

Gokhale Institute of Politics and Economics
M.Sc. Economics (Geopolitics and Geoeconomics)
Course Curriculum (2024-2026)

(Effective from academic year 2024-25)

(Approved by Board of Studies 26/02/2024 & 28/05/2024; Approved by Academic Council 5-6-2024)

Preamble

M.Sc. Economics (Geopolitics and Geoeconomics)

As the world is getting increasingly complex, competitive, and convoluted, it is imperative to pay close attention to the interdependent and multi-dimensional relationship between geopolitics and economics. The examples of the practice of geo-economics - deployment of economic instruments for geopolitical purposes and vice-versa - are plenty: be it the US-China trade and technology competition, the renewed push to bring semiconductor manufacturing to India or the efforts of de-coupling and de-risking global supply chains. In this context, Gokhale Institute of Politics and Economics seeks to introduce a new M.Sc. Economics programme with a specialization in Geopolitics and Geoeconomics from the academic year 2024-26, is a two-year full-time post-graduate programme. This programme offers theoretical underpinnings, practical knowledge and policy insights in Geo-Politics and Geo-Economics. Competences and skills acquired are directly transferable to a range of employment opportunities, including in the public, NGO and private sectors. The programme combines a strong core curriculum with flexibility in the choice of research topics selected by students. Through modules and independent research, students develop their own interests under the supervision of a member of staff with relevant expertise.

The specific objectives are:

- To Develop writing skills in the form of academic articles and a thesis.
- To Establish contacts with political and economic actors and policy-makers.
- To Gain critical reading skills in the area of Geo-Politics and Geo-Economics.
- To Learn research techniques and methodologies.
- To Obtain knowledge of current affairs and historical events as related to international affairs.

After completing the course, students will be able to:

- Understand and analyse the dynamic relationship between geopolitics and economics
- Critically assess how geopolitics is influencing economic policies of countries around the world and vice versa.
- Examine the key policy tools deployed in practice of geoeconomics.
- Comprehend major issues and important countries at play in geoeconomics.
- Locate and explore the emerging geoeconomics from India's perspective.

Course Structure: Overview

Total Number of Credit – 80 (1200 Hrs)

Semester 1 (20 Credit - 300 Hrs)

1. Microeconomics
2. Macroeconomics
3. Statistics and Operations Research
4. Introduction to Geopolitics and Geoeconomics
5. India's Foreign Policy

Semester 2 (20 Credit - 300 Hrs)

1. Business Analytics
2. Global Political Economy
3. Federalism and Indian Polity
4. Basic Econometrics
5. Introduction to International Security and Law

Semester 3 (20 Credit - 300 Hrs)

1. International Economic Order, Globalization and Global Financial Crises
2. Emerging powers in global politics
3. Asia's Geoeconomics
4. Research Methodology
5. Public Policy: Theory, Process, Instruments, and Decision Making

Semester 4 (20 Credit – 300 Hrs)

1. Role of USA in Geo-politics and Geoeconomics
2. Policy Evaluation
3. Project Assignment
4. Case Study Writings on regional blocs vs multilateralism
5. Dissertation

Semester 1

Course 1: Microeconomics

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1 : Consumer Theory 10 Hrs

- i. Preference Relation and Its Properties.
- ii. Consumer Preferences and Representation of Preferences by Utility Functions.
- iii. Budget Constraint, Utility Maximization and Derivation of the Demand Function, The Indirect Utility Function and Its Properties, Roy's Identity
- iv. Revealed Preferences. Endowments in the Budget Constraint, Difference between revealed and normative preference
- v. Limitations of the Consumer Theory
- vi. Behavioral Approach

Module 2 : Choice Under Uncertainty – 12 Hrs

- i. The Expected Utility Model, Utility on Lotteries, Axioms and Preferences under Uncertainty
- ii. Critiques of the Expected Utility Model, Prospect Theory
- iii. Measures of Risk--Domar-Musgrave Index, Roy's Safety Index, Mean-Variance, Semi Variance Mini-max Regret
- iv. Lotteries, Preference Relation over Lotteries, N-M Expected Utility Theory
- v. Basic Axiom and Representation Theorem Violations of EU theory.
- vi. Subjective Probabilities
- vii. Risk Aversion – Jensen's Inequality, Acceptance Set and Risk Aversion
- viii. Various Measures of Risk Aversion like Arrow-Pratt Measure of Absolute Risk
- ix. Aversion, Relative Risk Aversion
- x. Certainty Equivalent and Risk Premium
- xi. Arrow-Pratt Approximation of Risk Premium
- xii. Pratt's Theorem
- xiii. Classes of Utility Functions: Decreasing Absolute Risk Aversion (DARA), Constant Absolute Risk Aversion (CARA), Increasing Absolute Risk Aversion (IARA), Decreasing Relative Risk Aversion (DRRA), Increasing Relative Risk Aversion (IRRA), Constant Relative Risk Aversion (CRRA) etc. and their comparative statics
- xiv. Applications to Various Settings and Comparative Static Results.

Module 3 : Theory of Firm – 8 Hrs

- i. Theory of Organization. Measurements of Inputs and Outputs
- ii. Profit Maximization, Comparative Statics, Profit Function. Hotelling's Lemma, Factor Demand Functions, Supply Function.
- iii. Cost Minimization, Cost Functions, Average and Marginal Cost Functions, Short-Run and Long-Run Costs, Marginal Cost Pricing, Aggregation – Industry Supply Function, Shephard's Lemma, Conditional Factor Demand Functions.
- iv. The Duality Between Production and Cost Functions.

Module 4 : Game theory (introduction)– 8 Hrs

- i. Description of a Game, Normal Form Representation of the Game, Extensive Form Representation of the Game
- ii. Solution Concepts—Nash Equilibrium, Mixed Strategies, Repeated Games, Sequential Games

Module 5 : Theory of Market – 10 Hrs

- i. Perfect Competition: Short-Run and Long-Run Market Equilibrium.
- ii. Monopoly: Monopoly Power, Equilibrium Output and Prices, Effect on Welfare, Price Discrimination – First, Second, And Third-Degree, Quality Choice Under Monopoly. Market Power, Sources of Market Power, Monopoly & Regulation of Monopoly. HHI or Any Other Index Used to Measure the Concentration of Firms.
- iii. Monopolistic Competition.
- iv. Oligopoly: Cournot Equilibrium, Stability, Comparative Statics, Bertrand Equilibrium. Quantity Leadership, Price Leadership. Conjectural Variations.
- v. Spatial Competition: Linear City Model, Circular City Model.

Module 6 : Information Economics– 12 Hrs

- i. Introduction: The Elements of the Problem
- ii. Types of Asymmetric Information Problems– Moral Hazard, Adverse Selection, Signalling
- iii. Static Full Information Benchmark
- iv. Hidden Action in a Two Action-Two outcome model as well as in a Simple Continuous Action and Continuous Outcome Case
- v. Solution through First Order Approach and its Validity
- vi. Value of Information and Characteristics of the Optimal contract
- vii. Adverse Selection and Signalling: Akerlof's Model of Lemons,
- viii. Signalling in the Spence's Model of Education
- ix. The Notions of Pooling and Separating Equilibria.

