NIAS Doctoral Programme Courses
2020-2021

Foundation Course for the School of Conflict and Security Studies, 2020

An Introduction to
Conflict, Peace and Security Studies

Course title: An Introduction to Conflict, Peace and Security Studies

Subject/ discipline: Conflict, Peace and Security

Level of course: PhD
Number of credits: Two
Type: Lectures

Name of the instructors: D. Suba Chandran (subachandran@nias.res.in)
Rajaram Nagappa and other faculty from the School

Probable starting date and schedule/ timings: September 2020

Course Outline

The course provides an introduction to conflict and security studies. Divided into two broad themes – Conflict and Security, the course provides first an overview to conflict studies and security studies. Besides the above two, the School Course also provides an overview to Science Diplomacy as the third theme.

Following the overview, the course then focuses on specific issues/subthemes.

A. Introduction to Conflict Resolution and Peace Research
   a. Conflict Resolution: An Introduction
   b. Internal Conflicts
   c. Bilateral Conflicts & International Conflicts
   d. Peace Research: An Introduction
   e. Peace Processes: Case Studies

B. Introduction to Security Studies
   a. Security Studies: A theoretical overview of traditional and non-traditional security
   b. Contemporary Security Issues and Developments
   c. Science, Technology and Security: Space, Nuclear, Cyber, Artificial Intelligence etc
   d. Non-Traditional Security: Environment, Gender, Maritime, Water etc

C. **Science Diplomacy**
   a. Science Diplomacy: An Introduction
   b. Science for Diplomacy, Diplomacy for Science, Science in Diplomacy and Diplomacy in Science

Humanities Foundations Course 2020
Mandatory 2 Credit Course for Incoming Humanities Cohort

Course Description:

This course is designed to give an overview of the School of Humanities at NIAS. It focuses on four themes -- namely, "self and emotions", "nature and culture", "historical narratives" and "time and causality" -- that are central to the discipline, and provides interdisciplinary perspectives. The lectures are delivered by the faculty of the school. The instructors are:

Sangeetha Menon (sangeetha.menon@nias.res.in)

Shankar Rajaraman

Smriti Haricharan

M.B.Rajani

Tarun Menon

Srikumar Menon

Udaya Kumar

Nithin Nagaraj

Course Objectives:

(i) To introduce to various themes that represent a few select aspects of the Humanities.
(ii) To introduce the research interests of the School of Humanities faculty.
(iii) To familiarise with few instances of interdisciplinary studies in Humanities.

Course Design:

The course consists of 28 lectures of 2 hours each, meeting once a week (Friday: 10.00 – 12.00). (Lectures will be online)

Reading: A wide range of readings will be used for this Course, and the texts will be provided prior to the lecture by the instructor for each class.

Lecture Schedule

Self and Emotion

Sept 11*:* Can We Take the Self out of the Brain, and the Brain out of the Self? (Lecture 1)
Sangeetha Menon
Sept 18*:* Can We Take the Self out of the Brain, and the Brain out of the Self? (Lecture 2)
Sangeetha Menon
Sept 25:Do Literary Characters Have a Self? - An Indian Aesthetics Perspective (Lecture 3)
Shankar Rajaraman

Oct 2: **Holiday**

Oct 9:Whose Emotions? The Poet's, the Character's, the Actor's, or the Spectator's? (Lecture 4)
Shankar Rajaraman

Nature and Culture

Oct 16: Signatures of Nature and Culture on Archaeological Landscapes (Lecture 5)
Smriti Haricharan
Oct 23*:* Observing Earth's Surface to Decipher Impressions from the Past (Lecture 6)
MB Rajani
Oct 30*:* Climate Justice (Lecture 7)
Tarun Menon

Historical Narratives

Nov 6:Folklore as History: Ways of Looking at the Past (Lecture 8)
Srikumar Menon
Nov 13:Role of Ethnoarchaeology and Experimental Archaeology (Lecture 9)
Udaya Kumar
Nov 20:Historical Narratives Conveyed through Music (Lecture 10)
MB Rajani
Nov 27:The Medieval Architect as Agent of Innovation in Temple Form (Lecture 11)
Srikumar Menon

Time and Causality

Dec 4: Flow of Time ((Lecture 12)
Tarun Menon
Dec 11:Differentiating the Present and the Past in Archaeology (Lecture 13)
Smriti Haricharan
Dec 18: **C**ausality (Lecture 14)
Nithin Nagaraj

Schedule Details

Lectures 1 and 2: Can We Take the Self out of the Brain, and the Brain out of the Self?

