



ROYAL GLOBAL UNIVERSITY
— GUWAHATI —

THE INDIAN KNOWLEDGE SYSTEM CELL

**COURSE STRUCTURE & SYLLABUS
(BASED ON NATIONAL EDUCATION POLICY 2020)**

FOR

INTRODUCTION TO INDIAN KNOWLEDGE SYSTEM

W.E.F

AY - 2024 – 25

Preamble

In view of the importance accorded in the NEP 2020 to rooting our curricula and pedagogy in the Indian context and in the corpus of the Indian Knowledge System, the following points were taken into consideration while making the syllabus for Indian Knowledge System in UG-level following the UGC guidelines of Learning Outcome Based Curriculum Framework. The Indian Knowledge System (IKS) undergraduate course is designed to achieve a set of comprehensive learning outcomes that equip students with a deep understanding of the diverse intellectual heritage of India. Upon completing the course, students should be able to:

1. **Demonstrate a Holistic Understanding:** Display a comprehensive grasp of the multidimensional aspects of Indian knowledge systems, spanning philosophy, science, arts, literature, mathematics, social sciences, and health sciences and recognize their interconnectedness.
2. **Engage with Primary Texts:** Analyze and interpret primary texts from various historical periods, demonstrating the ability to critically engage with classical Indian texts and their relevance to contemporary contexts.
3. **Contextualize Historical Development:** Describe the evolution of Indian knowledge systems over time, identifying key historical landmarks, influences, and transformations that have shaped India's intellectual landscape.
4. **Synthesize Interdisciplinary Insights:** Apply interdisciplinary approaches to synthesize insights from different branches of Indian knowledge, fostering a holistic perspective that transcends disciplinary boundaries.
5. **Critically Evaluate Concepts and Ideas:** Evaluate key philosophical, scientific, artistic, and social concepts within the Indian context, demonstrating critical thinking and the capacity to assess their cultural, social, and ethical implications.
6. **Explore Cultural Diversity:** Examine the diversity within Indian knowledge systems, recognizing regional, linguistic, and sectarian variations, while appreciating the unity that underlies this diversity.
7. **Articulate Comparative Perspectives:** Compare and contrast Indian knowledge systems with global traditions, identifying similarities, differences, and areas of cross-cultural influence.
8. **Apply Ethical and Moral Insights:** Apply ethical and moral insights derived from Indian knowledge systems to real-world challenges, demonstrating an understanding of their practical relevance.

9. **Contribute to Interdisciplinary Discourse:** Contribute to interdisciplinary academic and public discourse by sharing insights and perspectives that bridge the gap between Indian knowledge systems and other fields of study.
10. **Nurture Lifelong Learning:** Develop a genuine passion for lifelong learning by embracing the rich legacy of Indian knowledge systems, encouraging continuous exploration and discovery beyond the formal course.

By achieving these learning outcomes, students of the IKS undergraduate course will not only gain a deep appreciation for India's intellectual heritage but also be prepared to engage critically, ethically, and thoughtfully with the globalized world and its challenges.

1. Introduction to The Indian Knowledge System

The Indian Knowledge System Syllabus for the Undergraduate Course is designed to provide students with a comprehensive and holistic understanding of the rich and diverse knowledge traditions that have evolved within the Indian subcontinent. This syllabus seeks to explore the multidimensional aspects of India's intellectual heritage, encompassing ancient, medieval, and modern contributions across various disciplines such as philosophy, science, arts, literature, spirituality, and social sciences.

Recognizing the profound influence of India's cultural, philosophical, and scientific legacy on global thought, this syllabus aims to foster a deep appreciation for the indigenous wisdom that has shaped not only the subcontinent's history but also continues to resonate in contemporary times. Through a balanced combination of theoretical study, practical engagement, and critical analysis, this syllabus endeavors to equip students with the tools to engage with and interpret the intricacies of the Indian knowledge system.