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Suggested Readings:**Books:**

1. Serrano.R and Feldman. M.A. (2018). A Short Course in Intermediate Microeconomics with Calculus. Cambridge University Press
2. Gravelle, H. and Rees R, 2003, Microeconomics, 3rd Edition, Prentice Hall
3. Kreps, David. (1992). A Course in Microeconomic Theory, Eastern Economy Edition, Prentice Hall of India
4. Mas-Colell.A, Whinston &Green, Microeconomic Theory. (1995). Oxford University Press
5. Perloff.J. (2019). Microeconomics, 7th Edition, Pearsom Education.
6. Pindyck, Robert S. and Rubinfeld, Daniel L. (2017), 9th Edition Microeconomics, Pearson College
7. Varian, Hal R. (1992). Microeconomic Analysis, 3rd Edition, International Student Edition, W.W. Norton and Company
8. Dixit. A and Nalebuff. B (2010) The Art of Strategy: A Game Theorist's Guide to Success in Business and Life, W.W.Norton &Company

9. Gibbons, Robert (1992), Game Theory for applied economists, Princeton University Press.
10. Eric Rasmusen. Games and Information: An Introduction to Game Theory (2006), Wiley

Articles:

1. Arrow, K.J. (1965) Aspects of the Theory of Risk Bearing. Yrjo Jahnssoonin Saatio, Helsinki.
2. Hadar, J. and Russell, W. (1969). Rules for ordering uncertain Prospects. AER.
3. Yan Sun & Shu Li, 2010. The effect of risk on intertemporal choice, Journal of Risk Research, Taylor & Francis Journals, vol. 13(6), pages 805-820, September.
4. Kahneman, D.and Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk.Econometrica. 47(2),pp263-291

Course 2: Macroeconomics

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Introduction and background – 4 Hrs

- i. Introduction to Macro Economics-, Objectives and instruments/policies.
- ii. Evolution of macroeconomic thought - classical and Keynes and Keynesian Cross

Module 2: Key Concepts and macroeconomic indicators – 08 Hrs

- i. Circular flow of Economic activity in a five-sector model Sources
- ii. Impact of Leakages and Injections in an economy
- iii. Introduction to Key concepts i.e. Growth, Inflation and Unemployment
- iv. Cyclical expansion and contraction of economic activity
- v. Meaning and Measurement of GDP through different methods (Production, Income and Expenditure).
- vi. Demand Side Growth ($GDP=C+I+G+NX$) Supply Side Growth ($GVA = \text{Agriculture} + \text{Industry} + \text{Services}$);
- vii. measurement of economic growth through Purchasing Managers Index (PMI) Real and Nominal Growth Saving-Investment approach to growth (ICOR and investment rate),
- viii. Macroeconomic Identity Inflation: Meaning, Types and Measurement
- ix. Unemployment: Meaning, Types and measurement Inflation and unemployment trade off: Phillips Curve and Okun's law

Module 3: IS-LM & AD-AS Model – 4 Hrs

- i. Introduction to IS-LM Model and derivation AD-AS model.
- ii. Aggregate Demand and Aggregate Supply. Components of aggregate demand and factors determining aggregate demand Shifts in aggregate demand causing business fluctuations.
- iii. The foundations of Aggregate Supply Determinants of aggregate supply Potential output, output gap Shifts in aggregate supply

Module 4: Open Economy – 6 Hrs

- i. Concept of Open Macro Economy in a Balance of Payments (BoP) framework
- ii. Management of trade and current account and capital flows, External debt, Investment position
- iii. External sector vulnerability: Indicator Analysis.
- iv. Macroeconomic Identity in an Open Economy and the Twin Deficit Problem.
- v. Demand for and Supply of foreign Exchange.
- vi. Exchange Rate Regimes: Fixed, Floating and Managed.

Module 5: Macroeconomic Crisis – 4 Hrs

- i. Asian crisis,
- ii. Global Financial crisis,
- iii. Sovereign debt crisis,
- iv. Economic crisis of Covid 19 pandemic

Module 6: Policy Intervention – 14 Hrs

- i. Introducing inside and outside lags in policy,
- ii. Fiscal policy: brief introduction to budget analysis financing of budget deficit from a central bank perspective, issues in debt management and cash management of the government, and issues in interest rate of the government
- iii. Monetary Policy: Demand for and Supply of money. Money creation Process, Objectives and instruments of Monetary Policy. Operating target and operating procedure of monetary policy.
- iv. Evolution of Monetary Policy framework in India: Credit Planning, Monetary Targeting, Multiple Indicator, Interest rate indicator.

- v. Liquidity management by the RBI: Concept and evolution Monetary Policy Committee and Inflation Management Monetary Policy.
- vi. Procedure Liquidity Management Stance, Monetary policy transmission concept, Process of monetary policy transmission.
- vii. Linking monetary policy to Central Bank intervention in FOREX market. Monetary policy and fiscal policy interface

Module 7: Overview of Advanced topics in Macroeconomics – 8 Hrs

- i. Consumption Function: Keynes Psychological Law and Kuznet's consumption puzzle, Fisher's inter-temporal Choice Model, Permanent Income Hypothesis, Life Cycle Hypothesis and Relative Income Hypothesis.
- ii. Investment Function: Neo-Classical Theory of Investment, and Tobin's q-ratio, Accelerator Theory of Investment (simple and flexible acceleration model Rational expectations equilibrium (Lucas supply equation) model, Real business cycle theory, New Keynesian model of price stickiness (micro foundation of Macroeconomics), random walk

Module 8: Interface with Industry Experts (1 session)

Evaluation pattern

- **Quizes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Basic Reading List

Text Book:

Mankiw N.G. & Taylor M.P. (2007) Principles of Macroeconomics (4th Edition) CENGAGE Learning Custom Publishing.

