NATIONAL INSTITUTE OF ADVANCED STUDIES

COURSE PLANS August – December 2025

Institute Core Courses

<u>1</u>

Course Name	Quantitative Research Methodology
Offered by	Institute Core Course
Course Credits	2
Course Teacher(s)	Dr Debosree Banerjee, debosree@nias.res.in & Dr Rudrodip Majumdar, rudrodip@nias.res.in
Course Objective	 Discuss the various kinds of quantitative approaches Discuss primary data collection methods Introduce techniques and tools for quantitative research Introduce basic statistical methods for primary and secondary data analysis
Lecture/Session Plan	 Basic concepts and Descriptive Statistics, correlations Sampling and survey methods Probability distribution Sampling distribution (Normal, z, t, binomial, Poisson, Chi-sq) Confidence intervals Analysis of Variance (ANOVA) Hypothesis testing Introduction to linear regressions (Simple and multivariate)
Course Evaluations	 10% of marks for attendance. 50% of the marks for the written examination. 40% of the marks for 2 assignments (20% each)
Course Readings	No single statistics book covers all. So here is a sequence to follow 1) Statistics, 4th ed. by David Freedman and Robert Pisani 2) Wooldridge, Jeffrey M. (2003), Introductory Econometrics: A Modern Approach. Mason, OH: Thomson South-West. 3) Gujarati, Damodar N. Essentials of econometrics. Sage Publications, 2021.

Course Name	Qualitative Research Methodology
Offered by	Institute Core Course
Course Credits	Two
Course Teacher(s)	Dr. Anshuman Behera, anshumanbehera@nias.res.in & Dr. Nithin Nagaraj, nithin@nias.res.in
Course Objective	a) A joint teaching session by the course instructorsb) Group discussion
Lecture/Session Plan	Course Outline 1. Philosophy of Science (Three Lectures) a. Lecture one The Scientific Method: observation, hypothesis, experimentation, and inference Theories and models, role of mathematics in science (its unreasonable effectiveness) Logic & reason, inductive and deductive reasoning, analysis & synthesis Falsifiability, testability, reproducibility b. Lecture Two Paradigms and Scientific Revolutions The nature of laws, the role of observation and theory in scientific knowledge Physics (Space, Time, Matter) & Metaphysics, debates on Realism c. Lecture Three Reductionism, emergence, determinism, randomness & uncertainty, complexity Observer in Science: Mind-Matter-Consciousness debate Causation, types of explanations in science and their nature 2. Doing Science (Three Lectures)

a. Lecture Four

Various schools and traditions (historical perspectives)

Axioms vs. Algorithms, Positivism (logical, computational)

Role of computation and technology in doing science

b. Lecture Five

Ethics & values in the practice and applications of science

Interdisciplinary approaches, limits of science & modes of knowing

c. Lecture Six

Data & Big Data in Science, third-person vs. first-person data

Rise of Artificial Intelligence: death of science? Controversies and debates, current trends, and open problems in the philosophy of science

3. Qualitative Research: Conceptual Framework (Two Lectures)

a. Lecture Seven

Ideas and development
New turns in qualitative research
Modern methods and 'Decolonizing' theory.

b. Lecture Eight

Making sense of oral traditions

Investigating marginality and subalternity

3. Qualitative Methods (Two Lectures)

a. Lecture Nine

Ethnography and participant observation

b. Lecture Ten

Mixed method

Case study

5. Analytical Tools (Four Classes)

Content Analysis

Discourse Analysis

Narrative Analysis

Grounded Theory

6. Interdisciplinarity of Methodology (Two Classes)

- c) A joint teaching session by the course instructors
- d) Group discussion

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Course Evaluations	 10% of marks for attendance 50% of marks for written examination 40% of marks for assignments
	Alan Chalmers, What Is This Thing Called Science? 4th Edition, Univ. of Queenland Press, 2013. B V Sreekantan, Philosophy of Science at the End of
	Twentieth Century, Gandhi Centre of Science and Human Values of Bharatiya Vidya Bhavan, Bangalore, 2001.
	Narasimha, Roddam. "Axiomatism and Computational Positivism: Two Mathematical Cultures in Pursuit of Exact Sciences." Economic and Political Weekly (2003): 3650-3656.
	Gopal Guru, Dalits from margin to margin, India International Centre Quarterly, 2000, Vol. 27, No. 2, pp. 111-116.
	Kalyan Das, Subaltern Historiography to Dalit Historiography: Tracing Heterogeneity in Dalit 'Subalternity', Economic and Political Weekly, Vol. 50, No. 7 (February 14, 2015), pp. 60-65.
Course Readings	Additional Reading List
	Kuhn, Thomas S. The structure of scientific revolutions: 50th-anniversary edition. University of Chicago press, 2012.
	Popper, Karl. The logic of scientific discovery. Routledge, 2005.
	Okasha, Samir. Philosophy of science: A very short introduction. Vol. 67. Oxford Paperbacks, 2002.
	Wigner, Eugene P. "The unreasonable effectiveness of mathematics in the natural sciences." Mathematics and science. 1990. 291-306.
	Hamming, Richard Wesley. "The unreasonable effectiveness of mathematics." The American Mathematical Monthly 87.2 (1980): 81-90.
	Staal, Frits. "Artificial languages across sciences and civilizations." Journal of Indian Philosophy 34.1-2 (2006): 89-141.

Alan Chalmers, What Is This Thing Called Science? Chs. 1-5.

Peter Godfrey-Smith, Theory and Reality: An Introduction to the Philosophy of Science. Chs. 12-13.

Mark Risjord, Philosophy of Social Science: A Contemporary Introduction. Chs. 2-3.

Alan Peshkin, The Goodness of Qualitative Research, Educational Researcher, Mar. 1993, Vol. 22, No. 2, pp. 23-29.

Atis K. Dasgupta, A Note on Content Analysis, Sociological Bulletin, March 1975, Vol. 24, No. 1, pp. 87-94.

Carlos Pessoa, On Hegemony, Post-Ideology and Subalternity, Bulletin of Latin American Research, Vol. 22, No. 4 Oct. 2003, pp. 484-490.

Edward J. Mullen, Pursuing knowledge through qualitative research, Social Work Research, March 1995, Vol. 19, No. 1, pp. 29-32.

George Spindler and Louise Spindler, Ethnography: An Anthropological View, Educational Horizons, Summer 1985, Vol. 63, No. 4, pp. 154-157.

J. W. Heyink and TJ. Tymstra, The Function of Qualitative Research, Social Indicators Research, Jul. 1993, Vol. 29, No. 3. pp. 291-305.

James S. Coleman, Social Theory, Social Research, and a Theory of Action, American Journal of Sociology, May 1986, Vol. 91, No. 6. pp. 1309-1335.

Kalyan Das, Subaltern Historiography to Dalit Historiography: Tracing Heterogeneity in Dalit 'Subalternity', Economic and Political Weekly, Vol. 50, No. 7 (February 14, 2015), pp. 60-65.

Mark Risjord, Philosophy of Social Science: A Contemporary Introduction. Chs. 4-6.

Martin Gerard Forsey, Ethnography as participant listening, Ethnography, December 2010, Vol. 11, No. 4, pp. 558-572.

Martin Packer, The Science of Qualitative Research. Chs. 4-6.

Scott Reeves, Mathieu Albert, Ayelet Kuper and Brian David Hodges, Qualitative Research: Why Use Theories in Qualitative Research? British Medical Journal, Sep. 13, 2008, Vol. 337, No. 7670, pp. 631-634.

<u>3</u>

Course Name	Research and Publication Ethics	
Offered by	Institute Core Course	
Course Credits	2	
Course Type	Institute Core	
Course Teacher(s)	Narendar Pani, <u>narendar@nias.res.in</u> & Chetan Choithani, <u>cchoithani@nias.res.in</u>	
Course Objective	This course aims to introduce students to the link between knowledge, method, and ethics. The course is divided into two broad parts that include philosophy and practice of research ethics.	
Lecture/Session Plan	 Philosophy of research and ethics (Narendar Pani) Ethics, logic and knowledge Types of knowledge Interaction of types of knowledge Sources of knowledge Substance and process philosophies of knowledge Knowledge through quantitative methods Knowledge through qualitative methods Philosophy of ethics Practice of research ethics (Chetan Choithani) Key concepts and principles of research ethics Scientific misconduct – falsification, fabrication and plagiarism Considering ethical issues in data collection 	

Course Evaluations	 Power in qualitative research Decolonising research ethics Use of Artificial Intelligence (AI) in research Ethics in publishing research Committee on Publication Ethics (COPE) core practices, open access publishing and predatory journals There will be two evaluations: one written exam and one assignment; the assignment could include either an oral presentation or an original term paper. The written exam carries 50% weightage and the assignment carries 40% weightage and students will need to obtain minimum passing marks/grades in both. Attendance carries 10% marks in that students who miss more than two classes will lose 10% of total marks and will only be assessed on 90% marks. Those who miss more than three classes will not be evaluated at all.
Course Readings	 Iltis, Ana S. & MacKay, Douglas (Eds.). (2024). The oxford handbook of research ethics. Oxford University Press. Iphofen, Ron (Ed.). (2020). Handbook of research ethics and scientific integrity. Cham: Springer. Kumar, Ranjit (2024). Research methodology: a step by step guide for beginners (Fourth edition). New Delhi.

