

Centre for Development Studies
Thiruvananthapuram
Kerala

Course Structure and Syllabus
for
PhD in Economics

2020

Contents

Sr.No.	TOPICS	PAGE
A	The PhD Course Structure	3-5
B	Syllabus for the Course Work	6-28
Semester One		
1	AE 100: Mathematical foundation	7
2	AE 301: Methodological approaches to socio-economic research	8-10
3	AE 302: Statistics and econometrics	11-12
4	AE 303: Qualitative research methods and field study	13-15
5	AE 304: Topics in applied microeconomics	16
6	AE 305: Topics in applied macroeconomics	17-18
Semester Two		
7	AE 311: Selected Topics in Indian Economy	20-21
8	AE 312: Development economics	22-24
9	AE 320: Research and publication ethics and research proposal formulation	25-27
10	AE 321: Specialised course as suggested by RAC members	28

A. The PhD Course Structure

PhD course work duration is of **twelve (12) months**.

The coursework will consist of fourteen (14) credits and ten (10) courses. The course structure is given below:

Detailed Course Structure

Semester I

Course code	Course Name	Credits	No. of contact hours
AE 100	Mathematical foundation	1	15
AE 301	Methodological approaches to socio-economic research	1	22.5
AE 302	Statistics and econometrics	1	22.5
AE 303	Qualitative research methods and field study	2	30 (approximately) ¹
AE 304	Topics in applied microeconomics	1	22.5
AE 305	Topics in applied macroeconomics	1	22.5
	<i>Total</i>	<i>7</i>	<i>135</i> <i>(approximately)</i>

Semester II

Course code	Course Name	Credits	No. of contact hours
AE 311	Selected Topics in Indian Economy	3	75
AE 312	Development economics	1	22.5
AE 320	Research and publication ethics and research proposal formulation	2	More than 30 ²
AE 321	Specialised course as suggested by RAC members	1	22.5 (approximately)
	<i>Total</i>	<i>7</i>	<i>Greater than</i> <i>150</i>

A student has to qualify (non F Grade) in each of the compulsory courses and the grade obtained would be used for final SGPA calculations. On the average, a minimum grade equivalent to 55% of marks has to be obtained by the student in order to be eligible to continue in the programme.

¹ This course will involve field work and hence the exact number of hours cannot be calculated.

² Part of this course is mandatory as per UGC rule and that part has 30 contact hours.

Students will have monthly meetings with coordinators in Semester I to discuss prospective thesis topic. By the end of Semester I, coordinators will set up an RAC (Research Advisory Committee) for each student.

Apart from these compulsory courses, if a PhD student wishes or his/her prospective supervisor(s) or RAC members suggest to opt for any one or more than one MA courses of any semester, then students can go for it. However, this will not carry any credit. If the course instructor thinks, then he/she can have different course materials or assignments specially designed for the PhD students. If any student wants to opt for some course which is present in the existing Mphil syllabus but does not match with any of the MA courses, then the coordinators will request the corresponding instructor to offer that course. However, once the student opts for these types of courses (apart from compulsory coursework), then he/she can opt out from it only within three classes. Otherwise he/she has to do the complete course as instructed by the instructor. This is to avoid circumstances where students disagree to do assignments given to them by saying that they are not getting any credit for this course. If the student still does not do assignments or opts out from the course after three classes, then there will be some method for penalising that.

B. Syllabus for the coursework³

Semester One

³ Kindly note that the instructors can deviate to a reasonable extent from the given syllabus if he/she feels the need to do that.

AE 100: MATHEMATICAL FOUNDATION (ONE CREDIT)

This course offers a training in basic mathematical methods, essential for studying the modern economics literature. The importance of the use of mathematics in economic analysis will be captured of all mathematical methods introduced in this course with relevant economic applications.

Topics:

1. Introductory Concepts: Mathematical logic and Set theory
2. Real Linear Algebra
3. Real Analysis
4. Static Optimization
5. Differential Equations, Dynamic System and Dynamic optimization

Suggested Readings

- Patrick Suppes, Introduction to Logic
- Anjan Mukherji and Subrata Guha, Mathematical Methods and Economic Theory
- A.H. Smith and W. Albrecht, Fundamental Concepts of Analysis
- C.P. Simon and L.E. Blume, Mathematics for Economists
- Gilbert Strang, Linear Algebra and its Application
- R.K.Sundaram, A first course in Optimization Theory
- M. Hoy, J. Livernois, C. McKenna, R. Rees, T. Stengos, Mathematics for Economics
- A.C. Chiang, Elements of Dynamic Optimization
- Kamien and N.I. Schwartz, Dynamic Optimization Calculus of Variations and Optimal Control in Economics and Management

