - Policy challenges in fostering economic growth
- 6. Central Banking and Monetary Policy Frameworks**
  - The role of central banks in economic stabilization
  - Independence of central banks
  - Case studies: Federal Reserve, European Central Bank, and State Bank of Pakistan
  - The debate over central bank transparency and accountability
- 7. Monetary Policy Rules vs. Discretion**

- Rules-based vs. discretionary monetary policy
  - The Taylor Rule and its application
  - Time consistency problems in monetary policy
  - Policy credibility and commitment
- 8. Exchange Rates and Monetary Policy**
- The impact of exchange rate regimes on monetary policy
  - Fixed vs. flexible exchange rate systems
  - Monetary policy in open economies: The Mundell-Fleming Model
  - Currency crises and their management
- 9. Monetary Policy in Developing Economies**
- Challenges specific to monetary policy in developing countries
  - Monetary policy and financial sector development
  - Inflation targeting in emerging markets
  - Case studies: Pakistan, Brazil, and India
- 10. Financial Stability and Monetary Policy**
- The role of monetary policy in preventing financial crises
  - Macroprudential policies and tools
  - The relationship between monetary policy and financial stability
  - Monetary policy in the aftermath of financial crises
- 11. Monetary Policy During Economic Shocks**
- Policy responses to supply and demand shocks
  - Monetary policy during pandemics and global recessions
  - The role of central banks in crisis management
  - Quantitative easing and its long-term impacts
- 12. Empirical Methods in Monetary Policy Analysis**
- Measuring the impact of monetary policy
  - Time series models: VAR and VECM in monetary economics
  - Event studies of central bank announcements
  - Case studies: Policy responses to global economic crises
- 13. Future of Monetary Policy**
- Challenges in a low-interest rate environment
  - The rise of digital currencies and implications for monetary policy
  - Climate change and its impact on monetary policy frameworks
  - Global coordination of monetary policies

**Textbooks:**

1. Mishkin, F. S. (2019). *The Economics of Money, Banking, and Financial Markets*. Pearson.
2. Walsh, C. E. (2017). *Monetary Theory and Policy*. MIT Press.
3. Woodford, M. (2003). *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton University Press.

**Reference Books:**

1. Taylor, J. B. (1999). *Monetary Policy Rules*. University of Chicago Press.

2. Blanchard, O. (2021). *Macroeconomics*. Pearson.
3. Bernanke, B., & Blinder, A. (1992). *The Federal Funds Rate and the Channels of Monetary Transmission*. American Economic Review.
4. Svensson, L. E. O. (1997). *Inflation Forecast Targeting: Implementing and Monitoring Inflation Targets*. European Economic Review.
5. Friedman, M., & Schwartz, A. J. (1963). *A Monetary History of the United States, 1867-1960*. Princeton University Press.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: International Economic Issues**  
**Course No. ###**

**Course Description:**

This course provides an in-depth analysis of contemporary international economic issues, exploring the dynamics of global trade, finance, and development. Students will examine the impact of globalization, trade policies, international organizations, and economic crises on national and global economies. The course aims to equip students with the analytical tools necessary to understand and address complex economic challenges in an interconnected world.

**Course Objectives:**

- Understand the fundamental concepts of international economics.
- Analyze the impact of globalization on national economies.
- Evaluate the role of international organizations in shaping economic policies.
- Assess current international economic issues and their implications for global stability and development.

**Course Topics:**

1. **Introduction to International Economics**
  - Overview of international economics
  - Key concepts: trade, finance, and development
  - Historical context of international economic relations
2. **Globalization and Its Impact**
  - Definition and dimensions of globalization
  - Economic, social, and political effects of globalization
  - Case studies of globalization in different regions
3. **International Trade Theories**
  - Comparative advantage and trade benefits
  - Heckscher-Ohlin theory
  - New trade theories and their implications
4. **Trade Policies and Agreements**
  - Tariffs, quotas, and trade barriers
  - Regional trade agreements (e.g., NAFTA, EU, ASEAN)
  - The role of the World Trade Organization (WTO)
5. **International Finance and Currency Markets**
  - Foreign exchange markets and exchange rates
  - Balance of payments and its components
  - The role of international financial institutions (IMF, World Bank)
6. **Economic Development and Global Inequality**
  - Theories of economic development
  - Measuring development: GDP, HDI, and other indicators
  - Global inequality and its economic implications

7. **International Economic Crises**
  - Causes and consequences of economic crises
  - Case studies: The 2008 financial crisis, Eurozone crisis
  - Policy responses to economic crises
8. **Characteristics of Emerging Markets**
  - Challenges and opportunities for development
  - The role of foreign direct investment (FDI)
9. **Trade and Environmental Issues**
  - The relationship between trade and the environment
  - Sustainable development and trade policies
  - International agreements on environmental protection
10. **Current International Economic Issues**
  - Analysis of contemporary issues (e.g., trade wars, pandemics)
  - The impact of technology on international economics
  - Future trends in international economic relations
11. **Policy Responses to International Economic Issues**
  - National vs. international policy responses
  - The role of governments and international organizations
  - Case studies of successful and unsuccessful policies
12. **Review and Final Assessment**
  - Recap of key concepts
  - Discussion of final projects or assessments
  - Preparation for final exam

### **Recommended Textbooks:**

1. **Krugman, Paul R., Obstfeld, Maurice, and Melitz, Marc J. (2018).** *International Economics: Theory and Policy (11th Edition)*. Pearson.
2. **Feenstra, Robert C., and Taylor, Alan M. (2021).** *International Economics (5th Edition)*. Worth Publishers.
3. **Stiglitz, Joseph E. (2017).** *Globalization and Its Discontents Revisited: Anti-Globalization in the Era of Trump*. W.W. Norton & Company.

### **Reference Books:**

1. **Rodrik, Dani. (2018).** *Straight Talk on Trade: Ideas for a Sane World Economy*. Princeton University Press.
2. **Acemoglu, Daron, and Robinson, James A. (2012).** *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Business.
3. **Klein, Matthew C., and Pettis, Michael. (2020).** *Trade Wars Are Class Wars: How Rising Inequality Distorts the Global Economy and Threatens International Peace*. Yale University Press.
4. **Baldwin, Richard E. (2016).** *The Great Convergence: Information Technology and the New Globalization*. Belknap Press.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Urban Economics**  
**Course No. ###**

**Course Description:** This course provides MPhil students with an in-depth understanding of urban economics, focusing on the economic analysis of cities, the role of urban areas in economic development, and the spatial distribution of activities. It covers theoretical foundations, empirical case studies, and policy approaches to managing urbanization challenges such as housing, transportation, land use, and urban poverty.

**Course Topics:**

- 1. Introduction to Urban Economics**
  - Definition and scope of urban economics
  - The role of cities in economic development
  - Historical evolution of cities
  - Theories of urbanization and city formation
- 2. Urbanization and Economic Growth**
  - Urbanization trends in developed and developing countries
  - The economic benefits of agglomeration
  - The relationship between urbanization and economic growth
  - Case studies: Urbanization in South Asia and Latin America
- 3. Location Theory and Land Use**
  - Central place theory and the formation of cities
  - The monocentric city model
  - Land rent and land use patterns
  - Zoning and urban land markets
- 4. Urban Land Markets and Housing**
  - Supply and demand in urban housing markets
  - Housing affordability and the role of government
  - The economics of slums and informal housing
  - Urban housing policy: Case studies from Pakistan and India
- 5. Urban Transportation Economics**
  - The economics of transportation networks in cities
  - Traffic congestion and its externalities
  - Public transportation and infrastructure investment
  - Urban transport policy: Congestion pricing, subsidies, and toll roads
- 6. Agglomeration Economies and City Growth**
  - Sources of agglomeration economies
  - Localization vs. urbanization economies
  - The role of technology and innovation in city growth
  - The growth of mega-cities and their challenges
- 7. Urban Spatial Structure**
  - The spatial distribution of economic activities in cities
  - Bid-rent theory and urban land use
  - Suburbanization and urban sprawl