Additional Reading List

Reference Books (Module-wise)

Module 1 and Module 2:

1. Samuelson P.A. & Nordhaus W. D. (2019) Economics (20th edition), Tata McGraw Hill, Chapter Nos.4 and 5
2. Mishkin S. F. (2014) Macroeconomics Policy & Practice (2nd edition), Pearson Publication.
3. Snowden and Vane Dornbusch Rudiger, Fisher Stanley, Startz Richard (2018) Macroeconomics (12th edition), Tata Mc Graw Hill. Chapter Nos 1 and 2, 7, 8, 21 and 22

Module 3:

1. Dornbusch Rudiger, Fisher Stanley, Startz Richard (2018) Macroeconomics (12th edition), Tata Mc Graw Hill, Chapter No. 5
2. Samuelson P.A. & Nordhaus W. D. (2019) Economics (20th edition), Tata McGraw Hill, Chapter Nos. 7 and 15

Module 4:

1. Dornbusch Rudiger, Fisher Stanley, Startz Richard (2018) Macroeconomics (12th edition), Tata Mc Graw Hill, Chapter No. 12
2. Samuelson P.A. & Nordhaus W. D. (2019) Economics (20th edition), Tata McGraw Hill, Chapter Nos. 14 and 15

Module 5:

1. Mishkin Frederic (2017) *Macroeconomics* (2nd edition), Pearson, Chapter 15
2. Report on Currency and Finance 2008-09, RBI, Chapter Nos. 2 and 7

Module 6:

1. Mishkin Frederic (2017) *Macroeconomics* (2nd edition), Pearson, Chapter Nos. 13, 16,
2. Samuelson P.A. & Nordhaus W. D. (2019) *Economics* (20th edition), Tata McGraw Hill, Chapter Nos. 7 and 10

Module 7:

1. Romar David (2019) *Advanced Macroeconomics* (4th edition), Tata McGraw Hill, Chapter 8.1 and Chapter 9.3
2. Dornbusch Rudiger, Fisher Stanley, Startz Richard (2018) *Macroeconomics* (12th edition), Tata McGraw Hill, Chapter Nos. 13,14, 20.4, 20.5, 20.6 and 24
3. Mishkin Frederic (2017) *Macroeconomics* (2nd edition), Pearson, Chapter Nos.18 and 19

Additional Reading List: Journal Articles

1. Javier B & Enrique G.M. (2020, March) A Fisherman Approach to Financial Crisis: Lessons from the sudden stops literature. National Bureau of Economic Research. <http://www.nber.org/papers/w26915>
2. Kanungo A.K. Determinants of Current Account Balance in Emerging Markets: A Study of BRICS
3. Mohanty M.S. Market volatility and foreign exchange intervention in EMEs: what has changed? - An Overview. Bank of International Settlement. BIS Paper No 73.
4. Dua P. (2020, June 23) Monetary policy framework in India. *Indian Economic Review* <https://doi.org/10.1007/s41775-020-00085-3>
5. Oliver J.B. & Lawrence H.S. (2017, December) Rethinking Stabilization Policy: Evolution or Revolution? National Bureau of Economic Research. <http://www.nber.org/papers/w24179>.
6. Barry J. Eichengreen and Donald J. Mathieson The Currency Composition of Foreign Exchange Reserves Retrospect and Prospect, IMF Working Paper <https://isni.org/isni/0000000404811396>, International Monetary Fund
7. Sophia Chen, Deniz Igan, Nicola Pierri, and Andrea F. Presbitero Tracking the Economic Impact of COVID-19 and Mitigation Policies in Europe and the United States IMF Working Paper July 2020
8. RBI Bulletin July 2022 Fed Taper and Indian Financial Markets: This Time is Different
9. Ila Patnaik and Radhika Pandey Four years of the inflation targeting framework No. 325 November 17, 2020, National Institute of Public Finance and Policy, New Delhi
10. National Stock Exchange, Market Pulse, A monthly review of Indian economy and markets, July 2022, Vol. 4, Issue 7
11. Keynote Address by Shri Shaktikanta Das, Governor, Reserve Bank of India - Creating New Opportunities for Growth Delivered at the Bombay Chamber of Commerce and Industry on Thursday, February 25, 2021
12. Address by Shri Shaktikanta Das, Governor, Reserve Bank of India - Seven Ages of India's Monetary Policy at the St. Stephen's College, University of Delhi on January 24, 2020
13. CRISIL Economy First Cut: Inflation sticky, IIP zooms on base effect, July 13, 2022
14. KPMG Global Economic Outlook March 2022, Yael Selfin, Chief Economist, KPMG in the UK.
15. Deloitte, Weekly global economic update, Week of July 25, 2022, by Ira Kalish
16. Ernst and Young, Economy Watch by D. K. Srivastava, July 2022

Additional Reading List: Website Links

1. <https://www.imf.org/en/Publications/WEO/Issues/2022/07/26/world-economic-outlook-update-july-2022>
2. <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220727a.htm>
3. <https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220721~53e5bdd317.en.html>
4. <https://www.ecb.europa.eu/press/blog/date/2022/html/ecb.blog220723~c2b1d4b654.en.html>
5. https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/interest_rates.en.html
6. https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=53904
7. https://www.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1318

8. https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=21137
9. https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=21132
10. https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=21133
11. https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=21129
12. <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21035>
13. <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21038>
14. https://dea.gov.in/sites/default/files/MER%20June%202022_Final.pdf
15. <https://www.indiabudget.gov.in/doc/frbm1.pdf>
16. <https://www.rbi.org.in/>
17. <https://www.federalreserve.gov/>
18. <https://www.ecb.europa.eu/home/html/index.en.html>
19. <https://www.imf.org/en/Home>
20. <https://www.indiabudget.gov.in/>
21. <https://www.indiabudget.gov.in/economicsurvey/>
22. https://ec.europa.eu/info/index_en
23. <https://tradingeconomics.com/>
24. <file:///C:/Users/R.K%20Pattnaik/Downloads/ey-economy-watch-july-2022.pdf>

Course 3: Statistics and Operations Research

(50 + 10 = 60 Hrs) 4 Credit

Objective

The objective of this course is to familiarize students with statistical theory and its application as the foundations for data analysis, as well as to acquaint them with basic and intermediate techniques from the field of operations research. Students at the end of the course should be familiar with the analysis and interpretation of data, along with hands on training in both of these fields.

Module 1: Testing of hypothesis

Simple versus composite hypothesis, critical region, type I and type II errors, power of a test, The Decision Rule, trinity of classical tests (Wald test, Lagrange multiplier, likelihood ratio), application of hypothesis testing with known and unknown variances, test for correlation.

Module 2: Special Distributions

Introduction, The Poisson Distribution, The Normal Distribution, The Geometric Distribution, The Negative Binomial Distribution, The Gamma Distribution, the Central Limit Theorem

Module 3: Estimation and Inference

Introduction, Estimating Parameters: The Method of Maximum Likelihood, the Method of Moments, Interval Estimation, Properties of Estimators, Minimum Variance Estimators: The Cramér-Rao Lower Bound, Sufficient Estimators, Consistency, Bayesian Estimation.

Module 4: Bivariate Distributions

Contingency tables, joint and conditional distributions, odds ratio, test of independence, Analysis of Variance (ANOVA), analysis of covariance.

