



**MASTER OF SOCIAL DATA SCIENCE AND POLICY (SODAS)
CURRICULUM & SYLLABUS**

2024 Admission onwards

CURRICULUM

Course Code	Course Title	LTP	Cr	Course Code	Course Title	LTP	Cr
Semester I				Semester II			
24SDS501	Introduction to Social Data Science		4	24SDS511	Sustainable Community Development		4
24SDS502	Economics for Public Policy		4	24SDS512	Academic Writing & Communication		3
24SDS503	Programming for Social Data Science I		4	24SDS513	Research Methods for Policy Studies II		4
24SDS504	Research Methods for Policy Studies I		4	24SDS514	Programming for Social Data Science II		4
22ADM501	Glimpses of Indian Culture	2 0 1	P/F		Specialization I		3
24SDS505	Immersive Data Collection		3		*Amrita Values Program	1 0 0	1
				22AVP103	Mastery Over Mind		2
	Total		19		Total		21
Course Code	Course Title	LTP	Cr	Course Code	Course Title	LTP	Cr
Semester III				Semester IV			
24SDS601	Behavioral Economics and Public Policy		4	24SDS699	Major Project/Dissertation		14
24SDS602	Machine Learning for Social Data Science		4		Specialization III		3
24SDS603	Policy & Design Thinking		3		Open Elective		3
	Specialization II		3				
24SDS698	Internship		4				
	Open Elective		3				
	Total		21		Total		20
TOTAL-81							

Course Code	Course Title	LTP	Cr	Course Code	Course Title	LTP	Cr
SPECIALIZATION: ECONOMIC POLICY				SPECIALIZATION: HEALTH POLICY			
24SDS531	Foundations of Development Policy		3	24SDS551	Health Policy and Systems Research (HPSR)		3
SPECIALIZATION: GENDER POLICY				SPECIALIZATION: EDUCATION POLICY			
24SDS541	Gender and Development		3	24SDS561	Education for Sustainable Development (SWAYAM)		3
24SDS542	Gender Policy and Legislations in India		3	OPEN ELECTIVES			
24SDS543	Critical Masculinities and Gender Equality		3	24OEL641	Social Welfare Policy & Administration		3
				24OEL642	Science, Technology, & Society Interactions		3

****Amrita Value Programme**

22ADM502	Vedanta in day-to-day life	1-0-0	1
22AVP506	Message of Swami Vivekananda	1-0-0	1
22AVP508	Indian Arts and Literature	1-0-0	1
22AVP510	Appreciation of Kerala Mural Arts Forms	1-0-0	1
22AVP501	Message of Śrī Mātā Amritanandamayi Devi	1-0-0	1
22AVP502	Insights from the Ramayana	1-0-0	1
22AVP503	Insights from the Mahabharata	1-0-0	1
22AVP504	Insights from the Upanishads	1-0-0	1
22AVP505	Insights from Bhagavad Gita	1-0-0	1
22AVP512	Ancient Indian Science and Technology	1-0-0	1
22AVP507	Great Spiritual Teachers of India	1-0-0	1
22AVP509	Yoga and Meditation 1	1-0-0	1

SYLLABUS

PROGRAM & PROGRAM SPECIFIC OUTCOMES (POs & PSOs)

Program Outcomes (POs)	
PO1	Scientific Knowledge and Training: Gain and apply knowledge of basic and applied scientific and analytical fundamentals within a social lens, leading to a deeper understanding of Data Sciences and Policy.
PO2	Data Science & Policy for society: Apply reasoning through the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional scientific practice.
PO3	Sustainability and society: Understand the impact of data science and policy within societal and environmental contexts, and demonstrate the knowledge, and need for sustainable development.
PO4	Ethics and Values: Apply ethical principles and commit to professional ethics and responsibilities and norms of scientific practice.
PO5	Numerical and Data Analysis: Numerical analysis, interpretation of data, and organised representation of the information to provide valid conclusions.
PO6	Scientific Communication: Communicate scientific content effectively with peers, educators, science community, and with society at large.
PO7	Individual and teamwork: Think critically and work independently, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO8	Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of scientific and technological changes for up-to-date research and teaching methods.
Program Specific Outcomes (PSOs)	
PSO1	Acquire conceptual understanding of fundamental principles of Data Science which enables them to gain insight into the potential applications of the field.
PSO2	Acquire conceptual understanding of fundamental principles of Indian and Global Policy which enables them to gain insight into the potential applications of the field.
PSO3	Explore advanced areas in Data Science and provide them with the necessary subject knowledge to pursue a career in IT industries, Government, NGO sector, research institutes as well as academia.
PSO4	Provide knowledge about the state-of-the-art techniques, methodologies, best practices and design and develop Data Science based solutions to complex problems related to society and sustainable development.
PSO5	Establish the culture of independent learning, innovative research and productive teamwork.

SEMESTER 1

24SDS501

Introduction to Social Data Science

4

Prerequisite: NA

Summary: This course explores successful applications of computational approaches to social science based on the representation of complex data, information visualization, and model construction. We will reexamine the scientific method in the social sciences in context of both theory development and testing, exploring how computation and digital data enables new answers to classic investigations, the posing of novel questions, and new ethical challenges and opportunities. The course also covers crucial issues in social data sciences surrounding privacy, gender bias, and fairness. By the end of the course students will gain a foundational understanding of the principles, methods, and applications of social data science using case studies for real-world applications.

Course Objectives:

1. To examine the theoretical underpinnings of social data analysis and theory-building.
2. To gain a basic understanding of methods and applications of social data science.
3. To develop ethical and contextual considerations when working with quantified data in social contexts.
4. To gain an overview of research areas in social science that can leverage data science techniques.
5. To explore key theories and challenges in political science, sociology and anthropology within the context of data science.

Course Outcomes:

CO1: Students can demonstrate an understanding of how theories inform data analysis and interpretation in social contexts.

CO2: Students can analyze quantified data through critical lenses, considering ethical and contextual implications.

CO3: Students understand the scope of application of data science techniques to contemporary issues in social science, addressing theoretical and practical challenges.

CO4: Students can explain approaches to integrating qualitative data analysis into social data science research, enriching the depth and context of their findings.

CO5: Students can synthesize findings from social data analysis across different disciplines, integrating insights from anthropology, sociology, and political studies.

Skills:

- Students will develop the ability to critically analyze data, theories, and methodologies from multiple disciplinary perspectives, enabling them to evaluate the strengths, limitations, and ethical implications of social data science approaches.
- Students will enhance their ethical decision-making skills by considering the social, cultural, and ethical implications of working with data in diverse contexts.

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2	-	-	-	X	-	-	-	-

CO3	-	X	-	-	-	-	-	-
CO4	X	-	-	-	-	-	-	-
CO5	X	-	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	X	-	-	-	-
CO3	X	-	-	-	-
CO4	-	X	-	-	-
CO5	-	-	-	X	-

Syllabus:

- Unit I – Introduction to Social Data Science: Questions, Concepts, and Methods. Foundations of theory-building. Social systems and social data. Applications of computational methods in social sciences: overview and case studies.
- Unit II – Critical Perspectives in Data Science. Production, analysis and use of quantified data: an anthropological approach. Thinking ethically and contextually about quantified data. Qualitative data and stakeholder engagement in social data science.
- Unit III – Data Science for Political Studies. Theories and open challenges in political science. Comparative environmental politics: social sciences and climate change. Case studies used for real-world understanding.
- Unit IV – Data Science for Sociology. Theories and open challenges in sociology. Social network theory. Applications of social network analysis to inform policy decisions. Case studies used for real-world understanding.
- Unit V – Data Science for Anthropology. Theories and open challenges in anthropology. Digital ethnography. Spatial analysis using Geographic Information Systems (GIS) data. Linguistic anthropology and natural language processing. Case studies used for real-world understanding.

Textbooks and Papers:

Llaudet, E., & Imai, K. (2022). Data analysis for social science: a friendly and practical introduction. Princeton University Press.

Kim, In Song and Dmitriy Kunisky. “Mapping Political Communities: A Statistical Analysis of Lobbying Networks in Legislative Politics.” Political Analysis (2020)

Kleinberg, J., Lakkaraju, H., Leskovec, J., Ludwig, J., & Mullainathan, S. (2018). Human decisions and machine predictions. The quarterly journal of economics, 133(1), 237-293.

Reference Books:

Rule, James. 1997. Theory and Progress in Social Science. New York: Cambridge University Press. Winch, Peter. 1958. The Idea of Social Science and Its Relation to Philosophy.

London: Routledge. Hesse, Mary. 1966. Models and Analogies in Science. Notre Dame, IN: Notre Dame University Press.

Parsons, Talcott. 1952. *The Social System*. Glencoe, IL: Free Press.

Davis, Murray S. 1971. "That's Interesting: Towards a Phenomenology of Sociology and a Sociology of Phenomenology." *Philosophy of the Social Sciences* 1(2):309–44.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	30	
End Semester		40

*CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar

Prerequisite: NA

Summary: This course teaches students to apply economic theory to current social and economic problems and formulate relevant recommendations for public policy. It emphasizes the understanding of analytical tools and models that can be applied in a wide variety of contexts. The course covers key topics in micro- and macroeconomics, as well as Regulation Theory & Methods, to explore how governments can address market failure, smooth out the business cycle and foster economic growth in the long-run. The students will learn to apply relevant tools and frameworks at each stage of economic analysis for public policy, including data collection, model estimation, policy design and impact analysis. The course prepares students to be able to critically evaluate the economic policies promulgated by governments and other institutions, form their own judgments and design public policy options in an evolving global context.

Course Objectives:

1. Understand relevant economic and regulation theories and apply them in them in a policy formulation context.
2. Understand when the government should intervene in the economy and what tools and policy options are applicable in different situations.
3. Analyze strengths and weaknesses of policy options in addressing the range of problems the government faces.
4. Explain and estimate the effects of government interventions on economic and social outcomes in the short- and long-run.
5. Be familiar with the process of policy-making and the tools available to policy-makers.

Course Outcomes:

- CO1: Apply economic concepts in a rigorous way to formulate public policy recommendations and communicate them to a wider audience.
- CO2: Evaluate the relevance of alternative economic theories for analyzing policy issues over a range of subject areas, such as taxation, government purchases, healthcare and education, science and technology etc.
- CO3: Present a structured argument and economic rationale for government intervention in a given policy area, addressing relevant financial challenges of the public policy option.
- CO4: Apply methods of cost-benefit and cost effectiveness analysis to identify the policy option with the greatest social net benefit, and therefore the greatest efficiency.
- CO5: Assess trade-offs and synergies between different public policy instruments to achieve short-run and long-run goals of economic development.

Skills:

- Critical thinking: students will develop critical thinking skills to assess the strengths, weaknesses, and unintended consequences of various policy interventions.
- Communication: students will enhance their ability to communicate complex economic concepts and policy recommendations clearly and persuasively to policymakers, stakeholders, and the general public.

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	-	-	-	X	-	-
CO2	X	-	-	-	-	-	-	-
CO3	-	X	-	-	-	-	-	-
CO4	-	-	-	-	X	-	-	-
CO5	X	-	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	-	X	-	-	-
CO3	-	X	-	-	-
CO4	-	-	-	X	-
CO5	-	-	-	X	-

Syllabus:

- Unit I – **Introduction to Economics for Public Policy** – Foundations and models. Opportunity cost, scarcity and choice. Efficiency and equity. Markets in action. The role of government. Price-setting. Interaction of supply and demand. Market structures. Externalities and public goods. Taxation and income distribution.
- Unit II – **Public Policy Frameworks** – Agenda setting. Policy formulation and design. Budget planning. Policy Implementation. Cost-benefit analysis. Cost effectiveness analysis. Case studies used for real-world understanding.
- Unit III – **Managing the National Economy in the Short-Run** – Foundations of macroeconomic analysis: models, frameworks and data. Measuring growth, unemployment and inflation. Business cycle theory. Fiscal policy. Public budgeting and the budget process. Multi-year expenditure frameworks. Money, banks and the role of the Central Bank. Monetary policy. Regulation Theory & Methods.
- Unit IV – **Long-Run Economic Growth** – Determinants of economic growth in the long-run. New Keynesian and neoclassical models of economic growth. Endogenous growth models and growth policies.
- Unit V – **International Economy** – Foreign exchange market and exchange rates. International financial system. Trade policy. Tariffs and non-tariff barriers.

Textbooks and Papers:

Hubbard, R. G., & O'Brien, A. P. (2020). Economics. 8th edition, Pearson Education.

Mankiw, N. G. (2022). Macroeconomics. 11th edition, Macmillan Learning.

Varian, H. R. (2016). Intermediate Microeconomics with Calculus: A Modern Approach: Ninth International Student Edition. WW Norton & Company.

Reference Books:

Baldwin, R., Cave, M., & Lodge, M. (2011). Understanding regulation: theory, strategy, and practice. Oxford university press.

Bellinger, W. K. (2015). The economic analysis of public policy. Routledge.

Coyle, D. (2020). Markets, state, and people: Economics for public policy. Princeton University Press.

Dunn, W. N. (2015). Public policy analysis. routledge.

Hausman, D., McPherson, M., & Satz, D. (2016). Economic analysis, moral philosophy, and public policy. Cambridge University Press.

Mankiw, N. G., & Taylor, M. P. (2020). Economics. Cengage Learning EMEA.

Moss, D. A. (2014). A concise guide to macroeconomics: what managers, executives, and students need to know. Harvard Business Press.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	30	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Course Description:

Programming for Social Data Science is a gentle introduction to programming concepts that are paramount to data science in general, and to social data science in particular. Students learn how to read and understand existing code, as well as to write and debug their own code. Basic computing algorithms are introduced, implemented, and their computational cost is being assessed. Essential programming concepts like object-oriented programming, and primitive and compound data types are also introduced. Students learn the R and Python programming language, which have grown to become the most popular among social scientists for numerous good reasons.

