

Course Title: Indian Knowledge System

Course Code:

Course Description:

The course on Indian Knowledge System aims to provide students with a comprehensive understanding of the rich and diverse knowledge traditions of India. It explores various branches of Indian knowledge systems, including philosophy, literature, sciences, arts, and spirituality. By examining historical development, foundational texts, and philosophical frameworks, students will gain insights into the deep-rooted wisdom and holistic worldview of Indian culture. The course also aims to highlight the relevance and applicability of Indian knowledge systems in addressing contemporary challenges.

Course Objective:

- To gain a comprehensive understanding of the diverse branches of Indian knowledge systems, including philosophy, literature, sciences, arts, and spirituality.
- To explore the historical development and evolution of Indian knowledge systems, tracing their roots back to ancient times.
- To examine the foundational texts and scriptures of Indian knowledge systems, such as the Vedas, Upanishads, Puranas, and philosophical treatises.
- To analyze the philosophical and conceptual frameworks of Indian knowledge systems, including concepts like dharma, karma, moksha, and the interconnectedness of all beings.
- To investigate the interplay between Indian knowledge systems and other global knowledge traditions, recognizing the contributions and influences of Indian thought on a broader scale.
- To appreciate the holistic and integrative nature of Indian knowledge systems, recognizing their relevance and applicability to contemporary issues and challenges.

Learning Outcome:

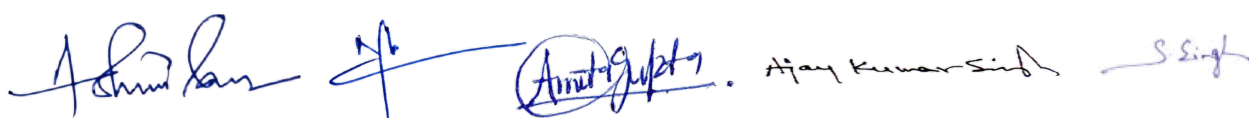
LO1: Demonstrate a comprehensive understanding of the foundational concepts, philosophies, and traditions of the Indian knowledge system, including its historical significance and relevance in contemporary times.

LO2: Critically analyze and evaluate the theories of knowledge (Pramanas) in Indian philosophy, and demonstrate an understanding of the various sources of valid knowledge in Indian epistemology.

LO3: Evaluate and compare Indian and Western philosophical frameworks, including metaphysical concepts, ontological perspectives, and ethical theories, to develop a nuanced understanding of the similarities and differences between these traditions.

LO4: Apply the principles of Indian aesthetics to analyze and interpret classical Indian literary works, music, dance, and visual arts, and demonstrate an understanding of the role of arts in Indian culture and spirituality.

LO5: Examine the contributions of ancient Indian sciences and mathematics, and analyze their applications and advancements in fields such as astronomy, medicine, architecture, and technology, highlighting their significance and relevance in modern times.

The image shows five handwritten signatures in blue ink at the bottom of the page. From left to right, they are: a stylized signature, a signature with a large 'N' or 'M' initial, a signature that appears to be 'Anand Gupta', a signature that appears to be 'Harj Kumar Singh', and a signature that appears to be 'S. Singh'.

LO6: Synthesize and apply the knowledge gained from the Indian knowledge system to address contemporary challenges, including sustainability, ecology, holistic well-being, and societal issues, by integrating traditional Indian wisdom with modern approaches.

1. Introduction to Indian Knowledge System (IKS)

- 1.1 Definition, Concept and Scope of IKS
- 1.2 IKS-based Approaches on Knowledge Paradigms
- 1.3 IKS in Ancient India and in Modern India

2. Metaphysical concepts in Indian thought

- 2.1 Exploration of Atman, Brahman, Maya, and their ontological implications
- 2.2 Understanding the Concept of Karma and its Role in Indian Philosophy
- 2.3 Analysis of the nature of reality and the concept of moksha (liberation)

3. Indian scientific treatises and disciplines

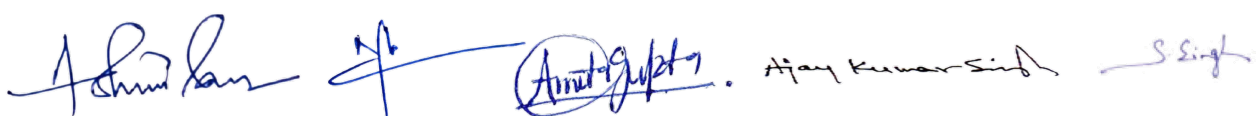
- 3.1 Contributions to Ancient Indian Mathematics
- 3.2 Analysis of Ancient Indian Texts on Astronomy, cosmology, and Astrology
- 3.3 Understanding the concepts of energy (Prana), sound (Nada), and vibration (Spanda) in Indian sciences

4. Traditional Indian sciences and technologies

- 4.1 Exploration of Vastu Shastra (Indian architecture) and its principles
- 4.2 Study of Jyotisha (Indian astrology) and its practical applications
- 4.3 Analysis of traditional Indian technologies in areas such as metallurgy and agriculture