By delving into the texts, concepts, practices, and methodologies that have been integral to Indian knowledge traditions, students will gain insights into the interconnectedness of various fields of study. This syllabus also encourages the exploration of the dynamic interactions between tradition and modernity, enabling learners to appreciate the enduring relevance of Indian thought while navigating the complexities of our rapidly changing world.

Furthermore, this syllabus emphasizes the significance of interdisciplinary learning, inviting students to bridge gaps between different domains of knowledge and fostering a holistic understanding of the Indian intellectual landscape. Through a blend of historical perspectives, contemporary interpretations, and interactive learning experiences, students will be empowered to engage in nuanced discussions, critical debates, and innovative inquiries that contribute to a deeper comprehension of the Indian knowledge system.

Ultimately, the Indian Knowledge System Syllabus for the Undergraduate Course aspires to nurture open-mindedness, curiosity, and a lifelong commitment to learning among students. By exploring the multifaceted dimensions of Indian knowledge, this syllabus seeks to instill a sense of cultural pride, intellectual curiosity, and a spirit of inquiry that transcends disciplinary boundaries and enriches the educational journey of each student.

Proposed Course Structure Under IKS

Students of UG programs will study the following courses under IKS:

Indian Knowledge System (IKS)	Nature of the Course	Credits Assigned
Semester – I	Introduction to Indian Knowledge System - I	3
Semester – II	Introduction to Indian Knowledge System - II	3
Semester – III/IV	Major/Core course linked to IKS	4
	Total	10
<i>Note: Minimum Credits to be acquired by the students is 8 by 4th Semester</i>		

Semester – I		
Paper I/Subject Name: Introduction to Indian Knowledge System - I		
Subject Code: IKS992K101	L-T-P-C – 2-1-0-3	
Credit Units: 3	Course Level: 100	
Scheme of Evaluation: Summative Assessment - 70% + Formative Assessment -30%		
Credit Distribution (NCH)		
Lecture/Tutorial (Hours)	Practical (Hours)	Experiential Learning (Hours)
60	0	30

Course objectives:

This Foundation course is designed to present an overall introduction to all the streams of IKS relevant to the UG program. It would enable students to explore the most fundamental ideas that have shaped Indian Knowledge Traditions over the centuries.

Course Outcomes:

On completion of this course students will be able to :

CO	Contents	BT Level
CO ₁	Recall the rich heritage of Indian knowledge systems	BT level 1
CO ₂	Describe the contribution of Indian knowledge systems to the world	BT level 2
CO ₃	Demonstrate knowledge of sociocultural and ethnolinguistic diversity that constitutes the soul of Bharatvarsha	BT level 2
CO ₄	Apply traditional knowledge and techniques in day-to-day life	BT level 3
CO ₅	Distinguish knowledge traditions that originated in the Indian subcontinent	BT level 3

Module	Course Contents	Periods
I	<p>Introduction to Indian Knowledge Systems (IKS): About Indian Knowledge System; Definition of Indigenous/ Traditional Knowledge; Scope, and Importance of Traditional Knowledge.</p> <p>Ancient India- Bharat Varsha: People of Ancient Bharat Varsha; Our great natural heritage: The great Himalayas and the rivers; The civilizations of the Sindhu-Ganga valley, and the Brahmaputra valley; Our coastal plains; Our Nature: Forests and Minerals; Ancient Indian Traditional Knowledge and Wisdom about nature and climate.</p>	15