The focus of the course is on analyzing data and generating reproducible research through the use of the programming language R and version control software. Topics include coding concepts (e.g., data structures, control structures, functions, etc.), data visualization, data wrangling and cleaning, exploratory data analysis, etc. Major emphasis is placed on a pragmatic understanding of core principles of programming and packaged implementations of methods.

Course Objectives:

1. Understanding about the approaches to solving Social Problems with Data
2. Understand the application of programming in Social Data Science
3. Define and understand variables and use sets, loops and conditional statements
4. Implement and use functions and operate on files to read

Course Outcomes:

- CO1: Apply basic programming skills to investigate social problems and interpret statistical output.
- CO2: Identify optimal statistical approaches for analyzing social problems based on data characteristics and assumptions, including measurement levels, data distribution, and dataset structure.
- CO3: Construct reproducible code with a theoretical and statistical justification for the decision-making process.
- CO4: Present a structured argument for government intervention in the social domain, based on a nuanced and critical understanding of statistical findings.

Skills:

- Structured thinking: students will learn to structure their thinking to approach social problems from a data science perspective, and take organized steps towards a conclusion.
- Scientific communication: students will enhance their ability for verbal and written communication of statistical output as well as its interpretation and broader implications.

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
--	-----	-----	-----	-----	-----	-----	-----	-----

CO1	X	-	-	-	-	-	-	-
CO2	-	X	-	-	-	-	-	-
CO3	-	-	-	-	X	-	-	-
CO4	-	-	-	-	-	X	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	-	X	-	-	-
CO3	-	-	-	X	-
CO4	-	-	-	-	X

Syllabus:

- Unit I – Introduction to Programming – What is Programming?; What Could it Mean for Social Science Research? Concept of automation. Programming languages. Applications in Social Science. 2 hrs.
- Unit II – Data wrangling and Descriptive analysis – Installations and Setting up the programming environment. Identifying and loading datasets. Data Wrangling, Filter, select, Apply, order, sort. Grouping and Summarizing Data. Tidying datasets (e.g., data cleaning techniques and handling missing data). 6 hrs.
- Unit III – Data visualization using gg-plot or Matplotlib – Ethics considerations. Data manipulations and Exploratory analysis. Graphs, plots, configurations. Histograms, Bar Plots, Scatterplots, Combining Multiple Plots, Saving Plots. Interactive visualizations. Visualizing geographical data. 6 hrs.
- Unit IV – Elementary programming - Data types and Typecasting. Operators (comparison, arithmetic and logical), variables, constants. Conditional statements. Loops , conditions and control statements. Data structures (e.g., List, tuples, sets and dictionaries). Functions. 8 hrs.
- Unit V – Exploratory analyses – Familiarize with main packages like Numpy, Pandas, matplotlib, etc. Numeric exploration and visual exploration. Correlations and heatmaps. Patterns and shapes. Plotting distributions and related statistics. 8 hrs

Textbooks and Papers:

Wickham, H., Çetinkaya-Rundel, M., & Grolemund, G. (2023). R for Data science. 2nd edition. O’Reilly Media. <https://r4ds.hadley.nz/>
 Nelli, F. (2023). Python Data Analytics. 3rd edition. Apress Berkeley, CA.

Reference Books:

1. Introduction to R for Social Scientists - A Tidy Programming Approach <https://www.routledge.com/Introduction-to-R-for-Social-Scientists-A-Tidy-Programming-Approach/Kennedy-Waggoner/p/book/9780367460723>
2. Python for Social Scientists https://gawron.sdsu.edu/python_for_ss/
3. Core Python Programming <https://www.udemy.com/course/core-python-3-and-oop-course-for-absolute-beginners/>

Evaluation Pattern

Assessment	Internal	External
------------	----------	----------

Programming assignments	25	
Student presentations & Class participation	20	
Attendance	5	
End Semester		50

Prerequisite: NA

Summary: This course introduces students to the key issues of the research process in social sciences, including measurement, reliability and validity, internal research design validity, and generalizability. This course is focused on quantitative (as well as the basics of qualitative) research methods and includes a brief introduction to the stages of research design in the policy context, followed by the exploratory data analysis, basics of probability theory, statistical inference, as well as a simple and multiple linear regression as part of a broader strategy of causal analysis. The course equips students with the skills and knowledge necessary to prepare a policy-relevant research project using rigorous empirical research methods.

Course Objectives:

1. Develop skills and methods to engage in independent empirical research, including the ability to design a study, collect data, and analyze materials and formulate policy recommendations.
2. Learn the key concepts of social science research and understand how to execute different research approaches in practice.
3. Become familiar with how to read, interpret, write, and present quantitative research.
4. Better understand the limits of formal, numerical, quantitative, or analytical reasoning and discuss the potential for the abuse of numerical arguments.
5. Apply different approaches to estimating relationships between measured constructs, including simple and multiple linear models, non-linear models, and correctly interpret significance tests for estimated coefficients.

Course Outcomes:

- CO1: Students will develop the ability to critically evaluate quantitative information, identify appropriate statistical techniques for various research questions, and make informed decisions and policy recommendations based on quantitative data analysis.
- CO2: Students will demonstrate proficiency in using statistical methods to analyze data, including descriptive statistics, inferential statistics, and multivariate analysis techniques.
- CO3: Students will gain a solid understanding of probability theory, including concepts such as probability distributions, random variables, and probability models, to analyze uncertain outcomes and make probabilistic predictions.
- CO4: Students will learn regression analysis techniques and develop the ability to build, interpret, and evaluate regression models to analyze relationships between variables and make predictions.
- CO5: Students will understand the basics of qualitative data collection techniques, such as interviews, focus groups, participant observation, and understand the strengths and limitations of each method.

Skills:

- Critical thinking and interpretation of results: students will develop critical thinking skills to evaluate the validity and reliability of quantitative research findings, interpret statistical results accurately, and communicate findings effectively to diverse audiences.
- Problem-solving and adaptability: students will develop strong problem-solving skills and adaptability by confronting and addressing challenges inherent in quantitative and qualitative research.

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	X	-	-	-	-	-	-
CO2	X	-	-	-	-	-	-	-
CO3	-	-	-	-	X	-	-	-
CO4	-	-	-	-	X	-	-	-
CO5	X	-	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	-	-	-	X	-
CO3	X	-	-	-	-
CO4	X	-	-	-	-
CO5	-	-	-	X	-

Syllabus:

- Unit I – **Introduction to policy and research design** – Elements of research design. Selection of a research approach. Theories, research questions and hypotheses. Measurement, validity, and reliability. Research ethics.
- Unit II – **Foundations of qualitative research** – Data collection, organization, and representation. Interviews and focus groups. Conducting observations. Survey research and questionnaire design. Practices of interpretation. Writing as interpretation.
- Unit III – **Foundations of exploratory data analysis.** Descriptive statistics. Frequency distributions. Mean, variance, standard deviation, skewness, and kurtosis. Measures of position. Correlation coefficient. Visualizing relationships between variables.
- Unit IV – **Statistical inference.** Probability useful for statistics. A survey of probability concepts. Random variables and functions of random variables. Discrete and continuous probability distributions. Sampling methods and the Central Limit Theorem. Estimation and confidence intervals. Choosing an appropriate sample size. Hypothesis testing.
- Unit V – **Regression analysis.** Simple linear regression. Linear model assumptions. Properties of the least squares estimator. Gauss-Markov Theorem. Testing and confidence intervals. Multiple linear regression. Inferences in multiple linear regression. Omitted variable bias. Multicollinearity. Heteroskedasticity. Dummy variables. Interaction Terms. Polynomials and logarithms. Advanced regression topics. Robust regression. Semi-parametric and non-parametric regression. Nonlinear regression: logit and probit models.

Textbooks and Papers:

Gujarati, D. N. (2021). Essentials of econometrics. Sage Publications.

Wooldridge, J. (2008) Introductory Econometrics. New York: South-Western. 4th edition.

Creswell, John W. (2002) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 2nd ed. Thousand Oaks, CA: Sage.

Reference Books:

- Singleton, Royce A., and Bruce C. Straits (2004). Approaches to Social Research. 4th ed. New York, NY: Oxford University Press.
- Freedman, D., Pisani, R., & Purves, R. (1998). Statistics. 4rd Edition. New York: Norton.
- Andrew, Gelman and Jennifer Hill (2006). Data Analysis Using Regression and Multilevel/Hierarchical Models. Cambridge University Press.
- Gill, Jeff. (2006) Essential Mathematics for Political and Social Research. 1st Edition. 2nd printing. New York: Cambridge University Press.
- Simon, Carl and Blume, Lawrence (1994). Mathematics for Economists. New York: Norton.
- Cleveland, William S. (1993) Visualizing Data. Summit, NJ: Hobart Press.
- Tufte, Edward (2001). The Visual Display of Quantitative Information, 2nd Edition. Cheshire, CN: Graphics Press.
- Weiss, Robert S. (1995). Learning from Strangers: The Art and Method of Qualitative Interview Studies. New York, NY:Free Press, 1995..

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	30	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Introduction: Love is the substratum of life and spirituality. If love is absent life becomes meaningless. In the present world if love is used as the string to connect the beads of values, life becomes precious, rare and

beautiful like a fragrant blossom. Values are not to be learned alone. They have to be imbibed into the inner spirit and put into practice. This should happen at the right time when you have vitality and strength, when your hearts are open.

The present course in value education is a humble experience-based effort to lead and metamorphosis the students through the process of transformation of their inner self towards achieving the best. Amma's nectarous words of wisdom and acts of love are our guiding principles. Amma's philosophy provides an insight into the vision of our optimistic future.

1. Invocation, Satsang and Question - Answers
2. Values - What are they? Definition, Guiding Principles with examples Sharing own experiences
3. Values - Key to meaningful life. Values in different contexts
4. Personality - Mind, Soul and Consciousness - Q and A. Body-Mind-Intellect and the Inner psyche Experience sharing
5. Psychological Significance of samskara (with e.g. From Epics)
6. Indian Heritage and Contribution and Q and A; Indian Ethos and Culture
7. Self-Discipline (Evolution and Practice) – Q and A
8. Human Development and Spiritual Growth - Q and A
9. Purpose of Life plus Q and A
10. Cultivating self-development
11. Self effort and Divine Grace - their roles – Q and A; - Vedanta and Creation – Understanding a spiritual Master
12. Dimensions of Spiritual Education; Need for change Lecture – 1; Need for Perfection Lecture - 2
13. How to help others who have achieved less - Man and Nature Q and A, Sharing of experiences

REFERENCES:

1. Swami Amritaswaroopananda Puri - Awaken Children (Volume VII and VIII)
2. Swami Amritaswaroopananda Puri - Amma's Heart
3. Swami Ramakrishnanda Puri - Rising Along the Razor's Edge
4. Deepak Chopra - Book 1: Quantum Healing; Book 2: Alpha and Omega of God; Book 3: Seven Spiritual Rules for Success
5. Dr. A. P. J. Abdul Kalam- 1. Ignited Minds 2. Talks (CD)
6. Swami Ramakrishnanda Puri - Ultimate Success
7. Swami Jnanamritananda Puri - Upadesamritham (Trans: Malayalam)
8. Vedanta Kesari Publication - Values - Key to a meaningful life
9. Swami Ranganathananda - Eternal values for a changing society
10. David Megginson & Vivien Whitaker - Cultivating Self Development
11. Elizabeth B. Hurlock - Personality Development, Tata McGraw Hill
12. Swami Jagatmananda - Learn to Live (Vol.1 and 2), RK Ashram,

Mylapore

Prerequisite: NA

Summary: The Immersive Data Collection course shall be conducted for a minimum period of 7 days. The students shall organize and conduct this endeavor under the direction and supervision of the teaching faculty in a rural/tribal community. The Immersive Data Collection programme is intended to bring in the living experience of the rural community in view of the social data science philosophy and principles. The course facilitates students to practice and integrate social data science in tune with their personal and societal expectations. It provides an opportunity to analyze the regional social system, the approaches, and the strategies of intervention used by the government and non-government organizations

The course gives an opportunity to understand the real-life situations in the rural/ tribal settings in the society and it also provides the opportunity to enhance the skills in planning, organizing and implementing programmes/ projects for the marginalized people. Self-reflection is a major part of the course.

Course Objectives:

1. To develop an understanding of the rural social structures and cultural processes with special reference to specific groups experiencing poverty and deprivation
2. To develop an understanding of the level of government intervention in relation to below the poverty line groups in the area and the related structure of decision-making and intervention
3. To develop the capacity to make a critique of the intervention of both the voluntary organisations and the Government Agencies in relation to the specific Below the poverty line group
4. Through experience in group living, appreciate its value in terms of self-development, interpersonal relationships sense of organization, management and mutual responsibility
5. To acquire skills in planning, organizing, implementing and evaluating the course

Course Outcomes:

CO1: Students gain knowledge of the rural and Tribal lifestyle and social structure and social life. CO2: Apply the Social Work methods and tools during the process and phases of Group Dynamics. CO3: To explain the policies and programmes by the Government and Voluntary organisations.

Skills:

- Field work
- Data collection

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	X	-	-	-	-	-	-
CO2	X	-	-	-	-	-	-	-
CO3	-	-	X	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	X	-
CO2	-	-	-	-	X
CO3	-	X	-	-	-

Syllabus:

- Unit I – Students must conduct pilot visits to the village areas to identify and select in consultation with faculty in charge, framing objectives 12 hrs.
- Unit II – Objectives, Activities, and outcome. Develop Skills in planning and organizing programs in the community, plan programme schedule and funds, preparation of action plan 12 hrs.
- Unit III – Students will conduct the situational analysis and do needs assessment to plan and implement the programmes. Conduct Baseline survey or need assessment, programme designing, evaluation survey, engaging in community activities (Social Survey, street play, medical camp, awareness programmes, Life Enrichment Education activities, Service activities, Dr. camps, etc) during the field visit
12 hrs.
- Unit IV – Students should prepare a report and submit it to their respective faculty supervisor 12 hrs.