Programme Core Courses

School of Conflict and Security Studies

Course Name	Global Politics and the World Order: Fault Lines, Fractures, and Futures
Offered by	School of Conflict and Security Studies Science, Technology and International Relations Programme
Course Credits	Two

Course Teacher(s)	Prof D Suba Chandran
Course Objective	 What is the state of global politics and the world order in the 2020s? What are new trends/vectors in contemporary global politics, and how do they affect the regional and world orders? What are the major regional and global faultiness and fractures? How will the World Order evolve into the 2030s?
Lecture/Session Plan	Module 1: Introduction to the Idea and History of the World Order (Six hours) What is World Order? How did it evolve historically? How is the World Order perceived and theorised? The Nature of World Order in the 19th Century and the Beginning of the 20th Century The World Orders between the World Wars I and II The Cold War World Order Transitions since the 1990s Module 2: Big Power Politics and Foreign Policy Approaches (Six hours) US China Europe India Module 3: Fractures and Faultines (Six hours) The War in Ukraine The War in Gaza Conflicts in Africa Maritime Conflicts The Nature of World Order in the 2020s Actors and Issues Into the 2030s: What Next in the World Order Module 4: Rising Powers, Regional Orders, Big Power Politics and Globalization (Six hours) The Rising Powers, Middle Powers and Swing States Big Power Politics Regional Orders: From East Asia to Latin America Globalization, Regional Orders and Global Order Module 5: Existing and Emerging Components of Global Orders (Six hours) Economy and Trade Defence Nuclear Space

	Technology Maritime Climate Change Module 6: Global/Regional Organizations, Groupings, Initiatives and Global Order (Six
	hours) The UN and related agencies Transnational Entities Regional Organizations: Political, Economic and Military Regional Groupings and Initiatives: G20, SCO, BRICS, Indo-Pacific, Quad
	Module 7: Disruptions and Global Order (Six hours) New Cold War Regional Hotspots Violence, Conflicts and Protest Movements Module 8: Futures (Six hours) Trajectories: Global and Regional Orders, Big Power
Course Evaluations	Politics, Major Conflicts, Regional Groups, Technologies and Disruptions. 10 % of marks for attendance 30 % of marks for the written examination
	60 % of the marks for assignments. Mark Leonard, "China Is Ready for a World of Disorder. America is not," <i>Foreign Affairs, August</i> 2023
	Philip Zelikow, "he Hollow Order: How can world leaders rebuild an international system that works?" Foreign Affairs, August 2022 Shivshankar Menon, India and Asian Geopolitics: The
Course Readings	Past, Present, 2021 Yun-han Chu and Yongnian Zheng, The Decline of the Western-Centric World and the Emerging New Global Order: Contending Views (China Policy Series), 2020
	Francis Fukuyama, <i>The End of History and the Last Man</i> , Penguin, 2020 Sergey Karaganov, Dmitry Suslov, "A New World Order: A View from Russia," <i>Horizons: Journal of International Relations and Sustainable Development</i> , 2019

BS Chimni, *International Law and World Order: A Critique of Contemporary Approaches*, Cambridge University Press, 2018

Samuel P Huntington, *The Clash of Civilization and the Remaking of World Order*, Simon & Schuster, 2016

Amitav Acharya, *The End of American World Order*, OUP, 2015

Henry Kissinger, World Order, Penguin, 2015

Globalization and World Order, Chatham House, 2014

Amitav Acharya, "Power Shift or Paradigm Shift? China's Rise and Asia's Emerging Security Order," *International Studies Quarterly*, March 2014

Martin Jacques, When China Rules the World: The End of the Western World and the Birth of a New Global Order, Penguin, 2012

Francis Fukuyama, *The Origins of Political Order:* From Prehuman Times to the French Revolution, 2012

Stephen G. Brooks and William C. Wohlforth, "Reshaping the World Order," *Foreign Affairs*, April 2009

Daniel W. Drezner, "The New New World Order," *Foreign Affairs*, April 2007

Vivien A Schmidt, "The New World Order, Incorporated: The Rise of Business and the Decline of the Nation-State," *Daedalus*, Spring, 1995

Robert W Cox, "Multilateralism and World Order," *Review of International Studies*, Vol. 18, No. 2, April 1992

Joseph S. Nye Jr, "What New World Order?" Foreign Affairs, Spring, 1992

Course Name	Theoretical Constructs of Conflict and Peace Research
Offered by	Conflict Resolution and Peace Research Programme
Course Credits	Two
Course Teacher(s)	Anshuman Behera (Coordinator, <u>anshumanbehera@nias.res.in</u>) & D Suba Chandran, <u>subachandran@nias.res.in</u>
Course Objective	This is primarily a lecture-based course. The course will also involve seminars and guided readings. This course will introduce the students to the basic understanding of the conceptual frameworks, theoretical orientations, and specific issues around conflict and Peace studies
Lecture/Session Plan	Course Outline: Understanding Conflict: An Introduction Incompatible Goals Hostility Conflict actions Conflict environment Issues and contenders in conflict Theoretical Framework of Understanding Conflict Nature and functions of social conflicts Greed and grievances around social conflicts Role of power elite and the masses in conflict Conflicts of local and national Conflicts of classes Issues of Social Conflicts Identity and Ethnic conflict Conflicts over resource access and distribution Inequalities and conflict Violence and conflict Conflicts of ideologies Peace Research: An Introduction Idea of Peace Approaches to Peace Institutions studying Peace Journals of Peace

	Peace Theories: A Critique
	Major Peace Theories
	Peace Theorists
	Peace through other disciplines
	• Peace Index
	Peace Processes: Case Studies
	• Ireland
	• Afghanistan
	• Colombia
	• 10% Attendance
	• 30% Written Examination
Course Evaluations	• 60% Assignments
	o The assignments will be in form of writing term papers and
	making presentations on selected topics
	Core Reading List
	Jayaram, N, et al. 1996. Social Conflict. New Delhi: Oxford University Press.
	Galtung, Johan. 1996. Peace by Peaceful Means: Peace, Conflict, Development
	and Civilization. New Delhi: Sage Publication.
	Kakar, Sudhir. 1996. The Colours of Violence. New Delhi: Penguin Books.
	International Conflict, Washington, D.C.: United States Institute of Peace
	Press.
	Additional Reading
	Barbanti. 2004. Development and Conflict Theory.
	http://www.beyondintractability.org/essay/development_conflict_theory/?nid=
	1158
	Bhargava, Rajeev, ed. 2005. Secularism and Its Critics, New Delhi: Oxford
	University Press.
	Burton, John and et.al. 1993. Conflict: Practices in Management, Settlement and
Course Readings	Resolution. New York: St. Martin's Press.
	Chandhoke, N. 2003. The Concept of Civil Society, New Delhi: Oxford
	University Press.
	Collier, Paul and Hoeffler Anke, Greed and Grievance in Civil War, Oxford
	Economic Papers, 56 (2004), 563-595.
	Coser, Lewis. 1956. The Functions of Social Conflict. New York: Free Press.
	Galtung, J. 1965. 'On the Meaning of Nonviolence.' Journal of Peace Research,
	2(4).
	Galtung, Johan. 1985. 'Twenty-five Years of Peace Research: Ten Challenges
	and Some Responses.' Journal of Peace Research 22(2): 141-158.
	Gandhi, M.K. 1927. An Autobiography: The Story of My Experiments with
	Truth, Reprint, Ahmedabad: Navajivan Publishing House.
	Johnson, Linda. 2005, Narrative Analysis. In Doing Research: Methods of
	Inquiry for Conflict
	Analysis, edited by Druckman, Daniel. London: Sage Publications.
	a marysis, edited by Druckman, Damer. London. Sage 1 unications.

Kaviraj, S., and S. Khilnani, eds. 2002. Civil Society: History and Possibilities. Delhi: Cambridge University Press.

Kothari, C.R. 200. Research Methodology: Methods & Techniques. New Delhi: New Age International Publishers.

Lederach, John Paul. 1995. Preparing for Peace: Conflict Transformation Across Cultures. New York: Syracuse University Press.

Lederach, John Paul, 2003, Little Book of Conflict Transformation: Intercourse. PA: Good Books.

Pruitt & Kim. 2004. Social Conflict: Escalation, Stalemate, and Settlement. 3rd Edition. Boston: McGraw-Hill.

Roy, Beth. 1994. Some Trouble with Cows: Making Sense of Social Conflict. Berkley: University of California Press.

Sen, Amartya. 2006. 'Globalization and Voice.' In Identity and Violence, 120-148. New York: W.W. Norton and Company.

Smock, David R. 1995. Perspectives on Pacifism: Christian, Jewish and Muslim Views on Nonviolence and Sponsel, Leslie E and Thomas Gregor, eds. 1994. The Anthropology of Peace and Non-Violence. Bouldert, Colo: L.Rienner.

Upadhyaya, P. 2009. 'Peace and Conflict: Reflections on Indian Thinking.' Strategic Analysis, 33(1).

Upadhyaya, Priyankar. 2010. 'Communal Peace in India: Lessons from Multicultural Banaras.'In Religion and Security in South and Central Asia edited by Warikoo, K. London: Routledge.

Upadhyaya, Priyankar. 2010. 'Hinduism and Peace Education.' In Spirituality, Religion and Peace Education, edited by Jing Lin, Edward J. Brantmeier: Charlotte: Information Age

Weber, Thomas. 1991. Conflict Resolution and Gandhian Ethics. New Delhi: Gandhi Peace Foundation.

Weber, Thomas. 1996. Gandhi's Peace Army: The Shanti Sena and Unarmed Peacekeeping. New York: Syracuse University Press.

Weber, Thomas. 2006. Gandhi, Gandhism and the Gandhians. New Delhi: Lotus Publication.

<u>3</u>

Course Name	Geopolitics, Warfare and S&T Aspect of International Relations in the 21st Century
Offered by	International Strategic and Security Studies
Course Credits	Two
Course Teacher(s)	Dr. Prakash Panneerselvam, <u>prakash.p@nias.res.in</u> & P.M. Soundar Rajan, <u>pmsdare@nias.res.in</u>

Course Objective	Course Description: The changing global geopolitical dynamics with the rise of regional and superpowers since the Second World War have aided diverse power politics among the nations and have cast a shadow in the bilateral and multilateral relations of the nations. Today, given the emerging geopolitical dynamics and strategic challenges in the Indo-Asia-Pacific, it is more essential than ever to understand the changing notion of war and the use of force in the international realm, as well as how contemporary geopolitics unfolds. The newer military technology, including cyber skills, has significantly changed the nature of war in international relations. Therefore, understanding the nuances of geopolitical discourse along with the trends in conventional warfare is an important focus of this course. The course will also discuss and examine asymmetric international security problems like nuclear proliferation, terrorism, ethnic conflicts and other non-traditional security issues. This course is explicitly designed to examine the field of geopolitics, international relations and military technology in the 21 st Century. The students interested in the field of global politics, peace and conflict studies, public policy, science and technological developments and military studies can register for this course. The aim of the course is to provide scholars with the necessary background and discourse on the complex global situation today and the future.
Lecture/Session Plan	 I. Geopolitics II. Theories of International Relations III. War - Definition, Concepts and a few case studies IV. What is Security? V. International Security and Great Power Competition VI. India and the Contemporary Geopolitics VII. Non-Traditional Security Threats VIII. Emerging Technologies and Warfare IX. S&T Aspect of National Security X. Space and Global Security XI. Space policy and International Law
Course Evaluations	 Evaluation of the students will be based on the following criteria: Term paper and Assignment (40 Marks)- Students will have to take one assignment topic during the course work and based on his/her area of interest. One presentation will be scheduled end of the course where the students have to make a presentation on the topic chosen. Written Exam (30 Marks) – End-of-semester written exam worth 30 marks. Book Review (20 Marks) – One latest book related to the subject has to be reviewed and the students need to submit for evaluation Attendance (10 Marks) – Attendance is compulsory and is assigned 10 marks. Leave of absences should be informed to the course coordinator, Dr. Prakash Pannerselvam, as well as the PhD Executive Assistant, Ms. Stella, in advance by email.
Course Readings	 Flint, Colin. Introduction to Geopolitics. United Kingdom: Taylor & Francis, 2016. Cohen, Saul Bernard. Geopolitics: The Geography of International Relations. United Kingdom: Rowman & Littlefield, 2015. Black, Jeremy. Geopolitics and the Quest for Dominance. United States: Indiana University Press, 2015. Kumar, Yogendra. Geopolitics in the Era of Globalisation: Mapping an Alternative Global Future. United Kingdom: Taylor & Francis, 2020.

