

Course Title: ***Special Fields for Economic Research II***

Course code: ***DI722***

Type of course: ***Optional (Credit 4)***

Intended for: PhD (Economics), CSWE, SIS, JNU

Objective: The objective of this course is to provide PhD students with sound theoretical foundation in special fields of Economics in which they intend to pursue their research. The course is organized around several modules, and a PhD student will be required to choose and complete *one* module, depending on her/his research interest.

Learning Outcome: This course will enable students to

- acquire thorough theoretical knowledge in their area of interest
- equip themselves with the issues and methods pertaining to their field of interest
- streamline research interest around a particular area of interest

Course content: The different modules on offer are listed below along with brief outlines and highlights of recommended readings:

- 1. Banking and Financial Markets:** This module provides PhD students an exposure to theoretical, institutional and empirical aspects of banking, financial markets, financial regulation, development finance and financial risk. The objectives of this special module are – (i) to build theoretical and empirical foundations for research in financial economics; (ii) to enable students to understand and critically review research articles in the area of financial economics; (iii) to enable students to understand various financial systems through quantitative measures and qualitative analysis. Suggested topics include: (1) Theory of banks as a firm; (2) Development Finance and Financial Inclusion; (3) Financial Markets; (4) Financial Regulation; (5) Financial Systems. Suggested readings: Select chapters from (a) Xavier Freixas and Jean-Charles Rochet (2008), *Microeconomics of Banking* (Second Edition), The MIT Press, Cambridge; (b) Armendariz, B. and J. Morduch(2005), *The Economics of Microfinance*, The MIT Press, Cambridge; (c) Hendrik S. Houthakker and Peter J. Williams (1996), *The Economics of Financial Markets*, Oxford University Press; (d) JohnC. Hull (2015), *Options, Futures and Other Derivatives* (9th Edition), Pearson; Additionally, journal articles will be provided in class as extra reading materials.
- 2. Macroeconomic Theory:** The module introduces students to new developments in growth theory, their possible extensions and popular applications. It broadly covers growth models with exogenous savings, models with consumer optimization, and models of endogenous growth with extensions to inclusion of knowledge spillovers, public goods/ infrastructure, and human capital. Introduction to select developments in macroeconomics over the recent years in terms of the use of the optimal growth models is provided. The main applications are the use of the infinite horizon consumer optimization to savings and investment in the open economy, and applying overlapping-generations models to social security and altruism. There is a module on demand for money, and an introduction to the theory of short run economic fluctuations, with focus on real business cycles to explain the cyclical behavior of employment and output. Illustrative readings: R. J. Barro and X. Sala-i-Martin, *Economic Growth*, Second Edition, Prentice Hall, India. 2004; O. J. Blanchard and S. Fischer, *Lectures on*

Macroeconomics, Prentice Hall of India 1996; D. Romer, Advanced Macroeconomics, Second Edition, McGraw-Hill International Edition (Economics Series) 2001.

3. **Public Economics:** This module will draw on the classic literature on optimal taxation and cover in detail the theoretical aspects of second-best taxation and their implications for real life tax policies. Subject to time constraints, the topics covered will include commodity taxation, non-linear income taxation, optimal tax mix, corrective taxation of externalities, tax reforms, and issues in dynamic taxation. Illustrative readings are: *G. Myles, Public Economics, Cambridge University Press, 1995; relevant volumes of Handbook of Public Economics, A. Auerbach and M. Feldstein (eds), Elsevier 1985, 1987, 2002, 2013; A. Atkinson and J. Stiglitz, Lectures on Public Economics, McGraw-Hill, 1980; The Mirrlees Review, Institute for Fiscal Studies, OUP, 2010; R. Guesnerie, A contribution to the pure theory of taxation, Cambridge University Press, 1998; Thomas Piketty, Capital in the twenty-first century, Harvard University Press, 2014; relevant articles from various journals*