Textbooks and Papers: NA

Evaluation Pattern:

Assessment	Internal	External
*Continuous Assessment (CA)	50	
End Semester Report		50

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

SEMESTER 2

24SDS511

Sustainable Community Development

4

Prerequisite: NA

Summary: This course will provide an introduction to Sustainable Community Development (SCD) with a strong focus on sustainability, Human Development, and gender equality. Basic concepts related to SCD will be defined and connected to the Indian context. The knowledge gained here provides a foundation for applied social science.

Course Objectives:

1. Define and use concepts of sustainable community development in discussions of social problems.
2. Define all of the SDGs and understand them in the Indian context.
3. Map India's 5-year-plans to SDGs within a historical context.
4. Utilize the systems-thinking approach to characterize the challenges of marginalized groups, especially for women.
5. Identify the main goals, activities, and approaches of key institutions in Sustainable Community Development, and link to Global Development Indices.

Course Outcomes:

CO1: Define and use concepts of sustainable community development in discussions of social problems; SDGs and understand them in the Indian context.

CO2: Utilize the systems-thinking approach to characterize the challenges of marginalized groups, especially for women.

CO3: Identify the main goals, activities, and approaches of key institutions in Sustainable Community Development.

Skills:

- Understand historical context of policy
- Map policies to SDGs

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	X	-	-	-	-	-	-
CO2	X	-	-	-	-	-	-	-
CO3	-	-	X	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	X	-	-	-
CO2	X	-	-	-	-
CO3	-	X	-	-	-

Syllabus:

- Unit I – Components and Characteristics of Community, Intro to UN SDGs, Community Capital Framework, Systems Thinking
- Unit II – The Role of Systems Thinking in the Practice of Implementing the SDGs
- Unit III – Inequalities and Marginalized groups- Gender , Caste , Class. Manifestations of Non-Sustainability and effects on- Family, youth/children, elderly
- Unit IV – Intergovernmental Approaches to Sustainable Community development. Stakeholder Map and their activities: (Panchayati Raj – Central) NGOs, Intergovernmental orgs. Community Development and Rural Development Programme. Introduce global human development indicators (e.g., UNDP’s HDI).
- Unit V – Indian policies/welfare programs/schemes in relation to SDGs (starting from India’s Indep to date)

Textbooks Papers, Reference Books:

1. Monkelbaan, J. (2019). Governance for the Sustainable Development Goals. Springer. <https://doi.org/10.1007/978-981-13-0475-0>.
2. Gracious Thomas (ed). 2010. Community Organization: Management for Community Development. IGNOU.
3. Gupta, R., Sankhe, S., Dobbs, R., Woetzel, J., Madgavkar, A., & Hasyagar, A. (2014). From poverty to empowerment: India’s imperative for jobs, growth, and effective basic services. McKinsey Global Institute.
4. Reynolds, M., Blackmore, C., Ison, R., Shah, R., & Wedlock, E. (2018). The Role of Systems Thinking in the Practice of Implementing Sustainable Development Goals. In World Sustainability Series (pp. 677–698). https://doi.org/10.1007/978-3-319-630076_42.
5. Flora, C. & Arnold, N. (2012). State of the Science Report: Community Development. University of Montana Rural Institute, Research and Training Center on Disability in Rural Communities.
6. Kumar, A. (2010). Social Work Among Communities. Social Work Intervention with Individuals and Groups, 96.
7. State Resource Center Kerala. 2016. Module 2: Community Development.
8. Seema. (2013). A Historical Analysis of Women Development in India. International Journal of Scientific Engineering and Research, 1(3), 111–116.
9. UNDP (United Nations Development Programme). 2024. Human Development Report 2023-24: Breaking the gridlock: Reimagining cooperation in a polarized world. New York.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	20	
*Continuous Assessment (CA)	20	
End Semester		60

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: NA

Summary: This course focuses on two elements. In the Writing component, the course covers the various stages of composition of an academic piece, including close reading of sources, summary, citation and reference, identifying rhetorical aspects in a text or flaws in reasoning, developing an argument, finding and using textual evidence, organising ideas effectively, compiling and referencing bibliographic material, avoiding plagiarism, and finally, strategies for revision. In the Communication component, the course focuses on covers the many facets of delivering effective presentations, such as organization and structure, modes of delivery, effective linking, choice of terminology, and interaction with an audience.

Course Objectives:

1. To apply and compare knowledge and understanding of at least two themes within Social Data Science.
2. To write a nuanced and critical thesis statement or problem question, and to be able to answer this question in the body of the essay, using logical structure and clear argumentation.
3. To learn careful reading techniques, develop the skill to analyse and summarize the main argument of a text in a critical and nuanced manner.
4. To conduct library research, gather and assess academic sources, and acknowledge academic work by others by referencing sources in accordance with recognised academic citation protocol.
5. To deliver a structured and coherent presentation about an academic research topic and engage and interact with their audience effectively.
6. To learn to give meaningful peer-feedback and offer constructive criticism

Course Outcomes:

CO1: Students will be able to apply and compare knowledge and understanding of at least two themes within Social Data Science.

CO2: Students will be able to write a nuanced and critical thesis statement or problem question, and can answer this question in the body of their essay, using a logical structure and clear argumentation.

CO3: Students will learn careful reading techniques, learn to analyse and summarize the main argument of a text in a critical and nuanced manner, and gain an understanding the current literature on social data science.

CO4: Students will get an understanding of the research area in social science that can leverage data sciences.

CO5: Students will have an understanding of the process pipeline from data collation to modelling and forecasting through the careful reading of literature on social data science.

Skills:

- **Structured Writing:** students will learn assess writings about social problems from a data science perspective and write themselves about these topics.
- **Scientific Communication:** students will enhance their ability for verbal communication about social data science issues

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2		PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-		-	-	-	-	-	-
CO2	-	-		X	-	X-	-	-	-
CO3	-	X		-	-	-	-	-	-
CO4	-	-		-	-	-	-	-	-
CO5	X	-		-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	-	X-	-	-	-
CO3	-	-	X-	-	-
CO4	-	-	-	-	X-
CO5	-	-	-	-	-

Syllabus:

- Unit 1: Online Library Tutorial. 12 hours
- Unit 2: Critical reflection of introductory article, including all relevant references in academic style (Chicago Manual of Style for example) format. 12 hours
- Unit 3: Outline of arguments for essay, including all relevant references in in academic style format. 12 hours
- Unit 4: Final Essay. 12 hours
- Unit 5: Final Presentation. 12 hours

Textbooks and Papers:

- Gopen, G. D., & Swan, J. A. (1990). The science of scientific writing. *American scientist*, 78(6), 550-558.
- Katz, M. J. (2009). *From research to manuscript: A guide to scientific writing*. Springer Science & Business Media.
- Peat, J., Elliott, E., Baur, L., & Keena, V. (2013). *Scientific writing: easy when you know how*. John Wiley & Sons.
- Guilford, W. H. (2001). Teaching peer review and the process of scientific writing. *Advances in physiology education*, 25(3), 167-175.

Evaluation Pattern

Assessment	Internal	External
Final Presentation (Unit 5)	20% each	
Units	15% each Unit 1-3	
End Semester (Final Essay, Unit 4)		30%
Attendance	5%	

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: Research Methods for Policy Studies – I

Summary: This course introduces students to qualitative and mixed-methods research and the ways it can contribute to the development of credible insights for policymaking. The course will begin by examining the foundational principles of qualitative research, including epistemological considerations and ethical dimensions. Students will then explore a range of qualitative data collection techniques, such as interviews, focus groups, participant observation, and ethnography, learning how to select and apply these methods effectively in different research contexts. Central to the course is the integration of qualitative and quantitative approaches within the mixed methods framework to generate robust evidence for policy recommendations. Throughout the course, students will engage with contemporary debates and challenges in qualitative research, including issues of validity, reliability, and researcher reflexivity. They will also have the opportunity to reflect on their own research practice and enhance their ability to communicate research findings to diverse stakeholders. By the end of the course, students will be equipped with the tools and skills necessary to conduct rigorous research and contribute to evidence-based policymaking in a variety of contexts.

Course Objectives:

1. To gain a basic understanding of the theoretical, historical, and philosophical traditions of qualitative research.
2. To understand how to identify research questions and other rationale for doing a qualitative study.
3. Become familiar with key issues of conducting qualitative and mixed-methods research such as gaining access to research sites, forms of interactions with research subjects, and research ethics.
4. Learn to conduct independent qualitative and mixed-methods research, including the ability to design a study, collect, analyze and interpret data, formulate policy recommendations.
5. Evaluate the implications of different strategies of reporting methods and findings for the quality of the reports.

Course Outcomes:

- CO1: Students will develop a comprehensive understanding of various qualitative research paradigms, including phenomenology, grounded theory, ethnography, along with their underlying philosophical assumptions and methodologies.
- CO2: Students will acquire proficiency in a wide range of qualitative data collection techniques, such as interviews, focus groups, participant observation, and document analysis, and understand how to select and apply appropriate methods based on research questions and contexts.
- CO3: Students will understand the principles of mixed-methods research design and learn how to effectively combine qualitative and quantitative data collection, analysis, and interpretation.
- CO4: Students will develop advanced skills in analyzing qualitative data, including techniques for coding, categorizing, and interpreting textual and visual data.
- CO5: Students will understand the ethical considerations inherent in qualitative and mixed-methods research, including issues related to informed consent, confidentiality, power dynamics, and researcher reflexivity.

Skills:

- Analytical skills: students will develop advanced analytical skills through the examination and interpretation of qualitative and mixed-methods research findings.
- Effective communication and presentation skills: students will enhance their ability to communicate complex ideas and research findings effectively to diverse audiences.

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2	-	X	-	-	-	-	-	-
CO3	X	-	-	-	-	-	-	-
CO4	-	-	-	-	X	-	-	-
CO5	-	-	-	X	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	X	-	-	-	-
CO3	-	-	-	-	X
CO4	-	-	-	X	-
CO5	X	-	-	-	-

Syllabus:

- Unit I – **Introduction to Qualitative Research Methods** – The Researcher as a multicultural subject. History and research traditions. Conceptions of self and the other. The ethics and politics of research. Theoretical paradigms and perspectives. Positivism, postpositivism. Interpretivism, constructivism, hermeneutics. Feminism. Critical theory and marxist models. Cultural studies models. Post-colonialism.
- Unit II – **Research Strategies** – Ethnography, participant observation, performance ethnography. Phenomenology, ethnomethodology. Grounded theory. Life history. Historical method. Action and applied research. Clinical research.
- Unit III – **Methods of Collection and Analysis** – Observation. Artifacts, documents, and records. Visual methods. Autoethnography. Data management methods. Textual analysis. Applied ethnography. Interviewing. Focus groups and expert/elite interviews. Narrative analysis. Approaches to coding and thematic analysis.
- Unit IV – **Practices of Interpretation and Evaluation** – Criteria for judging adequacy. Practices and politics of interpretation. Writing as interpretation. Policy analysis. Evaluation traditions. Applied research.
- Unit V – **Mixed-methods research** – Core mixed methods designs. Collecting data in mixed methods research. Analyzing and interpreting data. Writing and evaluating mixed-methods research.

Textbooks and Papers:

- Lofland, J., Snow, D., Anderson, L., & Lofland, L. H. (2022). *Analyzing social settings: A guide to qualitative observation and analysis*. Waveland Press.
- Lindlof, T. R., & Taylor, B. C. (2011). *Qualitative communication research methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Clark, V. P. (2011). *Mixed methods research*. SAGE Publications.
- Barley, S. R. (2015). Confessions of a mad ethnographer. *Handbook of Qualitative Organizational Research: Innovative Pathways and Methods*, 465-75.
- Eisenberg, E. M., Murphy, A. G., Sutcliffe, K., Wears, R., Schenkel, S., Perry, S., & Vanderhoef, M. (2005).

Communication in emergency medicine: Implications for patient safety. *Communication Monographs*, 72 (4), 390-413.

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.

Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 1-32). Thousand Oaks, CA: Sage.

Reference Books:

Weiss, Robert S. *Learning from Strangers: The Art and Method of Qualitative Interview Studies*. The Free Press: New York, NY

Peterson, B. (2017). Thematic Analysis/Interpretive thematic analysis. In C. R. Scott & L. K. Lewis (Eds.). *The international encyclopedia of organizational communication*. Hoboken, NJ: John Wiley & Sons.

Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: Sage.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	20	
End Semester		50

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: Programming for Social Data Science - I

Summary: This course is a continuation of Programming for Social Data Science I and focuses on programming tools for working with non-numerical data, such as text and audio. Complementary to the “deductive” approach of testing hypotheses using quantitative data in PSDS 1, in PSDS 2 students familiarize themselves with “inductive” approaches of collecting and analyzing qualitative data to shape theories and hypotheses. Students learn how to read and understand qualitative code, as well as to write and debug their own code. Essential concepts like conversation analysis, metaphor analysis, domain analysis, membership categorization analysis, visual data and discourse analysis are also introduced. Students learn to use R and Taguette software for qualitative analyses. R and Taguette are popular qualitative research tools that allow for free, open-source, replicable analyses. More advanced qualitative options available in commercial software such as ATLAS.ti and Nvivo are also introduced. The objectives of this course are the same as Programming for Social Data Science I.

Course Objectives:

1. Understanding the approaches to utilizing qualitative data for shaping social science theories and hypotheses
2. Understand the application of qualitative programming in Social Data Science
3. Define and understand basic procedures for the preparation, cleaning, and analyzing of qualitative data
4. Implement and use functions and operate on qualitative files to read

Course Outcomes:

CO1: Apply basic programming skills to investigate qualitative data, interpret statistical output, and generate novel hypotheses.