- Steans, Jill., El-Anis, Imad., Pettiford, Lloyd., Diez, Thomas. *An Introduction to International Relations Theory: Perspectives and Themes*. United Kingdom: Taylor & Francis, 2013.
- Griffiths, Martin. International Relations Theory for the Twenty-First Century: An Introduction. N.p.: Taylor & Francis, 2007.
- Markey, Daniel. *China's Western Horizon: Beijing and the New Geopolitics of Eurasia*. United Kingdom: Oxford University Press, 2020.
- Chapman, Graham. *The Geopolitics of South Asia: From Early Empires to the Nuclear Age*. United Kingdom: Taylor & Francis, 2018.
- Tallis, Joshua. *Maritime Security and Great Power Competition: Maintaining the US-led International Order*. United States: CNA, 2020.
- Harkavy, Robert E.. Great Power Competition for Overseas Bases: The Geopolitics of Access Diplomacy. United Kingdom: Elsevier Science, 2013.
- Buzan, Barry. *People, States & Fear: An Agenda for International Security Studies in the Post-cold War Era*. United Kingdom: ECPR Press, 2007.
- Speller, Ian, Tuck, Christopher, Jordan, David, Walton, C.
 Dale, Lonsdale, David J., Kiras, James D. *Understanding Modern Warfare*. United Kingdom: Cambridge University Press, 2016.
- McNeilly, Mark. Sun Tzu and the Art of Modern Warfare. United Kingdom: Oxford University Press, 2015.
- An Introduction to Non-Traditional Security Studies: A Transnational Approach. United Kingdom: SAGE Publications, 2015.
- Cook, Alistair D. B. *Non-traditional Security in Asia: Issues, Challenges, and Framework for Action*. Singapore: Institute of Southeast Asian Studies, 2013.

School of Humanities

Course Name	The I of the Mind and the Mind of the Machines: An Exploration of Self and Consciousness in Humans and Machines	
Offered by	Consciousness Studies Programme School of Humanities	
Course Credits	2	
Course Teacher(s)	Sangeetha Menon, Sangeetha.menon@nias.res.in	
Course Objective	This Two-credit course investigates the status of self, mind, and consciousness in both biological and artificial systems, adopting an integrative framework grounded in philosophy of mind, cognitive neuroscience, psychology, AI studies, and ethics. Foundational paradigms, including Cartesian dualism, the non-dualism of Advaita Vedānta, phenomenological minimal selfhood (Zahavi, 2005), and the 4E cognition model (Varela, Thompson, & Rosch, 1991), will help to problematize reductive and mechanistic accounts of consciousness and cognition.	

The course builds on the proposition advanced in *Brain, Self and Consciousness: Explaining the Conspiracy of Experience* (Menon, 2014), that the continuity and coherence of subjective awareness arise from the dynamic interrelation of neural, affective, and existential dimensions. This perspective necessitates attempts to naturalize consciousness exclusively through third-person methodologies, raising critical questions: Can machines ever participate in the 'conspiracy of experience'? Is the coherence of selfhood a necessary precondition for consciousness, or a contingent epiphenomenon? Are sentience, awareness and consciousness difference, and how are these interrelated?

The course introduces a normative lens through which AI is assessed not only in terms of technical capacity, but in relation to human dignity, moral agency, and relational ontology (Menon, 2024). Rather than pursuing anthropomorphic replication, students explore alternative frameworks wherein artificial systems are designed to enhance collective flourishing, narrative coherence, and intersubjective depth (Schneider, 2019; Floridi, 2011; Damasio, 1999; Russell et al., 2024; Bringsjord, Govindarajulu, & Ghosh, 2019).

Further topics include affective computing (Picard, 2000), moral personhood (Gunkel, 2012), and transhuman trajectories (Haraway, 1985; Kurzweil, 2005). Students will evaluate whether synthetic systems can sustain ethical intentionality, whether consciousness is computationally emergent or ontologically prior, the place of memory, and how human-machine assemblages may transform foundational conceptions of selfhood, agency, and autonomy.

15 Weeks

Course Type: Core Programme level course for students affiliated to NIAS Consciousness Studies Programme (and can be opted as Elective for students from other Programmes)

Session plan:

Week 1: Defining Mind and Self

Core Readings:

- Zahavi, D. (2005). Subjectivity and Selfhood. MIT Press.
- Upanishads and Mahabharata (selected verses)
- Descartes, R. (1641). Meditations on First Philosophy

Lecture/Session Plan

Guided Questions:

- How do classical and non-Western traditions conceptualize the mind and self?
- What tensions arise between dualist and non-dualist models?

Week 2: What is Consciousness?

Core Readings:

Chalmers, D. (1996). *The Conscious Mind*. OUP Baars, B. J. (1997). *In the Theater of Consciousness*

Guided Ouestions:

- What distinguishes the 'hard problem' of consciousness from empirical questions about cognition?
- Is consciousness reducible to physical processes?

Week 3: Philosophical Theories of the Self Core Readings:

Ricoeur, P. (1992). *Oneself as Another* Menon, S. (2014). *Brain, Self and Consciousness* Metzinger, T. (2009). *The Ego Tunnel*

Guided Questions:

- What are the philosophical implications of narrative and minimal selfhood?
- How do theories of self from different traditions compare and contrast?

Week 4: The Cognitive, Affective and Neural Architecture of Mind Core Readings:

Damasio, A. (1999). *The Feeling of What Happens* Northoff, G. (2014). *Unlocking the Brain* Gallagher, S. (2005). *How the Body Shapes the Mind* **Guided Questions:**

- How do predictive models inform our understanding of consciousness?
- What are the neural correlates of the sense of self?
- What is the sense of self, and is it different from psycho-somatic awareness?

Week 5: Minds and Machines: Historical Debates Core Readings:

Turing, A. (1950). 'Computing Machinery and Intelligence' Searle, J. (1980). 'Minds, Brains, and Programs' Lucas, J. R. (1961). 'Minds, Machines and Gödel'; Menon, S. (2016). The 'Outer Self' and the 'Inner Body': Exteriorization of the self in cognitive sciences. *Journal of Human Values*, 22(1), 39-45.

Guided Questions:

- Can symbolic machines replicate understanding?
- Are there formal limits to AI reasoning?
- Is there a test to check if you are a conscious person? (Turing vs Searle)
- Are cognition and consciousness; body schema and the self, different?
- Are the self and personhood exteriorised in cognitive/brain sciences?

Week 6 and 7: Indian Theories of Self, Mind and Consciousness (focus on: Upanishads, Mahabharata, Nyāya, Buddhism and Advaita Vedānta) and multidisciplinary discussions Core Readings:

Potter, K. H. (1977). *Indian Metaphysics and Epistemology: The Tradition of Nyāya-Vaiśesika*

Deutsch, E. (1980). Advaita Vedānta: A Philosophical Reconstruction

Menon, S. (2014). Brain, Self and Consciousness

Chakrabarti, K. (1999). Classical Indian Philosophy of Mind: The Nyāya Dualist Tradition. SUNY Press.

Matilal, B. K. (1986). Perception: An Essay on Classical Indian Theories of Knowledge. Oxford University Press.

Menon, S. (2001). Towards a Sankarite approach to consciousness studies: A discussion in the context of recent interdisciplinary scientific perspectives. Journal of the Indian Council of Philosophical Research, 18(1), 95-111.

Mahabharata, Iravati Karve

Guided Questions:

- What is memory?
- How does Nyāya conceptualize the relationship between self, cognition, and consciousness?
- Is consciousness an emergent property of mind or an independent ontological principle in Vedānta?
- Is there a minimal, life-long [somatic], and life-beyond consciousness?

Week 8 and 9: Can Machines Be Conscious of their Selves, and Humans be Self-aware deeply and broadly? Core Readings:

Schneider, S. (2019). *Artificial You* Philosophy Now, Issue 87: 'The Minds of Machines' Russell, S., et al. (2024). 'Value Alignment in the Age of Large Language Models'. *AI & Society*, 39(1), Menon, S. (2024). *Being "LaMDA" and the Person of the Self in AI*. In S. Menon, S. Todariya, & T. Agerwala (Eds.), *AI, Consciousness and the New Humanism: Fundamental Reflections on Minds and Machines* (pp. 331-349). Springer, Clark, A. (2003). *Natural-Born Cyborgs* PMC article: 'The Mind and the Machine' (2007), Gallagher, S. (2000). Philosophical conceptions of the self: Implications for cognitive science. *Trends in Cognitive Sciences*, *4*(1), 14-21. Gallagher, S. (2023). *Minimal self-consciousness and the Flying Man argument. Frontiers in Psychology*, *14*, Article 1296656. https://doi.org/10.3389/fpsyg.2023.1296656

Guided Questions:

- What constitutes artificial consciousness?
- What constitutes human consciousness?
- Are you conscious?
- How does biology contribute to development of a mind?
- What is the Human-Machine Interfaces and the Cyborg Self
- Can synthetic phenomenality be meaningfully assessed?
- Does AI have personhood?
- How do human-machine assemblages reshape the notion of the self?

Week 10: Emotional Intelligence and Moral Cognition in AI Core Readings:

Picard, R. (2000). *Affective Computing* Bostrom, N. (2014). *Superintelligence* Bringsjord, S., Govindarajulu, N. S., & Ghosh, R. (2019). 'Toward the Engineering of Virtuous Machines'. *The APA Newsletter on Philosophy and Computers*, 19(1)

Guided Questions:

 What are the implications of embedding moral cognition into machines?

Week 11: Ethics of Personhood and AI Rights Core Readings:

Gunkel, D. (2012). *The Machine Question* Floridi, L. (2013). *The Ethics of Information* Menon, S. (2024). *AI, Consciousness and the New Humanism* (selected chapters)

Related readings on impaired states of consciousness in patients with TBI, and in dementia patients.

Movie themes discussion from: "The Bicentennial Man" (Issac Asimov's book Positron man)

Guided Questions:

- Should machines be granted moral or legal personhood?
- What is artificial immortality, and philosophical concept of immortality of consciousness?
- Given that AI has no subjective self, can its contributions to the understanding of the self, and subjective experiences be taken authentic?
- How can a subjectless entity have a trust-worthy and genuine word on the subjective human self and consciousness? (is this question similar to the Mary's case in qualia discussion?)

Week 12: Posthuman Selves, Consciousness and Transcendence Core Readings:

Haraway, D. (1985). 'A Cyborg Manifesto'

Kurzweil, R. (2005). The Singularity is Near

Menon, S. (2024). AI, Consciousness and the New Humanism

Guided Questions:

• What transformations of selfhood arise in posthuman thought?