AE 301: METHODOLOGICAL APPROACHES TO SOCIO-ECONOMIC RESEARCH (ONE CREDIT)

Objectives

- To provide an introductory overview of major defining debates about the nature and possibilities of social scientific knowledge and practice.
- To introduce the diverse methodological approaches to social science inquiry.
- To introduce qualitative methods and interdisciplinarity in social science research.
- To promote critical reflection on the methodological debates in Economics and their implications for generating rigorous and critical understanding of society in general.
- The course involves teaching, a student seminar, and a book review with presentations. The teaching part is composed of three sets of lectures of four each, on the following topics:

Topics

Section 1: Understanding the Science-Social Science Connection

1. Introduction
2. Two: Rationalism
3. Empiricism: Positive Science
4. Difficulties of Positive Science

Section II : Holism vs. Individualism, Objectivism vs. Subjectivism

5. Methodological Holism in Objectivist Social Science: Functionalism and 'Social Facts'
6. Methodological Individualism in Social Science: Game Theory in Political Science
7. Subjectivist Approaches: Methodological Holism in 'Understanding'
8. Methodological Individualism in Understanding

Section III : Perennial Debates

9. Explanation and Understanding: Reconciliation?
10. Fact vs. Values in Social Research
11. Rationality vs. Relativism in Social Research
12. In What Sense is Social Science 'Science'?

Requirements: Participation in all lecture/discussion sessions.

Readings

Essential Readings

Aslaksen, Julie(2002) 'Gender Constructions and the Possibility of a Generous Economic Actor', *Hypatia* 17 (2).

Friedman, M. (1953), 'The Methodology of Positive Economics'.In *Essays in Positive Economics*. Chicago: University of Chicago Press.

Hausman, D. (1992) 'Economic Methodology in a nutshell', in *Essays on Philosophy and Economic Methodology*, Cambridge:Cambridge University Press.

Health, Joseph 2014. 'Methodological Individualism'.The Stanford Encyclopedia of Philosophy. Available at: <http://plato.stanford.edu/archives/fall2014/entries/methodological-individualism>.

M R.P. Dore, "Function and Cause, *Sociological Review*, 16, pp.843-53, 1981. Reprinted in M. Martin and L.C. McIntyre, eds. *Readings in the Philosophy of Social Sciences*, Cambridge MA: MIT Press, 1994..

P. Winch, "Understanding a Primitive Society", in *Ethics and Action*, London: RKP, 1972.

Risjord, Mark (2014). Chapter 2 (pp. 14-33) .*Philosophy of Social Science: A Contemporary Introduction*. London: Routledge.

Samuelson, P.(1963) 'Problems of Methodology: A Discussion', *American Economic Review*, vol. 52, pp.232-36.

Sen, A.K. (1977) 'Rational Fools', *Philosophy and Public Affairs*, 6, pp.317-44.

Taylor, C. "Interpretation and the Sciences of Man", *Review of Metaphysics*, 25, pp.3-51, 1971; reprinted in M. Martin and L.C. McIntyre, eds. *Readings in the Philosophy of Social Sciences*, Cambridge MA: MIT Press, 1994.

Taylor, C. (1985) "What is Human Agency?", in C. Taylor, *Philosophical Papers Vol.1: Human Agency and Language*.

Wallerstein (1996) '*Open the Social Sciences: Report of the Gulbenkian Commission on the Restructuring of the Social Sciences*', Vistaar, New Delhi.

Weber, Ch. 3, *The Methodology of the Social Sciences*, New York: Macmillan, 1949.

Winch, P. (1958) *The Idea of a Social Science and its Relation to Philosophy* . London: Routledge and Kegan Paul.

Additional Readings

Brady, Henry E. 2008. (pp. 217-249). 'Causation and Explanation in Social Science'. Pp. 217-270 in *The Oxford Handbook of Political Methodology*, edited by Janet M. Box Steffensmeier, Henry E. Brady and David Collier. Oxford: Oxford University Press.

Caldwell, Bruce (1982) *Beyond Positivism: Economic Methodology in the Twentieth Century*, London: George Allen and Unwin,

Chambers, R. (1994) 'The Origins and Practice of Participatory Rural Appraisal', 'PRA: Challenges, Potentials and Paradigm', 'PRA: Analysis of Experience', *World Development*, vol 22 (7), (9), (10).

Gerring, John 2012. Chapters 8-9 (pp. 197-255). *Social Science Methodology*. Cambridge (UK): Cambridge University Press.

Goldthorpe, John H. 2000. On Sociology. Chapter 7 (pp. 137-160). *On Sociology*. Oxford: Oxford University Press.