- The economics of skyscrapers and high-density development
- 8. Urban Poverty and Inequality**
  - The economic causes of urban poverty
  - Spatial inequality and the concentration of poverty in cities
  - The role of education, health, and social services in reducing urban poverty
  - Policies to address urban poverty: Case studies from Brazil and South Africa
- 9. Public Goods and Externalities in Urban Areas**
  - The provision of public goods in cities
  - Urban externalities: Crime, pollution, and noise
  - The economics of green spaces and urban environment quality
  - Environmental challenges in urban planning
- 10. Urban Policy and Governance**
  - The role of local governments in urban management
  - Urban fiscal policy: Revenue generation and expenditure
  - Public-private partnerships in urban infrastructure development
  - Urban governance models: Decentralization and regional planning
- 11. Housing Markets and Real Estate Economics**
  - The role of real estate in urban development
  - Dynamics of housing prices and property bubbles
  - Rent control and its economic effects
  - Urban housing markets in emerging economies
- 12. Urbanization and Infrastructure Development**
  - The economics of urban infrastructure: Roads, utilities, and services
  - Financing urban infrastructure projects
  - Infrastructure and regional development: Case studies from China and Africa
  - Challenges of maintaining urban infrastructure in developing countries
- 13. Urban Crime and Safety**
  - Economic models of urban crime
  - The spatial distribution of crime in cities
  - The cost of crime and its impact on urban development
  - Policy responses to urban crime
- 14. Migration and Urban Labor Markets**
  - Rural-urban migration: Causes and consequences
  - The informal economy in cities
  - The impact of immigration on urban labor markets
  - Policy approaches to managing urban migration
- 15. Sustainable Urban Development**
  - Concepts of sustainability in urban planning
  - Smart cities and the role of technology in sustainable urban development
  - Climate change and urban resilience
  - Sustainable urban policies: Case studies from Europe and Asia
- 16. Future of Cities**
  - The future of urbanization in a globalized world
  - Challenges of urban governance in the 21st century
  - The role of technology in shaping future cities
  - Global case studies of innovative urban solutions

**Textbooks:**

1. O'Sullivan, A. (2018). *Urban Economics*. McGraw-Hill Education.
2. Brueckner, J. K. (2011). *Lectures on Urban Economics*. MIT Press.
3. Glaeser, E. L. (2011). *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier*. Penguin.

**Reference Books:**

1. Mills, E. S., & Hamilton, B. W. (1989). *Urban Economics*. HarperCollins.
2. Fujita, M. (1989). *Urban Economic Theory: Land Use and City Size*. Cambridge University Press.
3. Quigley, J. M. (2008). *Urbanization and Economic Growth*. World Bank.
4. Henderson, J. V. (2005). *Urbanization and Growth*. University of Chicago Press.
5. Duranton, G., & Puga, D. (2004). *Micro-Foundations of Urban Agglomeration Economies*. In *Handbook of Regional and Urban Economics* (Vol. 4). Elsevier.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Agricultural Economics**  
**Course No. ###**

**Course Description:**

This course provides MPhil students with a comprehensive understanding of the principles and practices of agricultural economics. It explores the economic aspects of agriculture, including production, consumption, marketing, and policy analysis. The course emphasizes the role of agriculture in economic development, food security, and sustainable resource management. Students will learn to apply economic theories and analytical tools to real-world agricultural issues.

**Course Topics:**

1. **Introduction to Agricultural Economics**
  - Definition and scope of agricultural economics
  - Importance of agriculture in the economy
  - Overview of agricultural systems and structures
2. **Economic Principles in Agriculture**
  - Microeconomic principles applied to agriculture
  - Demand and supply analysis in agricultural markets
  - Price determination and market equilibrium
3. **Production Economics**
  - Production functions and the law of diminishing returns
  - Factors of production in agriculture
  - Cost concepts and production efficiency
4. **Farm Management Economics**
  - Farm planning and budgeting
  - Risk management in agriculture
  - Decision-making processes in farm management
5. **Agricultural Marketing**
  - Functions and importance of agricultural marketing
  - Market structure and conduct in agricultural markets
  - Marketing channels and pricing strategies
6. **Rural Development and Agricultural Policy**
  - The role of agriculture in rural development
  - Agricultural policies and their impacts
  - Case studies of successful agricultural development programs
7. **Food Security and Nutrition**
  - Concepts of food security and food sovereignty
  - The relationship between agriculture and nutrition
  - Policy measures to enhance food security
8. **Agricultural Finance and Credit**

- Sources of agricultural finance
- Role of microfinance in agriculture
- Evaluating financial options for farmers
- 9. **Sustainable Agriculture**
  - Principles of sustainable agricultural practices
  - Environmental impact of agricultural activities
  - Strategies for promoting sustainable farming
- 10. **International Trade in Agriculture**
  - The role of agriculture in international trade
  - Trade policies and their effects on agriculture
  - Global agricultural markets and trends
- 11. **Agricultural Technology and Innovation**
  - The impact of technology on agricultural productivity
  - Innovation in agricultural practices and techniques
  - Role of research and development in agriculture
- 12. **Challenges and Opportunities in Agriculture**
  - Current issues facing the agricultural sector (climate change, globalization)
  - Opportunities for growth and development in agriculture
  - Future directions for agricultural policy and practice

### **Recommended Textbooks:**

1. **Hodges, A. W., & Haynes, J. (2015).** *Agricultural Economics: Principles and Applications*. Wiley.
2. **Routh, S. K. (2017).** *Agricultural Economics: Theory and Practice*. Cambridge University Press.
3. **Cramer, G. L., & Jensen, L. R. (2013).** *Agricultural Economics*. Prentice Hall.

### **Reference Books:**

1. **Gonzalez, J. E. (2019).** *Principles of Agricultural Economics*. Routledge.
2. **Penson, J. B., et al. (2016).** *Introduction to Agricultural Economics*. Pearson.
3. **Sullivan, P., & Wolf, S. (2018).** *Farm Management: The Economics of Agriculture*. Oxford University Press.
4. **Kelley, T. H. (2010).** *Agricultural Finance: Fundamentals and Practice*. Wiley.
5. **Dey, M. (2019).** *Agricultural Marketing and Consumer Behavior in a Changing World*. Springer.
6. **Pingali, P. L., & Roger, J. (2008).** *Global Agricultural Performance: The Role of Public Policy*. Academic Press.

**Barker, R., & M. J. (2008).** *Food Security: A Global Perspective*. CABI Publishing.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Industrial Economics**  
**Course No. ###**

**Course Description:**

This course provides an in-depth exploration of the structure, conduct, and performance of industries and firms. It examines how different market structures influence business strategies and economic outcomes, focusing on the role of government and policy in shaping industrial behavior.

**Course Objectives:**

- To understand the fundamental concepts of industrial organization.
- To analyze different market structures and their implications for firm behavior.
- To evaluate the impact of government policies on industries.
- To apply economic theories to real-world industrial scenarios.

**Course Topics:**

1. **Introduction to Industrial Economics**
  - Overview of industrial economics
  - Importance and applications in real-world scenarios
2. **Market Structures**
  - Perfect competition
  - Monopoly
  - Oligopoly
  - Monopolistic competition
3. **Firm Behavior and Pricing Strategies**
  - Pricing strategies in different market structures
  - Price discrimination
  - Product differentiation
4. **Game Theory in Industrial Economics**
  - Introduction to game theory
  - Strategic behavior among firms
  - Nash equilibrium and its applications
5. **Market Power and Collusion**
  - Cournot model
  - Dynamic price competition and repeated interaction
  - Collusion and cartel stability
  - Theories of price wars
  - Empirical analysis of market power and collusive behavior
6. **Market Power and Antitrust Policy**
  - Definition of market power
  - Antitrust laws and regulations

- Case studies of antitrust actions
- 7. **Innovation and Technology in Industries**
  - Role of innovation in industrial performance
  - Technology adoption and diffusion
  - Intellectual property rights
- 8. **Regulation and Deregulation**
  - Economic regulation vs. social regulation
  - Effects of deregulation on industries
  - Case studies of regulated industries
- 9. **Globalization and Industrial Economics**
  - Impact of globalization on industries
  - Trade policies and their effects on domestic industries
  - Multinational corporations
- 10. **Labor Markets and Industrial Relations**
  - Labor market dynamics in different industries
  - Role of unions and collective bargaining
  - Employment policies and their economic implications
- 11. **Environmental Economics and Industry**
  - Environmental regulations and their impact on industries
  - Sustainable practices in industrial operations
  - Case studies on environmental policies
- 12. **Current Trends in Industrial Economics**
  - Digital economy and its implications for industries
  - The rise of e-commerce and its impact on traditional industries
  - Future challenges in industrial economics

### **Textbooks:**

1. **Tirole, Jean.** *The Theory of Industrial Organization*. MIT Press, 1988.
2. **Lipczynski, J., Wilson, J., & Goddard, J.** *Industrial Organization: Competition, Strategy, Policy*. 5th ed., Pearson, 2017.
3. **Martin, Stephen.** *Industrial Organization in Context*. Oxford University Press, 2010.
4. **Porter, Michael E.** *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. Free Press, 1980

### **Reference Books:**

1. **Paul, F.** *Industrial Economics: Issues and Perspectives*. Routledge, 2000.
2. **Phlips, Louis.** *Applied Industrial Economics*. Cambridge University Press, 2011.
3. **Carlton, Dennis W., & Perloff, Jeffrey M.** *Modern Industrial Organization*. 4th ed., Pearson, 2015.
4. **Cabral, Luis M. B.** *Introduction to Industrial Organization*. 2nd ed., MIT Press, 2017.