Week 13, 14 and 15: Student Presentations, Dialogues, and Concluding Reflections

Integrative Review and a Reflective discussion on the use of AI Focus 1: The Elemental Activities of Note-taking, Critical thinking, Empathetic imagining, and Abstracting: Why You Should not Outsource your Thinking and Reflective Processes to AI?

Focus 2: Individual selected readings relevant to research topics Questions:

- Future Research Directions in Consciousness and AI
- What gaps and possibilities define the future of AI-consciousness studies?

	 How does your phd research focus will reflect broader themes from this course? 	
	10% of marks for attendance	
Course Evaluations	30% of marks for the written examination: Essay (3000-4000 words) that offers an integrative synthesis of the course, grounded in the student's own research lens, and life-approaches.)	
	60 % of the marks for course assignments: Weekly presentations assignment; Weekly class summary writing assignment; Participation and contribution in thought experiments assignment; and Participation and contribution in collective reflections assignments)	
Course Readings	Essential readings are given under the weekly course plan. General readings and further course content will be provided to the students.	

<u>2</u>

Course Name	An Introduction to the Heritage of India
Offered by	Heritage, Science and Society Programme
Course Credits	2
Course Teacher(s)	Srikumar M. Menon, srikumar.menon@nias.res.in
Course Objective	This course is aimed at providing a basic overview of the origins of built heritage on the Indian Subcontinent and the various evolutionary trajectories and external influences which influenced the same, while giving insights into the various knowledge systems possessed by the creators of this heritage during various periods.
Lecture/Session Plan	 An Introduction to the Heritage of India: A brief overview of the nature and form of the built heritage of India, and their prehistoric predecessors. Monumental Architecture in the Indian Subcontinent – an overview: The construction of monuments in the subcontinent – from prehistoric to later times; the idea of a monument. Prehistoric structures in South India. The possible origins of the popularly known Indian monuments in earlier pan-Indian traditions of monument-building, and subsequent evolutionary trajectories.

- 3. Prehistoric monuments megaliths: A look at some of the earliest monuments in stone megaliths of the Indian subcontinent.
- 4. The World of the Harappans: An overview of the Harappan Civilization and sites. A discussion of Dholavira an important port city of the Harappans.
- 5. Early Religions and Monuments of India: A look at early religion in India, and the first monuments built for these religions.
- 6. The Earliest Temples: Tracking the history of the earliest temples across India; and understanding the beginnings of temple architecture in stone at some of the various nuclei in India.
- 7. Temple Form Evolution and Regional Variations: Development of temple form; continuity and evolution of formal traditions in temples; regional schools and guilds and regional variation in temple form.
- 8. Replicating the Mountain Conceptual Bases for Temple Form: An examination of the concept behind temple form as a cavern within a mountain, and evidence from the field to support this hypothesis.
- 9. Case Study 1 The Malaprabha Valley: The beginnings of monumental architecture and a study of selected individual monuments at an early temple site in Karnataka.
- Case Study 2 The Hoysala Heritage: The evolution of Hoysala Temples, and their forerunners in Kalyani Chalukyan temple form.
- 11. Case Study 3 Hampi: The beginnings of monumental architecture and a study of selected individual monuments at a later temple site in Karnataka.
- 12. The Layout of Large Temple Complexes: An examination of the design and layout of large temple complexes and their nature as composite complexes that came about by accretion and organic expansion of smaller nuclei, or as designed and planned entities.
- 13. The Artisan in Myth and History I Folklore and Tradition as History: A discussion of myth and folklore in the context of the built environment, and possible existence of kernels of actual history in these tales.

	 14. The Artisan in Myth and History II – Artisans and Guilds in South India: An examination of legendary and actual artisans from myth and history. Folklore, epigraphical records and literary references are the basis for this lecture. 15. Textual Sources on Indian Temple Architecture: An examination of the textual resources describing temple construction and an examination of their relevance to actual monuments. 16. Presentation of Review of Journal Paper by Students: The paper will be assigned to each student after discussion 17. Presentation of Term Paper Topic by Students: The topic for the term-paper will be decided sufficiently in advance. 18. Three sessions to be reserved for discussions of specific topics that the students can suggest. Class participation: 10%
Course Evaluations	Written examination: 30% Assignment 1: 20%
	Assignment 2: Term paper on chosen topic: 40%
Course Readings	 Core reading: Deva, K. (1969) Temples of North India, National Book Trust, New Delhi. Hardy, A. (1995) Indian Temple Architecture: Form and Transformation, IGNCA/Abhinav Publications, New Delhi. Huntington, S. L. (2015 – reprint) The Art of Ancient India: Buddhist, Hindu, Jain, Motilal Banarsidass Publishers Ltd. Delhi. Srinivasan, K. R. (1972) Temples of South India, National Book Trust, New Delhi. Additional Reading: Boner, A. (1982) Vastusutra Upanishad: The Essence of Form in Sacred Art, Motilal Banarsidass Publishers Private Limited, Delhi. Boner, A. et al. (1972) New Light on the Sun Temple of Konarka. The Chowkhamba Sanskrit
	Temple of Konarka, The Chowkhamba Sanskrit Series Office, Varanasi. • Brown, P. (2014 – reprint) Indian Architecture (Buddhist and Hindu), K. R. J. Book International, Delhi.

- Brown, P. (2014 reprint) Indian Architecture (Islamic Period), K. R. J. Book International, Delhi.
- Cunningham, A. (2009 reprint) The Bhilsa Topes: Buddhist Monuments of Central India, Aryan Books International, New Delhi.
- Dagens, B. (2016) The Indian Temple: Mirror of the World, IGNCA/ New Age Books, New Delhi.
- Dhaky, M. A. (1977) The Indian Temple Forms in Karnata Inscriptions and Architecture, Motilal Banarsidass Publishers Ltd. Delhi.
- Fritz, J. and Michell, G. (2003) Hampi Vijayanagara, India Book House Pvt. Ltd. Mumbai.
- Hardy, A. (2007) The Temple Architecture of India, Wiley, Chichester.
- Hardy, A. (2015) Theory & Practice of Temple Architecture in Medieval India: Bhoja's Samaranganasutradhara & the Bhojpur Line Drawings, IGNCA/ Dev Publishers & Distributors, New Delhi.
- Jagadish. (2005) Measurement System in Karnataka (AD 325 to 1700), Directorate of Archaeology and Museums, Hospet.
- Kramrisch, S. (1976) The Hindu Temple: An Introduction to its Meaning and Form, Motilal Banarsidass Publishers Ltd. Delhi.
- Kulkarni, R. P. (2005) Prasada Mandana of Sutradhara Mandana, Munshiram Manoharlal Publishers Pvt. Ltd., New Delhi.
- Michell, G. (1995) Architecture and Art of Southern India, Cambridge University Press/Foundation Books, New Delhi.
- Michell, G. (1977) The Hindu Temple, University of Chicago Press, Chicago.
- Michell, G. (2014) Temple Architecture and Art of the Early Chalukyas: Badami, Mahakuta, Aihole and Pattadakal, Niyogi Books, New Delhi.
- Paddayya, K. and Deo, S. G. (2017) Prehistory of South Asia: The Lower Palaeolithic or Formative Era of Hunting-Gathering, The Mythic Society, Bangalore.
- Padigar, S. V. et al. (Eds.) (2020) New Facets of Indian Art, Architecture and Epigraphy: Essays in Honour of Prof. S. L. Shantakumari, Agam Kala Prakashan, Delhi.

•	Renfrew, C. (2007) Prehistory: The Making of
the	Human Mind, Phoenix, London.

• Sinha, A. J. (2000) Imagining Architects: Creativity in the Religious Monuments of India, University of Delaware Press, Newark.

School of Natural Sciences and Engineering

<u>1</u>

Course Name	Analysing Science Communication Through the Lens of Behavioural Science		
Offered by	Science Communication Programme		
Course Credits	Two		
Course Teacher(s)	Dr. V V Binoy, <u>vvbinoy@nias.res.in</u>		
Course Objective	In this era of information explosion communicating new knowledge generated by the researchers undistorted with the non-expert public and eliminating their baseless fear and misconceptions related to science and technology is crucial to promote informed decision making and avoid science-society conflict. The deluge of fake and misleading information spreading over conventional and social media reaffirms the need for having an effective system for communicating science with the public in every society. In a multicultural community such as India where members are divergent in their perceptions, knowledge, beliefs, attitude and values, enhancing awareness of the people by disseminating science alone cannot bring positive changes in their behaviour. Recent research revealed that the knowledge of the determinants of perception, sensemaking, and personalisation of the scientific information and its utilisation while making decisions by individuals and groups is essential to develop and implement effective science communication strategies to manage public perception, fight the infodemic, mitigate climate change, reduce the chasm between perceived and actual risks from the technologies as well as to promote scientific temper in the society. The current course aims to discuss the topics given below and explore the meeting points between the behaviour and cognitive sciences and the 'science of science communication'.		
	Module 1: Behavioural Insights for Science communication (8 h)		
Lecture/Session Plan	 Public understanding of science and the models of science communication Making sense of scientific information; scientific thinking and cognitive biases Psychological factors influencing science and technology acceptance; Psychographics in science communication Managing trust (epistemic) in science Collective intelligence, innovation and science communication 		
	Module 2: Misinformation management and behaviour change: The role of science communication (8 h)		

Behaviour changes theories and strategic science communication Weaponization of the scientific information, propaganda and cognitive security Fighting fake information and infodemic Mitigating science-society conflicts: the role of science communication Artificial Intelligence (AI) and science communication Science communication and scientisation of the policy making Module 3: Understanding the practices of science communication (10h) Designing and broadcasting messages: Lessons from cognitive science Public involved science communication programmes: Citizen science and Disaster risk communication Climate change communication Social media and science communication Folk arts, traditional knowledge and science communication Science communication and industries Connecting science communication with science education Module 4: Methodologies of Science communication Research (6h) Introduction to the methodologies of science communication research Group Project presentation Attendance -10%; Written examination - 30%; Individual presentations -20%, Course Evaluations Debate- 20 % and Group project -20% Core Reading List 1. Kessler, S. H., Mahl, D., Schäfer, M. S., & Volk, S. C. (2025). All eyez on AI: a roadmap for science communication research in the age of artificial intelligence. JCOM: Journal of Science Communication, 24(2), Y01. 2. Bogert, J. M., Buczny, J., Harvey, J. A., & Ellers, J. (2024). The effect of trust in science and media use on public belief in anthropogenic climate change: A meta-analysis. Environmental Communication, 18(4), 484-509. 3. National Academies of Sciences, Engineering, and Medicine. (2017) Course Communicating Science Effectively: A Research Agenda. Washington, DC: The National Academies Press. https://doi.org/10.17226/23674. Readings 4. Bagla, P., & Binoy, V. V. Bridging the Communication Gap in Science and Technology: Lessons from India. Springer. 2017. Additional readings 1. Cassidy, A. (2021). Communicating the social sciences and humanities: Challenges and insights for research communication. In Routledge handbook of public communication of science and technology (pp. 198-213). Routledge. 2. Lewandowsky, S. et al. (2020). The Debunking Handbook 2020. Available at https://sks.to/db2020. DOI:10.17910/b7.1182

- 3. Amelung, D., Fischer, H., Kruse, L., & Sauerborn, R. (2016). Defogging climate change communication: How cognitive research can promote effective climate communication. Frontiers in psychology, 7, 1340.
- 4. Jamieson, K. H., Kahan, D., & Scheufele, D. A. (2017) The Oxford Handbook of the Science of Science Communication. Oxford University Press.