Hacking, Ian (1990) *The Taming of Chance*, NY, CUP.

Harriss, J. (2002) 'The Case for Cross Disciplinary Approaches in International Development', *World Development*, Vol 30 (3).

Hausman, D.M. (1984) (ed.), *The Philosophy of Economics: An Anthology*, Cambridge: Cambridge University Press. (Select articles)

Kinkaid, Harold (ed.) 2012. Chapters 2-9 (pp. 21-228). *The Oxford Handbook of Philosophy of Social Science*. Oxford: Oxford University Press.

Kuhn, T. (1970) *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press. (selected chapters)

M. Martin and L.C. McIntyre, eds. *Readings in the Philosophy of Social Sciences*, Cambridge MA: MIT Press, 1994.

Quine, W. v.O (1953). 'Two Dogmas of Empiricism'. In *From a Logical Point of View*. Harvard: Harvard University Press.

Sawyer, Keith R. 2005. *Social Emergence: Societies as Complex Systems*. Cambridge (UK): Cambridge University Press.

Weber.M (1922) *Economy and Society: An Outline of Interpretative Sociology*. Berkeley: University of California Press .

Weber.M. (1904) *The Methodology of the Social Sciences*. Glencoe: Free Press, 1949.

AE 302 : STATISTICS AND ECONOMETRICS (ONE CREDIT)

Objectives

This course would expose students to data analysis using statistics and econometrics. The aim of the course is to engage the students in empirical issues so as to equip them to use these tools. The method of delivering this course should contain hands-on training to the students in the form of series of workshops

Topics

1. Review of probability and statistics

- A. Probability and Distribution
- B. Expectation and Moments

2. Review of statistical inference

- A. Sampling distribution and inference
- B. Asymptotic distribution of sample mean (The central limit theorem)
- C. Confidence intervals

3. Regression basics

- A. Conditional expectation function, Bivariate regression, Graphical Demonstration.
- B. Sampling distribution of regression estimates, Gauss-Markov Theorem, Frisch-Waugh theorem.
- C. Residuals, fitted value and goodness of fit

4. Multivariate Regression

- A. Regression, causality, and control; anatomy of multivariate regression coefficients
- B. Testing linear restrictions, restricted least square.
- C. Dummy variable and interactions.
- D. Model evaluation and other diagnostic tests: Chow test, RESET, Jarque-Bera test of normality of errors and Hausman specification test.
- E. Problems of multicollinearity.

5. Inference problems - heteroscedasticity and autocorrelation

- A. Generalised least squares method of estimation and its properties.
- B. Heteroscedasticity: nature of the problem, tests for heteroscedasticity and estimation.
- C. Autocorrelation: models for autocorrelation, tests for autocorrelated disturbances and estimation.

6. Stochastic regressor and consistency

- A. Definition
- B. Stochastic regressor
- C. Instrumental variable
- D. Error in variables, measurement error

7. Simultaneous equation Models I

- A. The use of structural models
- B. Simultaneous equations bias
- C. The identification problem
- D. The structure and the reduced form
- E. Indirect least squares

8. Simultaneous equation Models II

- A. IV for the SEM
- B. Two-stage least squares, Limited information maximum likelihood
- C. Three stage least square and full information maximum likelihood

9. Limited dependent variable

- A. Limitations of linear probability model
- B. Probit and logit regression
- C. Truncated and censored (Tobit) models

Readings:

- (1) Erickson, B. H. & NOKANCHUK, T. A. (1995), *Understanding Data: an Introduction to Exploratory and Confirmatory Data Analysis for Students in Social Science*, Open University Press London.
- (2) Mukherjee, C.; White, H. & Wuyts, M. (2013), *Econometrics and data analysis for developing countries*, Routledge.

AE 303 : QUALITATIVE RESEARCH METHODS AND FIELD STUDY (TWO CREDITS)

Qualitative Research Methods Part Topics

1. Introduction: The Philosophy of Qualitative Research.
2. Observation in Qualitative research
 - a. The Nature of Qualitative Research
 - b. Ethnography
 - c. Participant Observation
 - d. Field Notes
 - e. Ethical Issues in Qualitative Observation
3. Validating Qualitative Research
 - a. Questions of validation in social research
 - b. Triangulation
 - c. Sampling
 - d. Abduction
 - e. Reflexivity
 - f. Contradiction
 - g. Embedding
 - h. Flexibility.
4. Interviewing
 - a. What is a qualitative research interview?
 - b. Types of interviews
 - c. Power in interview
5. Qualitative Analysis
 - a. Introduction to Qualitative Analysis
 - b. Coding, retrieval
 - c. Framework analysis
 - d. Analytic Induction
 - e. Grounded theory
 - f. Mixed methods.