**Motta, Massimo.** *Competition Policy: Theory and Practice*. Cambridge University Press, 2004.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Migration Economics**  
**Course No. ###**

**Course Description:**

This course provides an in-depth exploration of the principles, mechanisms, and operations of Islamic banking and finance. Students will learn about the unique foundations of the Islamic financial system, its prohibition of interest (riba), risk-sharing frameworks, and ethical principles that differentiate it from conventional finance. The course aims to enable students to critically assess the current landscape of Islamic banking and finance globally.

**Course Topics:**

**1. Introduction to Migration Economics**

- Overview of migration trends
- Historical perspectives on migration
- Migration in the context of globalization

**2. Theories of Migration I: Microeconomic Models**

- Neo-classical economics and migration
- Human capital theory and migration decision-making
- New economics of labor migration

**3. Theories of Migration II: Macroeconomic Models**

- Dual labor market theory
- World systems theory
- Push and pull factors in migration

**4. Migration and Labor Markets**

- Impact of migration on wages and employment
- Labor market segmentation
- Skill-biased migration and labor market outcomes

**5. Migration and Income Distribution**

- Distributional effects of migration in receiving countries
- Inequality and migration
- Empirical studies on wage gaps and employment outcomes

**6. Remittances and Development**

- Role of remittances in economic development
- Microeconomic and macroeconomic effects of remittances
- Policy implications for remittance flows

**7. Brain Drain and High-Skilled Migration**

- Causes and consequences of brain drain
- Migration of highly skilled workers and its impact on home countries
- Brain circulation and return migration

**8. Forced Migration and Refugee Economics**

- Economic impact of refugee flows on host countries

- Humanitarian aspects and economic integration of refugees
- Case studies: Syrian refugee crisis, Rohingya crisis, etc.

#### 9. Immigration Policies and Labor Markets

- Immigration restrictions and economic implications
- Legal vs. undocumented migration
- Labor market integration of migrants and refugees

#### 10. Migration and Urbanization

- Urban economic development and migration
- Rural-urban migration and its effects on city economies
- Policy issues in urban migration

#### 11. Empirical Analysis of Migration Economics

- Econometric methods in migration research
- Data sources and challenges
- Empirical studies: analyzing migration flows and impacts

### TEXTBOOKS

1. **Borjas, G. J.** (2014). *Immigration Economics*. Harvard University Press.
2. **Bhagwati, J., & Hanson, G.** (Eds.). (2009). *International Migration: Economic Causes, Consequences, and Evaluation*. Edward Elgar Publishing.

### REFERENCE MATERIAL:

1. **Massey, D. S., et al.** (1998). *Worlds in Motion: Understanding International Migration at the End of the Millennium*. Oxford University Press.
2. **Chiswick, B. R., & Miller, P. W.** (2014). *Handbook of the Economics of International Migration*. North Holland.
3. **De Haas, H., Castles, S., & Miller, M. J.** (2020). *The Age of Migration: International Population Movements in the Modern World*. Red Globe Press.
4. **Zimmermann, K. F.** (2005). *The Economics of Migration*. Edward Elgar Publishing.
5. **Hegre, H., & Strand, H.** (Eds.). (2015). *Migration and Globalization: The Handbook of Globalization, Governance, and Public Administration*. Routledge.
6. **Cooke, T. J.** (2013). *The Economic Geography of Cross-Border Migration*. Routledge.
7. **Fodors, F., & Langhammer, R. J.** (Eds.). (2006). *Labour Mobility and the World Economy*. Springer.
8. **Brettell, C., & Hollifield, J. F.** (Eds.). (2020). *Migration Theory: Talking Across Disciplines* (3rd ed.). Routledge.
9. **Stark, O.** (1991). *The New Economics of Labour Migration*. Basil Blackwell.
10. **Tamas, K., & Palme, J.** (Eds.). (2006). *Globalizing Migration Regimes: New Challenges to Transnational Cooperation*. Ashgate Publishing.

\* Additional journal articles and empirical studies will be provided throughout the course.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Health Economics**  
**Course No. ###**

**Course Description:**

This course is designed to provide MPhil students with advanced insights into health economics. The focus is on economic theory, empirical research, and real-world applications related to health care systems, policy design, and management. The course addresses both local and global health challenges and encourages the application of economic principles to health care issues. Emphasis is also placed on the evaluation of government interventions, health insurance markets, and the pharmaceutical industry using contemporary analytical tools.

**Course Topics:**

**1. Basic Health Care Economic Tools and Institutions**

- **Introduction to Health Economics:** History, scope, and applications
- **Health and Medical Care: An Economic Perspective:** Scarcity, efficiency, and choice
- **Cost-benefit and Cost-effectiveness Analysis:** Evaluating health care decisions
- **Health Care Systems:** Comparative analysis of different national health care systems
- **Demand for Medical Services:** Elasticity of demand, moral hazard, and principal-agent problems
- **Demand for Health Insurance:** Risk aversion, adverse selection, and moral hazard
- **Medical Care Production and Costs:** Production functions, economies of scale, and technological change
- **Market Structure and Competition:** Perfect competition, monopolistic competition, and government intervention

**2. The Role of Government in Health Economics**

- **Government Intervention in Health Care:** Equity, efficiency, and public health goals
- **Public Health Insurance Systems:** Single-payer vs. multi-payer systems
- **Regulation and Pricing of Health Care:** Price controls, subsidies, and public provision
- **Government as a Health Provider and Insurer:** Role in low- and middle-income countries
- **Health Care Equity and Access:** Universal health coverage, inequality in access, and health disparities

**3. Advanced Topics in Health Economics**

- **Health Capital and Human Capital Theory:** Investment in health, education, and labor market outcomes
- **Health Production Functions:** Inputs to health production and the role of lifestyle choices
- **Behavioral Economics in Health:** Psychological factors influencing health behaviors

- **Health Externalities and Public Goods:** Vaccination, herd immunity, and market failures
- **Health Economics and Aging:** The economics of aging populations and long-term care
- **Health and Environmental Economics:** Pollution, climate change, and health outcomes

#### 4. Industry Studies in Health Care

- **Private Health Insurance Markets:** Structure, competition, and market failures
- **Physician and Hospital Markets:** Pricing, regulation, and quality of care
- **Pharmaceutical Industry:** Drug development, patent laws, and pricing strategies
- **Health Technology Assessment (HTA):** Evaluating the impact of new technologies on health outcomes
- **The Role of Innovation in Health Care:** Medical technology, biotechnology, and digital health tools

#### 5. Global Health and International Comparisons

- **Global Health Systems:** Comparative analysis of health care systems in developed and developing countries
- **Global Health Challenges:** Pandemics, health inequalities, and international health policy
- **International Health Economics:** Financing global health initiatives, global pharmaceutical trade
- **Health Care in Developing Economies:** Challenges and reforms in resource-constrained settings

#### 6. Health Care Reform

- **Health Care System Performance:** International comparisons of health outcomes and efficiency
- **Health Sector Reform in Pakistan:** Challenges, opportunities, and future directions
- **Universal Health Coverage (UHC):** Financing strategies and policy challenges in Pakistan and globally
- **Public vs. Private Health Care:** Market-oriented reforms and privatization in health systems
- **Economic Evaluation of Health Policies:** Policy impact assessment using econometrics and simulation techniques

#### 7. Health Data and Research Methods

- **Empirical Research in Health Economics:** Data sources, econometric techniques, and interpretation
- **Cost-Effectiveness and Economic Evaluation Models:** Decision trees, Markov models, and simulation techniques
- **Econometrics of Health Outcomes:** Causal inference, randomized control trials, and observational studies

- **Big Data and Health Analytics:** Machine learning and AI in health care research
- **Health Impact Assessment (HIA):** Methodologies for evaluating the health impact of policies and interventions

## 8. Ethics in Health Economics

- **Ethical Considerations in Health Care Allocation:** Equity, access, and prioritization of health services
- **Ethical Dilemmas in Health Policy:** End-of-life care, rationing, and health care financing
- **Economic Analysis of Bioethics:** Pricing life-saving treatments, organ markets, and the ethics of medical research

### Textbooks:

1. **Rexford E. Santerre & Stephen P. Neun** (2021). *Health Economics: Theories, Insights, and Industry Studies* (5th edition). Cengage Learning.
2. **Paul J. Feldstein** (2022). *Health Care Economics* (8th edition). Cengage Learning.
3. **Stephen Morris, Nancy Devlin, David Parkin, & Anne Spencer** (2019). *Economic Analysis in Health Care* (3rd edition). Wiley.