Course Name	Introduction to Animal Behaviour and Cognition	
Being offered by Which Program	Animal Behaviour and Cognition School level Course	
Course Credits	2	
Course Teacher(s)	Prof. Sindhu Radhakrishna, <u>sindhu@nias.res.in</u> & Dr V V Binoy, <u>vvbinoy@nias.res.in</u>	
Course Objective	The goal of this course is to explore the principles of animal behavior, examine how animals interact with each other and their environments and how various factors - physiological, environmental and anthropogenic - shape animal behaviour. The various modules will cover topics such as the principles of animal behavior and its evolutionary basis, how animal behavior is studied through observation, experimentation, and technology, influences on animal behaviour and how knowledge of animal behavior is applied in fields such as conservation, animal welfare, and veterinary science.	
Lecture/Session Plan	odule 1: Animal behavior (8 h) Introduction to the study of animal behavior Tinbergen's four questions Foraging behaviors Social and Reproductive behaviors Module 2: Methods of Studying Animal Behaviour (6 h) Observational and experimental approaches Measuring and analysing animal behavior Technology and animal behaviour Module 3: Influences on Animal Behaviour (8h) Genetic and Physiological factors Environmental and Anthropogenic factors Environmental and Experience Animal Agency Module 4: Applied Animal Behavior and Cognition (6h)	

	Animal behavior and animal welfare
	 Animal behavior and conservation
	Human-animal interactions
	Module 5: Project presentation (2h)
	Designing a study on animal behaviour
Course Evaluations	Attendance (10%), Written examination (30%) Assignments (60%)
	 Alcock, J. (2009). Animal behavior: An evolutionary approach. Sinauer associates. Manning, A. and Dawkins, M. S. An Introduction to Animal Behavior (Cambridge University Press, 2012)
	3. Krebs, John R., and Nicholas B. Davies, eds. <i>Behavioral ecology: an evolutionary approach</i> . John Wiley & Sons, 2009.
	4. Bateson, M., & Martin, P. (2021). <i>Measuring behaviour:</i> an introductory guide. Cambridge University press
	 Lehner, P. N. (1998). Handbook of ethological methods. Cambridge University Press.
	6. Altmann, J. (1974). Observational study of behavior: Sampling methods. Behaviour, 49, 227–267.
Course Readings	7. Joshi, A. (2005). Behaviour genetics in the post-genomics
Core Reading List is marked in	era: From genes to behaviour and vice versa. Current
Bold	Science, 1128-1135.
	 Greggor, A. L., Berger-Tal, O., Blumstein, D. T., Angeloni, L., Bessa-Gomes, C., Blackwell, B. F., & Goldenberg, S. Z. (2016). Research priorities from animal behaviour for maximising conservation progress. <i>Trends in Ecology & Evolution</i>, 31(12), 953-964.
	9. Steward, H. (2009). Animal agency. Inquiry, 52(3), 217-231.
	 Blackwell, B. F., DeVault, T. L., Fernández-Juricic, E., Gese, E. M., Gilbert-Norton, L., & Breck, S. W. (2016). No single solution: application of behavioural principles in mitigating human–wildlife conflict. <i>Animal Behaviour</i>, 120, 245-254.

Course Name	Energy, Environment, and Climate Change	
Being offered by Which Program	Energy, Environment, and Climate Change (Program Core Course)	
Course Credits	Two	
Course Teacher(s)	Tejal Kanitkar, <u>tejalk@nias.res.in</u>	
Course Objective	 To introduce the intersecting elements of energy, environment, and climate change To introduce key debates in energy policy, sustainability and climate change – globally and in India To introduce methods for assessing energy and climate policies, plans and strategies. 	
Lecture/Session Plan	Module 1: Introduction (2 hours) Definitions of sustainability, climate change, environmental impacts, pollution and related concepts Module 2: Energy Systems (10 hours) Introduction to energy systems – conventional and nonconventional Energy systems and sustainability (global and national) Energy policy, diversification, just transitions Energy policy and planning in India Energy access, economic growth, and development Costs – financial, economic, environmental Module 3: Sustainable Development (6 hours) What are elements of sustainable development – how is sustainable development different from development? Major debates in sustainability – limits to growth, planetary boundaries, etc. Sectoral examples – DSM, energy efficiency, sufficiency, transport, recycling Module 4: Global Climate Policy and Governance (6 hours) The UNFCCC, KP, and Paris Agreement Relationship between different Rio Conventions and role in global environmental and climate governance Other relevant Conventions, Instruments India's role in global environmental governance Module 5: Environmental Economics (6 hours) Energy and environmental economics Markets vs. Regulation: Debates in climate change economics	

Course Evaluations Assignments (6%) Attendance (10%) 1. Anand, S and Amartya, S (2000), 'Human Development and Economic Sustainability', World Development, Vol 28, No 12, p 2029-2049. 2. Guha, R and J Martinez-Alier, (1998); 'Political Ecology, Environmentalism of the Poor and the Global Movement for Environmental Justice'. 3. Intergovernmental Panel on Climate Change, Working Group I, Sixth Assessment Report, 'Climate Change 2021: The Physical Science Basis' 4. Intergovernmental Panel on Climate Change, Working Group II, Sixth Assessment Report, 2022 5. Intergovernmental Panel on Climate Change, Working Group III, Sixth Assessment Report, 2022 6. Dubash, N. K. (Ed.). (2019). India in a warming world: Integrating climate change and development. Oxford University Press. 7. Vaclav Smil (2006). Energy: A Beginner's Guide, Beginners Guide, Oneworld 8. Phillips, L. (2015). Austerity Ecology & the Collapse-pom Addicts: A defence of growth, progress, industry and sruff. John Hunt Publishing. 9. Stokey, N. L. (1998). Are there limits to growth? International economic review, 1-31. 10. Hughes, T. P., Carpenter, S., Rockström, J., Scheffer, M., & Walker, B. (2013). Multiscale regime shifts and planetary boundaries. Trends in ecology & evolution, 28(7), 389-395. 11. Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (2018). The limits to growth. In Green planet blues (pp. 25-29). Routledge. 12. Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., & Foley, J. (2009). Planetary boundaries: exploring the safe operating space for humanity. Ecology and society, 14(2). 13. Montoya, J. M., Donohue, I., & Pimm, S. L. (2018). Planetary boundaries for biodiversity: implausible science, pernicious policies. Trends in ecology & evolution, 33(2), 71-73. 14. Kartha, S., Athanasiou, T., Caney, S., Cripps, E., Dooley, K., Dubash, N. K., & Winkler, H. (2018). Cascading biases against poorer countries. Nature Climate Change, 8(5), 348-349. 15. Morena, E. (2016). The price of climate action		Written Exam (30%)	
1. Anand, S and Amartya, S (2000), 'Human Development and Economic Sustainability', World Development, Vol 28, No 12, p 2029-2049. 2. Guha, R and J Martinez-Alier, (1998); 'Political Ecology, Environmentalism of the Poor and the Global Movement for Environmental Justice'. 3. Intergovernmental Panel on Climate Change, Working Group I, Sixth Assessment Report, 'Climate Change, Working Group II, Sixth Assessment Report, 2022 5. Intergovernmental Panel on Climate Change, Working Group III, Sixth Assessment Report, 2022 6. Dubash, N. K. (Ed.). (2019). India in a warming world: Integrating climate change and development. Oxford University Press. 7. Vaclav Smil (2006). Energy: A Beginner's Guide, Beginners Guide, Oneworld 8. Phillips, L. (2015). Austerity Ecology & the Collapse-porn Addicts: A defence of growth, progress, industry and stuff. John Hunt Publishing. 9. Stokey, N. L. (1998). Are there limits to growth?. International economic review, 1-31. 10. Hughes, T. P., Carpenter, S., Rockström, J., Scheffer, M., & Walker, B. (2013). Multiscale regime shifts and planetary boundaries. Trends in ecology & evolution, 28(7), 389-395. 11. Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (2018). The limits to growth. In Green planet blues (pp. 25-29). Routledge. 12. Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., & Foley, J. (2009). Planetary boundaries: exploring the safe operating space for humanity. Ecology and society, 14(2). 13. Montoya, J. M., Donohue, I., & Pimm, S. L. (2018). Planetary boundaries for biodiversity: implausible science, pernicious policies. Trends in ecology & evolution, 33(2), 71-73. 14. Kartha, S., Athanasiou, T., Caney, S., Cripps, E., Dooley, K., Dubash, N. K., & Winkler, H. (2018). Cascading biases against poorer countries. Nature Climate Change, 8(5), 348-349. 15. Morena, E. (2016). The price of climate action: Philanthropic foundations in the international climate debate. Springer.	Course Evaluations	Assignments (6%)	
Economic Sustainability', World Development, Vol 28, No 12, p 2029- 2049. 2. Guha, R and J Martinez-Alier, (1998); Political Ecology, Environmentalism of the Poor and the Global Movement for Environmental Justice'. 3. Intergovernmental Panel on Climate Change, Working Group I, Sixth Assessment Report, 'Climate Change, Working Group II, Sixth Assessment Report, 2022 5. Intergovernmental Panel on Climate Change, Working Group III, Sixth Assessment Report, 2022 6. Dubash, N. K. (Ed.). (2019). India in a warming world: Integrating climate change and development. Oxford University Press. 7. Vaclav Smil (2006). Energy: A Beginner's Guide, Beginners Guide, Oneworld 8. Phillips, I. (2015). Austerity Ecology & the Collapse-porn Addicts: A defence of growth, progress, industry and stuff. John Hunt Publishing. 9. Stokey, N. L. (1998). Are there limits to growth? International economic review, 1-31. 10. Hughes, T. P., Carpenter, S., Rockström, J., Scheffer, M., & Walker, B. (2013). Multiscale regime shifts and planetary boundaries. Trends in ecology & evolution, 28(7), 389-395. 11. Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (2018). The limits to growth. In Green planet blues (pp. 25-29). Routledge. 12. Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., & Foley, J. (2009). Planetary boundaries: exploring the safe operating space for humanity. Ecology and society, 14(2). 13. Montoya, J. M., Donohue, I., & Pimm, S. L. (2018). Planetary boundaries for biodiversity: implausible science, pernicious policies. Trends in ecology & evolution, 33(2), 71-73. 14. Kartha, S., Athanasiou, T., Caney, S., Cripps, E., Dooley, K., Dubash, N. K., & Winkler, H. (2018). Cascading biases against poorer countries. Nature Climate Change, 8(5), 348-349. 15. Morena, E. (2016). The price of climate action: Philanthropic foundations in the international climate debate. Springer.		Attendance (10%)	
Weekly, 56(52), 68-75. 17. Giddens, A. (2015). The politics of climate change. Policy &		 Anand, S and Amartya, S (2000), 'Human Development and Economic Sustainability', World Development, Vol 28, No 12, p 2029- 2049. Guha, R and J Martinez-Alier, (1998); 'Political Ecology, Environmental Justice'. Intergovernmental Panel on Climate Change, Working Group I, Sixth Assessment Report, 'Climate Change 2021: The Physical Science Basis' Intergovernmental Panel on Climate Change, Working Group II, Sixth Assessment Report, 2022 Intergovernmental Panel on Climate Change, Working Group III, Sixth Assessment Report, 2022 Dubash, N. K. (Ed.). (2019). India in a warming world: Integrating climate change and development. Oxford University Press. Vaclav Smil (2006). Energy: A Beginner's Guide, Beginners Guide, Oneworld Phillips, L. (2015). Austerity Ecology & the Collapse-porn Addicts: A defence of growth, progress, industry and stuff. John Hunt Publishing. Stokey, N. L. (1998). Are there limits to growth?. International economic review, 1-31. Hughes, T. P., Carpenter, S., Rockström, J., Scheffer, M., & Walker, B. (2013). Multiscale regime shifts and planetary boundaries. Trends in ecology & evolution, 28(7), 389-395. Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (2018). The limits to growth. In Green planet blues (pp. 25-29). Routledge. Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., & Foley, J. (2009). Planetary boundaries: exploring the safe operating space for humanity. Ecology and society, 14(2). Montoya, J. M., Donohue, I., & Pimm, S. L. (2018). Planetary boundaries for biodiversity: implausible science, pernicious policies. Trends in ecology & evolution, 33(2), 71-73. Kartha, S., Athanasiou, T., Caney, S., Cripps, E., Dooley, K., Dubash, N. K., & Winkler, H. (2018). Cascading biases against poorer countries. Nature Climate Change, 8(5), 348-349. Morena, E.	