Is there a common challenge in brain and self studies that appear over and again? Yes. That is the attempt to explain the unity, continuity, and adherence of our experience, whether it is sensory or mental. To address the unity, adherence and continuity of experience is to address the place of the self in the brain, or the role of the brain in presenting a self. A major challenge to this effort is the fact that, though we tend to commonly address a static unit by calling it 'self', it is a changing phenomenon as a result of our interactions with nature outside (social and biological) and nurture inside (cultural and moral). In the process of its emergence the boundaries of the self seem to change, creating havoc for some (in the case of psychiatric challenges) and peace for others (in the case of spiritual experiences). Where is that self without which we cannot make sense of anything that goes around however physiologically backed up it is? While the skin beautifully covers up all the anatomy and chemistry of a biological system without any spillouts, the self covers up the body too while giving us a feeling of being embodied. Is my self detachable from my body? Is my body inside my self, or is my self inside my body? We have asked the mind–body question for centuries. But this question becomes even more complex when it comes to the place and function of the self. Or is "the self" at all, or "his self", or "her self", etc. ? What is it to be the self of someone? What is self of oneself?

Readings:

Rosenthal, D. M. (2003). Unity of consciousness and the self. *Proceedings of the Aristotelian Society, New Series, 103*, 325–352.
Chalmers, D. (1995). The puzzle of conscious experience. *Scientific American, 273*, 62–68.
Gallagher, S. (2000). Philosophical conceptions of the self: Implications for cognitive science. *Trends in the Cognitive Sciences, 4*(1), 14–21.
Menon, S. (2002). Structure of mind and structured mind. *Indian Philosophical Quarterly*, *2 & 3*, 335–344.
Metzinger, T. (2009). *The ego tunnel: The science of the mind and the myth of the self*. New York: Basic Books.
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.

Lecture 3: Do Literary Characters Have a Self? - An Indian Aesthetics Perspective

This lecture shall provide an overview of a model for character analysis based on the aesthetic theory of Bhoja, the 12th century Indian polymath. Bhoja proposes a sophisticated typology of literary characters that brings within its ambit the notions of self, identity, life-goals, traits, personality, mental states, and well-being. Additionally, he illustrates his theoretical concepts

with examples culled out from several literary works. The usefulness of Bhoja's theory and the model derived thereof beyond the confines of Sanskrit literature shall be explored during the lecture

Readings:

Raghavan. V. *Bhoja'sŚṛṅgāraprakāśa,* 3rd ed. Madras: Punarvasu, 1978

Lecture 4: Whose Emotions? The Poet's, the Character's, the Actor's, or the Spectator's?

In this lecture, 4 Indian theories of aesthetic reception shall be discussed. These theories, that have their basis in the Rasa-aphorism formulated by the dramaturgist Bharata (between 2nd century BC and 2nd century AD), have been documented by the 10th century philosopher-poeticianAbhinavagupta. Through lively debates that resulted in much give and take, the proponents of these theories tackled questions pertaining to the nature of aesthetic emotions, the process by which they come into being and are communicated, and their locus.

Readings:

Gnoli, Ranerio. *The Aesthetic Experience According to Abhinavagupta*, 2nd ed. Varanasi: Chowkhamba Sanskrit Series Office, 1968

Lecture 5: Signatures of Nature and Culture on Archaeological Landscapes

The relationship between nature and culture is integral to how we interpret the past, and archaeology by definition is a discipline which uses human remains to understand the past. However the intricate relationship that human beings have always had with nature means that archaeologists cannot ignore signatures of natural processes such as erosion, or climate change. The effects of nature and culture on each other therefore become an integral part of how we understand the past, never more so than now with the naming of a new epoch by geologists- 'Age of Man'—the Anthropocene.

Readings:

Hudson, Mark J. "Placing Asia in the Anthropocene: histories, vulnerabilities, responses." *The journal of Asian studies* 73, no. 4 (2014): 941-962.

Bauer, Andrew M., and Erle C. Ellis. "The Anthropocene Divide." *Current Anthropology* 59, no. 2 (2018): 209-227.

Ruibal, Alfredo González-. "Beyond the Anthropocene: Defining the Age of Destruction." Norwegian Archaeological Review, 51 (2018): 10-21

Lecture 6: Observing Earth's Surface to Decipher Impressions from the Past

This lecture will cover how studying landscape - an object used and modified by humans in the past - can hold historical information that may not be readily visible, but can be revealed when observed from a distance from a vantage of air or space.