### Reference Books:

1. **Bhattacharya, Jay, Timothy Hyde, & Peter Tu** (2021). *Health Economics* (3rd edition). Palgrave Macmillan.
2. **Frank A. Sloan & Chee-Ruey Hsieh** (2017). *Health Economics* (2nd edition). MIT Press.
3. **Michael Drummond, Mark Sculpher, Karl Claxton, Greg Stoddart, & George Torrance** (2015). *Methods for the Economic Evaluation of Health Care Programmes* (4th edition). Oxford University Press.
4. **Culyer, A. J.** (2014). *The Dictionary of Health Economics* (3rd edition). Edward Elgar Publishing.
5. **Folland, Sherman, Allen Goodman, & Miron Stano** (2023). *The Economics of Health and Health Care* (8th edition). Routledge.
6. **Normand, Charles & Axelrad, Robert** (2020). *The Economics of Public Health: Insights from Theory and Practice* (2nd edition). Oxford University Press.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Title: Project Management**  
**Course No. ###**

**Course Description:**

This course provides an in-depth exploration of project management principles, practices, and methodologies. It is designed to equip students with both theoretical knowledge and practical skills required for successful project initiation, planning, execution, control, and closure. Students will explore traditional and agile methodologies and apply project management tools to real-world case studies.

**Course Topics:**

**1. Introduction to Project Management**

- History and evolution of project management
- Importance of project management in organizations
- The role of a project manager
- Project lifecycle and its phases

**2. Project Management Framework and Methodologies**

- Traditional vs Agile methodologies
- Waterfall model, Scrum, Kanban, Lean, and Six Sigma
- Selecting the right methodology for a project

**3. Project Initiation and Defining Scope**

- Project initiation documents (charter, stakeholder analysis)
- Defining project scope and objectives
- Stakeholder identification and engagement

**4. Project Planning I - Work Breakdown Structure (WBS)**

- Creating a WBS
- Defining deliverables, work packages, and tasks
- Time management principles

**5. Project Planning II - Scheduling and Resource Allocation**

- Gantt charts, network diagrams, and Critical Path Method (CPM)
- Resource leveling and allocation
- Use of MS Project for scheduling

**6. Project Planning III - Cost Estimation and Budgeting**

- Types of cost estimation (bottom-up, top-down)
- Developing a project budget
- Managing project finances and cost control

## 7. Project Planning IV - Risk Management

- Identifying risks and opportunities
- Qualitative and quantitative risk analysis
- Developing risk response strategies

## 8. Project Execution and Monitoring

- Managing project teams and resources
- Leadership and team dynamics in project management
- Performance measurement (KPIs, Earned Value Management)

## 9. Quality Management in Projects

- Defining quality standards
- Quality assurance vs. quality control
- Continuous improvement (PDCA cycle, Six Sigma)

## 10. Procurement and Contract Management

- Procurement planning and processes
- Selecting and managing vendors
- Contract types and management (fixed-price, time and materials, cost-reimbursable)

## 11. Agile Project Management

- Principles of Agile project management
- Scrum roles and events (sprints, retrospectives)
- Managing projects in dynamic environments

## 12. Project Closure and Evaluation

- Closing out a project: deliverables and documentation
- Post-project evaluation and lessons learned
- Measuring project success

### TEXTBOOKS:

3. **Project Management Institute.** (2021). *A Guide to the Project Management Body of Knowledge (PMBOK Guide)* (7th ed.). Project Management Institute.
4. **Kerzner, H.** (2022). *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (13th ed.). Wiley.

### REFERENCE BOOKS:

11. **Highsmith, J.** (2010). *Agile Project Management: Creating Innovative Products* (2nd ed.). Addison-Wesley Professional.
12. **Heagney, J.** (2016). *Fundamentals of Project Management* (5th ed.). AMACOM.

13. **Larson, E. W., & Gray, C. F.** (2020). *Project Management: The Managerial Process* (8th ed.). McGraw-Hill Education.
  14. **Meredith, J. R., & Mantel, S. J.** (2017). *Project Management: A Managerial Approach* (9th ed.). Wiley.
  15. **Wysocki, R. K.** (2014). *Effective Project Management: Traditional, Agile, Extreme* (7th ed.). Wiley.
  16. **Burke, R.** (2017). *Project Management: Planning and Control Techniques* (5th ed.). Wiley.
  17. **Dinsmore, P. C., & Cabanis-Brewin, J.** (2014). *The AMA Handbook of Project Management* (4th ed.). AMACOM.
  18. **PMI.** (2017). *Agile Practice Guide*. Project Management Institute.
  19. **Pinto, J. K.** (2020). *Project Management: Achieving Competitive Advantage* (5th ed.). Pearson.
- \* Additional journal articles and empirical studies will be provided throughout the course.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Public Sector Economics**

**Course No. ###**

**Course Description**

The goal is to develop students' analytical and consulting skills in Public Sector Economics. The course objective is to introduce the theory and practice of how national, regional and local governments should and finance their budgets for operating and capital project purposes.

The purpose of this course is to introduce the theory and practice of how government finances itself from both positive and normative points of view. To accomplish this, the course reviews rationales for government intervention in the marketplace, analyses methods of resolving conflicts over the size of the public sector's budget, extensively analyses the rationales and issues of various sources of public revenue and reviews the effects of public sector spending and taxes on the aggregate economy. The positive and normative frameworks in public finance, coupled with many examples, help organize one's thinking about the modern public sector and its interactions with the private and non-profit sectors. Throughout, Public Finance emphasizes the interplay between how current revenue policy is fashioned, and how the models and their key assumptions along with political processes interact which result in changes in current law at the federal, state, and local levels. Major tax instruments are analysed from multiple perspectives: vertical and horizontal equity, economic efficiency, feasibility of administration, and best and worst practices identified and discussed. In this course, students will learn through problem sets how to: play a budget game, simulate the federal individual income tax and make inferences about revenues and equity, build simple models of real estate price behaviour, how to locate, read and interpret the tax laws, devise alternative business depreciation measures, and stabilize the economy through simulations of Fair Model.

**Course Topics:**

**1. The Public Sector: Functions and Institutions**

- Foundations of public economics
- Foundations of welfare and distributional analysis
- Utility maximization and welfare measures.
- Equilibrium analysis. Economic incidence.
- Fundamental theorems of welfare economics.

**2. Introduction to Public Finance.**

- Review of the Public Finance Reforms
- Public sector reforms and the role of public finance.
- Stages in public finance development in Pakistan

**3. Budgeting and Performance Evaluation in Public Sector Organizations**

- The role of budgeting in managing public sector organizations.
  - Strategy map for public sector organizations
- 4. Externalities**
- The theory of externalities. Market failure and the conditions for economic efficiency. Types of externalities.
  - Private bargaining solutions versus government intervention. Alternative government policies: taxes, congestion charges, regulation, and zoning.
  - Climate change.
- 5. Public goods**
- Sources of market failure and the role for government intervention: competition failure, public goods, externalities, incomplete markets, information failures.
  - The theory of public goods: non-rivalness and non-excludability; efficiency conditions.
- 6. Public choice & political economy**
- Fundamental issues in public choice: preference revelation, aggregation of preference. Arrow's Impossibility Theorem.
  - Voting models and the new political economy. New contract theory and the scope of government.
- 7. Public intervention in the education market**
- Reasons for government intervention in education: market failure and redistribution.
  - The crowd-out effect of free public schools.
  - The arguments for and against school choice and school vouchers.
  - Measuring the returns to education.
  - Human capital investment versus job market signalling.
- 8. Social insurance**
- Why do people value insurance? Why have social insurance?
  - Asymmetric information and adverse selection.
  - What are the problems with social insurance? Crowd-out and moral hazard.
  - Applications to Unemployment Insurance and Disability Insurance.
- 9. Retirement Pensions**
- Funded versus unfunded ("pay-as-you-go") state pensions. Is there a pensions crisis?
  - Intergenerational and intragenerational equity. Efficiency: effects on savings and retirement decisions. Options for reform.
- 10. Health**
- Reasons for government intervention in health care markets.
  - The moral hazard cost of subsidized health insurance and the price elasticity of health care demand.
  - Optimal health insurance. What is the effect of public health insurance on health outcomes?