Module 5: Nonparametric Statistics

Introduction, Sign Test, Wilcoxon Tests, The Kruskal-Wallis Test, The Friedman Test, Testing for Randomness, Comparing Parametric and Nonparametric Procedures

Module 6: Introduction to OR

Basic algorithms; Linear programming (LP), Graphical and Simplex; LP Formulation and LP with solver and sensitivity analysis; Transportation and transshipment models; Simulation; Decision Analysis

Module 7: Advanced algorithms in OR

Goal Programming; Queuing Theory; Networking Models; Markov chains; Data Envelopment Analysis (DEA); Analytical Hierarchical processing (AHP)

Reading List

- Larsen, Richard J., and Morris L. Marx. (2001): An Introduction to Mathematical Statistics and its Applications. 3rd ed. Upper Saddle River, NJ: Prentice Hall.
- Lewis Margaret (2011): Applied Statistics for Economists, Routledge.
- Newbold P. (2007): Statistics for Business and Economics (6th edition or later), Prentice Hall
- Sweet, Stephen and Karen Grace- Martin (2008): Data Analysis with SPSS: A First Course in Applied Statistics, Allyn & Bacon, 3rd Edition.
- Field Andy (2013): Discovering Statistics using IBM SPSS Statistics. Fourth Edition, SAGE
- Quantitative Analysis for Managerial Decision Making By Render and Stair
- Operations Research by Hiller and Liberman
- Operations Research by Hamdy and Taha

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Course 4 : Introduction to Geopolitics and Geoeconomics

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Geopolitics conceptual underpinnings – 8 Hrs

- i. Definition and Evolution of Geopolitics – Mahan, Mackinder, Spykman
- ii. Contemporary Global Politics
- iii. Key Concepts in Global Politics – state and nation, security and power, war and peace

Module 2: Nation state vs Multilateralism- 8 Hrs

- i. Concept of nation state
- ii. Concept of multilateralism
- iii. The Crisis of Multilateralism

Module 3: Geoeconomics conceptual underpinnings - 8 Hrs

- i. Definition and Evolution of Geoeconomics
- ii. Market, command and mixed economies
- iii. Trade, Money and Capital
- iv. The visible hand of government

Module 4: Interconnectedness of Geopolitics and Geoeconomics - 12 Hrs

- i. Theory and problems of Political Economy of International Relations
- ii. Global Political Economy- Conflict and Cooperation
- iii. Globalization, Social Change and Culture

Module 5: Changing Contours - 14 Hrs

- i. Terrorism and Asymmetric Conflicts
- ii. Human Rights and International Law
- iii. International Organizations
- iv. Major Global Powers and the World (US,China, EU)
- v. Geopolitics of energy

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Readings

- Robert Blackwill and Jennifer Harris, War by Other Means: Geoeconomics and Statecraft, Harvard University Press, 2016.
- Christian Pfeiffer, Geoeconomics in International Relations Neorealist and Neoliberal, Routledge, 2024.

- Henry Farrell and Abraham L. Newman, 'Weaponized Interdependence: How Global Economic Networks Shape State Coercion', *International Security*, Vol 44, No. 1, 2019.
- Bimal Jalan, *India After Liberalisation: An Overview*, Harper Collins, 2021.
- Ruchir Sharma, *The Rise and Fall of Nations*, Penguin, 2017.
- Bruno Macaes, *Belt and Road: A Chinese World Order*, Penguin, 2019.
- Michael E Kraft, Scott R Furlong *Public Policy – Politics Analysis and Alternatives*, Sage Publications
- Colin Flint, *Introduction to Geopolitics*, London and New York: Routledge, 2006
- Lucian M. Ashworth, 'Realism and the spirit of 1919: Halford Mackinder, geopolitics and the reality of the League of Nations', *European Journal of International Relations*, 2010
- Ó Tuathail G (1992) Putting Mackinder in his place: Material transformations and myth. *Political Geography* 11(1): 100–118.
- Ó Tuathail G (1996) *Critical Geopolitics: The Politics of Writing Global Space*. Minneapolis, MN: University of Minnesota Press.
- R. Hrair Dekmejian and Hovan H. Simonian, *Troubled Waters: The Geopolitics of the Caspian Region*, London: I.B. Tauris, 2001
- Timothy C. Lehmann, (ed) *The Geopolitics of Global Energy: The New Cost of Plenty*, Boulder, CO, USA, 2017
- Geopolitics to Geoeconomics to The New Era of Geo-technology.
https://cenjows.in/wp-content/uploads/2022/03/Inside_GEOPOLITICS_10-5-19.pdf
- Mahan's concept of Sea Power - <https://www.jstor.org/stable/45236517?seq=1>

Course 5: India's Foreign Policy (50+10=60 hours) – 4 credits

Module 1 : Evolution of India's Foreign Policy since 1947 - 10 Hrs

- i. 1947-1991
- ii. 1991-Present
- iii. Economic Dimensions of India's Foreign Policy

Module 2: Determinants of India's Foreign Policy - 10 Hrs

- i. Geography and history
- ii. Economy and technology
- iii. Culture and diaspora
- iv. India's Energy Security
- v. India's trade and Investment Policy

Module 3: India and Geopolitical Leanings - 10 Hrs

- i. US
- ii. China
- iii. Europe
- iv. Russia
- v. Africa

Module 4: India and the Global Institutions - 10 Hrs

- i. United Nations
- ii. IMF and World Bank
- iii. GATT and WTO

Module 5: India's Neighbourhood - 10 Hrs

- i. India's Act East Policy
- ii. South Asia
- iii. Central Asia and West Asia
- iv. Southeast Asia and Indian Ocean

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Readings

- Foreign and Security Policy for a Resurgent India – Edited Book by Rakesh Mohan, 25 Years of Economic Reforms
- Chris Miller, Chip War: The Fight for the World's Most Critical Technology, Simon and Schuster, 2022.

Semester 2

Course 6 : Business Analytics

(50 + 10 = 60 Hrs) (Credits: 4)

COURSE OUTCOMES:

1. To develop a proficiency in analysing data using different techniques. (Module 1 to 8)
2. To learn how to build and apply predictive models to forecast future outcomes. (Module 2 and 3)
3. To gain knowledge of business outcomes. (Module 1 to 8)
4. To apply optimization techniques to solve business problems. (Module 1 to 8)
5. To understand the role of business analytics in strategic decision making. (Module 3 and 5)
6. To learn skills and techniques for the application of R. (Module 4,6 and 7)

Module 1 - The need for Analytics and Understanding Analytics

- Decision Making – Heuristics and Biases
- The need for analytics
- Impact of analytics on business
- Being analytically competitive
- The difference between analytics and BI
- Introduction to the business Analytics model
- Types of analytics
- Models and algorithms in Analytics
- The Analytics Methodology

Module 2 - Tool and Tech Landscape

- A review of technology used in data storage, data processing, and data science
- Popular tools used in Data Science and when to use each

Module 3 - Descriptive Analytics with excel and Tableau

- An introduction to Tableau
- Using descriptive statistics in analysis and reporting
- Advanced reporting with Tableau

Module 4 - R programming

- An introduction to R
- Importing and exporting data in R
- Data Manipulation with R
- Advanced Data Manipulation with R
- Data Visualization with R

Module 5 - Data Pre-processing

- Data Exploration and Assessment for Data Science
- Identifying and dealing with noise in Data
- Preparing data for Data Science Modelling

Module 6 - Predictive Models in R

- Linear Regression Models and their applications
- Logistics Regression Models and Their applications
- Time Series Forecasting

Module 7 - ML Models in R

- Clustering Algorithms and application
- Decision Tree Algorithms and applications
- Random Forest Algorithms and applications