This will tentatively involve 5 full-fledged lecture parts, one a general introduction and four introduction parts to each module, of some 30 minutes each (two and a half hours). Besides these,

there will be a smaller talk on each topic in the modules of some 15 minutes each (five and a half hours).

The assignment will be in interviewing and interpretation, and will be conducted alongside the field survey.

Readings

Bryman, A. (2012). *Social Research Methods* (4 ed.). Oxford: Oxford University Press.

Charmaz, K. (2014). *Constructing Grounded Theory* (2 ed.). London: SAGE.

Flick, U. (2014). *An Introduction to Qualitative Research* (5 ed.). London: SAGE.

Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice* (3 ed.). London: Routledge.

Seale, C. (1999). *The Quality of Qualitative Research*. London: SAGE.

Silverman, D. (2015). *Interpreting Qualitative Data* (5 ed.). London: SAGE.

Field Study part

Objectives

The objective of this course is to train the students in collecting data, analysing and drawing inference from both qualitative and quantitative data. The course should equip the student in data collection methods, survey techniques, sampling methods. The aim of the field survey is to provide an opportunity to the students to apply the tools, techniques and methods they learnt to a real world problem.

Topics

- Sampling schemes: random, stratified, cluster, systematic samplings
- Estimation
- Field survey exercise and analysis of the survey

(3 lectures, 3 preparatory workshops for the survey, 5 field days, 5 workshops for data entry and analysis, 1 workshop on discussion of the results).

Mode of Teaching

- Class-room lectures, computer-aided workshops, discussion-based workshops critically reviewing published research material.

Essential Readings

Hamilton, Lawrence C. (1990) *Modern Data Analysis: A First Course in Applied Statistics*, Brooks/Cole, California.

Moore, D.S. and McCabe, G.P. (1989) *Introduction to the Practice of Statistics*, W.H. Freeman & Company, New York.

Marsh, Catherine (1988) Exploring Data: An Introduction to Data Analysis for Social Scientists, Polity Press, UK.

Erickson, B.H. and Nosunchuk, T.A. (1983) Understanding Data, Open University Press, UK.

Chambers, J.M. et al. (1983) Graphical Methods for Data Analysis, Duxbury, USA

AE 304 : TOPICS IN APPLIED MICROECONOMICS (ONE CREDIT)

The objective of this course is to introduce students to basic concepts, theories and methods in microeconomics.

Topics

1. Choice (Consumer behavior under certain and uncertain conditions)
2. Theory of the Firm (production, cost)
3. Competitive Markets and Monopoly
4. Market Structure (Cournot, Bertrand and Stackelberg) with an introduction to Game Theory
5. General Equilibrium, Welfare Theorems and Social Welfare functions.
6. Information Economics (Moral Hazard and Adverse Selection)

Readings

1. Varian, Hal R. (1992) *Microeconomic Analysis*, W.W Norton & Company, New York.
2. Geoffrey A. Jehle and Philip J. Reny, (2011) *Advanced Microeconomic Theory*, 3rd Edition, Prentice Hall.
3. David M. Kreps, (1990) *A Course in Microeconomic Theory*, Princeton University Press.
4. Mas-Colell, A.; Whinston, M. D. & Green, J. R. (1995), *Microeconomic Theory*,

AE 305: TOPICS IN APPLIED MACROECONOMICS (ONE CREDIT)

Objectives: Objectives: This course aims to provide a solid ground in Macroeconomic theory.

Topics

1. What is Macroeconomics? Subject matter of macroeconomics, National Income Accounting, Macroeconomic identities, Overview of data on broad empirical patterns.
2. Classical Macroeconomics: Classical Dichotomy, Quantity Theory of Money, Great deflation, Origins of modern macroeconomics.
3. Keynesian Macroeconomics: Say's law, Loanable funds vs. liquidity preferences, Effective demand, Role of Investment, Keynes-Kahn Multiplier, Output determination, Paradox of thrift, Role for stabilization policy.
4. Neoclassical Synthesis :IS-LM model, Aggregate supply and aggregate demand, Phillips curve, Adaptive expectations, Stagflation, Lucas critique.
5. Money, Inflation and Monetary Policy: Functions of Money, Determination of price level and Interest rates, Monetarist view (Friedman), Monetary Policy, Instruments and Targets, Stable Monetary Rules, Inflation dynamics, Endogenous Money.
6. New Classical Macroeconomics : Micro foundations, Neoclassical (optimal) Growth models, OLG Model, Lucas supply curve, Rational Expectations, Policy Ineffectiveness proposition, Dynamic Inconsistency, New Keynesian viewpoint, Nominal rigidities, Dynamic Stochastic General Equilibrium Model.
7. Unemployment :Classical vs. Keynesian Unemployment, Natural rate hypothesis, Efficiency wage models, Search and matching in labour market.
8. Business Cycles :Measurement, Endogenous theories (Hicks, Goodwin, Kaldor), Exogenous theories - Real Business Cycle theories, Financial cycles (Minsky), Growth cycles.
9. Budget Deficits and Macroeconomic Policy Debt dynamics, Domar instability condition, Ricardian Equivalence, Monetisation of the debt, Contemporary Macroeconomic debates in India and the world.