- The rising health care expenditures over time.

#### **11. Behavioural Public Economics**

- Empirical evidence of mistakes.
- New policy tools from behavioural economics.
- Rethinking old policy tools in light of mistakes.
- Optimal policy and irrational behaviour: is welfare economics doomed?

#### **12. Taxation and transfer programs**

- Tax incidence Defining incidence. Partial equilibrium analysis of simple incidence problem and the role of elasticities.
- General equilibrium analysis. New behavioural research in salience.

#### **13. Poverty alleviation**

- Inequality and poverty across countries.
- Different types of social programs.
- The moral hazard costs of low-income support.
- Reducing moral hazard: tagging, in-kind benefits, and ordeals.
- Lesson from Pakistan's welfare programmes

#### **14. Taxes, transfers, and labour supply**

- The theory of tax and labour supply: income vs substitution effects, hours worked vs labour force participation.
- Evidence on tax and labour supply.
- In-work benefit programs: theory and evidence.

#### **15. Top Income Taxation and behavioural responses at the top of the distribution**

- The long-run evolution of top income shares and top marginal tax rates.
- The elasticity of taxable income: concept, policy relevance, and estimates.
- The high-income Laffer curve.

#### **16. Tax inefficiencies and optimal commodity and income taxation**

- Reasons for using commodity taxes.
- The deadweight loss from commodity taxes.
- The Ramsey optimal tax problem and the Inverse Elasticity Rule.
- The uniformity versus selectivity debate.
- Extensions: equity concerns, externalities, internalities.
- The fundamental theorems of welfare economics and the informational constraint in income taxation.
- The deadweight loss from income taxation.
- The optimal income tax problem.
- The relationship between optimal income taxation and the Laffer curve

#### **17. Taxation and wealth accumulation**

- The theory of how taxation affects savings. The two-period "Fisher" life-cycle model of saving.
- Problems with the standard life-cycle model.
- Behavioural models of saving. Optimal taxation of savings.

- Applying the Fisher model. Empirical analysis: behavioural models and institutional design.

### **18. Public Finance and Development**

- Lessons from optimal tax theory.
- Actual tax systems across countries and over the course of development.
- Explaining the divergence between optimal and actual tax systems in under-developed economies.
- Tax evasion and tax enforcement: theory and evidence.

### **19. Tax Structure in Pakistan, Role of FBR.**

- Various Kinds of Taxes and their Objectives / Performance in Pakistan.
- Income and Sales Taxes, Excise and Custom Duties, Export and Import Taxes,
- Tax Reforms in Pakistan and their Impacts.

#### **Textbooks:**

1. Stiglitz, Joseph E. Economics of the Public Sector.
2. J Gruber, Public Finance and Public Policy, 5th edition, Worth Publishers.
3. N. Barr, The Economics of the Welfare State, 5th ed., OUP

#### **References:**

The textbook: Musgrave and Musgrave, Public Finance in Theory and Practice 5th Edition

Tanzi V., Schuknecht L. (2000), Public Spending in 20-th Century: A Global Perspective. N.Y.:Cambridge University Press.

Diamond J. (2001). Performance budgeting: managing the reform process. IMF.

Akbar Zaidi, Issues in Pakistan Economy

Hindriks, J. and G.D. Myles, (2013), Intermediate Public Finance, (2nd edition), Cambridge: MIT Press.

Atkinson, A. and J. E. Stiglitz (2015), Lectures on Public Economics, Updated Edition New York: Princeton University Press

Leach, J. (2004), A Course in Public Economics, Cambridge: Cambridge University Press.

Howard, M. M., A. La Foucade & E. Scott (2010) Public Sector Economics for Developing Countries, 2nd Edition, Barbados: University of the West Indies Press

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Title: Portfolio Management**  
**Course No. ###**

**Course Description:**

This advanced course delves into portfolio management principles and practices, focusing on the application of quantitative techniques and theoretical models in constructing, optimizing, and evaluating portfolios. Students will engage with real-world case studies and apply their understanding to contemporary issues in finance, such as risk management, asset pricing, behavioral finance, and the global investment environment. The course will challenge students to critically analyze the latest research in portfolio theory and apply their findings to real-world investment scenarios.

**Course Contents:**

**Week 1: Introduction to Portfolio Management**

- Definitions and Scope of Portfolio Management
- Evolution of Portfolio Theory: From Traditional to Modern Theories
- Objectives, Constraints, and Behavioral Aspects in Portfolio Management

**Week 2: Advanced Investment Fundamentals**

- Overview of Traditional and Alternative Asset Classes (Stocks, Bonds, Derivatives, Real Estate, Cryptocurrencies)
- Advanced Risk-Return Models: Extensions to CAPM and the Arbitrage Pricing Theory (APT)
- Decision-Making Under Uncertainty: Bayesian Approaches and Behavioral Influences

**Week 3: Modern Portfolio Theory and Beyond**

- Review of MPT and Critiques
- Advanced Efficient Frontier Construction: Incorporating Alternative Assets and Illiquidity
- Empirical Analysis of the Capital Market Line and the Separation Theorem

**Week 4: Advanced Risk Management in Portfolios**

- Understanding Systemic and Idiosyncratic Risks in Global Markets
- Tail Risk Hedging and Management of Black Swan Events
- Use of Derivatives for Portfolio Protection (Options, Futures, and Swaps)

**Week 5: Portfolio Construction and Advanced Optimization Techniques**

- Application of Mean-Variance Optimization and Extensions (Robust and Bayesian Optimization)
- Machine Learning and Artificial Intelligence in Portfolio Construction
- Constraints in Portfolio Optimization: Liquidity, Taxation, and Regulatory Requirements

### **Week 6: Performance Evaluation and Attribution**

- Advanced Metrics (Sortino Ratio, Jensen's Alpha, Treynor Ratio)
- Risk-Adjusted Performance Attribution Models
- Decomposing Portfolio Returns: Factor Contributions and Style Analysis

### **Week 7: Behavioral Finance and Complex Investment Strategies**

- Behavioral Biases in Professional vs. Retail Investors
- Quantitative Behavioral Finance: Models and Empirical Evidence
- Advanced Investment Strategies (Pairs Trading, Statistical Arbitrage, Algorithmic Trading)

### **Week 8: Factor Models and Risk Premia**

- Multifactor Models (Fama-French, Carhart Four-Factor, Five-Factor Models)
- Estimating and Backtesting Risk Premia
- Practical Implications for Tactical Asset Allocation and Dynamic Strategies

### **Week 9: Case Studies and Real-World Applications**

- Detailed Case Studies in Portfolio Management: Global Hedge Funds, Sovereign Wealth Funds
- Application of Academic Theories to Asset Management in Emerging Markets
- The Role of ESG (Environmental, Social, Governance) in Modern Portfolio Construction

### **Week 10: Portfolio Management in Institutional Contexts**

- Institutional Portfolio Management: Strategies for Pension Funds, Endowments, and Mutual Funds
- Regulatory and Ethical Considerations in Global Markets (MiFID II, Dodd-Frank, Basel III)
- Future Trends: AI, Robo-Advisors, and Sustainable Finance

## **Textbooks and References:**

### **Main Textbook:**

- *Investment Analysis and Portfolio Management* by Frank K. Reilly and Keith C. Brown (2023 Edition)

## Reference Books:

- *Modern Portfolio Theory and Investment Analysis* by Edwin J. Elton, Martin J. Gruber, and Stephen J. Brown (2022 Edition)
- *Factor Investing and Risk Premia in Financial Markets* by Andreas Beck and Martin Shetty (2021 Edition)
- *Behavioral Finance: Psychology, Decision-Making, and Markets* by Lucy Ackert and Richard Deaves (2020 Edition)
- *Applied Quantitative Finance for Portfolio Management* by Christian L. Dunis, Peter W. Middleton (2019 Edition)
- *Fixed Income Securities: Tools for Today's Markets* by Bruce Tuckman and Angel Serrat (2018 Edition)

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Title: Financial Markets and Institutions**  
**Course No. ###**

**Course Description:**

This course provides an advanced exploration of financial markets and institutions, focusing on the rapid technological advancements reshaping the financial system. Topics include the evolution of digital currencies, fintech innovations, the impact of cryptocurrencies, and the emergence of central bank digital currencies (CBDCs). The course also covers traditional financial markets, regulatory frameworks, and the socio-economic and political implications of changes in financial systems.