- 18. Ostrom, E. (2009). A polycentric approach for coping with climate change. Available at SSRN 1934353.
- 19. Jayaraman, T., & Kanitkar, T. (2016). The Paris Agreement: deepening the climate crisis. Economic and Political Weekly, 10-13.
- 20. Winkler, H., Jayaraman, T., Pan, J., de Oliveira, A. S., Zhang, Y., Sant, G., ... & Raubenheimer, S. (2011). Equitable access to sustainable development. Contribution to the body of scientific knowledge: A paper by experts from BASIC countries, BASIC expert group: Beijing, Brasilia, Cape Town and Mumbai.
- 21. Rao, N. D. (2014). International and intranational equity in sharing climate change mitigation burdens. International Environmental Agreements: Politics, Law and Economics, 14, 129-146.
- 22. Baer, P., Athanasiou, T., & Kartha, S. (2007). The right to development in a climate constrained world: the Greenhouse Development Rights framework.
- 23. Freese, B. (2016). Coal: A human history. Basic Books.
- 24. Kanitkar, Tejal, Rangan Banerjee, and T. Jayaraman. "An integrated modelling framework for energy economy and emissions modelling: A case for India." Energy 167 (2019): 670-679
- 25. Bina, C. (1992). The laws of economic rent and property: application to the oil industry. *American Journal of Economics and Sociology*, *51*(2), 187-204.
- 26. Dubash, N. K., & Rajan, S. C. (2001). The politics of power sector reform in India. *World Resources Institute. Washington, DC.*
- 27. Common, M. S. (1996) Environmental and Resource Economics: An Introduction, Longman, 2nd edition.
- 28. Lele, S (1991), 'Sustainable Development: A Critical Review', World Development, Vol 19, No 6, p.607-621
- Jacobs, M (1999)'Sustainable Development: A Contested Concept' in A Dobson(ed) Fairness and Futirity: Essays on Environmental Sustainability and Environmental Justice, OUP, Oxford, p 211-245.

School of Social Sciences

Course Name	Introduction to Inequality
Offered by	School of Social Sciences

Course Credits	2
Course Teacher(s)	Anant Kamath and Chetan Choithani
Course Objective	The course combines theoretical insights with empirical knowledge to critically reflect on the issue of inequality, and its various dimensions. This is an advanced, PhD-level mandatory course which has an overarching objective of introducing doctoral students in the Inequality and Human Development Programme to some of the key ideas and issues pertaining to inequality, but is open to students from other programmes/streams interested in the issue of inequality. The course has three broad units that include i) inequality experiences, ii) instruments of inequality, and iii) responses to inequality. Emphasis is on the Indian experience but the course also places these issues in the wider, global context. Specific topics that students consider under each of these units are listed in the course content table below. Students will be provided relevant readings before the lectures/seminars, and they are required to go through them beforehand.
Lecture/Session Plan	(in table provided below)
Course Evaluations	The course is built on discussion-oriented lectures. Lectures introduce key concepts and ideas which are then discussed in detail, with the aim to promote critical responses to both key texts and empirical observations. There will be two evaluations: one written exam and one assignment; the assignment could include either an oral presentation or an original term paper. The evaluations carry 45% weightage each and students will need to obtain minimum passing marks/grades in both. Attendance carries 10% marks in that students who miss more than two classes will lose 10% of total marks and will only be assessed on 90% marks. Those who miss more than three classes will not be evaluated at all.
Course Readings	Core Readings Bakshi, S., Chawla, A., & Shah, M. (2015). Regional disparities in India: A moving frontier. Economic and Political Weekly, Vol 50(1), 44-52. Chancel, L., and Piketty, T. (2019) 'Indian Income Inequality, 1922-2015: From British Raj to Billionaire Raj?' Review of Income and Wealth, 65:S33-S62 Thorat, S., and Newman, K.S. (2010) Blocked by Caste: Economic Discrimination in Modern India, Oxford University Press
	Additional Readings

- Ambedkar, B. R. (2014). Annihilation of caste: The annotated critical edition. Verso Books
- Banerjee, A. V., & Duflo, E. (2011). Poor economics:

 Rethinking poverty & the ways to end it. Random House India.
- Bharathi, N., Malghan, D., Mishra, S., & Rahman, A. (2021). Fractal urbanism: City size and residential segregation in India. *World Development*, 141, 105397.
- Choithani, C., Van Duijne, R. J., & Nijman, J. (2021). Changing livelihoods at India's rural–urban transition. *World Development*, 146, 105617.
- Choithani, Chetan (2021). Of left-behind places and people: Inequality, migration and development in India. NIAS Working Paper 21. Bengaluru: National Institute of Advanced Studies.
- Christophe J. (2006). The impact of affirmative action in India: More political than socioeconomic. *India Review*, Vol 5(2), 173-189, DOI: 10.1080/14736480600824516
- Crehan, K. (2016) Gramsci's Common Sense: Inequality and its Narratives, Orient Blackswan
- Dandekar, V. M., & Rath, N. (1971). Poverty in India: Dimensions and trends. *Economic and Political weekly*, 25-48.
- Dandekar, V. M., & Rath, N. (1971). Poverty in India-II: Policies and programmes. *Economic and Political Weekly*, 106-146.
- Ghosh, J. (2015) 'Growth, Industrialisation and Inequality in India', *Journal of the Asia-Pacific Economy*, 20(1):42-56
- Halford, S., and Savage, M. (2010) 'Reconceptualising Digital Social Inequality', *Information, Communication, and Society*, 13(7): 937-955
- Jayal, N. G. (2015). Affirmative action in India: Before and after the neo-liberal turn. *Cultural Dynamics*, Vol 27(1), 117-133.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435-464.
- Kumar, D. (1992). The affirmative action debate in India. *Asian Survey*, Vol 32(3), 290-302
- Robotham, D. (2005) *Culture, Society, and Economy,*, Sage Publications
- Roy, D., Lees, M. H., Pfeffer, K., & Sloot, P. M. (2018). 'Spatial segregation, inequality, and opportunity bias in the slums of Bengaluru' *Cities*, 74, 269-276.
- Sen, A. (1984). The living standard. Oxford Economic Papers, 36, 74-90.
- Sen, A. (1983). Development: Which way now?. The Economic Journal, 93(372), 745-762.
- Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.

Session Plan

Session	Topic	Speaker			
	Introductory				
1	Conceptualizing inequality	Dr Chetan and Dr Anant			
Experiencing inequality					
2	Untouchability	Dr Anant Kamath			
3	Identity and caste	Dr Anant Kamath			
4	Elements of class	Dr Anant Kamath			
5	Gender discrimination	Dr Chetan Choithani			
6	Poverty and deprivation	Dr Chetan Choithani			
7	Spatial inequalities	Dr Chetan Choithani			
8	Global inequalities	Dr Chetan Choithani			
	Instruments of inequality	·			
9	Markets and the state	Dr Anant Kamath			
10	Technology	Dr Anant Kamath			
11	Culture	Dr Anant Kamath			
	Responses to inequality	·			
12	Migration and Informality	Dr Chetan Choithani			
13	Segregation	Dr Chetan Choithani			
14	Affirmative action	Dr Chetan Choithani			
	Concluding thoughts				
15	Thinking about inequality: Ambedkar, Gandhi and	Dr Chetan and Dr Anant			
	Lohia				

Elective Courses School of Humanities

<u>1</u>

Name of the course	GIS for spatial data visualization and analysis (elective)
Programme Offering the course	Institute-level: Elective
Course credits	2 (Two)
Course teachers	M.B. Rajani, mbrajani@nias.res.in
Course objectives	GIS is a powerful tool for organizing, visualizing and analysing
	any data which has a geo-spatial component. It therefore has
	applications in a variety of domains. This course will emphasize
	the applications of GIS for various fields (focusing on interests
	of cohort). It will discuss several applications, with lectures by
	instructor (plus few guest lectures), focusing on methodologies
	and resulting outcomes. Students will receive guidance to
	undertake a course project, where they must investigate spatial
	components of data in their chosen domains. Participants have
	to bring their own laptops for lab component. The software

	necessary can be freely downloaded, and usage will be	
	demonstrated.	
Lecture/Session Plan	1) Introduction 2) Remote sensing – 1 (images and image interpretation) 3) Remote sensing – 2 (orbits and sensors) 4) Remote sensing – 3 (applications) 5) Georeferencing – 1 6) Georeferencing – 2 7) Time series analysis 8) Evaluation – 1 (presentations) 9) GIS – 1 (projections, datum, geoid) 10) GIS – 2 (Digitization) 11) GIS – 3 (Map composition) 12) GIS – Data visualisation and applications 13) GIS – Geospatial visualization of numeric (demographic) data 14) Evaluation – 2 (presentations) 15) Ethics of map making	
Course evaluation	Assignment 60% attendance (10%) and written exam (30%)	
Course readings	Joseph G, Jeganathan C (2018) Fundamentals of remote sensing, 3rd edn. Universities Press Pvt Ltd, Hyderabad Joseph, G. (2015). <i>Building Earth Observation Cameras</i> (1st ed.). CRC Press.	
	M.B.Rajani (2021) Patterns in Past Settlements: Geospatial Analysis of Imprints of Cultural Heritage on Landscapes. Springer Remote Sensing/Photogrammetry. Springer, Singapore. https://doi.org/10.1007/978-981-15-7466-5	
	Asha Kuzhiparambil and M. B. Rajani (2012) Epicentres Of Missing Daughters', Asian Population Studies, Vol 8, Issue 3, pp 265-280 (https://doi.org/10.1080/17441730.2012.714668)	