Module 8 - Storytelling with Data

- Communicating data science results
- Effective presentation skills
- Using Data visualizations for storytelling

REFERENCES:

1. Provost, F., & Fawcett, T. (2013). Data science for business: What you need to know about data mining and data-analytic thinking. O'Reilly Media.
2. Davenport, T. H., & Harris, J. G. (2017). Competing on analytics: Updated, with a new introduction. Harvard Business Press.
3. Evans, J. R., & Paquette, L. (2019). Business analytics: Methods, models, and decisions. Pearson.
4. Shmueli, G., Bruce, P. C., & Patel, N. R. (2019). Data mining for business analytics: Concepts, techniques, and applications in R. John Wiley & Sons.
5. Witten, I. H., Frank, E., Hall, M. A., & Pal, C. J. (2016). Data mining: Practical machine learning tools and techniques. Morgan Kaufmann.
6. Kelleher, J. D., Mac Namee, B., & D'Arcy, A. (2015). Fundamentals of machine learning for predictive data analytics: Algorithms, worked examples, and case studies. MIT Press.
7. Few, S. (2019). Show me the numbers: Designing tables and graphs to enlighten. Analytics Press.
8. Cairo, A. (2019). The truthful art: Data, charts, and maps for communication. New Riders.

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Course 7: Global and Indian Political Economy

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Introduction to Global Political Economy - 10 Hrs

- i. Colonialism and World Wars
- ii. Cold war
- iii. Post-Cold War World
- iv. Nuclear disarmament

Module 2: International Institutions and Issues since World War II – 10 Hrs

- i. Bretton woods system
- ii. GATT and WTO
- iii. UNO , UNCTAD, UNDP
- iv. ILO
- v. G20
- vi. MDG and SDGs.

Module 3 : Theories of International Relations 10 Hrs

- i. Realism
- ii. Liberalism
- iii. Constructivism
- iv. Critical Theories

Module 4: Interdependence of Political and Economic System 10 Hrs

- i. Dependency and World Systems Theory
- ii. Complex Interdependence of political and economical system
- iii. International monetary system
- iv. European union- Many markets into one
- v. BRICS countries in the world economy
- vi. Economy's Technological Possibilities

Module 5: International Trade vs International Factor Movement 10 Hrs

- i. Free trade versus protectionism
- ii. Non tariff barriers and new protectionism
- iii. International movement of capital
- iv. International movement of labour
- v. Multinational corporations
- vi. Global value chain

Readings

- Ngozi Okonjo-Iweala, Why the World Still Needs Trade the Case for Reimagining—Not Abandoning—Globalization, *Foreign Affairs*, July/August 2023.
- Francis Sempa, *Geopolitics: From the Cold War to the 21st Century*, Routledge, 2002.
- W. Charles Sawyer, Richard L. Sprinkle, *International Economics*, PHI Learning Private Limited.
- Krugman and Obstfeld, *International Economics-Theory and Policy*, Pearson Eighth edition.

- International Relations Theories, Tim Dunne and Steve Smith, Oxford.
- International Relations, C. W. Pevehouse Jon and S. Goldstein Joshua, Pearson
- Bhagwati, Jagdish. 2002. *Free Trade Today*, Princeton, Princeton University Press
- Bhagwati, Jagdish. 2004. *In defense of Globalization*, New York, Oxford University Press.
- Feenstra, R. C., & Taylor, A. M. (2017). *International Economics*. Worth Publishers

Course 8: Federalism and Indian Polity

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Political Institutions in India - 10 Hrs

- i. Understand structures, functions, and concrete working of the main political institutions in India.
- ii. Political process in India
- iii. Politics and Society

Module 2: Federalism - 10 Hrs

- i. Strong Center Framework;
- ii. Multilevel federalism
- iii. Fiscal federalism in India
- iv. Cooperative and Competitive Federalism

Module 3: Executive, Legislature and Judiciary - 10 Hrs

- i. Basic Structure Doctrine
- ii. President and the PM;
- iii. Issue of Representation;
- iv. Legislative Supremacy
- v. Judicial Review

Module 4: Governance - 10 Hrs

- i. Framework
- ii. Contemporary Issues in Governance
- iii. Governance and Public Institutions

Module 5 : Ethics - 10 Hrs

- i. Introduction to Ethics and Ethical Theories
- ii. Theories of Ethics – Utilitarian, Deontological, Virtue, Care
- iii. Concept of Dirty Hands
- iv. Contemporary Case Studies
- v. Ethics in Development and Sustainability

Evaluation pattern

- Quizzes – 10 marks
- Mid-term – 15 marks
- Assignment – 15 marks
- End Semester Exam – 60 marks

Readings

- The Constitution of India
- I.M.D. Little, Ethics, Economics and Politics
- Indian Public Administration – Arora and Goyal
- New Horizons of Public Administration – Mohit Bhattacharya
- Michael E Kraft, Scott R Furlong Public Policy – Politics Analysis and Alternatives, Sage Publications
- Changing Contours of Indian Governance – Edited Book by Rakesh Mohan India Transformed 25 Years of Economic Reforms

Course 9: Basic Econometrics (40 + 10 = 50 hours) – 4 credits

Module 1: The nature of Econometrics and Economic Data:

- Introduction, Model Specification and applied research
- The role of data in model specification
- The Structure of Economic Data
- Steps in Empirical Analysis
- Causality and the Notation of Ceteris Paribus in Econometrics, etc.

Module 2: The Classical Linear Regression Model:

- Estimation and Inference: Ordinary least squares (OLS) estimation, the Classical assumptions, the Gauss-Markov theorem and properties of the OLS estimators
- Interval estimation and hypothesis testing and prediction
- Reporting and interpreting regression results
- Maximum Likelihood techniques
- Restricted Least Square estimation
- Likelihood Ratio (LR)
- Wald and Lagrange Multiplier (LM) Test
- Minimum Variance Bound (Rao-Cramer Inequality Theorem).

Module 3: Non-linear regression:

- Conversion of non-linear forms into linear forms
- Testing linear versus non-linear functional form
- Appropriateness and relevance of the choice of functional form.

Module 4: Regression Analysis with Qualitative information: Binary (or Dummy) Variables:

- Exogenous Dummy Variable- Formulating and interpreting coefficients on dummy explanatory variables
- Interactions involving dummy variables and use of dummy variables in seasonal analysis
- Piecewise regression analysis
- The dummy variable alternative to chow test.
- Discrete and Limited Dependent variable - Linear Probability Model, Problems relating to LPM
- Logit and Probit Model
- Multinomial Choice Models: Ordered Response Model; Unordered Response Model, Censored and Truncated Regression Model

Module 5: Multicollinearity:

- Introduction, perfect versus imperfect Multicollinearity
- Consequences, tests for detection and remedies for Multicollinearity.