**Course Topics:**

**Week 1: The International Financial Markets**

- Overview of Global Financial Markets
- Key Players: Central Banks, Financial Institutions, and Regulatory Bodies
- Global Capital Flows and Financial Market Integration

**Week 2: The Mortgage Market**

- Structure and Functioning of Mortgage Markets
- Role of Mortgage-Backed Securities (MBS)
- Impact of Housing Crises on Financial Markets

**Week 3: Racing to the Future**

- The Role of Technological Advancements in Financial Systems
- Case Studies: Innovations in East Africa and China (Mobile Money)
- The Rise of Peer-to-Peer Lending and Microinsurance

**Week 4: Money and Finance: The Basics (Review)**

- Fundamentals of Money and Banking Systems
- Traditional Banking vs. Shadow Banking
- Historical Evolution of Money and Financial Institutions

**Week 5: Will Fintech Make the World a Better Place?**

- Fintech Innovations: Payments, Lending, and Wealth Management
- Opportunities and Risks in Fintech Expansion
- Regulatory Challenges for Fintech Companies

## **Week 6: Bitcoin Sets Off a Revolution, Then Falters**

- The History and Evolution of Bitcoin
- Blockchain Technology and Its Financial Applications
- The Volatility of Cryptocurrencies: Market Risks and Rewards

## **Week 7: Crypto Mania**

- The Growth and Speculation in Cryptocurrencies
- ICOs (Initial Coin Offerings) and Market Bubbles
- Regulatory Responses to Cryptocurrency Markets

## **Week 8: The Case for Central Bank Digital Currencies (CBDCs)**

- Definition and Key Features of CBDCs
- Potential Economic and Political Implications of CBDC Adoption
- The Role of Central Banks in a Digital Currency World

## **Week 9: Getting Central Bank Digital Currencies Off the Ground**

- Case Studies: CBDC Initiatives in China, Europe, and Developing Nations
- Policy Design, Implementation, and Technical Challenges
- Security, Privacy, and the Role of Decentralized Finance (DeFi)

## **Week 10: Optimal Portfolio Selection**

- Portfolio Theory and Asset Allocation
- Risk-Return Tradeoff and Investment Strategies
- Role of Diversification in Financial Markets

## **Week 11: Risk and Return in Equilibrium: The CAPM**

- Capital Asset Pricing Model (CAPM): Theory and Application
- Risk Premium and Market Equilibrium
- Critiques and Extensions of CAPM

## **Week 12: Behavioral Finance**

- Psychological Biases in Financial Markets
- Behavioral Theories of Investment Decision-Making
- Empirical Evidence on Behavioral Finance and Market Efficiency

## **Textbooks and References:**

### **Main Textbooks:**

- Prasad, E. S. (2021). *The Future of Money: How the Digital Revolution is Transforming Currencies and Finance*. Harvard University Press.
- Bodie, Z., Kane, A., & Marcus, A. J. (2018). *Investments* (11th ed.). McGraw-Hill.

### **Reference Books:**

- Fabozzi, F. J., & Modigliani, F. (3rd ed.). *Capital Markets, Institutions, and Instruments*.
- Mishkin, F. S. (2007). *The Economics of Money, Banking, and Financial Markets*. Pearson Education.
- Bailey, R. E. (2005). *The Economics of Financial Markets*. Cambridge University Press.
- Yermack, D. (2017). *Fintech in Sub-Saharan Africa: What Can We Learn?* IMF Working Paper.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Outline: Islamic Banking and Finance**  
**Course No. ###**

**Course Description:**

This course provides an in-depth exploration of the principles, mechanisms, and operations of Islamic banking and finance. Students will learn about the unique foundations of the Islamic financial system, its prohibition of interest (riba), risk-sharing frameworks, and ethical principles that differentiate it from conventional finance. The course aims to enable students to critically assess the current landscape of Islamic banking and finance globally.

**Course Topics:**

- 1. Introduction to Islamic Economics and Finance**
  - Overview of Islamic economics
  - Principles of Shariah (Islamic law) and its implications for finance
  - Comparison with conventional finance
  
- 2. Prohibition of Riba and Gharar**
  - Definition of riba (interest) and its types
  - Prohibition of gharar (uncertainty) and maysir (gambling)
  - Ethical considerations in Islamic finance
  
- 3. Islamic Contracts and Financial Instruments I**
  - Mudarabah (profit-sharing)
  - Musharakah (joint venture)
  - Sukuk (Islamic bonds)
  
- 4. Islamic Contracts and Financial Instruments II**
  - Murabaha (cost-plus financing)
  - Ijarah (Islamic leasing)
  - Istisna and Salam contracts
  
- 5. Islamic Banking Models**
  - Islamic commercial banks
  - Islamic investment banks
  - Takaful (Islamic insurance) models
  
- 6. Case Studies on Islamic Banking Practices**
  - Islamic banking in the Middle East
  - Islamic banking in Southeast Asia
  - Islamic banking in the West
  
- 7. Risk Management in Islamic Finance**
  - Risk-sharing principles
  - Operational risks in Islamic banks
  - Shariah compliance and risk mitigation
  
- 8. Regulatory Frameworks in Islamic Finance**

- Role of central banks and Islamic financial regulators
- Global regulatory challenges
- Shariah boards and governance

#### **9. Challenges and Criticisms of Islamic Finance**

- Practical challenges in Islamic banking
- Criticisms of Islamic finance models
- Addressing misconceptions

#### **10. Islamic Microfinance**

- Concepts and models of Islamic microfinance
- Role in poverty alleviation
- Case studies

#### **11. Future of Islamic Banking and Finance**

- Fintech and innovation in Islamic finance
- Global trends and the role of Islamic finance in sustainable development

#### **12. Research Methodology in Islamic Finance**

- Research approaches and methodologies
- Data collection and analysis
- Ethical considerations in Islamic finance research

#### **TEXTBOOKS**

1. **Zamir Iqbal, A. M.** (2011). *An Introduction to Islamic Finance: Theory and Practice*. Singapore: John Wiley & Sons.
2. **Usmani, M. T.** (n.d.). *An Introduction to Islamic Finance*. Karachi: Maktaba Ma'ariful Quran.

#### **REFERENCE MATERIAL:**

1. **El-Gamal, M. A.** (2006). *Islamic Finance: Law, Economics, and Practice*. Cambridge University Press.
2. **Iqbal, Z., & Mirakhor, A.** (2011). *An Introduction to Islamic Finance: Theory and Practice*. Wiley.
3. **Usmani, M. T.** (2002). *Introduction to Islamic Finance*. Kluwer Law International.
4. **Hassan, K., & Lewis, M.** (2009). *Handbook of Islamic Banking*. Edward Elgar Publishing.
5. **M Kabir Hassan, S. A.** (2020). *Introduction to Islamic Banking and Finance: An Economic Analysis*. World Scientific.
6. **Visser, H.** (2013). *Islamic Finance: Principles and Practice*. Edward Elgar Publishing.
7. **El-Gamal, M. A.** (2006). *Islamic Finance: Law, Economics, and Practice*. Cambridge University Press.
8. **Ariff, M., & Iqbal, M.** (Eds.). (2011). *Foundations of Islamic Banking: Theory, Practice, and Education*. Edward Elgar Publishing.
9. **El Diwany, T.** (2010). *Islamic Banking and Finance: What It Is and What It Could Be*. 1st Ethical Charitable Trust.
10. **Khan, M. F.** (2012). *Risk and Regulation of Islamic Banking*. Edward Elgar Publishing.