Module	Course Contents	Periods
II	<p>Indian Heritage of Knowledge: Ancient Indian Knowledge: The <i>Vedas</i> and its components-the <i>Vedangas</i> Ancient Indian books and treaties: The <i>Sastras</i>.; The Great Indian Epics: The Ramayana and The Mahabharata Epics and religious treaties of ancient Assam: Introduction to Madhav Kandali's <i>Ramayan</i> and Srimanta Sankardev's <i>Dasam Skandha Bhagavat</i> of the Puranas; Ancient Traditional Knowledge-The <i>Agamas</i> ; The ancient Buddhist knowledge: <i>Tripitaka: Vinaya, Sutta and Abhidhamma Pitaka</i></p> <p>Languages and language studies in India: What is linguistics?; Script and Language; Alphabet of the Indian; languages <i>Varnamala</i>: Origin, Evolution, and phonetic features; Languages of India; Important texts of Indian languages: Skills <i>Siksha</i>, Expression/Pronunciation-<i>Nirukta</i>, Grammer-<i>Vyakarana</i>, Poetic rhythm- <i>Chandas</i>;Paninian Grammar: A Brief Introduction</p> <p>Introduction to Fine Arts and Performing Arts of India: Ancient Indian classical music and dance forms: The Science of Dramas- <i>Natyasastra</i> and the Science of Music-<i>Gandharva-Veda</i>; Aesthetics in Indian Art and Culture; Folk music and traditional dance forms of the Northeast.</p>	15
III	<p>Indian Science & Technology: Ancient India's contribution to Mathematics - Number System. Algebra and Arithmetic, Geometry and Trigonometry; Origin of Decimal system in India; nomenclature of numbers in the Vedas. Zero and Infinity. Sulba-sutras. Contribution of Brahmagupta and Sridhar Acharya to Mathematics. Important texts of Indian mathematics.</p> <p>Indian Astronomy: Planetary System. Motion of the Planets; Velocity of Light; Eclipse. Astronomy. Navagrahas. Important works in Indian Astronomy. Aryabhata and Nilakantha: Contribution to Astronomical Studies</p> <p>Indian Metal Works: Mining Techniques. Types of Metals. Tools & Techniques for Metal Smelting with examples. Metalworks in pre- modern India: Special reference to NE India.</p>	15
IV	<p>Contribution of Ancient India to Health Sciences: Traditional Indigenous systems of medicines in India: - <i>Ayurveda</i> and <i>Yoga</i>; Elements of <i>Ayurveda: Gunas and Doshas, Pancha Mahabhuta</i> and <i>Sapta-dhatu</i>; Concept of disease in <i>Ayurveda</i>; Ayurvedic lifestyle practices: <i>Dinacharya</i> and <i>Ritucharya</i>; Important Ayurvedic Texts; Hospitals in Ancient India; <i>Ayurveda</i>: Gift of India to the modern world.</p>	15
Total		60

Textbooks Books:

1. Mahadevan, B., Bhat Vinayak Rajat, Nagendra Pavan RN. (2022), *Introduction to Indian Knowledge System: Concepts and Applications*. PHI Learning Private Ltd.

2. Mukul Chandra Bora, *Foundations of Bharatiya Knowledge System*. Khanna Book Publishing

Reference Books:

1. Baladev Upadhyaya, *Samskrta Śāstrom ka Itihās*, Chowkhambha, Varanasi, 2010.
2. D. M. Bose, S. N. Sen and B. V. Subbarayappa, Eds., *A Concise History of Science in India*, 2nd Ed., Universities Press, Hyderabad, 2010.
3. Astāngahrdaya, Vol. I, *Sūtrasthāna and Śarīrasthāna*, Translated by K. R. Srikantha Murthy, Vol. I, Krishnadas Academy, Varanasi, 1991.
4. Dharampal, *The Beautiful Tree: Indian Indigenous Education in the Eighteenth Century*, Dharampal Classics Series, Rashtrathana Sahitya, Bengaluru, 2021.
5. J. K. Bajaj and M. D. Srinivas, *Indian Economy, and Polity in Eighteenth-century Chingalpattu*, in J. K. Bajaj ed., *Indian Economy and Polity*, Centre for Policy Studies, Chennai, 1995, pp. 63-84.