Module 6: Violation of the OLS Assumptions:

- Introduction, Consequences of violation of OLS assumption
- GLS Estimation- Aitken's generalization of Gauss Marks Theorem.
- Heteroscedasticity & Autocorrelation: Causes and consequences, diagnostic tests and remedial procedural

Module 7: Specifications: Choosing the Independent Variables and Functional Form

- Omitted variables: Too few variables, Irrelevant variables: variable overload, Criterion of choice, superfluous variables etc.
- The use and Interpretation of constant term

- Alternative Functional forms, Problem with incorrect functional form, test for choosing the appropriate functional form.

Module 8: Lagged Variables and Distributed- Lag Models:

- Introduction, Consequences of applying OLS
- Almon's lag approach
- Koyak Transformation: Partial adjustment hypothesis and adaptive expectations hypothesis, estimation of distributed lag models etc.

Module 9: Simultaneous Equation Models (SEM):

- Introduction, Structural, reduced form and final form model
- Rational behind the use of SEM - simultaneous bias and inconsistency of the OLS estimator
- Problem of Identification: Rank and Orders conditions
- Methods of estimation: ILS, 2SLS, Instrumental Variable, LIML (LVR), Mixed estimation Method, 3 SLS and FIML methods.

References

Books:

1. Green, William H. (2014), *Econometric Analysis*, *Prentice Hall*.
2. Griffiths, Hill and Judge (1993), *Learning and Practicing Econometrics*, *Wiley*, New York.
3. Gujarati, Damodar, (2003), *Basic Econometrics*, 4th Edition, *Tata McGraw Hill Publishing Company*, New Delhi
4. Johnston and Dinardo (1997), *Econometric Methods*, 4th Edition *McGraw-Hill International Edition*.
5. Judge, G.G. et al., *Introduction to the theory and Practice of econometrics*, 2nd Edition *John Wiley and Sons*.
6. Koutsoyiannis, A (2004), *Theory of Econometrics*, 2nd edition, *Palgrave*, N. Y.
7. Madala G.S. (2001), *Introduction to Econometrics*, *John Wiley & Sons*.
8. Pindyck & Rubinfeld (1997), *Econometrics Models & Economic Forecast*, 4th edition, *McGraw-Hill/Irwin*.
9. Studenmund, A.H., (2005), *Using Econometrics: A Practical Guide*, *Addison Wesley Publishing Company*, Boston.
10. Wooldridge J. (2009), *Introductory Econometrics: A Modern Approach*, *South-Western College Pub*.

Articles:

1. Amemiya, Takeshi (1980), 'Selection of Regressors', *International Economic Review*, Vol. 21, No. 2, June, pp. 331-354,
2. Amin and Islam (2014), 'Are There More Female Managers in the Retail Sector? Evidence from Survey Data in Developing Countries,' Policy Research Working Paper-6843, *World Bank*.
3. Angrist and Kruger (2001), 'Instrumental Variables and search for Identification: From Supply and Demand to Natural Experiments,' *Journal of Economic Perspective*, Volume 15, November 4- Fell 2001, P 69-85
4. Chen, Dhal, and Khan(2002), 'Nonparametric Identification and Estimation of a Censored Regression Model with an Application to Unemployment Insurance Receipt', *Center For Labor Economics University of California*, Berkeley Working Paper No. 54
5. Chintagunta and Honore (1996), 'Investigating the effects of marketing variables and unobserved heterogeneity in a multinomial probit model,' *International Journal of Research in Marketing, Elsevier Science*, 13(1996) 1-15
6. Comanor William S. and Wilson Thomas A. (1967), 'Advertising Market Structure and Performance', *The Review of Economics and Statistics*, Vol. 49, No. 4, Nov., pp. 423-440
7. Dornbusch, R. and Pechman, Clarice (1985), 'The Bid-Ask Spread in the Black Market for Dollars in Brazil', *Journal of Money, Credit and Banking*, Vol. 17, No. 4, Part 1, November, pp. 517-520.
8. Halvorsen, R. and Palmquist, R. (1980), 'The Interpretation of Dummy Variables in Semi logarithmic Equations', *The American Economic Review*, Vol. 70, No. 3, June. pp. 474-475
9. Harvey, A. C. (1976), 'Estimating Regression Models with Multiplicative

Course 10: Introduction to International Security and Law

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Conceptualization of International Law and International Security - 10 Hrs

- i. Understanding International law and international security as a background

Module 2: Introduction to International law - 10 Hrs

- i. What is International Law
- ii. Historical Development
- iii. Basis of treaties
- iv. Law of treaties
- v. International Environment law

Module 3: Introduction to International security - 10 Hrs

- i. Concept of International security: Realism, Liberalism and Critical Theories
- ii. Security: National, Regional, International and Global
- iii. International Security in an era of Globalization
- iv. Non-State Actors and International Security

Module 4: Climate change, Energy Geopolitics and International Security - 10 Hrs

- i. Climate Change and Development
- ii. Global Manifestation of climatic change and International co-operation
- iii. Russia, China and Energy Geopolitics
- iv. Renewable Energy and Critical and Rare Earth Minerals
- v. Security of Supply Chains

Module 5: Security Challenges for India - 10 Hrs

- i. India : Traditional and Non-Traditional Security Challenges
- ii. China and Pakistan
- iii. Terrorism and Left-Wing Extremism
- iv. Separatism in the North-East

Evaluation pattern

- Quizzes – 10 marks
- Mid-term – 15 marks
- Assignment – 15 marks
- End Semester Exam – 60 marks

Reading

- Henry Farrell and Abraham L. Newman, 'Weaponized Interdependence: How Global Economic Networks Shape State Coercion', International Security, Vol 44, No. 1, 2019
- RBI Report On Currency And Finance – Climate Change 2022-23.
- Daniel Yergin, The New Map: Energy, Climate, and the Clash of Nations, Penguin: 2020
- Anthea Roberts, Henrique Choer Moraes and Victor Ferguson, Toward a Geoeconomic Order in International Trade and Investment, Journal of International Economic Law 22 (2019), 655–676
- Michael E Kraft, Scott R Furlong Public Policy – Politics Analysis and Alternatives, Sage Publications

SEMESTER 3

Course 11: International Economic Order, Globalization and Global Financial Crises

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Conceptual Underpinnings of Globalization – 8 Hrs

- i. Definition of globalization
- ii. Evolution
- iii. Pros and Cons

Module 2: Two Faces of Globalization and Globalization in Action- 12 Hrs

- i. Globalization – Economic Reforms, Prosperity and Poverty
- ii. Reforming globalization and de-globalization
- iii. Migration
- iv. Intellectual property its strength and limit
- v. Saving the planet- Global Environmental problems

Module 3: Role of Markets – 8 Hrs

- i. Fall of communism
- ii. Comprehensive approach to development
- iii. Issues in Governance

Module 5: Democratizing Globalization – 8 Hrs

- i. Democratic deficit
- ii. Reforming the global reserve system
- iii. Burden of debt

Module 6: Global Financial Crises- Genesis, Nature and Manifestation – 8 Hrs

- i. Financial crises in a historical perspective
- ii. Global imbalances
- iii. Savings glut hypothesis
- iv. Regional manifestation- AEs, EMEs

Module 7: Global Financial crisis and its aftermath - 6 Hrs

- i. Lessons from the global financial crisis
- ii. Global crisis and exist strategies – An Indian Perspective
- iii. The new global financial architecture- approaches and issues

Evaluation pattern

- Quizzes – 10 marks
- Mid-term – 15 marks
- Assignment – 15 marks
- End Semester Exam – 60 marks

Readings

- Joseph Stiglitz, Globalization & Its Discontents, Penguin, 2002.
- Jagdish Bhagwati, In Defense of Globalization, OUP, 2007.
- Making Globalization Works, Joseph Stiglitz, Penguin.
- Global Crisis and Recession and Uneven Recovery, Y. V. Reddy, Orient Blackswan.