Readings:

To be determined

Lecture 7: Climate Justice

Global climate change is a dramatic illustration of the power of human activity to transform our natural environment in fundamental ways. It also raises a number of questions about how we need to transform our ways of living in order to mitigate the looming threat. In this lecture, we examine the question of how we need to rethink issues of justice and responsibility when tackling climate change in a radically unequal world.

Readings:

Gardiner, Stephen M. (2010). Ethics and Global Climate Change. In Gardiner et al. (Eds.), *Climate Ethics: Essential Readings* (pp. 3-35). Oxford: Oxford University Press

Shue, Henry (1999). Global Environment and International Inequity. *International Affairs, 75,* 531-545.

Lecture 8: Folklore as History: Ways of Looking at the Past

In this lecture, myths, folklore and tradition will be examined as possibly containing kernels of history. A few examples from archaeology will be discussed in the lecture.

Readings:

Settar, S. (1969) A Buddhist Vihara at Aihole. *East and West*, 19 1/2, pp. 126-138.

Apoorva, G. and Menon, S. M. (2019) In Search of a Mythical Artisan: Tracking the Jakanachari Legend of Karnataka. In Rajesh, S. V., Abhayan, G. S., Nayar, P. and Ilahi, E. R. (Eds.) *Human and Heritage: An Archaeological Spectrum of Asiatic Countries (Felicitation to Professor Ajit Kumar) Volume – II*, Delhi, New Bharatiya Book Corporation, pp. 497-524.

Lecture 9: Role of Ethnoarchaeology and Experimental Archaeology

The lecture will cover the ethnoarchaeology of iron smithing and the experimental approach to the process of iron smelting using evidence from current ethnography and archaeology.

Readings:

Coles, J. 1979. *Experimental Archaeology*. London: Academic Press.

Elwin, H.V.H., 1942. *The Agaria*. London: Indian Branch, Oxford University Press.

Mohanta, B.K., K.K.Basa, P.K. Chattopadhyay and K. Das 2003. Pre-industrial Iron smelting in Mayurbhani, Northern Orissa: an Ethnohistoric study, *Man and Environment* 38 (2): Pp. 81.

Tripathi, V. and A.K. Mishra. 1997. Understanding Iron Technology- An Ethnographic Model, *Man and Environment* 25(1): 318-322.

Tylecote, R.F. 1985. Experimental Smelting Techniques: Achievements and Future, in *Furnace and Smelting Technology in Antiquity* (P.T. Craddock and M.J. Hughes Eds.), pp. 3-21.

Tylecote, R.F. 1992. *A History of Metallurgy*. U.K: Institute of Material.

Lecture 10: Historical Narratives Conveyed through Music

This talk will discuss the 18th and 19th century South India where melodies from western music made their way into the Carnatic repertoire and created a new genre of composition in the realm of Carnatic classical music.

Readings:

To be determined.

Lecture 11: The Medieval Architect as Agent of Innovation in Temple Form

The role of the artisan in the development of form in Indian temple architecture has always been underestimated. In this lecture, this aspect will be examined, using the example of the evolution of Vesara temples in southern India.

Readings:

Hardy, A. (2012) Indian Temple Typologies. In Lorenzetti, T. and Scialpi, F. (Eds.) Glimpses of Indian History and Art: Reflections on the Past, Perspectives for the Future. Rome, Sapienza UniversitaEditrice, pp. 101-125.

Sinha, A. J. 1996 Architectural Invention in Sacred Structures: The Case of Vesara Temples of Southern India. *Journal of the Society of Architectural Historians*, 55, 4. pp. 382-399.

Lecture 12: Flow of Time

This lecture is intended to provide a case study of how the humanities and sciences can work together to reconcile subjectivity and objectivity. We examine the nature of time, both as it appears to us in our experience and as it is described in science. There is an apparent

contradiction between these two modes of understanding, with experience representing time as dynamic, flowing from past to future, and physics representing time as static, a dimension akin to space. We will study how philosophers and scientists have attempted to bridge this gap between everyday experience and science.

Readings:

Calendar, Craig (2010). Is Time an Illusion? *Scientific American*, 302, pp. 58-65

Bardon, Adrian (2013). *A Brief History of the Philosophy of Time*. Chapter 4. Oxford: Oxford University Press.

Lecture 13: Differentiating the Present and the Past in Archaeology

Time is used to explain many things in the past, but it is also used to differentiate the past and the present, in other words it is used to understand the past but also what is past. Archaeologists use time in both how archaeology is done and how it is analysed or explained. This class will look at time in archaeology specifically with reference to multiple temporalities in the south Asian context.