The experiential learning sessions may include:

- Field Visits: Organizing visits to historical sites, museums, traditional craft centers, and other places relevant to Indian knowledge systems.
- Interactive Sessions: Engaging students in discussions with experts and practitioners in various fields of Indian knowledge systems to gain insights and practical knowledge.
- Online Lecture Series: Providing the students with online lectures by distinguished experts in the field of the Indian Knowledge System.
- Hands-on Activities: Providing opportunities for students to participate in activities related to traditional arts, crafts, music, dance, agriculture, etc., to understand the practical aspects of Indian knowledge systems.
- Practical Demonstrations: Conducting workshops or sessions to demonstrate traditional practices, such as yoga, Ayurveda, Vastu Shastra, etc., for the students.

Semester – II		
Paper II/Subject Name: Introduction to Indian Knowledge System - II		
Subject Code: IKS992K201	L-T-P-C – 2-1-0-3	
Credit Units: 3	Course Level: 100	
Scheme of Evaluation: Summative Assessment - 70% + Formative Assessment -30%		
Credit Distribution (NCH)		
Lecture/Tutorial (Hours)	Practical (Hours)	Experiential Learning (Hours)
60	0	30

Course objectives:

This Foundation course is designed to present an overall introduction to all the streams of IKS relevant to the UG program. It would enable students to explore the most fundamental ideas that have shaped Indian Knowledge Traditions over the centuries.

Course Outcomes:

On completion of this course, students will be expected to –

CO	Contents	BT Level
CO ₁	Recall traditional Indian knowledge traditions constituting Indian culture	BT level 1
CO ₂	Summarize differences between classical literature in Sanskrit and other Indian languages	BT level 2
CO ₃	Compare knowledge traditions originating in NE India	BT level 2
CO ₄	Appreciate the contribution of Indian Knowledge Systems to the world	BT level 3

Module	Course Contents	Periods
I	<p>Indian Classical Literature Indian Classical Literature: A Brief Introduction; Ancient Indian Spritual Poetics-<i>Kavya</i>: Contribution of Kalidasa</p> <p>Diversity and Indian Culture: Diversity and Indian Culture; Indigenous Faith and Religion; Preservation of culture and indigenous knowledge</p> <p>The Purpose of Knowledge: Understanding Self-Awareness and Spirituality; Indian concept and purpose of Knowledge and Education; Understanding Spirituality and Materialism: <i>Para</i> and <i>Apara Vidya</i></p>	15

Module	Course Contents	Periods
II	<p>Methodology of Indian Knowledge System: <i>Shruti</i> and <i>Smriti</i> traditions; Introduction to <i>Shastras</i>; Manuscriptology: The art and science of documenting knowledge; Repositories of ancient manuscripts with special reference to the Northeast India.</p> <p>Indian Architecture and Town Planning: Introduction ancient Indian architecture; <i>Sthapatya-Veda</i>: An Introduction; Indigenous tools & techniques for town planning & Temple Architecture. Lothal, Mohan Jo Daro; Temple Art: Lepakshi Temple, Jagannath Puri Temple, Konark Sun Temple; Vernacular architecture of Assam: Special reference to Brahmaputra Valley</p>	15
III	<p>Indian Agriculture: Agriculture: Significance in Human Civilization; Sustainable Agriculture; Historical significance of agriculture and sustainable farming in India; Step Cultivation of India: Special reference to Northeast India; Wet rice cultivation of Assam.</p> <p>Indian Textiles: What is Textile?; Tradition of cotton and silk textiles in India; The historical contribution of textile and weaving to the Indian economy; Varieties of textiles and dyes developed in different regions of India with special reference to Northeast India</p>	15
IV	<p>Indian Polity and Economy: Understanding Kingdom and Chiefdom; Role of a king; The Indian idea of a well-organized polity and flourishing economy; The <i>Chakravarti</i> System: Administrative System of Ancient Bharatvarsha; Village administrative system: Northeast India; <i>Arthashastra</i>: Brief synopsis</p> <p>The outreach of Indian Knowledge System across Geographical Boundaries: Indian Languages; Scripts; Linguistics; Ayurveda; Yoga and Meditation; Textile; Decimal value place system-based arithmetic, Algebra and Astronomy</p>	15
Total		60

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