Suggested Readings

Heijdra, B.J. and F. van der Ploeg (2002), Foundations of Modern Macroeconomics, Oxford University Press, UK.6

Keynes, John Maynard (1936), The General Theory of Employment, Interest and Money, Macmillan and Co., Limited, London.

Ljungqvist, L and Thomas J Sargent (2000), Recursive Macroeconomic Theory, The MIT Press, Cambridge, Massachusetts.

Phelps, E. (1990), Seven Schools of Macroeconomic Thought, Oxford University Press, Oxford
Romer, David (2006), Advanced Macroeconomics, McGraw-Hill/Irwin, NY, 3rd edition.

Taylor, Lance (2004) *Reconstructing Macroeconomics - Structuralist Proposals and Critiques of the Mainstream*, Harvard University Press, Cambridge, Massachusetts.

Papers / Chapters

Friedman, M. (1948), A Monetary And Fiscal Framework For Economic Stability, *American Economic Review*, 38, 245-264.

Friedman, M. (1968), The Role of Monetary Policy, *American Economic Review*, 58, 1-17.

Goodwin, R. (1951), The Nonlinear Accelerator and the Persistence of Business Cycles, *Econometrica*, Vol.19, No. 1, (Jan., 1951), 1-17.

Goodwin, R. (1967), *Socialism, Capitalism and Economic Growth: Essays Presented to Maurice Dobb*, Chapter A Growth Cycle, pp. 54-58. Cambridge University Press, Cambridge.

Hicks, J. R. (1937), Mr. Keynes and the Classics ? A Suggested Interpretation, *Econometrica*, v. 5 (April): 147-159

Kydland, F. E and Prescott, E. C. (1977), Rules rather than discretion: the inconsistency of optimal plans, *Journal of Political Economy*, vol. 85, no 3, 473-92

Kydland, F. E. and Prescott, E. C. (1982), Time to build and aggregate fluctuations, *Econometrica*, vol. 50, no. 6, 1345-69

Lucas, R. E., and Sargent, T. J. (1981), After Keynesian macroeconomics, pp.295-319 in *Rational Expectations and Econometric Practice*, London, George Allen & Unwin

Prescott, Edward C (2004b), The Transformation of Macroeconomic Policy and Research, Nobel Prize Lecture, December, 8; pp. 24.

SEMESTER TWO

AE 311 : SELECTED TOPICS IN INDIAN ECONOMY (THREE CREDITS)

Objective: The course aims to provide a detailed exposure to the various aspects of Indian economic development. The course focuses on the evolution of Indian economy and economic policy regime and stresses to impart an analytical understanding of the contemporary issues in Indian economic development. The course starts with a discussion of the overall development of the Indian economy, linking on the role of ancient Indian economic thinking in the formation of modern Indian economy, and then consider the issues and performance in each sector of the economy. There are six modules in this course and they are-

- Role of ancient Indian economic thought in understanding modern Indian economy
- Macroeconomic performance
- Agriculture
- Industry
- External sector
- Poverty, employment and inequality

Evaluation: The course will have a detailed evaluation with 60% weightage on a term paper write up, open seminar presentation and discussion on a topic allotted to the student.

Essential Readings:

Backhouse, R.E. (2004), *The Ordinary Business of Life: A History of Economics from the Ancient World to the Twenty-First Century*, Princeton University Press.

Balakrishnan, P (2011). *Economic Reforms and Growth in India*. Orient Blackswan: New Delhi.

Balakrishnan, P. & Parameswaran, M. (2007), 'Understanding Economic Growth in India: A prerequisite', *Economic and Political Weekly* **62**(27), 2915--2922.

Balakrishnan, P.; Das, M. & Parameswaran, M. (2017), 'The internal dynamic of Indian economic growth', *Journal of Asian Economics* **50**, 46-61.