CO2: Identify optimal statistical approaches for analyzing social problems based on qualitative data characteristics and assumptions, including content type, sample characteristics, and noise reduction.

CO3: Construct reproducible code with a theoretical and statistical justification for the decision-making process.

CO4: Present a structured argument for fine-tuning policies in the social domain, based on empirical qualitative output.

Skills:

- Structured thinking: students will learn to structure sets of qualitative data concerning a social problem in an empirical, reproducible way, that allows for a reliable conclusion.
- Scientific communication: students will enhance their ability to summarize large quantities of written or auditory data, incorporating broader patterns as well as specific exemplary excerpts in order to communicate meaningful conclusions.

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2	-	X	-	-	-	-	-	-
CO3	-	-	-	-	X	-	-	-
CO4	-	-	-	-	-	X	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	-	X	-	-	-
CO3	-	-	-	X	-
CO4	-	-	-	-	X

Syllabus:

- Unit I – **Text as data** – Loading text data. Cleaning. Tokenization, Stemming, Stopword removal. Word cloud visualization. Tools for advanced visualization. Temporal analysis on text data. 6 hrs.
- Unit II – **Tools for Multi modal data** – Text to Audio. Audio to Text. Tools for text translations. 6 hrs.
- Unit III – **Data Models** – Data models (Taxonomies, Ontologies, Meta-data schema. Entities and Relationships. 6 hrs.
- Unit IV – **Data storage** – Types of Data storage and storage methods. Data model representations (ER diagrams, Data flow diagrams). 6 hrs.
- Unit V – **Object Oriented Programming** – Concepts of OOP. Class members and function (Encapsulation). 6 hrs.

Textbooks and Papers:

1. Estrada, S. (2017). Qualitative Analysis Using R: A Free Analytic Tool. *The Qualitative Report*, 22(4), 956-968. <https://doi.org/10.46743/2160-3715/2017.2659>
2. Rampin, R. & Rampin, V. (2021). Taguette: Open-source qualitative data analysis. *Journal of Open Source Software*. <https://joss.theoj.org/papers/10.21105/joss.03522>

Reference Books

1. Dauber, R. (2024). *R for Non-Programmers: A Guide for Social Scientists*. Mixed-methods research: Analysing qualitative data in R. https://bookdown.org/daniel_dauber_io/r4np_book/mixed-methods-research.html
2. Thiem, A. & Duşa, A. (2012). *Qualitative Comparative Analysis with R: A User’s Guide*. Springer.
3. Temple University’s Qualitative Data Analysis and QDA Tools. Taguette Guide. <https://guides.temple.edu/qda/taguette>
4. NYU Libraries for Qualitative Data Analysis: Taguette Guide. <https://guides.nyu.edu/ODA/Taguette>

Evaluation Pattern:

Assessment	Internal	External
Programming assignments	25	
Student presentations & Class participation	20	
Attendance	5	
End Semester		50

*CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	X
CO2	-	-	-	-	X
CO3	-	-	-	-	X
CO4	-	-	-	-	X
CO5	-	-	-	-	X

Amrita Values Program

1 0 0 1

Amrita University's Amrita Values Program (AVP) is a new initiative to give exposure to students to the richness and beauty of the Indian way of life. India is a country where history, culture, art, aesthetics, cuisine, and nature exhibit more diversity than anywhere else in the world. Amrita Values Programs emphasize making students familiar with the rich tapestry of Indian life, culture, arts, science, and heritage which has historically drawn people from all over the world. Post-graduate students shall have to register for any one of the following courses, in the second semester, which may be offered by the respective school.

Courses offered under the framework of the Amrita Values Program:

22AVP501 Message of Śrī Mātā Amritanandamayi Devi

Amma's messages can be put into action in our life through pragmatism and attuning of our thought process in a positive and creative manner. Every single word Amma speaks, and the guidance received in matters which we consider trivial are rich in content and touches the very inner being of our personality. Life gets enriched by Amma's guidance, and She teaches us the art of exemplary life skills where we become witness to all the happenings around us keeping the balance of the mind.

22AVP502 Insights from the Ramayana

The historical significance of Ramayana, the first Epic in the world, influence of Ramayana on Indian values and culture, storyline of Ramayana, study of leading characters in Ramayana, influence of Ramayana outside India, misinterpretation of Ramayana by colonial powers and its impact on Indian life, relevance of Ramayana for modern times.

22AVP503 Insights from the Mahabharata

The historical significance of Mahabharata, the largest Epic in the world, influence of Mahabharata on Indian values and culture, storyline of Mahabharata, study of leading characters in Mahabharata, Kurukshetra War and its significance, importance of Dharma in society, message of the Bhagavad Gita, relevance of Mahabharata for modern times.

22AVP504 Insights from the Upanishads

Introduction: Sruti versus Smṛti, overview of the four Vedas and the ten Principal Upanishads, the central problems of the Upanishads, ultimate reality, the nature of Atman, the different modes of consciousness, Sanātana Dharma and its uniqueness, The Upanishads and Indian Culture, relevance of Upanishads for modern times, a few Upanishad Personalities: Nachiketas, Satyakama Jabala, Aruni, Shvetaketu.

22AVP505 Insights from Bhagavad Gita

Introduction to Bhagavad Gita, brief storyline of Mahabharata, context of Kurukshetra War, the anguish of Arjuna, counsel by Sri. Krishna, key teachings of the Bhagavad Gita, Karma Yoga, Jnana Yoga, and Bhakti Yoga, theory of Karma and Reincarnation, concept of Dharma, idea of the self and realization of the self, qualities of a realized person, concept of Avatar, relevance of Mahabharata for modern times.

22AVP506 Message of Swami Vivekananda

Brief sketch of Swami Vivekananda's life, meeting with Guru, disciplining of Narendra, travel across India, inspiring life incidents, address at the parliament of religions, travel in the United States and Europe, return and reception in India, message to Indians about our duties to the nation.

22AVP507 Great Spiritual Teachers of India

Sri Rama, Sri Krishna, Sri Buddha, Adi Shankaracharya, Sri Ramanujacharya, Sri Madhvacharya, Sri Ramakrishna Paramahansa, Swami Vivekananda, Sri Ramana Maharshi, Mata Amritanandamayi Devi

22AVP508 Indian Arts and Literature:

The aim of this course is to present the rich literature, culture of ancient India, and help students appreciate their deep influence on Indian life, Vedic culture, the primary source of Indian culture, brief introduction, and appreciation of a few of the art forms of India, arts, music, dance, theatre, paintings, sculpture and architecture, the wonder language, Sanskrit, and ancient Indian Literature.

22AVP509 Yoga and Meditation

The objective of the course is to provide practical training in YOGA ASANAS with a sound theoretical base and theory classes on selected verses of Patanjali's Yoga Sutra and Ashtanga Yoga. The coverage also includes the effect of yoga on integrated personality development.

22AVP510 Appreciation of Kerala's Mural Art Forms:

A mural is any piece of artwork painted or applied directly on a wall, ceiling, or another large permanent surface. In the contemporary scenario, Mural painting is not restricted to permanent structures and is being done even on canvas. A distinguishing characteristic of mural painting is that the architectural elements of the given space are harmoniously incorporated into the picture. Kerala mural paintings are frescos depicting mythology and legends, which are drawn on the walls of temples and churches in South India, principally in Kerala. Ancient temples, churches, and places in Kerala, South India, display an abounding tradition of mural paintings mostly dating back to the 9th to 12th centuries CE when this form of art enjoyed Royal patronage. Learning Mural painting through the theory and practice workshop is the objective of this course.

22AVP512 Ancient Indian Science and Technology

Science and technology in ancient and medieval India covered all the major branches of human knowledge and activities, including mathematics, astronomy, physics, chemistry, medical science and surgery, fine arts, mechanical, civil engineering, architecture, shipbuilding, and navigation. Ancient India was a land of sages, saints, and seers as well as a land of scholars and scientists. The course gives awareness of India's contribution to science and technology.

Course Overview

Master Over the Mind (MAOM) is an Amrita initiative to implement schemes and organise university-wide programs to enhance health and wellbeing of all faculty, staff, and students (UN SDG -3). This program as part of our efforts for sustainable stress reduction gives an introduction to immediate and long-term benefits and equips every attendee to manage stressful emotions and anxiety facilitating inner peace and harmony.

With a meditation technique offered by Amrita Chancellor and world-renowned humanitarian and spiritual leader, Sri Mata Amritanandamayi Devi (Amma), this course has been planned to be offered to all students of all campuses of AMRITA, starting off with all first years, wherein one hour per week is completely dedicated for guided practical meditation session and one hour on the theory aspects of MAOM. The theory section comprises lecture hours within a structured syllabus and will include invited guest lecture series from eminent personalities from diverse fields of excellence. This course will enhance the understanding of experiential learning based on university's mission: "Education for Life along with Education for Living", and is aimed to allow learners to realize and rediscover the infinite potential of one's true Being and the fulfilment of life's goals.

Course Outcomes:

Course Outcome 1: To be able to describe what meditation is and to understand its healthbenefits (CO1)

Course Outcome 2: To understand the causes of stress and how meditation improves well-being(CO2)

Course Outcome 3: To understand the science of meditation. (CO3)

Course Outcome 4: To learn and practice MA OM meditation in daily life. (CO4)

Course Outcome 5: To understand the application of meditation to improve communication and relationships. (CO5)

Course Outcome 6: To be able to understand the power of meditation in compassion-drivenaction. (CO6)

Course Structure

Unit 1: Describe Meditation and Understand its Benefits (CO1)

A: Importance of meditation. How does meditation help to overcome obstacles in life

B: Understand how meditation works. Understand how meditation helps in improvingphysical and mental health. Understand how meditation helps in the development of personality.

Unit 2: Causes of Stress and How Meditation Improves Well-being (CO2)

A: Learn how to prepare for meditation. Understand the aids that can help in effectively practicing meditation. Understand the role of sleep, physical activity, and a balanced dietin supporting meditation.

B: Causes of Stress. The problem of not being relaxed. Effects of stress on health. How meditation helps to relieve stress. Basics of stress management at home and the workplace.

Unit 3: The Science of Meditation (CO3)

A: A preliminary understanding of the Science of meditation. What can modern science tell us about this tradition-based method?

B: How meditation helps humanity according to what we know from scientific research

Unit 4: Improving Communication and Relationships (CO5)

How meditation and mindfulness influence interpersonal communication. The role of meditation in improving relationship quality in the family, at the university and in the workplace.

Unit 5: Meditation and Compassion-driven Action (CO6)

Understand how meditation can help to motivate compassion-driven action.

Practicing MA OM Meditation in Daily Life (CO4)

Guided Meditation Sessions following scripts provided (Level One to Level Five) during meditation sessions.

TEXTBOOKS/ REFERENCES:

1. Allen, Cynthia (2020) *The Potential Health Benefits of Meditation*
2. Sharma, Hari (2022) *Meditation: Process and Effects*
3. Mayo Clinic Staff (2022, April 29). *Meditation: A Simple, Fast Way to Reduce Stress*.
4. Seppala E (2022, June 30th) *Unexpected Ways Meditation Improves Relationships a Lot*. Psychology Today
5. Schindler, S., & Friese, M. (2022). The relation of mindfulness and prosocial behavior: What do we (not) know?. *Current Opinion in Psychology*, 44, 151-156.
6. *Amritam Gamaya* (2022). Mata Amritanandamayi Mission Trust.

Course Assessment:

The course outcomes are envisaged as a four broad categories of assessment with the overall weight of each component as articulated in the Course Assessment Specification (Table 3).

1. Reflective Journal: 20 %
2. Group Activities: 20 %
3. Class Participation: 40%
4. Written Examination: 20%

Course Assessment Specification Table:

		CO1	CO2	CO3	CO4	CO5	CO6	Total
1	Reflection					10	10	20
2	Group Activities	20*						20
3	Class Participation				40			40
4	Written Examination	5	5	5		5		20

*The Group Activities could be related to CO1, CO2 or CO3 depending on the preference of the instructor

SEMESTER 3

24SDS601

Behavioral Economics & Public Policy

4

Prerequisite: Economics for Public Policy

Summary: The course aims to familiarize students with recent advances in psychology and economics and teach them to apply behavioral insights to design better solutions to societal challenges. It focuses on a rigorous application of experimental methodology in various social contexts and shows how the resulting findings can be used to advance policy in such areas as health, education, energy, etc. Behavioral economics deviates from the standard assumption of the economic theory that individuals are rational and self-seeking. Key findings in the field identify ways in which economic agents can systematically behave irrationally or prosocially. These behavioral insights enable us to design “choice architecture”, which nudges individuals to make better decisions and enhance their well-being. At the same time, public policy instruments can be used to transform social preferences to foster higher cooperation, long-term orientation and sustainable economic practices in a society. This course prepares students to understand cutting edge research in the field of behavioral sciences, apply these insights to improve social policy and communicate their ideas in a succinct and compelling way to government agencies, non-profit organizations, and a wider audience.

Course Objectives:

1. Become familiar with cutting-edge research in behavioral economics, public policy, cognitive and social psychology, and other social sciences.
2. Gain deeper understanding of factors that drive individual behavior and learn to devise incentives for behavioral change.
3. Interpret empirical results from academic research papers for a policy audience.
4. Learn behavioral approaches to improving the effectiveness of social interventions and programs across a range of diverse fields.
5. Apply insights from behavioral economics to policy design.

Course Outcomes:

CO1: Design behavioral policy interventions and devise empirical strategies for testing them. CO2: Critically discuss nudging approaches to policy making, including ethical issues involved.

CO3: Evaluate the scope and directions for policy interventions aimed at transforming social preferences. CO4: Summarize the current status of the behavior-proofing of the policies in India and across the world.

CO5: Learn to apply the principles of game theory and interpret incentives of economic agents in various situations of social cooperation.