Readings:

Lucas, Gavin. *The archaeology of time*. Routledge, (2004): 1-31

Rao, Velcheru Narayana, David Shulman, and Sanjay Subrahmanyam. "A Pragmatic Response" *History and Theory* 46, no. 3 (2007): 409-427.

Helgesson, Stefan. "Radicalizing temporal difference: Anthropology, postcolonial theory, and literary time." *History and theory* 53, no. 4 (2014): 545-562.

Lecture 14: Causality

Causal reasoning is important in diverse disciplines such as econometrics, climatology, cognitive science, social sciences, consciousness studies, epidemiology, statistics, physics, artificial intelligence etc. In these lectures, we will attempt to uncover the notion of causation as distinct from correlation, the ladder of causation, role of intervention and counterfactual reasoning. Notions of retro-causality and arrow-of-time will also be discussed.

Readings:

Judea Pearl and Dana Mackenzie. The Book of Why: The New Science of Cause and Effect. Basic Books, 2018.

Aditi Kathpalia and Nithin Nagaraj. "Measuring Causality: The Science of Cause and Effect." arXiv preprint arXiv:1910.08750 (2019).

Foundation Course of the School of Natural Sciences & Engineering

Introduction

The School of Natural Sciences and Engineering conducts research in areas related to Energy, Environment and Behaviour. Reflecting the research interests of the faculty members, the foundational course from the School will cover topics related to Sustainability, Governance, Coupled Human-Environment Systems, Behaviour and Decision Making and Biodiversity. The course consists of two modules; while the module from the Animal Behaviour and Cognition Programme will address themes related to Coupled Human-Environment Systems, Behaviour and Decision Making and Biodiversity, the module from the Energy and Environment Research Programme will focus on Environmental Governance in India.

Duration of Course: September – January 2020; Fridays 10.30 – 12.00

Course Details

(I) Human-Environment Interactions
Course Instructors: V V Binoy, Sindhu Radhakrishna (sindhu@nias.res.in)

Brief description:
This module will look at various aspects of interactions between ecological and social systems. Beginning with an introduction to ecosystem ecology and the various components of the ecosystem, the course will then address the importance of biodiversity, and the consequences of biodiversity loss. The second part of the module will address how human and environmental systems are coupled, the feedback loops that sustain them, and how behaviour and decision-making impact the environment around us.

(II) Introduction to Forest and Environment Governance in India
Course Instructor: R Srikanth
Brief description:
This module focusses on key statutes, policies, and guidelines, policies related to the Energy and Environment sectors in India. With respect to these specific statutes/policies/guidelines, this module appraises the role of different stakeholders in their formulation, approval, and implementation. It will involve 10 inter-active sessions, reading assignments, and a final term paper.

Learning objectives:
(i) To understand the key statutes and policies of India in the energy and environment.
(ii) To understand the Legal and Policy issues related to Environment & Forest Governance in India.
(iii) To discover and analyze areas for improvement in some of these key statutes and policies

Number of credits:

This module will be delivered over 10 interactive sessions (90 minutes each). Grade will be based on the classroom discussions and a Term Paper the topic for which will be decided during the course.

Learning Materials

A selection of key topics from the following Acts/Policies/Guidelines will be covered, along with landmark Court Judgements that have laid down the Law in the following areas:

- Environment Protection Act
- Forest Conservation Act
- Sustainable Development

Suitable links to various judgements of the Hon Supreme Court of India and other Courts in relation to Environment Protection, and key Acts and Government Notifications related to Environment Protection will be provided as supplementary reading material.

Course Schedule

Sl No	Topics	Required Reading
1	Introduction to the Course*Sep 11*	
2	Ecosystem Ecology: Concept, components, interactions *Sep* 18	Pickett and Cadenasso 2002
3	Landscape ecology: Patterns and processes *Sep25*	Turner 2005
4	Landscape ecology: Land use land cover change and consequences *Oct 2*	Foley et al. 2005
5	Biodiversity: Concept, value, types; Ecosystem services*Oct9*	Harper and Hawskorth 1994
6	Biodiversity: Threats, assessment, and conservation *Oct 16*	Sih et al. 2013
7	Human-environment interactions: Approaches and framework *Oct 23*	Liu et al 2007; Nyhus 2016
8	Behaviour, cognition and decision making: An introduction *Oct 30*	Dill et al. 1987, Premack 2007
9	Animal decision making: a key to managing animal populations for conservation and control? *Nov 6*	Owen et al. 2017
10	Determinants of environmental decision making and behaviour *Nov 13*	Saunders 2003
Introduction to Sustainable Development, Forest and Environment Governance in India		
11	Constitutional Foundations for Environment & Forest Protection in India - ***Nov 20***	Directive Principles & Fundamental Duties <https://www.mea.gov.in/Images/