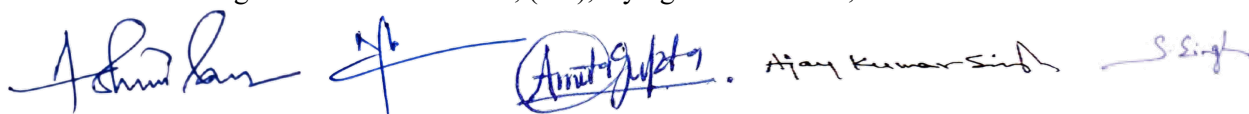
5. Indian systems of medicine and Well-being

- 5.1 Study of Ayurveda, Yoga, and Naturopathy as holistic approaches to Health
- 5.2 Understanding the Principles and Practices of Traditional Indian Medicine
- 5.3 Exploration of the Integration of Indian healing modalities with modern healthcare

 Ashwini Anurag Gupta. Hay Kumar Singh S. Singh

Suggested Reading

1. S An Introduction to Indian Knowledge Systems: Concepts and Applications, B Mahadevan, V R Bhat, and Nagendra Pavana R N; 2022 (Prentice Hall of India).
2. Indian Knowledge Systems: Vol I and II, Kapil Kapoor and A K Singh; 2005 (D.K. Print World Ltd).
3. The Beautiful Tree: Indigenous India Education in the Eighteenth Century, Dharampal,
4. Biblia Impex, New Delhi, 1983. Reprinted by Keerthi Publishing House Pvt Ltd., Coimbatore, 1995.
5. Indian Science and Technology in the Eighteenth Century, Dharampal. Delhi: Impex India, 1971. The British Journal for the History of Science.
6. The Wonder That Was India, Arthur Llewellyn Basham, 1954, Sidgwick & Jackson.
7. The India they saw series (foreigner visitors on India in history from 5CE to 17th century), Ed. Meenakshi Jain and Sandhya Jain, Prabhat Prakashan.
8. R.M. Pujari, Pradeep Kolhe, N. R. Kumar, 'Pride of India: A Glimpse into India's Scientific Heritage', Samskrita Bharati Publication.
9. 'Indian Contribution to science', compiled by Vijnana Bharati.
10. 'Knowledge traditions and practices of India', Kapil Kapoor, Michel Danino, CBSE, India.
11. Dr. Subhash Kak, Computation in Ancient India, Mount, Meru Publishing (2016)
12. Dharampal, Indian Science and Technology in the Eighteenth Century, Academy of
13. Gandhian Studies, Hyderabad, 1971, republic. Other India Bookstore, Goa, 2000
14. Robert Kanigel, The Man Who Knew Infinity: A Life of the Genius Ramanujan, Abacus, London, 1999
15. Alok Kumar, Sciences of the Ancient Hindus: Unlocking Nature in the Pursuit of Salvation, CreateSpace Independent Publishing, 2014
16. B.V. Subbarayappa, Science in India: A Historical Perspective, Rupa, New Delhi, 2013
17. S. Balachandra Rao, Indian Mathematics and Astronomy: Some Landmarks, Jnana Deep Publications, Bangalore, 3rd edn, 2004
18. S. Balachandra Rao, Vedic Mathematics and Science in Vedas, Navakarnataka Publications, Bengaluru, 2019
19. Bibhuti bhushan Datta, Ancient Hindu Geometry: The Science of the Śulba, 1932, repr. Cosmo Publications, New Delhi, 1993
20. Bibhuti bhushan Datta & Avadhesh Narayan Singh, History of Hindu Mathematics, 1935, repr. Bharatiya Kala Prakashan, Delhi, 2004
21. George Gheverghese Joseph, The Crest of the Peacock, Penguin Books, London & New Delhi, 2000
22. J. McKim Malville & Lalit M. Gujral, Ancient Cities, Sacred Skies: Cosmic Geometries and City Planning in Ancient India, IGNCA & Aryan Books International, New Delhi, 2000).
23. Clemency Montelle, Chasing Shadows: Mathematics, Astronomy and the Early History of Eclipse Reckoning, Johns Hopkins University Press, 2011
24. Anisha Shekhar Mukherji, Jantar Mantar: Maharaja Sawai Jai Singh's Observatory in Delhi, AMBI Knowledge Resources, New Delhi, 2010
25. Thanu Padmanabhan, (ed.), Astronomy in India: A Historical Perspective, Indian National Science Academy, New Delhi & Springer (India), 2010
26. Acharya Prafulla Chandra Ray, A History of Hindu Chemistry, 1902, republ., Shailbya Prakashan Bibhag, centenary edition, Kolkata, 2002
27. R. Balasubramaniam, Delhi Iron Pillar: New Insights, Indian Institute of Advanced Study, Shimla & Aryan Books International, New Delhi, 2002
28. R. Balasubramaniam, Marvels of Indian Iron through the Ages, Rupa & Infinity Foundation, New Delhi, 2008
29. Anil Agarwal & Sunita Narain, (eds), Dying Wisdom: Rise, Fall and Potential of India's



Traditional Water-Harvesting Systems, Centre for Science and Environment, New Delhi, 1997

30. Fredrick W. Bunce: The Iconography of Water: Well and Tank Forms of the Indian Subcontinent, DK Printworld, New Delhi, 2013

   Anand Gupta. Ajay Kumar Singh S. Singh