Skills:

- Psychological empathy: through studying human behavior, students will cultivate empathy for individuals' decision-making processes, leading to more compassionate and people-centered policy solutions.
- Interdisciplinary collaboration: students will collaborate across disciplines such as psychology, sociology, and economics, gaining a holistic understanding of human behavior and its implications for public policy.

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2	-	-	-	X	-	-	-	-
CO3		X	-	-	-	-	-	-
CO4	X	-	-	-	-	-	-	-
CO5	X	-	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	-	-	-	X	-
CO3	-	-	X	-	-
CO4	-	X	-	-	-
CO5	-	X	-	-	-

Syllabus:

- Unit I – **Intro to Prospect Theory** – Rational decision making: standard vs behavioral approach. Heuristics and biases. Empirical methods for behavioral economics. Field and lab experiments. Econometrics review. Qualitative methods. Case studies used for real-world understanding.
- Unit II – **Static and Dynamic Models of Individual Decision-Making** – Loss aversion, reference points, status quo. The endowment effect. Present bias and commitment devices. Multiple selves models and their applications to temptation, self-control, procrastination.
- Unit III – **Applications of Behavioral Economics to Public Policy** – Architecture of choice and the nudging Debate. Mental accounting, nudging and applications to savings, microfinance, health, and education. Case studies used for real-world understanding.
- Unit IV – **Prosocial Preferences and Motivation** – Intrinsic vs. extrinsic motivation. Prosocial preferences and altruistic capital. Policies for the accumulation of altruistic capital.
- Unit V – **Behavioral Game Theory** – Behavioral theories of collective decision making: inequity aversion, fairness, reciprocity, guilt aversion, etc. Experimental evidence. Case studies used for real-world understanding.

Textbooks and Papers:

Thaler, Richard H., and Cass R. Sunstein (2021). *Nudge: The Final Edition*. Yale University Press.

Ashraf, N., Bandiera, O. and Jack, B.K. (2014). “No margin, no mission? A field experiment on incentives for publicservice delivery.” *Journal of Public Economics* 120 (December): 1-17

Ashraf, N., Camerer, C. F. and Loewenstein, G. (2005). “Adam Smith, Behavioral Economist.” *Journal of Economic Perspectives* 19(3): 131–145.

Kamenica, E. (2012). “Behavioral Economics and Psychology of Incentives.” *Annual Review of Economics* 4(1): 427–452.

Reference Books:

- Ariely D. (2010) Predictably Irrational, Revised and Expanded Edition: The Hidden Forces That Shape Our Decisions. New York: Harper Perennial.
- Congdon, W. J., Kling, J. R., & Mullainathan, S. (2011). Policy and choice: Public finance through the lens of behavioral economics. Brookings Institution Press
- Kahneman, D. (2013) Thinking, Fast and Slow. New York: Farrar, Strausand.
- Mullainathan, S., Eldar, S. (2013) Scarcity: Why Having Too Little Means so Much. New York: Times Books, Henry Holt and Company.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	30	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: Programming for Social Data Science I & II, Research Methods for Policy Studies I & II.

Summary: This course offers an introduction to machine learning tailored for research in social sciences. In the world where the volume of social data is rapidly expanding, mastering machine learning techniques becomes imperative to extract actionable insights for informed policy-making. Machine learning integrates insights from artificial intelligence, probability theory, and statistical inference to automate tasks like pattern recognition and prediction. We'll explore supervised and unsupervised learning techniques, focusing on the variety of their applications in social research. Ethical considerations surrounding automated analysis and decision-making will be discussed, including their potential to mitigate or exacerbate human biases. Key topics include the bias-variance tradeoff, model selection, cross-validation, regularization, and dimension reduction. Techniques covered range from linear regression variations to tree-based methods and introductory neural networks. Unsupervised methods like principal component analysis and clustering techniques will also be examined. By the end of the course, students will be well acquainted with some of the state-of-the-art toolkits of machine learning and be able to apply them in their own projects.

Course Objectives:

1. Understand the fundamentals of machine learning methods.
2. Describe the statistical theory behind widely used supervised and unsupervised machine learning methods.
3. Explain the variety of machine learning methods available for social science research.
4. Identify appropriate machine learning methods to address a variety of research questions.
5. Learn how to design, train, and deploy machine-learning models to produce insights relevant for addressing societal challenges.

Course Outcomes:

- CO1: Students will develop a thorough understanding of machine learning principles as they relate to social sciences, enabling them to effectively extract insights from large social datasets.
- CO2: Students will gain proficiency in selecting and applying appropriate machine learning techniques to address specific research questions and challenges within social data analysis.
- CO3: Students will be able to critically evaluate the ethical implications associated with the use of machine learning algorithms in social research, including considerations of bias mitigation and fairness.
- CO4: Students will acquire practical skills in implementing various machine learning algorithms, including supervised and unsupervised learning methods, to analyze social data sets effectively.
- CO5: Students will be introduced to the foundational concepts of deep learning and natural language processing, gaining familiarity with key principles and applications of these methodologies within social sciences.

Skills:

- **Data-driven decision-making:** through practical application of machine learning techniques, students will acquire the skill to leverage data effectively for evidence-based decision-making in social research and policy formulation, enhancing their capacity to address complex societal challenges.
- **Ethical reasoning:** students will develop ethical reasoning skills, enabling them to navigate and address ethical dilemmas inherent in the use of machine learning algorithms within social research, thus promoting responsible and ethical use of data-driven methodologies for societal benefit.

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2	-	X	-	-	-	-	-	-
CO3	-	-	-	X	-	-	-	-
CO4	-	-	-	-	X	-	-	-
CO5	-	X	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	X	-	-	-	-
CO3	X	-	-	-	-
CO4	-	-	X	-	-
CO5	-	-	-	X	-

Syllabus:

- Unit I – Introduction to machine learning. Machine learning, data science and artificial intelligence. Building models for policy analysis. Case studies in social data science. Review of relevant concepts in mathematics, statistics and regression analysis.
- Unit II – Supervised Learning. Classification. Regression. Fine-Tuning a model. Preprocessing and pipelines.
- Unit III – Unsupervised Learning. Clustering. Visualization with hierarchical clustering. Principal component analysis. Discovering interpretable features.
- Unit IV – Machine Learning with tree-based models. The bias-variance tradeoff. Decision Trees & ensembles (Random Forests, Bagging, Boosting). Model Tuning.
- Unit V – Deep learning. Basics of deep learning and neural networks. Deep learning models for regression and classification. Natural language processing for social data science. Qualitative data and AI. Text preprocessing, classification and annotation, information extraction, opinion mining, text summarization. Text translation (using Whisper AI). Large language models and related tools (ChatGPT).

Textbooks and Papers:

- Murphy, K. P. (2012). Machine Learning : A Probabilistic Perspective. Cambridge, Mass: The MIT Press.
Retrieved from <http>
- Géron, A. (2017). Hands-on Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems. O'Reilly Media, Inc.
- Müller, A. C., & Guido, S. (2016). Introduction to Machine Learning with Python: A Guide for Data Scientists. O'Reilly Media, Inc.
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). An Introduction to Statistical Learning (Vol. 112). New York: Springer.
- D'Orazio, V., Landis, S. T., Palmer, G., & Schrodtt, P. (2014). Separating the wheat from the chaff: Applications of automated document classification using support vector machines. Political Analysis, 22(2), 224-242.

Jones, Z. M., & Lupu, Y. (2018). Is There More Violence in the Middle?. American Journal of Political Science, 62(3), 652-667.

Kosinski, M., Stillwell, D., & Graepel, T. (2013). Private traits and attributes are predictable from digital records of human behavior. Proceedings of the National Academy of Sciences, 201218772.

Reference Books:

Géron, A. (2019). Hands-on machine learning with Scikit-Learn, Keras, and TensorFlow: Concepts, tools, and techniques to build intelligent systems, 1.

Bouckaert, R. R., Frank, E., Hall, M., Kirkby, R., Reutemann, P., Seewald, A., & Scuse, D. (2016). WEKA manual for version 3-9-1. University of Waikato: Hamilton, New Zealand, 1-341.

Hapke, H., Howard, C., & Lane, H. (2019). Natural Language Processing in Action: Understanding, analyzing, and generating text with Python. Simon and Schuster.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	30	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: NA

Summary: This course introduces students to the principles of design thinking and their application in the field of public policy. The course begins by outlining the concept of co-production: solutions to social problems often cannot be simply handed down to end-users, but need to be produced by the end-users themselves interacting with the supplier of the solution. Applying the tools of design thinking and qualitative methods students will learn to better diagnose the end-users' actual needs and preferences and use these insights to develop feasible policy options. Since many societal challenges represent "wicked problems" with many interdependent factors and stakeholders, a significant part of the course is dedicated to the exploration of methodologies of collective decision-making. The students will learn to apply tools of creative problem solving and consensus building to design and implement policies in a complex multi stakeholder context. Real world examples through case studies will be used for contextualized understanding.

Course Objectives:

1. To gain a basic understanding of the principles and concepts of co-production and design thinking in the context of public policy.
2. To develop a critical understanding of how to apply design thinking methodologies to policy challenges.
3. To understand how to evaluate the effectiveness of design thinking in addressing complex policy issues.
4. To gain knowledge and tools to collaborate effectively in interdisciplinary teams to co-create innovative policy solutions.
5. To be able to communicate policy ideas and proposals effectively using various forms of media.

Course Outcomes:

CO1: Develop a mindset necessary for effective design thinking, such as divergent and convergent thinking, empathetic thinking, ethnographic approach, adaptive policy-making, etc.

CO2: Apply tools of design thinking to formulate policy solutions to complex societal challenges. CO3: Be able to explain and advocate for design thinking in a team or organizational context.

CO4: Evaluate policy impact and show how ethnographic research can be translated into policy action.

CO5: Formulate recommendations to improve decision-making and performance across an organization or chosen area of policy analysis based on the principles of design thinking.

Skills:

- Systems thinking: mastering the ability to understand and analyze complex systems to identify leverage points for policy interventions.
- User research: Proficiency in conducting qualitative research methods to understand the needs, preferences, and behaviors of diverse stakeholders.
- Ethnographic research: gaining expertise in immersive fieldwork methods to uncover deep insights into the lived experiences of communities affected by policy decisions.
- Policy implementation: developing skills in project management and stakeholder engagement to ensure effective implementation of policy interventions.

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	X	-	-	-	-	-	-
CO2	-	X	-	-	-	-	-	-
CO3	-	-	-	-	-	X	-	-
CO4	-	-	X	-	-	-	-	-
CO5	-	-	-	-	-	-	X	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	X	-
CO2	-	X	-	-	-
CO3	X	-	-	-	-
CO4	-	-	-	-	X
CO5	-	-	X	-	-

Syllabus:

- Unit I – Introduction to Design Thinking. History & fundamentals. Relevance of design thinking in public policy. Participatory design and co-production. Public policy frameworks and participatory design. Rationale and ethical dimension of co-production.
- Unit II – Empathy & Ethnography. Understanding users and their needs. Defining the problem statement. Ethnographic research methods in the context of policy formulation. Ideation and Creativity in Policy Design. Brainstorming and divergent thinking. Techniques for generating innovative policy ideas. Convergent thinking and selecting the best ideas.
- Unit III – Prototyping Policy Solutions. Low-fidelity and high-fidelity prototypes. Testing and refining policy solutions. Policy experimentation and adaptive policymaking. Policy Implementation and Scaling. Overcoming barriers to policy implementation. Scaling policy solutions effectively. Monitoring, evaluation, and learning.
- Unit IV – Collaborative Design and Multi-Stakeholder Engagement. Co-design and co-production in public policy. Engaging stakeholders and building partnerships. Managing conflicts and facilitating consensus. Institutionalization for Systematic Design Thinking. Importance of values to anchor innovation. Regulatory impact analysis. Public-private partnerships.
- Unit V – Communication and Storytelling in Policy Design. Crafting compelling policy narratives. Visual communication and data visualization for policy-making. Presenting policy ideas and proposals effectively.

Textbooks and Papers:

Bason, C. (2016). Design for policy. Routledge.

Brown, T. (2009), Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, HarperCollins.

Moore, M. H. (1995). Creating Public Value: Strategic Management in Government. Harvard University Press.

Reference Books:

Ansell, C., & Gash, A. (2008). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18(4), 543-571.

Bason, C. (2010), *Leading Public Sector Innovation: Co-creating for a Better Society*. Policy Press.

Boyle, D., J. Slay and L. Stephens (2010), *Public Services Inside- Out: Putting Co-production into Practice*, The Lab, Nesta.

Brown, T. and J. Wyatt (2010), “Design Thinking for social innovation”, in *Stanford Social Innovation Review*, Winter, pp.30-37.

Carstensen, H.V. and C. Bason (2012), “Powering collaborative policy innovation: Can innovation labs help?”, in *The Innovation Journal: The Public Sector Innovation Journal*, Vol.17/1, article 4.

European Commission (2009a), *Impact Assessment Guidelines*, SEC(2009) 92 of 15 January 2009.

European Commission (2009b), *Design as a Driver of User-centred Innovation*, Commission Staff working Document, SWD(2009) 501 final of 7 April 2009.

European Commission (2012), *Design for Growth & Prosperity, Report and Recommendations of the European Design Leadership Board*, European Design Innovation Initiative.

European Commission (2013), *Implementing an Action Plan for Design-Driven Innovation*, Commission Staff working Document, SWD(2013) 380 final of 23 September 2013.

Hahn R.W. and P.C. Tetlock (2007), “Has Economic Analysis Improved Regulatory Decisions?”, in *Journal of Economic Perspectives*, Vol.22/1, pp.67-84.

Homes, B. (2011), *Citizens’ Engagement in Policymaking and the Design of Public Services*, Parliamentary Library Research Paper 01, Parliament of Australia.

Høytrup, S. (2010). “Employee-driven innovation and workplace learning: Basic concepts, approaches and themes”, in *Transfer: European Review of Labour and Research*, Vol.16/2, pp.143-154.