		pdf1/Part4.pdf>
12	Key Environment Laws in India – Salient aspects of: • Water Act, 1974 • Air Act, 1981 • Environment Protection Act, 1986 - ***Nov 27***	
13	Forest Laws in India – Salient aspects of: • Forest Conservation Act, 1980 • Wildlife (Protection Act), 1972 • Biodiversity Protection Act, 2002 - ***Dec 4***	
14	Landmark cases related to Forest and Environment Protection: ***Dec 11*** Right to Life includes Right to Pollution-Free Water Rule of absolute liability Polluter Pays principle	Subhash Kumar v. State of Bihar (1991) <https://sci.gov.in/jonew/judis/12854.pdf> M.C. Mehta v. Union of India [Oleum Leak case] (1986) <https://sci.gov.in/jonew/judis/8858.pdf> M.C. Mehta v. Kamal Nath & Others (1996) <https://sci.gov.in/jonew/judis/14611.pdf>
15	Landmark Court cases in India related to Mining, Forest and Environment (cont'd): ***Dec 18***	M C Mehta v. Union of India [Aravalli Hill range case] (2009) <https://sci.gov.in/jonew/judis/34552.pdf> Lafarge Umiam Mining Private Ltd. v. Union of India (2011) <https://sci.gov.in/jonew/judis/38179.pdf SamajParivartanaSamudaya v. State of Karnataka & Others (2013) <https://sci.gov.in/jonew/judis/40304.pdf>- ***Dec 18***
16	Sustainable Development	T.N. GodavarmanThirumulkpad v.

	Tribal Rights in Schedule Areas Non-compliance with Forest & Environment Laws is tantamount to Illegal Mining. ***Dec 24***	Union of India & Others (1996) <https://sci.gov.in/jonew/judis/14617.pdf> Samata v. State of Andhra Pradesh (1997) <https://indiankanoon.org/doc/1969682/> Common Cause v. Union of India and others [2017] <https://sci.gov.in/supremecourt/2014/4352/4352_2014_Judgement_02-Aug-2017.pdf>
17	Environmental Impact Assessment ***Dec 31***	EIA Notification, 2006 <http://www.environmentwb.gov.in/pdf/EIA%20Notification,%202006.pdf> Draft EIA Notification, 2020
18	Environment Impact Assessment in practice: Need for following due process of Law, including Public Consultation ***Jan 8, 2021***	Hanuman Laxman Aroskar v. Union of India (2019) <https://sci.gov.in/supremecourt/2018/43379/43379_2018_Judgement_29-Mar-2019.pdf> WorliKoliwadaNakhwaMatsyaVyavasaySahkari Society Ltd. & others v. Municipal Corporation of Greater Mumbai (2019) <https://bombayhighcourt.nic.in/generatenewauth.php?auth=cGF0aD0uL2RhdGEvanVkZ2VtZW50cy8yMDE5LyZmbmFtZT1PUzFXUDU2MDE5LnBkZiZzbWZsYWc9WSZyanVkZGF0ZT0xOC8wNy8yMDE5JnVwbG9hZGR0PTE5LzA3LzIwMTkmc3Bhc3NwaHJhc2U9MjQwNzE5MTgyMTI1>
19 & 20	Forest & Environment Governance in India and suggestions on the Way Forward	**Presentations by Students and Discussions** ***Jan 15, 2021 (10:30 am to 1 pm)***

Foundation Course of the School of Social Sciences

Perspectives in Social Sciences (Credit: 2)

Time-period: September -December 2020

The purpose of **"Perspectives in Social Sciences**" course is to give disciplinary ideas in social sciences and possibility of interdisciplinarity in the same. The course is around two broad themes, Social Inequality and Education& Society. In these two themes there are sessions on different disciplinary perspectives. The students will be introduces to the interdisciplinary ideas through engaging in sessions listed below:

Schedule:

Session	Topic	Faculty
1	Perspectives in Social sciences	Prof Narendar Pani
2	Instrumentality of Inequality	Prof Narendar Pani
3	Forms of Policy Interventions	Prof Narendar Pani
4	Gender and Social Sciences	Dr Shivali Tukdeo
5	Psychological Responses to Social Discrimination	Dr Shalini Dixit
6	Education in Contemporary India	Prof Anitha Kurup
7	Education Policy in India	Prof Anitha Kurup
8	Sociology of Education	Dr Jeebanlata Salam
9	Social Exclusion and Education	Dr Jeebanlata Salam
10		Prof Carol Upadhya