- Global Financial crisis, Report on Currency finance 2008-09, RBI.
- Acharya V and Mathew Richardson. 2009. "Causes of the Financial Crisis", New York University.
- Akerlof George A. and Robert J. Shiller. 2009. "Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism", Princeton University Press, 2009
- Bank for International Settlements (2009), 79th Annual Report.
- Chakarbartty K.C. 2009. "Global Crisis: Genesis, Challenges and Opportunities Unleashed", RBI Bulletin, October.
- Global Crisis and Recession and Uneven Recovery, Y. V. Reddy, Orient Blackswan.
- Asian Development Bank. 2009. "Rebalancing Asia's Growth." Asian Development Outlook.
- Blanchard, Olivier. 2009. "The Crisis: Basic Mechanisms and Appropriate Policies." IMF Working Paper WP/09/80. April.
- Goldstein, M., G. L. Kaminsky and C. M. Reinhart. 2000. "Assessing Financial Vulnerability: A Early Warning System for Emerging Markets." Institute for International Economics: Washington, D C.
- Spence, A. Michael. 2009. "The Financial and Economic Crisis and the Developing World". Journal of Policy Modeling.

Carmen M Reinhart, Kenneth S Rogoff "*This Time is Different: Eight Centuries of Financial Folly*"

Course 12: Emerging Powers in Global Politics
(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Politics and Power: Debates and Dimensions - 10 Hrs

- i. The Role of Power in Global Politics
 - ii. Changing Dimensions of Politics and Power
 - iii. Changing Structure of Global Politics
-

Module 2: Typology of Powers - 10 Hrs

- i. Superpowers,
 - ii. Great Powers,
 - iii. Regional Powers
 - iv. Emerging Powers
-

Module 3: The Idea of Emerging Powers in Global Politics - 10 Hrs

- i. Political, Economic, Resources and Ideational Dimensions
-

Module 4: Worldview of Emerging Powers - 10 Hrs

- i. Pro-West and Anti-West
 - ii. Pro- China and Anti- China
 - iii. Russia
 - iv. Non-alignment
-

Module 5: Case Studies - 10 Hrs

- i. BRICS
- ii. West Asia: UAE, Iran and Saudi Arabia
- iii. Africa: Egypt, Ethiopia and Nigeria
- iv. Americas: Mexico, Argentina

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Reading:

- Fonseca, P. C. D., Paes, L. D. O., & Cunha, A. M. (2016). The concept of emerging power in international politics and economy. *Brazilian Journal of Political Economy*, 36, 46-69.
- Hurrell, A. (2014). Rising powers and the emerging global order. *The globalization of world politics: an introduction to international relations*, 80-94.
- Stephen, M. D. (2017). Emerging powers and emerging trends in global governance. *Global governance*, 483-502.
- Alam, M. B. (1977). The concept of non-alignment: A critical analysis. *World Affs.*, 140, 166.
- Alam, M. B. (1977). The concept of non-alignment: A critical analysis. *World Affs.*, 140, 166.

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Course 13: Asia's Geoeconomics

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: The Rise of Asia - 10 Hrs

- i. Asian Tigers
- ii. China
- iii. ASEAN + RCEP

Module 2: Asian Tigers - 10 Hrs

- i. Export-led Growth Model
- ii. Asian Financial Crisis
- iii. China and Asian Economies

Module 3: China and the Global Economy - 10 Hrs

- i. China's Political Economy
- ii. Economic Reforms and State Capitalism
- iii. Quest for Energy and Economic Security
- iv. China's debt- trap diplomacy
- v. China's forays into India's neighbourhood

Module 4: Belt and Road Initiative - 10 Hrs

- i. Geopolitics and Geoeconomics
- ii. Connectivity and Infrastructure Projects
- iii. Debt Trap and Global Implications

Module 5: US, China and Asian Economic Future - 10 Hrs

- i. RCEP and CP-TPP
- ii. Donald Trump, Trade War and Supply Chain Crisis
- iii. Indo-Pacific Economic Framework
- iv. India and the Asian Economic Future

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Readings:

- Vijay Gokhale, After Tiananmen: The Rise of China, Harper Collins, 2022
- Learning from Asian Tigers Studies in Technology and Industrial Policy – Springer
- Mr. Peter S. Heller "Aging in the Asian Tigers" : Challenges for Fiscal Policy"
- Kapur, D., & Suri, M. (2014). Geoeconomics versus geopolitics: Implications for Asia. The Oxford Handbook of the Economics of the Pacific Rim, 290-313.

Course 14: Research Methodology: Technique and Design (2 Credit - 30 Hrs)

Module 1- Scientific Methods of Research

- Definition of Research
- Aims, objectives and scope of social research, Assumptions, Operations and Aims of Scientific Research, Steps in research, Formulation of a research problem, Operationalisation of concepts, Research Process: conceptual, Empirical and Analytical Phases of Research, Essentials Criteria of Scientific methods.

Module 2 - Research Designs and Logic in research

- Experimental research design: Pre experimental, True experimental and Quasi experimental research design, RCT.
- Non-experimental research design: Descriptive, exploratory, Explanatory and Monitoring and Evaluation
- Reliability and Validity- Face, content, construct, convergent, concurrent, and predictive validity
- Inductive and deductive reasoning; Measurements
- Non-random and random errors, Scaling and composite indices

Module 3 – Data collection – Quantitative and Qualitative

- Quantitative: Survey methods and their application to public health research, Conceptual framework; Mixed-method design; Survey design and planning, sampling; Construction of questionnaire; Data collection and analysis; Large sample surveys – Techniques
- Qualitative: Types of qualitative research, approaches in qualitative Research-Ethnography, Grounded Theory, Historical research
- Qualitative data collection methods: In Depth Interview, Focus Group Discussion, Observation, Case Study, Participatory methods, KII
- Sampling and Analytical approaches- thematic analysis, content analysis, narrative analysis.