4. **Topics in Energy Economics:** This course provides a rigorous economic analysis of energy systems, focusing on the interaction between energy markets, policy instruments, investment decisions, and the energy transition in both global and Indian contexts. It introduces core concepts of energy economics, including energy balances and indicators, demand analysis and elasticities, project appraisal and levelised costs, pricing reforms, subsidies, taxation, and renewable energy policy instruments. The course also examines issues of energy access, security, and transition challenges, alongside the linkages between energy use, climate change, and policy responses. It further introduces Energy–Economy–Environment (E3) and Integrated Assessment Models as tools for scenario analysis and policy evaluation. Illustrative readings include Bhattacharyya (2019), *Energy Economics: Concepts, Issues, Markets and Governance*, Springer; Filippini and Srinivasan (2024), *An Introduction to Energy Economics and Policy*, Cambridge University Press; Kandpal and Garg (2003), *Financial Evaluation of Renewable Energy Technologies*, Macmillan India; Gittinger, J. P. (1973). *Economic analysis of agricultural projects*, Johns Hopkins University Press; Cherp and Jewell (2014), *The concept of energy security: Beyond the four As*. *Energy Policy*, 75, 415-421; Pfenninger et al. (2014). *Energy systems modeling for twenty-first century energy challenges*. *Renewable and sustainable energy reviews*, 33, 74-86 along with selected journal articles and official energy statistics and policy documents.

5. **Topics in Political Economy:** There is an increasing awareness among social scientists that most of the key challenges in understanding underdevelopment in both poor and prospering societies are political challenges. What lessons we can draw from history? Are there economic motives behind ethnic conflicts? What is the (economic) role of state, and which political regimes promote better governance and foster development? Which factors are likely to affect voter turnout? These are longstanding political economy problems and there is no universal remedy available to these problems. Economic theory and the experiences of different countries have much to tell us about both what has worked in the past, and what hasn't. The objective of this course is to introduce some of the core theoretical concepts in modern political development economics and evaluate empirical evidence from both developing and developed countries. Suggestive readings include: Besley, T., and T. Persson (2011). *Pillars of Prosperity: The Political Economics of Development Clusters*. Princeton University Press; Persson, T., and G. Tabellini (2002): *Political Economics: Explaining Economic Policy*. MIT Press; Nunn, N. (2020). The historical roots of economic development. *Science* 367: eaaz9986;

Ray, D., and J. Esteban (2017). Conflict and development. *Annual Review of Economics* 9: 263-293; Bardhan, P. (2016). State and development: The need for a reappraisal of the current literature. *Journal of Economic Literature* 54: 862-892; Wallace Oates (1999). An Essay on Fiscal Federalism. *Journal of Economic Literature* 37: 1120-1149; Cantoni, E., V. Pons, and J. Schafer (2025). Voting rules, turnout, and economic policies. *Annual Review of Economics* 17: 217-239.

- 6. Themes in the World Economy:** This course provides Ph.D. students an integrated understanding of the structure, evolution, and contemporary dynamics of the world economy by combining historical analysis, theoretical perspectives, and current policy debates. It focuses on global interdependence, the role of key actors (states, firms, institutions, and financial markets), transformations in global finance, the rise of emerging markets, geoeconomics, digital platforms, and the future of globalization. Suggested topics include: (1) Definition, scope, and core components of the world economy and its distinction from the international economy; (2) Historical evolution from mercantilism and the first globalization to the post-2008 era; (3) Global financial architecture, sovereign debt, reserve currencies, and sustainability challenges; (4) Geoeconomics, economic nationalism, and great-power rivalry; (5) Emerging markets and the Global South, including structural transformation and South–South cooperation; (6) Digital and platform economies, data as a factor of production, and regulation of big tech; (7) The future of globalization, regionalism, digital trade, and global inequality. Readings would include select chapters and articles from (a) Siebert (2007), *The World Economy*; (b) Frieden, Lake & Broz (2017), *International Political Economy*; (c) Findlay & O'Rourke (2007), *Power and Plenty*; (d) Eichengreen (2019), *Globalizing Capital*; (e) Blackwill & Harris (2016), *War by Other Means*; (f) Gereffi (2018), *Global Value Chains and Development*; (g) Calvano & Polo (2021) and Jullien & Sand-Zantman (2021) on digital markets; (h) Milanovic (2016) and *World Inequality Report* (2022); along with journal articles and policy reports on debt crises, geoeconomics, digital trade, and regional integration.