<u>2</u>

Course Name	Emerging Methods in Neurohumanities: Intersections of Art, Music, Culture, Education, and Heritage
Offered by	School of Humanities
Course Credits	2

Course Teacher(s)	Deepti Navaratna, deeptinavaratna@nias.res.in
	This course introduces students to the emerging interdisciplinary methods in neurohumanities—a dynamic intersection between neuroscience and the humanities—exploring art, music, culture, education, and heritage. Students examine emerging neuroscientific methods and how they transform our understanding of culture, creativity, perception, cultural identity, learning, and collective memory. Through didactic lectures, experiential modules, and collaborative projects, students will gain an understanding on how to design cross-disciplinary research and engage in critical reflection on ethics and cultural perspectives.
	Learning Objectives
	 Critically analyze neuroscientific approaches in humanistic contexts.
	Integrate theories from art, music, culture, and heritage into cognitive and neuroscience frameworks.
Course Objective	 Understand how interdisciplinary research paradigms can use neuro-based methodologies.
	Reflect on ethical, cultural, and decolonial issues in neurohumanities.
	Overall Course Format
	 Weekly seminars (2 hours) Experiential and guided learning (field visits, workshops)
	 Group and individual project assignments Final Examination
	Experiential Components
	 Art gallery or museum visit. Live or virtual music performance analysis. Heritage site visit. Guest workshops with artists and
	neuroscientists.

Week 1: Introduction to Neurohumanities

Themes: Historical context, field overview. **Readings:** Chatterjee & Vartanian (2014);

Slingerland & Collard (2011).

Activity: Discussion on interdisciplinary research

futures.

Week 2: Neuroscientific Methods

Themes: fMRI, EEG, behavioral studies,

computational models.

Readings: Kandel (2012); Zeki (1999).

Assignment: Essay analyzing neuroscientific

tools.

Week 3: Neuroaesthetics & Visual Art

Themes: Beauty, creativity, perception.

Readings: Chatterjee (2011); Ramachandran &

Hirstein (1999).

Activity: Art museum visit and analysis journal.

Week 4: Music & the Brain

Themes: Music cognition, cultural context.

Readings: Patel (2008); Thaut & Hodges (2019).

Activity: Concert analysis workshop.

Week 5: Embodied Cognition & Performance

Themes: Dance, movement, bodily knowledge. **Readings:** Gallagher (2005); Cross et al. (2006). **Assignment:** Reflection essay on embodied

experience.

Week 6: Cultural Neuroscience

Themes: Cultural identity, collective memory. **Readings:** Han & Northoff (2008); Chiao (2009).

Activity: Case study presentation.

Week 7: Heritage & Memory

Themes: Neuroarchaeology, cultural

transmission.

Readings: Renfrew & Zubrow (1994); Dudai et

al. (2015).

Assignment: Group heritage study proposal.

Lecture/Session Plan

	Week 8: Neuroeducation
	Themes: Creative learning, pedagogy. Readings: Immordino-Yang & Damasio (2007); Tokuhama-Espinosa (2011). Activity: Design an educational intervention.
	Week 9: Technology & AI
	Themes: BCIs, AI art. Readings: Damasio (2018); MIT Tech Review articles. Assignment: Short research paper.
	Week 10: Ethics & Decolonial Critiques
	Themes: Brain ethics, cultural perspectives. Readings: Rose & Abi-Rached (2013); Ngũgĩ wa Thiong'o (selected essays). Activity: Debate and policy draft.
	Week 11: Transdisciplinary Research Design
	Themes: Project design, funding, communication. Readings: Slingerland & Collard (2011); policy documents. Assignment: Draft a 2 page -research proposal.
	Week 12: Final Exam
	A 1-hour written-exam with MCQs and short answer questions drawn from the didactic lectures and readings. This will be followed by course synopsis and reflections.
Course Evaluations	 1. 10% of marks for attendance 2. 30% of marks for the written examination 3. 60 % of the marks for assignments.
	Core Reading List:
	Chatterjee, A., & Vartanian, O. (2014). Neuroaesthetics. Oxford University Press.
Course Readings	Kandel, E. R. (2012). <i>The Age of Insight</i> . Random House. Patel, A. D. (2008). <i>Music, Language, and the Brain</i> . Oxford University Press.
	Ramachandran, V. S., & Hirstein, W. (1999). The science of art. <i>Journal of Consciousness Studies</i> , 6(6-7), 15–51.

Immordino-Yang, M. H., & Damasio, A. (2007). We feel, therefore we learn. *Mind, Brain, and Education*, 1(1), 3–10.

All Readings:

Cross, E. S., Hamilton, A. F. D. C., & Grafton, S. T. (2006). Building a motor simulation de novo: Observation of dance by dancers. *NeuroImage*, 31(3), 1257–1267.

Han, S., & Northoff, G. (2008). Culture-sensitive neural substrates. *Nature Reviews Neuroscience*, 9(8), 646–654.

Immordino-Yang, M. H., & Damasio, A. (2007). We feel, therefore we learn. *Mind, Brain, and Education*, 1(1), 3–10.

Kandel, E. R. (2012). *The Age of Insight*. Random House. Patel, A. D. (2008). *Music, Language, and the Brain*. Oxford University Press.

Renfrew, C., & Zubrow, E. B. W. (1994). *The Ancient Mind*. Cambridge University Press.

Rose, N., & Abi-Rached, J. (2013). Neuro: The New Brain Sciences and the Management of the Mind. Princeton University Press.

Slingerland, E., & Collard, M. (2011). *Creating Consilience*. Oxford University Press. Tokuhama-Espinosa, T. (2011).

Mind, Brain, and Education Science. W. W. Norton & Company. Zeki, S. (1999). Inner Vision. Oxford University Press.

Ramachandran, V. S., & Hirstein, W. (1999). The science of art. *Journal of Consciousness Studies*, 6(6-7), 15–51.

School of Social Sciences

1

Course Name	Health Policy and Sustainability

Being offered by Which School	School of Social Sciences
Course Credits	2
Course Teacher(s)	Dr. Aleena Sebastian, aleena.sebastian@nias.res.in
Course Objective	This course offers doctoral students a foundational understanding of health policy frameworks and their impact on building sustainable health systems. It examines how public health, environmental, social, and economic factors intersect to support the development of a more equitable and effective healthcare system. The course also aims to contribute to the capacity building of scholars interested in socially impactful health research by providing exposure to grant writing, and drafting of policy briefs and scientific manuscripts.
Lecture/Session Plan	 Module 1: Introduction: Health Policy and Sustainability [2 hours] Key considerations in the global and national scenario Policy cycles and frameworks Actors, institutions, models and power in policymaking Module 2: Learning Health Beyond Medicine [2 hours] Environmental, economic, and social sustainability Planetary health and health system resilience Climate change and health (e.g., One Health approach) Key theoretical frameworks Module 3: Research to Policy Partnerships [2 hours] Evidence-based decision making Identifying public health needs Evaluating policy impact Cost effectiveness analysis Strategies to building policy partnerships Module 4: Policy Analysis and Implementation Science [2 hours] Policy design, tools, and implementation barriers Realist and formative evaluations Evidence-informed policy and knowledge translation Module 4: Research Methods [6 hours]

- Qualitative and mixed methods research
- Community engaged research methods
- Formative and longitudinal studies
- Intervention studies and randomized control trials

Module 5: Ethics in Health Research and Publication [4 hours]

- Introduction to DHR/ICMR guidelines
- Ethics concerning research design, implementation, and publication
- Clinical Trial Registry of India (CTRI)
- Key considerations while involving vulnerable communities
- Research team and ethics training
- Institutional Review Boards (IRBs) & Community Advisory Boards (CABs)
- Researcher and institutional positionality statement

Module 5: Case Specific Learnings [6 hours]

- LGBTQ health studies (specific focus on mental health & HIV burden)
- Sexual and reproductive health rights of women
- Marginalized communities in the urban sustainability discourse

Module 6: Dissemination Strategies [2 hours]

- Drafting policy briefs and scientific manuscripts
- Audience centred communication strategies
- Monitoring and evaluating dissemination impact
- Tools and channels for effective dissemination

Module 7: Writing Grant Proposals in Health Policy [4 hours]

- Learning the funding landscape and identifying potential funders
- Key considerations in structuring health grant proposals
- Budget, team and project management

Course Evaluations

- 1. Attendance [10 Marks]
- 2. Written Examination [30 Marks]
- 3. Oral Presentation [20 Marks]

4. *Submission of Term Paper*: Scholars will be asked to submit a term paper based on the modules taught [40 Marks]

Regular class participation is mandatory for this course with a <u>minimum participation of 13 lectures</u> out of 15. <u>Those who audit the course will also be required to submit the course deliverables</u>

Core Readings:

- 1. Agyeman, Julian. (2003). *Just Sustainabilities:* Development in an Unequal World. MIT Press.
- 2. Fong, B.Y.F., & Chiu, W.-K. (Eds.). (2024). Sustainable Health Promotion Practices and the Global Economy (1st ed.). Routledge.
- 3. Abraham, Leena and Sen, Gita. (2022). 'Health policy in India: Processes and politics' In. Global Health Watch. Bloomsbury.
- Chakrapani V, Lakshmi PVM, Tsai AC, Vijin PP, Kumar P, Srinivas V. The syndemic of violence victimisation, drug use, frequent alcohol use, and HIV transmission risk behaviour among men who have sex with men: Cross-sectional, population-based study in India. SSM Popul Health. 2019 Jan 3;7:100348. doi: 10.1016/j.ssmph.2018.100348. PMID: 30656208; PMCID: PMC6329829.