Baljit Kaur and Amarjit Singh Sethi (2007) 'Liberalisation and social sector expenditure: an inter-state analysis in india' *Journal of Income and Wealth*, Vol.29(1), pp.79-92.

Bijesh C Purohit (2014) *Efficacy of Social Sector Expenditure in India*, Routledge London

Chand, R. and Parappurathu, S. (2011). Historical and spatial trends in agriculture: Growth analysis at national and state level in India. IGIDR Proceeding/Projects Series no. PP-069-3b. Indira Gandhi Institute of Development Research (IGIDR), Mumbai.

Chandrasekhar CP (2015) *Indian Industrialisation*, ICSSR Research Surveys and Explorations, Oxford.

Dasgupta, A.K. (1993), *A History of Indian Economic Thought*. Routledge.

DeLong, J. B. (2003), India since Independence: An analytic growth narrative, *in* Dani Rodrik, ed., 'In Search of Prosperity: Analytic Narratives on Economic Growth', Princeton University Press, Princeton NJ., , pp. 184-204.

Deodhar, Satish Y. (2018), Indian Antecedents to Modern Economic Thought, Working paper 2018-01-02, Indian Institute of Management, Ahmedabad, India.

Economic Survey- Agriculture

EPW VOL. 46, Issue 41 Multiple articles on Land acquisition and resettlement bill Oct. 2011.

Gaurav Datt and Martin Ravallion (1998) 'Why have Some Indian States Done Better than Others at Reducing Rural Poverty?' *Economica*, 65(257),pp.17-38

Haque, T. (2005), Resource use efficiency in Indian Agriculture, *Indian J. Of Agri. Econ.* 61(1):65-76.

Jalan, B. (2004). *The Indian Economy: Problems and Prospects*. Penguin: New Delhi

Kapila, U. (2008). *India's Economic Development since 1947*. 3rd Ed. Academic Foundation: New Delhi.

Kautilya, (Translated by L N Rangarajan), (2000). *Arthashastra*, Penguin India.

NABARD [National Bank for Agricultural and Rural Development]. 2014. *Agricultural Credit in India: Trends, Regional Spreads and Data Base Issues*. [on-line]. Available: https://www.nabard.org/Publication/OP_A59.pdf [15 Nov. 2015].

Narayanamoorthy, A. (2013), Profitability in crop cultivation in India: Some evidence from cost of cultivation survey data, *Indian J. Of Agri. Econ.* 68(1):104-121

Nayyar Deepak 1994(ed): *Industrial Growth and Stagnation*, OUP.

NSSO [National Sample Survey Office]. *Situation Assessment Survey of Some Aspects of Farming*. [on-line]. Available: mospi.nic.in/Mospi_New/upload/496_final.pdf

Rodrik, D. & Subramanian, A. (2005), 'From "Hindu Growth" to Productivity Surge: The Mystery of the Indian Growth Transition', *IMF Staff Papers* 52(2), 193-228.

Rout, H.S. and P. Mishra (2015) *Social Sector in India: Issues and challenges*, Cambridge Scholar Publishing,

Roy, M. and S. Sinha Roy (2016). *International Trade and International Finance: Explorations of Contemporary Issues*. Springer: Singapore.

Sikdar, S (2013). *Capital Flows And Foreign Exchange Rate Management*. Oxford: New Delhi.

Skare, M. (2013). "The Missing Link: From Kautilya's Arthashastra to Modern Economics," *The Journal of Philosophical Economics*, Vol. 6 (2)

Vinod, H.D. (2013), *Handbook of Hindu Economics and Business*, CreateSpace Independent Publishing Platform.

Waldauer, C., Zahka, W., and Pal S. (1996). "Kautilya's Arthashastra: A Neglected Precursor to Classical Economics," *Indian Economic Review*, Vol. 31, No. 1, pp. 101-108

AE 312 : DEVELOPMENT ECONOMICS (ONE CREDIT)

Objective: This course aims to provide an overview of thoughts on economic development. It sets the background by providing the concepts, dimensions and theories of economic development. The course would further introduce to the students the multilayered and multidisciplinary nature of poverty and inequality. Core concerns relating to human development, health and education are discussed further, and finally the role of state and issues relating to state intervention are discussed.