11. **Alkhamees, A. A.** (2017). *Islamic Financial Contracts: Principles and Applications*. Edward Elgar Publishing.
12. **Kamali, M. H.** (2016). *Shariah Minds in Islamic Finance*. Amanie Media.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Title: History of Economic Thought**  
**Course No. ###**

**Course Description:**

This course surveys the evolution of economic ideas from ancient times to the present, highlighting key thinkers, theories, and debates that have shaped the discipline of economics. Special emphasis is placed on the contributions of Muslim economists and their invaluable input in developing the framework of Islamic economics.

**Course Topics:**

**I. The Roots of Economic Thinking**

1. **Ancient Greek Thinkers**
  - Contributions of Plato and Aristotle
  - Concepts of value and justice in ancient thought
2. **Medieval Scholasticism**
  - Economic ideas during the Middle Ages
  - The role of the Church and moral philosophy

**II. Mercantilism and the Emergence of Capitalism**

1. **Mercantilism**
  - Key principles and policies
  - Impact on European economies
2. **The Rise of Commercial Capitalism**
  - Dutch and British commercial expansion
  - Early financial institutions
3. **Early Critiques of Mercantilism**
  - Arguments by David Hume and others
  - Transition towards classical thinking

**III. Foundations of Classical Economics**

1. **Adam Smith: The Wealth of Nations (1776)**
  - Division of labor and the invisible hand
  - Free markets and laissez-faire economics
2. **David Ricardo: Principles of Political Economy (1817)**
  - Theory of comparative advantage
  - Labor theory of value
3. **Thomas Malthus: Population and Resource Scarcity**
  - Malthusian theory of population growth
  - Implications for economic sustainability

4. **John Stuart Mill: Utilitarianism and Laissez-Faire**
  - Principles of utility
  - Role of government in the economy

#### **IV. A New Era: Marxian Economics**

1. **Karl Marx: Das Kapital (1867)**
  - Critique of capitalism
  - Historical materialism
2. **Marxist Theories of Value, Exploitation, and Class Struggle**
  - Surplus value and labor exploitation
  - Dynamics of capitalist societies
3. **Critiques of Marxism**
  - Responses from neoclassical economists
  - Alternative perspectives

#### **V. Neoclassical Thinkers and Theories**

1. **Carl Menger: Subjective Value Theory**
  - Marginal utility and individual preferences
  - Foundations of the Austrian School
2. **Leon Walras: General Equilibrium Theory**
  - Mathematical modeling of markets
  - Conditions for general equilibrium
3. **Alfred Marshall: Neoclassical Synthesis**
  - Principles of economics
  - Supply and demand analysis
4. **Critiques of Neoclassicism**
  - Thorstein Veblen's institutionalism
  - Early critiques leading to Keynesian thought

#### **VI. Keynesian Economics and the Macroeconomic Revolution**

1. **John Maynard Keynes: The General Theory (1936)**
  - Aggregate demand and employment
  - Government intervention in the economy
2. **Keynesian Theories of Aggregate Demand and Policy**
  - Fiscal and monetary policy tools
  - Multiplier effect
3. **Critiques of Keynesianism**
  - Monetarism (Milton Friedman)
  - Austrian School's emphasis on market processes

#### **VII. Contemporary Economic Thought**

1. **New Classical Economics**

- Rational expectations (Robert Lucas)
- Critique of policy effectiveness
- 2. **New Keynesian Economics**
  - Price and wage stickiness (Gregory Mankiw)
  - Real-world market imperfections
- 3. **Behavioral Economics**
  - Cognitive biases (Daniel Kahneman, Amos Tversky)
  - Challenging the notion of rational agents
- 4. **Alternative Economic Perspectives**
  - Feminist economics
  - Ecological economics
  - Institutional economics

## VIII. Economic Thought of Muslim Scholars

1. **Imam Abu Yusuf (RA)**
  - Fiscal policy and taxation in Islamic law
  - His book "Kitab al-Kharaj"
2. **Imam Abu Ubaid al-Qasim ibn Sallam**
  - Concepts of wealth distribution
  - Zakat and public finance
3. **Nasir al-Din al-Tusi**
  - Ethics and economics
  - Early contributions to philosophy and science
4. **Imam Ibn Taymiyyah**
  - Market regulation and fairness
  - Price controls in Islamic jurisprudence
5. **Ibn Khaldun**
  - Theory of social cycles
  - Economic growth and development in "Muqaddimah"
6. **Shah Waliullah Dehlavi**
  - Integration of economics and spirituality
  - Socio-economic reforms

## Recommended Readings:

### Primary Textbooks:

1. **Heilbroner, R. (1953).** *The Worldly Philosophers*. Simon & Schuster.
2. **Schumpeter, J. (1954).** *History of Economic Analysis*. Oxford University Press.
3. **Roll, E. (1992).** *A History of Economic Thought*. Faber & Faber.
4. **Husaini, S. Waqar Ahmed. (2002).** *Islamic Thought*. Goodword Books.
5. **Usmani, Mufti Taqi.** *Islam Aur Jadeed Ma'eshat-o-Tijarat*. Idara Al Maarif, Karachi.
6. **Dar, Abdul Hammed, and Mian Muhammad Akram.** *Islamic Economics*. Ilmi Kitab Khana, Lahore

### Supplementary References:

1. **Heilbroner, R. (1999).** *The Worldly Philosophers* (7th ed.). Simon & Schuster.
2. **Backhouse, R. E. (2002).** *The Ordinary Business of Life: A History of Economics*. Princeton University Press.
3. **Spiegel, H. W. (1991).** *The Growth of Economic Thought* (3rd ed.). Duke University Press.
4. **Kahneman, D. (2011).** *Thinking, Fast and Slow*. Farrar, Straus and Giroux.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Title: Economics of Technologies**  
**Course No. ###**

**Course Description:**

The *Economics of Technology* course explores the critical role of innovation and technological advancement in fostering economic growth. It delves into the historical development of the innovation economy, emphasizing the evolution of thought from classical to modern economics. This course highlights how creative capabilities, entrepreneurial activities, and technological externalities drive economic growth in today's knowledge-based economy. Students will examine global case studies, including the impacts of Artificial Intelligence (AI), intellectual property rights, and sustainable development challenges in the context of technology's evolving landscape.

**Course Topics:**

**PART I: Introduction to Economics of Technology**

1. **Definition and Concepts of Technology and Innovation**
  - Evolution of technology in economic theory
  - Innovation as a driver of growth
2. **Types of Innovation and Technology**
  - Product, process, organizational, and institutional innovation
  - Impact of various forms of innovation on the economy
3. **Role of Technology and Innovation in Economic Growth**
  - Global experiences and case studies
  - Schumpeter's theory of innovation-led growth

**PART II: Models of Economic Growth**

1. **Schumpeter's Analogy of Economic Growth**
  - Creative destruction and innovation cycles
2. **The Solow Model**
  - Physical and human capital in growth dynamics
  - Solow's model interpretation concerning technological change
3. **Neo-Classical Growth Models**
  - Empirical application of growth models in modern economies
4. **Romer's Endogenous Growth Theory**
  - Innovation and knowledge as endogenous factors driving growth

**PART III: The Economics of Ideas and Innovation**

1. **Innovation and Productivity: Measurement and Impact**
  - Innovation as a tool for enhancing productivity

2. **Entrepreneurial Economics**
  - Opportunities and risks in innovative economies
3. **Startups, Spin-Offs, and Small Business Innovation**
  - The role of entrepreneurship in technology development
4. **Entrepreneurial Finance**
  - Venture capital, crowdfunding, and business incubators
5. **Innovation Capacity and Economic Development: Case Study of China**
  - China's growth through innovation and its implications for other economies

#### **PART IV: Framework for Innovation and Technology**

1. **Taxation, Subsidies, and Regulatory Framework**
  - Government policy in promoting technological innovation
2. **Intellectual Property Rights and Patent Policies**
  - Importance of protecting innovation through patents and intellectual property
3. **Role of Research and Development (R&D)**
  - R&D as a cornerstone of technological advancement
4. **International Trade and Technology Transfer**
  - Global dissemination of technology and its economic impact

#### **PART V: The Global Technological Transformation**

1. **Emerging Economies and Catching Up Strategies**
  - How developing economies leverage technology to close the gap with advanced economies
2. **Lessons for Less Developed Countries**
  - Strategies for integrating technological innovation in low-income economies
3. **Innovation and Sustainable Development**
  - Balancing technological advancement with environmental sustainability
4. **The Paradox of Technology and Climate Change**
  - Technology's role in both solving and exacerbating climate challenges
5. **Artificial Intelligence and Economic Growth**
  - The implications of AI on labor markets, productivity, and economic restructuring

#### **Recommended Textbooks:**

1. **Jones, C. I., & Vollrath, D. (2013).** *Introduction to Economic Growth* (3rd ed.). W.W. Norton & Company.
2. **Weil, D. N. (2012).** *Economic Growth*. Routledge.
3. **Swann, G. M. P. (2009).** *The Economics of Innovation: An Introduction*. Edward Elgar Publishing.