Course Readings

Additional Readings:

- 5. Mukherjee S, Haddad S, Narayana D. Social class related inequalities in household health expenditure and economic burden: evidence from Kerala, South India. Int J Equity Health. 2011;10(1):1. doi: 10.1186/1475-9276-10-1.
- 6. Chauhan LS. Public health in India: issues and challenges. Indian J Public Health. (2011) 55:88. 10.4103/0019-557X.85237
- 7. Dash A, Mohanty SK. Do poor people in the poorer states pay more for healthcare in India? BMC Public Health. 2019 Jul 30;19(1):1020. doi: 10.1186/s12889-019-7342-8. PMID: 31362727; PMCID: PMC6668144.
- 8. Bolte G, Dandolo L, Gepp S, Hornberg C, Lumbi SL. Climate change and health equity: A public health perspective on climate justice. J Health Monit. 2023 Nov 29;8(Suppl 6):3-35. doi: 10.25646/11772. PMID: 38105794; PMCID: PMC10722520.
- 9. Fraser, Mark W. 2009. Intervention Research: Developing Social Programs. Oxford: Oxford University Press.

10. Uzochukwu B, Onwujekwe O, Mbachu C,
Okwuosa C, Etiaba E, Nyström ME, Gilson L.
The challenge of bridging the gap between
researchers and policy makers: experiences of a
Health Policy Research Group in engaging policy
makers to support evidence informed policy
making in Nigeria. Global Health. 2016 Nov
4;12(1):67. doi: 10.1186/s12992-016-0209-1.
PMID: 27809862; PMCID: PMC5095957.

- 11. Luger TM, Hamilton AB, True G. Measuring Community-Engaged Research Contexts, Processes, and Outcomes: A Mapping Review. Milbank Q. 2020 Jun;98(2):493-553. doi: 10.1111/1468-0009.12458. Epub 2020 May 19. PMID: 32428339; PMCID: PMC7296434.
- 12. Parashar R, Gawde N, Gupt A, Gilson L. Unpacking the implementation blackbox using 'actor interface analysis': how did actor relations and practices of power influence delivery of a free entitlement health policy in India? Health Policy Plan. 2020 Nov 1;35(Supplement_2):ii74-ii83. doi: 10.1093/heapol/czaa125. PMID: 33156935; PMCID: PMC7646725.
- 13. Thresia, C. (2018). Health Inequalities in South Asia at the Launch of Sustainable Development Goals: Exclusions in Health in Kerala, India Need Political Interventions. *International Journal of Health Services*, 48(1), 57–80. https://www.jstor.org/stable/48513064

2

Course Name	Exploring the Contemporary State: Policy, Planning, Law and Politics
Offered by	School of Social Sciences
Course Credits	2 credits
Course Teacher(s)	Prof. Carol Upadhya, <u>carol.upadhya@nias.res.in</u> & Prof. Supriya RoyChowdhury, <u>supriya@nias.res.in</u>
Course Objective	The course will introduce students to different disciplinary perspectives and recent debates on the state, law, policy, and citizenship, with a focus on India. Assigned readings will provide exposure to various theoretical and methodological approaches to studying the state.

Lecture/Session Plan	Topics: 1. The state in historical and legal-constitutional perspective 2. Anthropology of the state 3. Studying the "everyday state" 4. Law and the working class 5. State responses to gender violence 6. State planning and informality 7. Digitalization of governance
Course Evaluations	Marks: - Assignment (60%) - Written examination (30%) - Class participation (10%) For the assignment, students will write a research paper or an extended literature review on a topic of their choice, related to the broad themes of the course, drawing on relevant bodies of literature from political science, anthropology, and related disciplines. The paper will be presented in the final seminar. In addition, there will be one in-class written exam. Required readings:
Course Readings	Partha Chatterjee, The Nation and its Fragments: Colonial and Post-Colonial Histories (Permanent Black, 1993). Madhav Khosla, India's Founding Moment: The Constitution of a Most Surprising Democracy (Harvard University Press, 2020). Aradhana Sharma and Akhil Gupta, eds. The Anthropology of the State: A Reader (John Wiley & Sons, 2009), Introduction + selected chapters. Nayanika Mathur, Paper Tiger: Law, Bureaucracy and the Developmental State in Himalayan India (Cambridge University Press, 2015). Additional and optional readings: Kalyan Sanyal, Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post Colonial Capitalism, Routledge, 2007, Chapter 1. Bob Jessop, The State: Past, Present, Future (Cambridge: Polity Press, 2016). Louise Tillin, Making India Work: The Development of Welfare in a Multi-Level Democracy (Cambridge University Press, 2025). N. Kukshreshtha, 'A critical analysis of the standard of consent in rape law in India', Onati Socio Legal Series, 2023. Equality Now, Justice Denied: Sexual Violence and Intersectional Discrimination Barriers to Accessing Justice for Dalit Women and Girls in Haryana, India', 2020. Inove Sachi, 'The state of gender-based sexual violence against women in India: Current state and future directions', South Asian Journal of Law, Policy and Social Research 1(1), 2020. Atul Sood and Paritosh Nath, 'Labour law changes', EPW 55(22), 20 May 2020.

Elina Samantroy, Kingshuk Sarkar, 'Violence in times of Covid 19: Lack of legal protection for women informal workers', *EPW* 55(40), October 2020.

Akhil Gupta, David Nugent, and Shreyas Sreenath, 'State, corruption, postcoloniality: A conversation with Akhil Gupta on the 20th anniversary of "Blurred Boundaries", *American Ethnologist* 42(4): 581–591, 2015.

Grace Carswell and Geert De Neve, 'Paperwork, patronage, and citizenship: The materiality of everyday interactions with bureaucracy in Tamil Nadu, India', *Journal of the Royal Anthropological Institute* 26(3): 495–514, 2020.

Simone Abram and Gisa Weszkalnys, 'Elusive promises: Planning in the contemporary world—an introduction'. In *Elusive Promises: Planning in the Contemporary World*, ed. Simone Abram and Gisa Weszkalnys (New York: Berghahn Books, 2013, 1–33).

Teresa P.R. Caldeira, 'Peripheral urbanization: Autoconstruction, transversal logics, and politics in cities of the Global South'. *Environment and Planning D: Society and Space* 35(1): 3–20. 2017.

Laura Bear, 'Making a river of gold: Speculative state planning, informality, and neoliberal governance on the Hooghly', *Focaal: Journal of Global and Historical Anthropology* 61: 46–60, 2011.

Indivar Jonnalagadda, 'Reactive regulation: Rethinking urban growth and governance through property relations'. *Cultural Anthropology* 40(2): 192–220, 2025.

Bidisha Chaudhuri, 'Programmed welfare: An ethnographic account of algorithmic practices in the public distribution system in India'. *New Media & Society* 24(4): 887–902, 2022.

Grace Carswell and Geert De Neve, 'Transparency, exclusion and mediation: How digital and biometric technologies are transforming social protection in Tamil Nadu, India', Oxford Development Studies 50(2): 126–141, 2022.

Thomas Cowan, 'Uncertain grounds: Cartographic negotiation and digitized property on the urban frontier', *International Journal of Urban and Regional Research*_45(3): 442–457, 2021.

Nishant Shah, Ashish Rajadhyaksha, and Nafis Aziz Hasan, *Overload, Creep, Excess: An Internet from India.* Theory on Demand #45, Institute of Network Cultures, Amsterdam, 2022.

Nafis Aziz Hasan, 'Citizen labor: Correcting data and creating value in an Indian land records database', *American Ethnologist* 51(3): 376–87, 2024.

Uday Chandra, Resistance as Negotiation: Making States and Tribes in the Margins of Modern India (Stanford University Press, 2024).

Course Name	Education Policy & Practice in India
Offered by	School of Social Sciences (Education Programme)
Course Credits	2
Course Teacher(s)	Prof. Mythili Ramchand, <u>udupamythili@gmail.com</u> & Dr. Bindu Thirumalai, <u>bindu.thirumalai@nias.res.in</u>
Course Objective	This course provides doctoral scholars with a critical understanding of education policy and practice in India, focusing on historical, legal, socio-political, and contemporary perspectives. It is aimed at fostering the ability to analyse, critique, and influence education policy frameworks, with an emphasis on research-based insights and the diverse realities of India's educational landscape. • Critically examine the evolution and implementation of key educational policies in India. • Analyse the interplay between policy, practice, and socioeconomic contexts. • Explore current issues and reforms with a focus on inclusion, quality, and equity.
Lecture/Session Plan	Three key policy documents will be studied using key readings to frame discussions of policy, institutions, and practices with some core readings Unit 1: Education policy in India - NEP 2020 Policy Document Unit 2: Legal & Constitutional Framework – Right to Education Act Unit 3: Equity Inclusion and Social Justice - The Rights of Persons with Disabilities Act, 2016.
Course Evaluations	The course evaluation format: 1. 10% of marks for attendance 2. 30% of marks for the written examination 3. 60% of the marks for assignments. Assessments will include discussions, presentations and case analysis.
Course Readings	Policy Documents GoI (2020) National Education Policy 2020. Ministry of Education, New Delhi.

GoI (2016) The Rights of Persons with Disabilities Act, 2016. Ministry of Social Justice, New Delhi.

GoI (2009). Right to Free and Compulsory Act 2009 (Right to Education Act). MHRD, New Delhi.

Readings to discuss the framing of policy, institutions, and practices

Mehendale, Archana and Mukhopadhyay, Rahul (2019) School system and education policy in India: charting the contours. In: *Handbook of education systems in South Asia. Global Education Systems*. Springer, Singapore, pp. 1-35.

Mukhopadhyay, R., & Sarangapani, P. M. (2018). Introduction: Education in India between the state and market—Concepts framing the new discourse: Quality, efficiency, accountability. In *School education in India: Market, state and quality* (pp. 1-27). Routledge India.

Little, Angela W. Access to Elementary Education in India: Politics, Policies and Progress. CREATE Pathways to Access. Research Monograph No. 44. 2010.

Dyer, Caroline. "Researching the implementation of educational policy: A backward mapping approach." *Comparative education* 35.1 (1999): 45-61.

Ball, S. J. (2015). What is policy? 21 years later: Reflections on the possibilities of policy research. *Discourse: Studies in the cultural politics of education*, 36(3), 306-313.

Additional Readings

Wadia, L. C. (2020). Higher Education Systems and Policy in South Asia: An Introduction. In *Handbook of education systems in South Asia. Global Education Systems* (pp. 1-12). Singapore: Springer Singapore.

Srivastava, P., & Walford, G. (2016). Non-state actors in education in the Global South. *Oxford Review of Education*, *42*(5), 491-494.

Sharma, R., & Ramachandran, V. (Eds.). (2009). *The elementary education system in India: Exploring institutional structures, processes and dynamics*. Routledge.

Jain, M., Mehendale, A., Mukhopadhyay, R., Sarangapani, P. M., & Winch, C. (Eds.). (2018). *School education in India: Market, state and quality*. Taylor & Francis.