Course Evaluation: Course evaluation would consist of seminar presentations, assignments, workshops, and written examinations

Course Outline

1. Economic development

1.1 Concept and dimensions of development.

1.2 Trade-offs among different dimensions of development

1.3 Theoretical framework for economic development: Development of the social system

2. Theories of economic growth

2.1 Early theories of economic growth – Adam Smith and Ricardo

2.2 Solow and endogenous growth models

2.3 Increasing returns and multiple equilibrium – importance of history and expectations.

2.4 Role of the state in economic growth.

3. Dual Economy models of development

3.1 Lewis-Ranis- Fei Model, Harris-Todaro Model

4. Role of the external sector: Aid and economic growth – Trade and growth

5. Institutions and economic development

6. Markets in developing countries:

6.1 Land

6.2 Labour

6.3 Capital

7. Selected topics in economic development:

7.1 Economic Inequality : Concepts and Measurement - Economic inequality and access to credit market- Economic inequality and choice of occupation- Economic inequality and Human capital formation-Economic inequality and conflict.

7.2 Poverty: Concepts and measurement-Poverty and intra-household allocation of resources- Poverty and access to labour and credit markets.- Poverty and Social structure-Poverty, health and nutrition-Poverty trap-Poverty alleviation policies

Essential Readings:

Books:

Acemoglu, D.; Robinson, J. A. & Johnson., S. (2005), Institutions as a Fundamental Cause of Long-Run Growth' *Handbook of Economic Growth 1A*, North Holland, , pp. 386-472.

Basu, K. (1997), Analytical Development Economics: The Less Developed Economy Revisited, The MIT Press, Cambridge M A.

Chakravarty, Sukhamoy (1997) Writings on Development, Oxford University Press, New Delhi.

Hayami, Y. & Godo, Y. (2005), *Development Economics: From Poverty to the Wealth of Nations (Third Edition)*, Oxford University Press, New Delhi.

Ray, D. (1999), *Development Economics*, Oxford University Press, New Delhi.

Papers:

Banerjee, A. V. & Newman, A. F. (1993), 'Occupational Choice and the Process of Development', *Journal of Political Economy* **101**(2), 274-298.

Banerjee, A. V. & Duflo, E. (2007), 'The Economic Lives of the Poor', *Journal of Economic Perspective* **21**(1), 141-168.

Banerjee, A. V. (2005), 'New Development Economics' and the Challenge to Theory', *Economic and Political Weekly* **40**(40), 4340--4344.

Behrman, J.R. (1988). Intrahousehold allocation of nutrients in rural India, *Oxford Economic Papers*, Vol. 40, pp. 32-54.

Besley, T. and Coate, S. (1992). Workfare versus welfare: incentive arguments for Work Requirements in Poverty-Alleviation Programs, *American Economic Review*, 82(1), 249-261.

Cornia, G.A. and Stewart, F (2006). Two errors of targeting, *Journal of International Development*, 5(5), 459-496

Das, J., Do, Q.T., Ozler, B. (2005). Reassessing Conditional Cash Transfer Programs. *World Bank Research Observer*. 20(1), pp. 57-80.

Dasgupta, P. & Ray, D. (1986), 'Inequality as a Determinant of Malnutrition and Unemployment: Theory', *The Economic Journal* **96**(384), 1011--1034.

Dasgupta, P. & Ray, D. (1987), 'Inequality as a Determinant of Malnutrition and Unemployment: Policy', *The Economic Journal* **97**(385), 177--188.

Dreze, J. (1990). Poverty in India and the IRDP Delusion, *Economic and Political Weekly*, 25(39)

Hayami, Y. (2001), *Development Economics: From the Poverty to the Wealth of Nations, Second Edition*, Oxford University Press, New Delhi.

Hirschman, A. O. & Rothschild, M. (1973), 'The Changing Tolerance for Income Inequality in the Course of Economic Development', *Quarterly Journal of Economics* **87**(4), 544-566.

Jackson, C. 1996. Rescuing gender from the poverty trap, *World Development*, Vol. 24 (5), pp 469-504
Khera, R. (2011). India's Public Distribution System: Utilisation and Impact. *Journal of Development Studies*, 47(7), 1038-1060.

Klasen S and D. Schuler. 2011. Reforming the Gender-Related Development Index and the Gender Empowerment Measure: Implementing Some Specific Proposals, *Feminist Economics*, 17 (1), 1-30

Ray, D. (2000), 'What's New in Development Economics?', *The American Economist* 44(2), 3--16.

Ray, D. (2010), 'Uneven Growth: A Framework for Research in Development Economics', *Journal of Economic Perspective* 24(3), 45--60.

Schultz, Paul. 2002. "Why governments should invest more to educate girls." *World Development* 30: 207-25

Sen, A. (1983), 'Development: Which Way Now?', *Economic Journal* 93(372), 745-762.

Sen, A. (1988), The Concept of Development, in Hollis. Chenery & T N. Srinivasan, ed., 'Handbook of Development Economics Vol.1.', North Holland, Amsterdam., , pp. 9-26.