Module 4 – Communication and Proposal Development

- Scientific writing, Writing and Presentation of literature review, report, papers, manuals, Research Brief, Plagiarism, Ethics in research
- Select a topic, identify a research gap, Frame research questions, Develop objectives
- Write proposal for grant

Module 5 - Monitoring and Evaluation

- Principles of Monitoring & Evaluation: Introduction to M&E – roles and uses; Results paradigm: inputs, activities, outputs, outcomes and impact/goal; M&E in Project Cycle; Stakeholder Analysis – who, needs and roles.
- M&E Frameworks: LFA; Logic model; Results frame; M&E plan in general
- Theory of Change: Theory of change – project design, M&E frame Knowledge &
- Skills for efficiency and productivity in development
- Quantitative Impact Evaluation: Estimation of Counterfactual – Theoretical concept; Descriptive comparison - Why simple difference is insufficient; Difference in Differences (DiD); Regression Discontinuity Design (RDD); Propensity Score Matching (PSM)

Reading List

1. Creswell, J. W. & Creswell, J. D. Research Design. (2023), Ed. 6, New Delhi: Sage Pub.,xxvii, 291p. ISBN: 9781071817971
2. Chaddah, P. (2018). Ethics in Competitive Research: ISBN: 978-9387480865 {PDF}
3. Kilonzo, S.M. & Ojebode, M. Research Methods for Public Policy, In Aiyde, E.M. & Muganda, B (2023) Public Policy and Research in Africa, Springer Nature, pp.67-85, ISBN: 978-3-030-99723-6
4. Kothari, C. R. (2004) Research Methodology: Models and Techniques, New Delhi: New Age

Publishers, 401p. ISBN: 978-81-224-1522-3

5. Kothari. C. R. (2004). Quantitative Techniques (2nd edition). Vikas Publishing House Pvt. Ltd., New Delhi
6. Forum (1994). Focus Group for Health Research. Health Transition Review, 4(1): 81-104.
7. Sharma, R. A. (2000). Essentials of Scientific Behavioural Research; R. Lall book depot, Meerut (UP).
8. Singh, K. (2007). Quantitative social research methods. Sage.
9. Bernard, H. R. (2017). Research methods in anthropology: Qualitative and quantitative approaches. Rowman & Littlefield.
10. Kish, L. (1995). Survey Sampling; John Wiley and Sons Inc., New York.
11. Lohr, S. (1999). Sampling design and analysis. Duxbury Press Pacific Grove. CA, 221, 249.
12. Lwanga, S. K., Lemeshow, S., & World Health Organization. (1991). Sample size determination in health studies: a practical manual. World Health Organization.
13. Singleton R.A. and Straits B.C. (1999). Approaches to Social Research. Oxford University Press.
14. Young P. V. (1994). Scientific Social Surveys and Research (4th Edition). Prentice-Hall, New York.
15. Tolley, E. E., Ulin, P. R., Mack, N., Robinson, E. T., & Succop, S. M. (2016). Qualitative methods in public health: a field guide for applied research. John Wiley & Sons.
16. Bernard, H. R., Wutich, A., & Ryan, G. W. (2016). Analyzing qualitative data: Systematic approaches. SAGE publications.
17. Green, J., & Thorogood, N. (2004). Qualitative methods for Health Research sage. New York.
18. Silverman, D. (2006). Credible qualitative research. Interpreting qualitative data, 271-314.

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Course 15: Public Policy: Theory, Process, Instruments, and Decision Making

Module 1: Theories of Public Policy - 10 Hrs

- i. Elite Theory
- ii. Rational Choice Theory
- iii. Political Systems Theory
- iv. Group Theory
- v. Institutional Theory

Module 2: Public Policy, Social Science and State - 10 Hrs

- i. Theoretical Tradition
- ii. Two sides of quality of intellect: a) Transformation of epistemic constellation b) Phronesis (Practical Wisdom)
- iii. Crisis of useful knowledge
- iv. Why do Social Science Matter? Why does social science inquiry fails how can it succeed again?

Module 3: Policy Process - 10 Hrs

- i. Constitutional Framework
- ii. Non-Constitutional bodies
- iii. Theories of Policy Cycle: Agenda setting and Regulatory Institutions
- iv. Policy Formulation design and tools

Module 4: Instruments of Public Policy - 10 Hrs

- i. Theories of instruments of public policy: Public Intervention, market intervention and behavioral intervention.
- ii. Instruments of Public Policy: Regulation, Government Management, Market Mechanism Symmetry and asymmetry of information
- iii. Public Private Participation

Module 5: Decision Making and Governance - 10 Hrs

- i. Implicit Concept of Rationality in Policy Decision Making
- ii. Rational choice in public policy
- iii. Effectiveness and efficiency in Public Governance: Conceptual Underpinnings
- iv. Role of ethics

Reading

- Handbook of Public Policy Analysis, Theory, politics and Methods by Frank Fischer, Gerald J Miller, Mara S. Sidney
- Public Policy Analysis An integrated approach William N. Dunn
- The Oxford Handbook of Public Policy by Micheal Moran, Martin Ren, Robert E. Goodin
- Public Policy Politics, Analysis, and Alternatives by Michael E. Kraft and Scott R. Furlong.
- In service of Republic –by Vijay Kelar and Ajay Shah Penguin Random house India

Semester 4 (20 Credit – 300 Hrs)

Course 16: Role of USA in Geopolitics and Goeconomics

(50 + 10 = 60 Hrs) (Credits: 4)

Module 1: Introduction to America - 10 Hrs

- i. American Revolution
- ii. Domestic Political System
- iii. The Making of Foreign and Defence Policy

Module 2: America and the World since 20th Century - 10 Hrs

- i. World Wars
- ii. Cold War
- iii. Post-Cold War World

Module 3: America and the Global Economy - 10 Hrs

- i. American Economic Policy
- ii. Marshall Plan and the Rebuilding of Europe
- iii. NAFTA and Globalization
- iv. Global Financial Crisis of 2008

Module 4: America and 21st Century Geopolitics - 10 Hrs

- i. The Global War on Terror
- ii. Democracy Promotion and Military Interventions
- v. China, Russia, North Korea and Iran

Module 5: The Future of American Power - 10 Hrs

- i. The Rise of Donald Trump and Trade Wars
- ii. Strategic Rivalries and the Return of Great Power Politics
- iii. The Crisis of Confidence and Identity

Evaluation pattern

- **Quizzes – 10 marks**
- **Mid-term – 15 marks**
- **Assignment – 15 marks**
- **End Semester Exam – 60 marks**

Reading

- Mercille, J. (2008). The radical geopolitics of US foreign policy: Geopolitical and goeconomic logics of power. *Political Geography*, 27(5), 570-586.
- Baizidi, R. (2021). Strategies and International Geopolitical, Goeconomic, and Geocultural Regimes of the United States in Global and Regional Ordering. *World Politics*, 10(2), 31-60.

Course 17. Policy Evaluation (2 credits)

Course 18: Project Assignment (2 credits)

Course 19: Case Study Writing on regional blocs vs multilateralism (2 credits)

Course 20: Dissertation (10 credits)

Evaluation pattern

- **Case Study - 2 Credits**
- **Policy Evaluation - 2 Credits**
- **Project Assignment - 2 Credits**
- **Dissertation – 10 Credits**