#### **Supplementary Readings:**

1. **Schumpeter, J. (1942).** *Capitalism, Socialism, and Democracy*. Harper & Brothers.

2. **Fagerberg, J., Mowery, D., & Nelson, R. (2005).** *The Oxford Handbook of Innovation.* Oxford University Press.
3. **Nelson, R. (1987).** *Understanding Technical Change as an Evolutionary Process.* Cambridge University Press.
4. *Imitate or Die.* (2007, November 8). The Economist.
5. *Fast and Furious: Chinese Private Firms Are Embracing Innovation.* (2015, September 12). The Economist.

**DEPARTMENT OF ECONOMICS, UNIVERSITY OF KARACHI**  
**Course Title: Economics of Cooperative Societies**  
**Course No. ###**

**Course Description:**

This course provides an advanced exploration of the role of cooperative societies in economic systems. It examines cooperative business models, their governance structures, and their economic impact, particularly in relation to market failures, social welfare, and sustainable development. The course will also investigate how cooperatives differ from conventional firms in terms of ownership, decision-making, and profit distribution.

**Course Topics:**

- 1. Introduction to Cooperative Economics**
  - Definition and principles of cooperative societies
  - Historical evolution and significance in different economies
  - Cooperative economics vs. traditional capitalism
- 2. Types of Cooperatives**
  - Agricultural cooperatives
  - Consumer cooperatives
  - Worker cooperatives
  - Housing and service cooperatives
- 3. Theoretical Foundations of Cooperatives**
  - The cooperative firm in economic theory
  - Market failures and the role of cooperatives
  - Collective action and public goods
  - Behavioral economics and cooperative governance
- 4. Cooperatives and Market Structures**
  - Cooperatives in competitive and monopolistic markets
  - Pricing, profit-sharing, and reinvestment models
  - The role of cooperatives in rural and urban economic development
- 5. Governance and Management of Cooperatives**
  - Cooperative governance models: democratic decision-making and stakeholder participation
  - Leadership, accountability, and conflict resolution within cooperatives
  - Case studies of successful and unsuccessful cooperative societies
- 6. Cooperatives and Social Welfare**
  - Cooperatives as vehicles for social change and poverty alleviation
  - The role of cooperatives in promoting equality and community resilience
  - Gender dynamics within cooperatives
- 7. Policy and Regulation of Cooperatives**
  - Government policies affecting cooperatives
  - Legal frameworks for cooperative societies
  - International cooperative movements and organizations (e.g., ICA)
- 8. Challenges Facing Cooperative Societies**

- Economic sustainability and capital constraints
  - Globalization and its impact on local cooperatives
  - Technological disruptions and innovation in cooperatives
9. **Future Trends in Cooperative Economics**
- The role of cooperatives in the digital economy
  - Environmental sustainability and green cooperatives
  - The future of cooperative models in a globalized world

**Reading List:**

- **Primary Textbooks:**
  1. Dow, G. (2003). *The Labor-Managed Firm: Theoretical Foundations*.
  2. Bowles, S., & Gintis, H. (2011). *A Cooperative Species: Human Reciprocity and Its Evolution*.
  3. Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*.
- **Supplementary Readings:**
  1. Polanyi, K. (2001). *The Great Transformation: The Political and Economic Origins of Our Time*.
  2. Vieta, M. (2020). *Workers' Self-Management in Argentina*.

# **Department of Economics, University of Karachi**

## **Course Outline: Tourism and Hospitality**

**Course No. ###**

### **Course Description:**

The aim of this course is to familiarize students with the basic principles of Tourism Economic in a macroeconomic as well as microeconomic level. The objective of the course is twofold: first, to study the economic impact and contribution of tourism at local, national and international level; and second, to understand the functioning of aggregate markets and how different economic circumstances affect the tourism sector to enhance students' skills to analyse and take decisions in the tourism business environment. Learning about the effects of tourism on the global, national and local economy and social superstructure.

### **Course Topics:**

#### **1. INTRODUCTION**

- Scarcity, Choice and Alternatives
- Microeconomics – Meaning, Scope and its uses in Tourism Business
- Macroeconomics – Meaning, Scope and its Significance in Tourism Business Environment

#### **2. BASIC CONCEPTS OF TOURISM ECONOMICS**

- The theory of tourism economics
- History of the tourism economy development
- The classification of types of tourism

#### **3. LEISURE AND TOURISM**

- Meaning, Interrelationship between Leisure and tourism, Determinants

#### **4. RESOURCES IN TOURISM AND TOURISM DEMAND**

- The Tourism Industry and Its Products,
- Travel and Tourism Resources,
- Factors Influencing and Constraining Tourism Demand,
- Levels of Choice in Travel and Tourism Demand,
- Tourism Demand forecasting – Meaning, Significance, Survey Method of forecasting.

#### **5. THEORY OF FIRM AND PRICING OF TOURISM PRODUCTS**

- Objectives of Tourism Enterprises,
- Production function – Meaning and Types.
- The Decision to Supply, Costs and Supply in Tourism, Controls on Supply.
- Business profit vs Economic profit.
- Market Structures.
- Price and Output determination under Perfect Competition, and Monopoly, Price Discrimination,
- Role of Private and Public Organizations in the Development of Travel and Tourism.

## **6. THE ECONOMICS OF TOURISM AT A NATIONAL, REGIONAL, AND INTERNATIONAL LEVEL**

- Tourism in a National and Regional Context
- Tourism in an International Context

## **7. TOURISM INVESTMENT AND FINANCE**

- Investment in Travel and Tourism,
- Investment Appraisal in Public and Private Sector,
- Sources of Finance in Tourism,
- Factors Influencing Travel and Tourism's Yield and Future.

## **8. TOURISM INDUSTRY AND ITS COMPONENTS**

- Structure of the tourism industry
- Labour productivity

## **9. TRAVEL AGENCY AND TOUR OPERATOR ACTIVITIES IN THE FIELD OF TOURISM**

- Role of travel agent and tour operator in the tourism market
- Mechanism of interaction between travel agents and tour operators

## **10. THE ECONOMIC ESSENCE OF TOURISM PRODUCT**

- Properties of tourist services
- Tourism product manufacturing

## **11. HOTEL INDUSTRY**

- The history of the hotel industry development
- Characteristics of the hotel product
- Structure of a typical hotel enterprise

- Global booking systems in hotel industry

## **12. PROBLEMS AND PROSPECTS OF THE TOURISM ECONOMY DEVELOPMENT**

- Factors of the general directions of international tourism development
- International tourism organizations in tourism industry and hospitality
- Development of digital technologies and innovations in Tourism

## **13. IMPACT OF TOURISM SECTOR IN NATIONAL ECONOMY**

- Tourism Satellites Account (TSA),
- Status of Tourism Sector in the economy:
- It's Growth and Trends, Impact and Contribution of Tourism Sector in National Economy,
- Tourism Multipliers.

## **14. THE ECONOMICS OF ENVIRONMENTAL ISSUES IN TOURISM**

- Global Environmental issues and Tourism
- The Microeconomic Analysis of Environmental Issues
- The valuation of Resources and Environmental policies
- An Appraisal of the Economics of Tourism

### **TEXTBOOKS:**

- Bull, A. (1995). *The Economics of Travel and Tourism*. Harlow: Longman.
- Tribe, J. (2011) *The Economics of Recreation, Leisure and Tourism*, (4th ed.), Elsevier Ltd.

### **REFERENCES:**

- Stabler, M. J., Papatheodorou, A. and Sinclair, M. T. (2010). *The Economics of Tourism*, (second edition), London: Routledge.
- Telfer, D. J. and Sharpley, R. (2016). *Tourism and Development in the Developing World*, Abingdon: Routledge.
- Vogel, H. (2001). *Travel Industry Economics*. New York: Cambridge University Press.
- Lundberg, D., Krishnamoorthy, M., and Stavenga, M.H. (1995). *Tourism Economics*. New York: John Wiley & Sons, Inc.
- Anna Rogova, (2021). *Tourism Economics*, LAMBERT: Academic Publishing.