Strauss, J and Thomas, D. (1998). Health , Nutrition and Economic Development. *Journal of Economic Literature*, Vol. 36, pp. 766-817.

Strauss, J. and Thomas, D. (2007). Health over the Life Course. In Schultz, T.P. and Strauss, J.A. (eds.) *Handbook of Development Economics*, Chapter 54, Vol. 4, pp. 3046-4036.

Swaminathan, M. (2002). Excluding the Needy: The Public Provisioning of Food in India. *Social Scientist*, 30(3/4), 34-58.

Additional Readings:

Desai, V. and Potter, R.B (eds.). (2006): Doing development research. London: Sage.

Dréze, J. & Sen, A. (2013), An Uncertain Glory: India and its Contradictions, Allen Lane.

Escobar, A. (1995) Encountering Development, Princeton, NJ, Princeton University

J. Timmons Roberts, Amy Bellone Hite (editors), The Globalization and Development Reader: Perspectives on Development and Global Change (Paperback). Blackwell 2007

Gupta, Akhil (1998) Postcolonial Developments: Agriculture in the Making of Modern India, Duke University Press.

North, D. C. (1990), *Institutions, institutional change and economic performance*, Cambridge university press.

Sen, A. (2000), Development as freedom, Anchor Books, New York.

AE 320 : RESEARCH AND PUBLICATION ETHICS AND RESEARCH PROPOSAL FORMULATION (TWO CREDITS)

This course has two parts. The first part is ‘Research and Publication Ethics’. This part is compulsory as recommended by UGC. The structure and syllabus of this portion is designed by UGC as well. This portion of the course is for awareness about the publication ethics and publication misconducts. This part focuses on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, impact factor etc.) and plagiarism tools will be introduced in this course.

This part of the course comprises of 6 modules listed in table below⁴.

Modules	Unit title	Teaching hours
Theory		
1	Philosophy and ethics	4
2	Scientific conduct	4
3	Publication ethics	7
Practice		
4	Open access publishing	4
5	Publication misconduct	4
6	Databases and Research metrics	7
Total		30

Details of these modules are given below.

Theory

1. Philosophy and ethics

- i) Introduction to philosophy: definition, nature and scope, concept, branches
- ii) Ethics: definition, moral philosophy, nature of moral judgements and reactions

2. Scientific conduct

- i) Ethics with respect to science and research

⁴ Some parts of this course have similarity with the course titled “Methodological approaches to socio-economic research”, taught in the semester I. So the instructor may choose not to repeat those parts.

- ii) Intellectual honesty and research integrity
- iii) Scientific misconducts: Falsification, Fabrication and Plagiarism (FFP)
- iv) Redundant publications: duplicate and overlapping publications, Salami slicing
- v) Selective reporting and misrepresentation of data

3. Publication ethics

- i) Publication ethics: definition, introduction and importance
- ii) Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
- iii) Conflicts of interest
- iv) Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types
- v) Violation of publication ethics, authorship and contributorship
- vi) Identification of publication misconduct, complaints and appeals
- vii) Predatory publishers and journals

Practice

4. Open access publishing

- i) Open access publications and initiatives
- ii) SHERPA/RoMEO online resource to check publisher copyright and self-archiving policies
- iii) Software tool to identify predatory publications developed by SPPU
- iv) Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

5. Publication misconduct

A. Group discussions (2 hours)

- i) Subject specific ethical issues, FFP, authorship
- ii) Conflicts of interest
- iii) Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hours)

Use of plagiarism software like Turnitin, Urkund and other open source software tools

6. Databases and research metrics

A. Databases (4 hours)

- i) Indexing databases
- ii) Citation databases: Web of Science, Scopus, etc.

B. Research metrics (3 hours)

- i) Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score

ii) Metrics: h-index, g index, i10 index, altmetrics

The other part of this course will be focused on developing individual thesis proposals. It will involve cap lectures and workshops on the following modules-

- Critical Reading Practices
- Literature Review
- Academic Writing

This part of the course will have three rounds of evaluations in the form of presentations and/or write up related to PhD topic in the following order- Review of literature related to the broad area of research, tentative research question and probable methods to be used.

AE 321: SPECIALISED COURSE SUGGESTED BY RAC MEMBERS (ONE CREDIT)

This course is designed along the guidelines of UGC. The coordinators, RAC members and prospective supervisor(s) may suggest one of the existing MA courses (Semesters II or IV) or a certificate course. If selecting an MA course, the RAC members may mention the specific topics (equivalent to 22.5 hours) that the student needs to learn. The instructor will have a separate customized evaluation for the PhD student. Similarly, for a certificate course, the instructor may have some additional engagement with the student such as an extended term paper (equivalent to 22.5 hours).