Mintrom, M., & Luetjens, J. (2016). Design Thinking in Policymaking Processes: Opportunities and Challenges. *Australian Journal of Public Administration*, 75(3), 391-402.

Sanders, E. And P.J. Stappers (2008), “Co-creation and the new landscape of Design”, in *CoDesign: International Journal of CoCreation in Design and Arts*, Vol.4/1, pp.5-18.

Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333-1357.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	20	
End Semester		50

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

SPECIALIZATION: ECONOMIC POLICY

24SDS531

Foundations of Development Policy

3

Prerequisite: Economics for Public Policy, Research Methods for Policy Studies I&II

Summary: The course aims to introduce students to the main issues of development economics in the context of policy formulation. The course is focused on the issues of economic growth, Human Development & poverty, and inequality and covers a set of analytical tools and frameworks that are applicable to a wide variety of developmental issues. The students will be exposed to modern empirical methods of impact evaluation such as multivariate regression, regression discontinuity design, instrumental variables, randomized control trials and others. Real-world examples via study of global policies on human development (e.g., UNDP's Human Development Index) will ground the course and provide greater context. In this course we will initially approach these questions from a "macro" perspective and later introduce a "microeconomic" view of the problems. The course prepares students to critically evaluate the scope and direction of policy interventions and formulate their own recommendations on alleviating the root causes and consequences of poverty as well as other pressing developmental issues.

Course Objectives:

1. To provide students with a comprehensive understanding of major theories and paradigms in development economics and policy.
2. To explore the role of structural factors such as institutions, governance, geography, and historical legacies in shaping development outcomes.
3. To equip students with the tools and methodologies necessary to evaluate the impact of development policies on poverty alleviation, inequality reduction, and sustainable development.
4. To highlight the social and environmental dimensions of development, including issues related to gender equality, environmental sustainability, and social justice.
5. To foster students' ability to design innovative and contextually appropriate development policies that address the multidimensional challenges of poverty and underdevelopment.

Course Outcomes:

- CO1: Students will demonstrate a deep understanding of key development theories and their relevance to contemporary development challenges.
- CO2: Students will be able to conduct rigorous policy analysis, identifying the strengths, weaknesses, and potential unintended consequences of development policies.
- CO3: Students will demonstrate proficiency in conducting empirical research on development issues, including data collection, analysis, and interpretation.
- CO4: Students will gain cross-cultural awareness and sensitivity to the diverse social, economic, and cultural contexts in which development policies are implemented.
- CO5: Students will effectively communicate complex development concepts and policy recommendations to diverse stakeholders, including policymakers, practitioners, and local communities.

Skills:

- Students will develop critical thinking skills, enabling them to evaluate development policies from multiple perspectives and engage in informed policy debates.
- Students will develop ethical decision-making skills, considering the ethical implications of development policies and prioritizing approaches that promote social justice, human rights, and environmental sustainability.

- Students will develop the ability to generate innovative solutions to complex development challenges, thinking beyond conventional approaches and paradigms.

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2	-	X	-	-	-	-	-	-
CO3	-	-	-	-	X	-	-	-
CO4	-	-	X	-	-	-	-	-
CO5	-	-	-	-	-	X	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	X	-	-	-	-
CO2	X	-	-	-	-
CO3	-	X	-	-	-
CO4	-	-	-	X	-
CO5	-	-	-	-	X

Syllabus:

- Unit I – Introduction to Development Policy. Measurement of Development. Growth accounting. History of economic growth. Convergence. Neoclassical growth theory. Exogenous and endogenous growth models. Divergence. Traps, complementarities, multiple equilibria and the Big Bush.
- Unit II – Political Economy: Deep Determinants of Development. Formal and informal institutions. Culture, geography and colonial origins. Inequality and Growth. Evolution of inequality in the development path. Theoretical models and empirical evidence on the relationship between growth and inequality. Redistribution policy.
- Unit III – Investing in Human Capital. Demand for education. Private and social returns to education. Supply of education. Case studies of effective interventions. The role of government policy. Human Development and global indices (e.g., UNDP’s HDI).
- Unit IV – Nutrition, Health, and Productivity. The capacity curve. Elasticity of nutrition. Impacts and determinants of health levels. Short-term subsidies and long-run adoption of health products.
- Unit V – Financial Markets. Poverty and vulnerability. Credit constraints. Microfinance. Savings. Behavioral barriers to savings. Borrowing, savings, and income smoothing.

Textbooks and Papers:

Banerjee, A. V., & Duflo, E. (2011). Poor economics: A radical rethinking of the way to fight global poverty. PublicAffairs Store.

Todaro, M. P., & Smith, S. C. (2020). Economic development. Pearson

UK.Ray, D. (1998). Development economics. Princeton University Press.

Kaushik Basu. (2003). Analytical Development Economics: The Less Developed Economy Revisited. The MIT Press. Acemoglu, D. (2009). Introduction to modern economic growth. Princeton, N.J.

Deaton, A. (1992). "Household saving in LDCs: Credit markets, insurance and welfare", *Scandinavian Journal of Economics*.

Deaton, A. (1991). "Saving and Liquidity Constraints." *Econometrica*.

Banerjee, A., & Mullainathan, S. (2010). "The shape of temptation: Implications for the economic lives of the poor" (No. w15973). National Bureau of Economic Research.

Genicot, G., & Ray, D. (2003). "Group formation in risk-sharing arrangements." *The Review of Economic Studies*, 70(1), 87-113.

Besley, T., & Coate, S. (1995). "Group lending, repayment incentives and social collateral." *Journal of Development Economics*, 46(1), 1-18.

Greenwood, J., J. M. Sanchez, et al. (2013) "Quantifying the Impact of Financial Development on Economic Development." *Review of Economic Dynamics* 16, no. 1: 194–215.

Allen, R. (2017). "Absolute Poverty: When Necessity Displaces Desire." *American Economic Review* 107(12): 3690-3721.

Jones, C., and P. Klenow. (2016). "Beyond GDP: Welfare Across Countries and Time." *American Economic Review* 106:2426-2457.

Mankiw, N.G., D. Romer, and D. Weil. (1992). "A Contribution to the Empirics of Economic Growth." *Quarterly Journal of Economics* 107(2): 407-437.

UNDP (United Nations Development Programme). 2024. *Human Development Report 2023-24: Breaking the gridlock: Reimagining cooperation in a polarized world*. New York

Reference Books:

Bardhan, Pranab and Christopher Udry. *Development Microeconomics*. Oxford: Oxford University Press, 1999.

Banerjee, Abhijit, Roland Benabou and Dilip Mookherjee (Editors), *Understanding Poverty*, Oxford: Oxford University Press, 2006.

Banerjee & Duflo (2019). *Good Economics for Hard Times*.

Collins, D., Morduch, J., Rutherford, S., & Ruthven, O. (2009). *Portfolios of the poor: how the world's poor live on \$2 a day*. Princeton University Press.

Deaton, A. (1997). *The analysis of household surveys: a microeconomic approach to development policy*. World Bank Publications.

Karlan, D. S., & Appel, J. (2011). *More than good intentions*. New York: Dutton.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	30	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

SPECIALIZATION: GENDER POLICY

24SDS541

Gender and Development

3

Prerequisite: NA

Summary: The Gender and Development course provides a comprehensive exploration of the intersection between gender dynamics and development processes. Through an interdisciplinary lens, students delve into the fundamental concepts, theories, and historical perspectives shaping gender roles, inequalities, and power structures globally. The course equips students with the tools and methodologies for conducting gender analysis, enabling them to critically evaluate development projects and policies through a gender-sensitive lens.

Course Objectives:

1. Understand the Conceptual Foundations
2. Examine Key Concepts and Theoretical Frameworks
3. Gain proficiency in employing gender analysis frameworks to assess the differential impacts of development policies and projects on diverse gender groups.
4. Investigate the gendered division of labor across formal and informal sectors, discerning the challenges and opportunities for women's economic empowerment.
5. Investigate Gender and Environment for Sustainable Development

Course Outcomes:

CO1: Students can define fundamental concepts and theories related to gender and development,

CO2: Students grasp the complexities of gender roles, patriarchy, and gender inequality within various socio-cultural contexts.

CO3: Identify Critically evaluate different theoretical frameworks, such as feminist perspectives and intersectionality, to comprehend the multifaceted nature of gender issues.

CO4: Apply gender analysis frameworks to deconstruct development projects and policies, discerning their differential impacts on various gender groups.

CO5: Recognize the significance of gender mainstreaming and gender integration strategies in promoting gender equality within development interventions.

Skills:

- Reading philosophical and sociological texts
- Self-reflection

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	X	-	-	-	-	-
CO2	-	-	X	-	-	-	-	-
CO3	-	-	-	X	-	-	-	-
CO4	-	-	-	X	-	-	-	-
CO5	-	X	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	X
CO2	-	-	-	-	X
CO3	-	-	-	-	X
CO4	-	-	-	X	-
CO5	-	X	-	-	-

Syllabus:

- Unit I – Introduction to Gender and Development: Understanding Gender: Definitions, Concepts, and Theories, Historical Perspectives on Gender and Development Key Concepts: Patriarchy, Gender Roles, Gender Inequality, Theoretical Frameworks: Feminist Perspectives, Intersectionality.
- Unit II – Gender Analysis Frameworks: Introduction to Gender Analysis, Gender Mainstreaming vs. Gender Integration, Tools and Methods for Gender Analysis, Applying Gender Analysis to Development Projects and Policies, Case Studies: Gender Analysis in Practice.
- Unit III – Gender, Work, and Economic Development: Gender Division of Labor: Formal and Informal Sectors, Women's Economic Empowerment: Challenges and Opportunities, Gender Wage Gap and Employment Discrimination, Microfinance and Women's Entrepreneurship Sustainable Livelihoods Approaches and Gender.
- Unit IV – Gender, Health, and Education: Gender Disparities in Health: Access, Utilization, and Outcomes, Reproductive Health and Rights, Gender-Based Violence: Impacts on Health and Development, Gender and Education: Access, Quality, and Gender Parity, Gender-responsive Health and Education Policies and Programs.
- Unit V – Gender, Environment, and Sustainable Development: Gender and Environmental Degradation, Climate Change and Gender Vulnerabilities, Women's Role in Natural Resource Management and Conservation, Gender-responsive Approaches to Sustainable Development Goals (SDGs), Mainstreaming Gender in Environmental Policies and Projects.

Textbooks, Papers, Reference Books:

- "Gender and Development: A Practical Guide" by Caroline Moser and Fiona Clark
- "Gender, Development and Globalization: Economics as if All People Mattered" by Lourdes Benería, Gunseli Berik, and Maria S. Floro
- "Gender and Development" by Janet Momsen
- Selected journal articles, policy briefs, and reports related to each unit's topic.
- Online resources from reputable organizations such as UN Women, World Bank, and WHO.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	20	
*Continuous Assessment (CA)	20	
End Semester		60

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

24SDS542

Gender Policy and Legislations in India

3

Prerequisite: NA

Summary: Gender Policy and Legislation in India provides a comprehensive overview of the legal and policy frameworks addressing gender issues in India. Through five units, students will explore the historical evolution of gender policies, constitutional provisions for gender equality, women's empowerment initiatives, laws addressing gender-based violence, and emerging issues in the field. By the end of the course, students will gain an understanding of the complexities of gender policy implementation and the challenges and opportunities for advancing gender equality in India..

Course Objectives:

1. Understand the historical evolution of gender policies and legislation in India
2. Analyze the constitutional provisions related to gender equality and women's rights in India, including fundamental rights and directive principles
3. Evaluate landmark judgments and legal mechanisms aimed at addressing gender-based discrimination and violence in India's judicial system.
4. Examine the role of government bodies, NGOs, and civil society organizations in formulating, implementing, and monitoring gender policies and legislation.
5. Explore emerging issues such as intersectionality, transgender rights, and gender-based cyberharassment, and evaluate policy responses to address these challenges

Course Outcomes:

CO1: Demonstrate a comprehensive understanding of the historical evolution, constitutional provisions, and key legal frameworks pertaining to gender policy and legislation in India.

CO2: Develop analytical skills to critically evaluate landmark judgments, legal mechanisms, and policy initiatives aimed at addressing gender-based discrimination.

CO3: assess the effectiveness and impact of national policies and programs for women's empowerment and development.

CO4: identify emerging issues such as intersectionality, transgender rights, and gender-based cyber harassment, and propose policy solutions.

CO5: recognize opportunities for policy reform and advocacy in advancing gender equality and women's rights in India, and develop strategies for meaningful engagement with government bodies, civil society organizations, and other stakeholders to effect positive change.

Skills:

- Critically analyse and comprehend
- Self-reflection

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	X	-	-	-	-	-
CO2	-	-	X	-	-	-	-	-
CO3	-	-	-	X	-	-	-	-
CO4	-	-	-	X	-	-	-	-
CO5	-	X	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	X
CO2	-	-	-	-	X
CO3	-	-	-	-	X
CO4	-	-	-	X	-
CO5	-	X	-	-	-

Syllabus:

- Unit I – Introduction to Gender Policy and Legislation: Understanding Gender: Understanding Gender: Concepts, Definitions, and Terminologies, Overview of Gender Policy and Legislation Framework in India, Historical Perspectives: Evolution of Gender Policies and Laws, Key Actors and Institutions: Government Bodies, NGOs, Civil Society, Challenges and Gaps in Gender Policy Implementation
- Unit II – Constitutional Framework and Gender Rights: Constitutional Provisions for Gender Equality: Fundamental Rights and Directive Principles, Landmark Judgments on Gender Equality and Women's Rights, Gender Equality and Right to Equality: Case Studies, Role of National Human Rights Commission and State Human Rights Commissions, Legal Mechanisms for Addressing Gender-Based Discrimination and Violence.
- Unit III – Women's Empowerment and Development Policies: National Policy for Empowerment of Women, Gender Mainstreaming in Development Programs and Policies, Women's Health and Reproductive Rights Policies, Women's Economic Empowerment: Employment,

Entrepreneurship, and Financial Inclusion, Reservation Policies and Affirmative Action for Women: Quotas in Panchayats and Urban Local Bodies.

- Unit IV – Gender-Based Violence: Laws and Interventions: Legal Framework for Addressing Gender-Based Violence: Domestic Violence Act, Sexual Harassment at Workplace Act, Criminal Laws and Amendments related to Rape, Dowry, Acid Attacks, and Honor Killings, Support Systems for Survivors of Gender-Based Violence: Shelters, Helplines, Legal Aid, Role of Law Enforcement Agencies and Judiciary in Combating Gender-Based Violence, Prevention Strategies: Education, Awareness Campaigns, Community Interventions.
- Unit V – Emerging Issues and Future Directions: Intersectionality and Multiple Forms of Discrimination: Caste, Class, Religion, Disability, Transgender Rights and Legal Recognition: Transgender Persons (Protection of Rights) Act, Emerging Policy Responses to Gender and Technology: Cyber Harassment, Online Abuse, Sustainable Development Goals (SDGs) and Gender Equality: Progress and Challenges Future Directions in Gender Policy and Legislation: Opportunities for Reform and Advocacy

Textbooks, Papers, Reference

Books:

- "Gender Justice, Citizenship and Development" by Maitrayee Mukhopadhyay and Navsharan Singh
- "Gender and Law in India: Critical Essays" edited by Kalpana Kannabiran and Ranbir Singh
- "Women and Law in India: An Omnibus" edited by Kalpana Kannabiran and Others
- "Gender Inequality in India: Perspectives from Social Science Research" by Nandini Deo and B. L. Ramakrishna
- "Gender, Rights and Development: A Global Sourcebook" edited by Caroline Sweetman
- "Gender and Politics in India" by Nivedita Menon
- "Engendering Law: Essays in Honour of Lotika Sarkar" edited by Amita Dhanda and Archana Parashar
- "The Gendered Terrain of Disaster: Through Women's Eyes" edited by Enarson and Chakrabarti
- "Mapping Gendered Violence: Narratives, Political Tensions, and the Public Sphere" edited by Sunita Chakravarty and Tanika Sarkar

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	20	
*Continuous Assessment (CA)	20	
End Semester		60

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: NA

Summary: This course offers a comprehensive exploration of critical perspectives on masculinities and their implications for achieving gender equality policies. Through interdisciplinary approaches drawing from sociology, psychology, cultural studies, and feminist theory, students will examine the social construction of masculinity, its intersections with race, class, sexuality, and other dimensions of identity, and its impact on individual lives, government policies, and societal structures. Emphasis will be placed on the Indian context and critically evaluating traditional notions of masculinity, understanding power dynamics in gender relations, and developing strategies for promoting gender justice and equality.

Course Objectives:

1. Analyze the social construction of masculinity and its historical and cultural variations.
2. Critically assess the intersections of masculinity with race, class, sexuality, and other social categories.
3. Examine the role of masculinities in perpetuating gender inequalities and oppressive systems.
4. Explore feminist theories and methodologies for studying masculinities and gender relations.
5. Evaluate representations of masculinity in media, literature, and popular culture.
6. Understand the impacts of toxic masculinity on individuals and communities.
7. Investigate the potential for transformative masculinities and alternative models of gender identity.
8. Develop strategies in policy and intervention for promoting gender equality and challenging patriarchal structures.

Course Outcomes:

CO1: Students can define the various forms of masculinity and how this impacts social

life CO2: Students grasp the historical and cultural perspectives of gender norms

CO3: Identify intersections of masculinity with race, class, and sexuality and links with violence CO4: Become familiar with strategies to engage men & boys to promote gender equality

CO5: Understand how critical masculinities can play a supportive role in gender policies

Skills:

- Reading philosophical and sociological texts
- Self-reflection

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	X	-	-	-	-	-
CO2	-	-	X	-	-	-	-	-
CO3	-	-	-	X	-	-	-	-
CO4	-	-	-	X	-	-	-	-
CO5	-	X	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	X

CO2	-	-	-	-	X
CO3	-	-	-	-	X
CO4	-	-	-	X	-
CO5	-	X	-	-	-

Syllabus:

- Unit I – Introduction to Critical Masculinities: Hegemonic Masculinity and Power Dynamics; Feminist Perspectives on Masculinities
- Unit II – Representations of Masculinity in Media and Culture: Media representations of masculinity; Gender stereotypes in advertising and popular culture; Alternative representations and counter-narratives.
- Unit III – Masculinities and Violence: Toxic Masculinity and Its Consequences; Intersections of masculinity with violence against women, LGBTQ+ individuals, and other marginalized groups; Masculinities and Health
- Unit IV – Transformative Masculinities and Allyship: Models of transformative and inclusive masculinities; Allyship and solidarity in the pursuit of gender equality; Strategies for Change

Textbooks, Papers, Reference Books:

- Banerjee, S. (2005). *Make me a man!: Masculinity, Hinduism, and Nationalism in India*. Albany; State University of New York Press.
- Basu, J., Samanta, M., Basu, S., & Bhattacharya, M. (2018). Gender and Mental Health: Masculinity, Femininity, Modernity and Daily Hassles as Predictors of Subjective Well-Being. In G. Misra (Ed.), *Psychosocial Interventions for Health and Well-Being* (pp. 313–333). New Delhi; Springer India.
<https://doi.org/10.1007/978-81-322-3782-2>
- Coley, C., Gressel, C.M., Bhavani, R.R. (2021). *Transforming MENTalities: Gender equality and masculinities in India*. UNESCO New Delhi. <https://unesdoc.unesco.org/ark:/48223/pf0000377859.locale=en>
- Connell, R. W. (2005). *Masculinities* (2nd ed.). Los Angeles; University of California Press.
- Gottzén, L., Mellström, U., & Shefer, T. (Eds.). (2019). *Routledge international handbook of masculinity studies*. Routledge.
- Kimmel, M., Hearn, J., & Connel, R. W. (Eds.). (2005). *Handbook of Studies on Men and Masculinities*. London; Sage Publications, Inc.
- Lang, J., Greig, A., & Connell, R. (2008). The Role of Men and Boys in Achieving Gender Equality. In *Women 2000 and Beyond*. United Nations Division for the Advancement of Women, DESA.
- Osella, C., & Osella, F. (2006). *Men and Masculinities in South India*. London; Anthem Press.
- Sudkämper, A. (2019). *Men’s Support for Gender Equality*. University of Exeter.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	20	
*Continuous Assessment (CA)	20	
End Semester		60

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

SPECIALIZATION: HEALTH POLICY

24SDS551

Health Policy and Systems Research (HPSR)

3

Prerequisite: NA

Summary:

Course Objectives:

1. Highlight the Fundamental Elements of Effective Health Systems and the Significance of Collaboration Among the Six Core Health System Structures
2. Differentiate Among Various Health Funding Mechanisms with Real-World Illustrations
3. Explain the Distinctions Among Health System Components/Operations, Funding Strategies, and Their Influence on Individuals' Health Care Utilization Pattern
4. Understanding Governance and Priority Setting in Health Systems
5. Exploring Global Approaches to Determining Health Priorities
6. Recognizing Challenges in Effective Health System Governance
7. Assessing the Effectiveness of Health Systems:

Course Outcomes:

- CO1: Understand the the Fundamental Elements of Effective Health Systems and the Significance of Collaboration Among the Six Core Health System Structures
- CO2: Differentiate Among Various Health Funding Mechanisms with Real-World Illustration
- CO3: Explain the Distinctions Among Health System Components/Operations, Funding Strategies, and Their Influence on Individuals' Health Care Utilization Pattern
- CO4: Understanding Governance and Priority Setting in Health Systems while Exploring Global Approaches to Determining Health Priorities
- CO5: Recognizing Challenges in Effective Health System Governance, Assessing the Effectiveness of Health Systems

Skills

- Critical Analysis: Students will hone their ability to critically evaluate the advantages, disadvantages, and potential unforeseen outcomes of diverse policy measures.
- Effective Communication: Students will improve their skills in articulately and convincingly conveying intricate concepts related to health systems and policy suggestions to decision-makers, interested parties, and the wider community.
- Informed Decision-Making and Evaluation of Health Systems and Alternative Policies: This involves developing a informed decisions and assessing the impact of health systems and varying policy options.

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	X	-	-	-	-	-	-	-
CO2		X	-	-	-	-	-	-
CO3	-	-	-	-	-	X	-	-
CO4	X	-	-	-	-	-	-	-
CO5	-	-	-	-	-	-	X	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	X	-	-	-
CO2	-	X	-	-	-
CO3	-	X	-	-	-
CO4	-	-	-	X	-
CO5	-	-	-	X	-

Syllabus:

Unit I: Introduction to HPSR– Overview of Health Policy analysis, Overview of Health Systems analysis, Concepts, Elements, Key characteristics, Interrelationships, Goals, Boundaries of what HPSR entails, WHO building blocks framework

Unit II: Conceptual Frameworks for HPSR - Integration of targeted health interventions into health systems, Decision making perspective, Accountability and governance issues, Role of trust in health systems, Financing models, Policies and Decision Making

Unit III: Performance assessment - Performance assessment tools, Equity and development priorities, impact assessment, decision making between policies,

Unit IV: Conducting HPSR - Identifying issues and framing research questions in the context of HPSR , Designing a study, Research Quality, Ethical considerations

Unit V: Systems thinking and Public Health - Characteristics of systems, Appraising systems, feedback loops, Emergence, Cascading effects of health policies.

Unit VI: Reading Empirical Research - Cross-sectional studies, Case-studies, Impact Evaluation, Policy and System change temporally, Action research, Cross national analysis, Ethnographic studies

Suggested Readings:

1. Carrin, G., & Carrin, Guy. (2009). *Health systems policy, finance, and organization* (1st edition). Academic Press.
2. Gilson, L., & World Health Organization. (2012). Health policy and systems research: a methodology reader/edited by Lucy Gilson. In *Health policy and systems research: a methodology reader/edited by Lucy Gilson*.
3. 1. Newell B, Tan DT, Proust K. Systems Thinking for Health System Improvement. In: Martins JoM, Pathmanathan I, Tan DT, Lim SC, Allotey P, eds. *Systems Thinking Analyses for Health Policy and Systems Development: A Malaysian Case Study*. Cambridge University Press; 2021:17-30.
4. Perić N, Hofmarcher-Holzhaecker MM, Simon J. Health system performance assessment landscape at the EU level: a structured synthesis of actors and actions. *Arch Public Health*. 2017 Jan 30;75:5

5. Tashobya, C.K., da Silveira, V.C., Ssenooba, F. *et al.* Health systems performance assessment in low-income countries: learning from international experiences. *Global Health* 10, 5 (2014).
6. Derick W Brinkerhoff, Thomas J Bossert, Health governance: principal-agent linkages and health system strengthening, *Health Policy and Planning*, Volume 29, Issue 6, September 2014, Pages 685–693
7. Derick W Brinkerhoff, Thomas J Bossert, Health governance: principal-agent linkages and health system strengthening, *Health Policy and Planning*, Volume 29, Issue 6, September 2014, Pages 685–693
8. Szlezák NA, Bloom BR, Jamison DT, Keusch GT, Michaud CM, Moon S, et al. (2010) The Global Health System: Actors, Norms, and Expectations in Transition. *PLoS Med* 7(1): e1000183.

Further Case studies/Journal Paper will be suggested as per the direction of discussion

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	20	
*Continuous Assessment (CA)	40	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

SPECIALIZATION: EDUCATION POLICY

24SDS561

Education for Sustainable Development (SWAYAM)

3

Prerequisite: NA

Summary: Education is a human right and a force for sustainable development and peace. Every goal in UNESCO's '2030 Agenda' (17 Sustainable Development Goals-SDGs) requires education to empower people with the knowledge, skills and values to live in dignity, build their lives and contribute to their societies. While governments hold the main responsibility for ensuring the right to quality education, the '2030 Agenda' is a universal and collective commitment. It requires political will, global and regional collaboration, and active engagement of educational institutions, civil society, youth, corporate/private sector, and other multilateral agencies to tackle educational challenges and build systems that are inclusive, equitable and relevant to all learners/stakeholders.

Course Objectives:

1. Highlight the fundamental elements of education, sustainable development, and contextual realities
2. Differentiate ESD needs among various population groups in cities, villages and in between with real-world illustrations
3. Tackle contemporary global rights issues including gender equality, migration, diversity, and peace
4. Understanding education governance and priority setting in education
5. Exploring 21st century competencies and their relation to the global job market
6. Understand the role of social transformation as an outcome of ESD

Course Outcomes:

CO1: Understand the fundamental elements of education, sustainable development, and contextual realities

CO2: Differentiate ESD needs among various population groups in cities, villages and in between

CO3: Tackle contemporary global rights issues including gender equality, migration, diversity, and peace

CO4: Understanding education governance and priority setting in education

CO5: Recognizing 21st century competencies and their relation to the global job market

Skills:

- Critical Analysis: Students will hone their ability to critically evaluate the advantages, disadvantages, and potential unforeseen outcomes of diverse policy measures.
- Effective Communication: Students will improve their skills in articulately and convincingly conveying intricate concepts related to health systems and policy suggestions to decision-makers, interested parties, and the wider community.
- Informed Decision-Making and Evaluation of Education for Sustainable Development. This involves developing a deeper understanding and application of strategies for making informed decisions and assessing the impact of ESD and varying policy options.
- Recognizing 21st century competencies and their relation to the global job market

Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	X	-	-	-	-	-
CO2	-	-	X	-	-	-	-	-
CO3	-	-	-	X	-	-	-	-
CO4	-	X	-	-	-	-	-	-
CO5	-	-	-	-	-	X	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	X	-	-	-
CO2	-	X	-	-	-
CO3	-	X	-	-	-
CO4	-	-	-	X	-
CO5	-	-	-	X	-

Syllabus:

Unit I: Introduction and SDGs – Intro to ESD and SDGs, SDG 4: Quality Education for All

Unit II: Human Rights, Gender Equality, and Diversity – ESD & SDGs for achieving social development, Human Rights, Gender Equality, Promotion of peace & non-violence, Global citizenship, Leveraging cultural diversity for SDGs

Unit III: 21st Century Competencies for Economic Development– 21st Century competencies for global & decent jobs, Sustainable entrepreneurship, Promoting good mental health & wellbeing, Inclusive education & social transformation

Unit IV: ESD for Social Transformation

Unit V: Educational Research and Social Benefits Suggested

Readings:

1. Issues and trends in Education for Sustainable Development: UNESCO Publication
2. Digital Pedagogy for Building Peaceful & Sustainable Societies: Blue Dot Publication
3. https://www.mdpi.com/journal/sustainability/special_issues/Entrepreneurship_Education

Further Case studies/Journal Paper will be suggested as per the direction of discussion Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	20	
*Continuous Assessment (CA)	40	
End Semester		40

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Semina**

OPEN ELECTIVES

240EL641

Social Welfare Policy & Administration

3

Prerequisite: NA

Summary: An introduction to social welfare administration course can cover a variety of topics, including:

1. The history, principles, and fundamental concepts of social welfare policy
2. The development and impact of social policies, and their role in shaping society
3. The principles, policies, and practices involved in managing social welfare programs and organizations
4. Knowledge on management processes and basic skills to handle administrative matters in social care organizations

Course Objectives:

1. To prepare students for possible work within non-profit administration and social welfare policies.
2. Students gain an understanding of social issues and needs of various populations.
3. Students gain an understanding of social welfare administration, NGO/CSO engagement, NGO/CSO administration and its various applications.

Course Outcomes:

CO1: Knowledge of the fundamentals of non-profit administration and social welfare policies. CO2: Insight into social issues and needs of various populations.

CO3: Knowledge of the fundamentals of social welfare administration, CO4: Knowledge of the fundamentals of NGO/CSO engagement, NGO/CSO administration and its various applications.

Skills:

- NGO and social welfare administration
- NGO/CSO engagement strategies

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	X	-	-	-	-	-	-
CO2	-	-	X	-	-	-	-	-
CO3	-	-	-	-	-	X	-	-
CO4	-	-	-	-	-	-	X	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	X	-	-	-
CO2	-	X	-	-	-
CO3	-	-	-	-	X
CO4	-	-	-	-	X

Syllabus:

- Unit I – Social Welfare Policy: Concept, meaning, definition, need, evolution, constitutional base, sources and instrument. Approaches to social policy; unified, integrated and sectoral. Social welfare; Meaning, concept and importance, evolution of social welfare in India.
- Unit II – Social Welfare Policies and Programmes for Various Populations: Scheduled sastes (SCs) and schedule tribes (STs), other backward classes (OBCs), religious and linguistic minorities, women, children, older persons and persons with disabilities (PWDs), transgender, mentally Ill persons, refugees, substance abuse, internally displaced persons (IDP) and project affected persons (PAPs).
- Unit III – Social Welfare Administration: Definition, meaning, concepts, scope, task, functions, skills, principles and areas. Evolution of social welfare administration in India. Administrative setup & functions; centre level, state level, & local level.
- Unit IV – Non State Organizations (NSO)/Civil Society Organizations (CSOs): History and evolution of CSO in the World & India. Type of VOs: Legal Status of VOs / CSOs; salient features of societies registration act, 1860: State acts related to voluntary organizations. Indian Trust Act 1882. Organizational Structure: National Policy on Voluntary Sector - 2007. Problems and challenges in administration of Voluntary organization
- Unit V – Administration of NSOs/CSOs: Office administration, reporting and preparation of annual reports; Financial administration. Resource mobilization: Fund Raising. Income Tax Act Sections 12A, 35AC, 80G & 80 GGA; Foreign Contribution Regulation Act (FCRA) 2010. Need for effective implementation of FCRA provisions and challenges for government and VOs

Textbooks, Papers, Reference Books:

- Bhattacharya Sanjay. (2006) Social Work Administration and Development. New Delhi, Rawat.
- Chowdhry Paul D. (2006) Social Welfare Administration. Delhi, Atma Ram & sons.
- Goel, S.L. & Jain, R.K. (1988) Social Welfare Administration, Vol. I & II. New Delhi, Deep and Deep.
- Sachdeva D R. (2007) Social Welfare Administration in India. Allahabad, KitabMahal.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exam	30	
*Continuous Assessment (CA)	20	
End Semester		50

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**

Prerequisite: NA

Summary: Science and technology have become all pervasive force influencing almost every aspect of our daily life. The present course focuses on the increasing complexities of the interrelationship between science, technology and society. Science and technology policy of the twenty first century is faced by challenges like emerging technology, globalization and the environmental movement.

Some of the notions like objectivity, rationality, skepticism, systematic investigation, scientific temper require an understanding of how science emerged as a social institution, what role S&T plays in our society and how socioeconomic structure influences the character of modern science. This course will familiarize undergraduate students about the basic concepts and perspectives on science and technology and explore the emergence and growth of modern science and technology in India. The course will discuss issues concerning both functional and dysfunctional aspects of the impact of science and technology on society and vice versa

Course Objectives:

1. Gain understanding on the basic concepts and perspectives on science and technology
2. Gain insights into science and technology in India.
3. Become familiar with the structure of Scientific Research & Development Organizations

Course Outcomes:

CO1: Grasp basic concepts and perspectives on science and technology

CO2: Understand science and tech within the Indian Context

CO3: Understand the structure of scientific R&D organizations

CO4: Understand the impact and role of science on policy Skills:

- Critical thinking
- Understanding the connections between science and society

-Program outcome PO - Course Outcomes CO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	-	-	-	X	-	-
CO2	-	-	-	-	-	X	-	-
CO3	-	-	-	-	-	X	-	-
CO4	-	X	-	-	-	-	-	-

Program Specific Outcomes PSO - Course Objectives - Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	X	-	-	-
CO2	-	X	-	-	-
CO3	-	X	-	-	-
CO4	-	X	-	-	-

Syllabus:

- Unit I – Basic concepts and perspectives: Concept of Science: Nature of scientific knowledge. Scientific method, demarcation between science and non science, Critique of modern science: scientific temper vs. humanistic temper. Emergence of modern science: Role of Scientists. Institutionalization and professionalization of science.
- Unit II – Science, Technology and Culture: Science, Technological Change and Development; Science and Politics; Public Understanding of Science and Technology; Science and Religion; Science and Ethics & Social Responsibility
- Unit III – Science and Technology in India: Development of Science in India: Precolonial Science; Colonial science and response of Indian Scientists; Origin and growth of scientific institutions and societies in India; Science in Post Independent India: Role of political and scientific elites in the development of Science and Technology, Emergence of Scientific community in India
- Unit IV – Structure of Scientific Research & Development Organizations: Evolution of S&T Policy; Science and Technology in Globalized world: Challenges and opportunities of emerging technologies like Information technology and Biotechnology. TRIPS; Patent Laws and Indigenous Knowledge. Consequences and Implications.

Textbooks, Papers, Reference Books:

1. Barber, Bernard (1953.) Science and Social Order. London: George Allen & Unwin. Chapter 1 “The Nature of Science: The Place of Rationality in Human Society” pp.722. Chapter X , “The social Control of Science”. pp.207237.
2. BenDavid, Joseph, (1965), The Scientists Role in Society: a comparative study. Englewood Cliff, Print iceHall.
3. Campbell, Norman, (1952). What is Science? London: Dover.
4. Crother, T.G. (1967) Science in Modern Society. Boston: The Cresset Press
5. Desai, Pranav N.(2005) “Challenges of AgroBiotechnologies, Intellectual Property Rights and Globalization” , Asian Biotechnology and Development Review, Vol.7.(2)
6. Gailard, J., Krishna, V.V. and Waast, (1997), Scientific Communities in the Developing Countries. New Delhi: Sage Publication. Chapter1& 3
7. Haldane, J.B.S., (1965) Science and Indian Culture.Culcutta.New Age Publisher Kothari, D.S. (1974) Science and Man, Newdelhi: Indian Publication.
8. Kumar, Deepak (1995), Science and the Raj 18571905, NewDelhi, Oxford Uni,Press
9. Merton, Robert K. (1968). Social Theory and Social Structure. New Delhi: Amerind Publication. Chapter XVII, “Science and the social Order” pp. 591603., Chapter, XVIII “Democratic Social Structure and Science”. Pp.604615.
10. Mack, Arien (ed.) (1997). Technology and the Rest of Culture. Columbus; Ohio University Press.Chapter.2, “Social Context of Technology” pp.524.Chapter, 11, “Technology and Culture” pp. 177184.
11. Nandy, Ashis(ed.) (1988). Science, Hegemony and Violence: A Requiem for Modernity, Tokyo: Tokyo University Press.
12. Patnaik, Binay Kumar (1992). The Scientific Temper: An Empirical Study. Jaipur: Rawat Publication
13. Rose, Hilary and Rose, Steven (1977) Science and Society. Harmondsworth: Penguin Books. Snow,C.P. (1969), Two Culture: A Second Look. London: Cambridge University Press.

Optional Reading Lists:

1. Abrol, Dinesh(2004)“Science and Technology: Current Imperatives.” Social Scientists, 32(78):7684.
2. Adams, Robert McC (1997) “Social Context of Technology” in Mack, Arien(ed) Technology and the Rest of Culture. Columbus: Ohio University Press, 522.
3. Adhikari, Kamini, (1987) “Science Society and The Indian Transformation,” Philosophy and Social Action, Vol.XII, no.14, pp3356.
4. Avinish(2004) “Science and Society: What Kind of Mediation?” Economic &Political Weekly 39(6) 713 Feb.53840.
5. Barnes, B. (1982) “The Science Technology relationship: A model and query”. Social Studies of Science.12:166172.

7. BenYehuda, Nachman (1985), Deviant Science. Chicago: Chicago Uni. Press Bernal, J.D. (1948), The Social Function of Science. London: George and Rutledge
 8. Bhattacharya, Subrata (1998) Post independent India Society and Science: An appraisal, analysis and outlook. IASSI. Quarterly. 17(2), (OctDec):6575.
 9. Biswas, S.K. 2000 “Do Science and technology have a future in India”. MAINSTREAM, annual (23 December) :103104.
 10. Bronowski, J. (1956) Science and Human Values, New York: Harper Torch Books Bush, Vannevar (1945), Science: Endless Frontier, Washington. Public Affairs Press.
 11. Chattopadhyay,D.P.(ed)(1982) Studies in the History of Science in India, New Delhi: Editorial Enterprises.
 12. Chattopadhyaya,D.P.(2000), Science Values and Ethics” Science and Culture.Vol,66,no.3 4.pp101109.
 13. Conant, James B.(1954). Modern Science and Modern Man. New York: Columbia University Press.
 14. Desai, Pranav N.(1997) Science, Technology and International Cooperation. New Delhi: Har Anand.
 15. Finocchiaro, Maurice A.(1988). Science and Society in Newton and in Marx. INQUIRY, 31(1):103122.
 16. Goonatilke, Susantha, (1999) Towards a Global Science: Mining Civilizational Knowledge. NewDelhi: Vistaar Pub.
 17. Irwin, Allan & Wyne, Brian (ed.) (1996) Misunderstanding science ? The Public
 18. Jagtenberg, Tom (1983). The Social Construction of Science : A Comparative Study of Global Direction of Research
- ,Evolution and Legitimation. Dordrecht; D. Reidel Publication.Chapter 2 “What is science”.pp1240.**
19. Migration in the Context of Brain Gain &Brain Drain in India’. Science, Technology& Society, 2(2). PP. 34789.
 20. Krishna, V.V.(2001). “Reflection on the Changing Status of Academic Science in India”. INTERNATIONAL SOCIAL SCIENCE JOURNAL 169 (June) 231246.
 21. Mashelker, R.A.(2004)“National Building through Science and Technology: A Developing World Perspectives”. Man & Development. 26(3) September 2746.
 22. Merton,R.K.(1970) Sociology of Science. New York: Harper and Row.
 23. Minsky, Marvin (1997) “Technology and Culture” in Mack, Arien (ed.) Technology and the Rest of Culture. Columbus: Ohio University Press, 177184.
 24. Oberai,J.P.S. (1979) Science and Culture. New Delhi: Oxford University Press.
 25. Paisley, Willium J. (1998)‘ Scientific Literacy and the Competition for Public Attention and Understanding’. Science Communication Vol. 20. No.1 PP. 7080
 26. Pal, Yash (1996) “ Science in Culture and the Good Society.’MAINSTREAM Annual (December,14):1519.
 27. Polanyi, Michael (1969.) “Growth of Science in Society”. Minerva,Vol.5(4)
 28. Singh, Baldev (ed.) (1986) Jawaharlal Nehru on Science. New Delhi: Nehru Memorial Museum and library.
 29. Visvanathan, Shiv (1997) Carnival for Science Essays on Science, Technology and Development. Delhi: Oxford University Press. Chapter 1, “A carnival for Science” .pp114, Chapter 4, Modern Medicine and its NonModern Critics: A Study in Discourse. pp 94145.
 30. Ziman,J. M.(1968), Public Knowledge: An Essay Concerning the Social Dimension of Science, Cambridge: Cambridge Uni. Press.

Evaluation Pattern:

Assessment	Internal	External
Midterm Exams (2)	30	
*Continuous Assessment (CA)	20	
End Semester		50

***CA - Can be Quizzes, Assignment, Projects, and Reports, and Seminar**