

4 + 1 Integrated UG and PG Programme

School	School of Pedagogical Sciences			
Programme	4 + 1 Integrated UG and PG Programme			
Course Title	Educational Technology and Digital Learning			
Course Designer	Dr. Ismail Thamarasseri			
Course Type	MDC (Multidisciplinary Course	e)		
Course Level	100-199			
Course Code	MG1MDCUPS101			
Course Overview	This course aims to equip students with the knowledge and skills necessary to effectively integrate technology into educational settings. It covers a range of digital tools and pedagogical strategies, emphasizing the design and implementation of technology-enhanced learning environments.			
Semester	1	Cre	dit	3
Total Student Learning	Instructional hours for theory Instructional hours for practical/lab work/fieldwork			
Time	45 hours 30 hours			30 hours
Pre-requisite	 Proficiency in using common software applications Familiarity with internet navigation, email communication, and basic troubleshooting of computer-related issues. Basic knowledge of how students learn, including cognitive processes and motivational factors in education. 			

СО	Expected Course Outcome	Learning	PSO
No.	Upon completion of this course, students will be able to;	Domains	No.
1	<i>Illustrate</i> the evolution and impact of educational technology.	U	1,4
2	<i>Utilize</i> a variety of digital tools to enhance teaching and learning.	А	2,3,4
3	<i>Develop</i> comprehensive lesson plans that incorporate educational technology.	А	1,2,4
4	<i>Evaluate</i> the effectiveness of digital learning strategies.	Е	1,4,6
5	Adapt technology-integrated instructional strategies.	С	1,2,4
6	<i>Solve</i> challenges related to digital learning in educational contexts.	С	1,4,5,6

*(Learning Domains: Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S)) COURSE CONTENT

	1	
Module 1: Foundations of Educational Technology	15 Hours	
Introduction to Educational Technology: Definition and Scope		
 Technology in Education: A Historical Perspective 		
Theoretical Frameworks: Behaviourism, Cognitivism, Constructivism	vism	
• Current Trends and Future Directions: Emerging Technologies in	Education.	
Principles of Instructional Design: ADDIE model		
Module 2: Digital Tools and Resources for Education	15 Hours	
Interactive Whiteboards and Smart Classrooms		
Learning Management Systems (LMS)		
• Educational Apps and Software: Tools for content creation and collaboration		
• Open Educational Resources (OER): Finding and utilizing OER		
Virtual and Augmented Reality in Education		
Module 3: Designing Technology-Enhanced Learning	15 Hours	
• E-Content Development: SWAYAM, MOOC		
Blended and Flipped Classroom Models		
• Creating Digital Content: Videos, interactive modules.		
Implementing and Assessing Digital Learning: Digital assessment	t tools.	
• Addressing Challenges in Digital Learning: Digital divide	and accessibility,	
managing screen time and online behaviour		

Mode of Transaction	 Classroom activities: Lectures, discussions, tool demonstrations. Field activities: Case studies, real-world applications. Lab-based activities: Hands-on workshops, content creation exercises.
Mode of Assessment	 Quizzes Tool evaluation reports Presentations Peer-reviewed projects Final exam

Learning Resources

- Bates, A. W. (2015). *Teaching in a Digital Age*. Open Textbook.
- Picciano, A. G. (2017). *Theories and Frameworks for Online Education: Seeking an Integrated Model*. Distance Education.
- Selwyn, N. (2011). *Education and Technology: Key Issues and Debates*. Bloomsbury Academic.
- Thamarasseri, I. & Parey, M.A. (2014). *Instructional Technology*. New Delhi: APH Publishing Corporation
- Thamarasseri, I. (2018). *Technology & Innovations in Education*. New Delhi: Wisdom Press

Relevance of Learning the Course/ Employability of the Course

Understanding and effectively using educational technology is crucial in modern educational environments. This course prepares students to become proficient in integrating technology into their learning, enhancing their employability as educators, instructional designers, and educational technologists. They will be equipped to handle contemporary educational challenges, making them valuable assets in schools, colleges, and educational institutions globally.



4 + 1 Integrated UG and PG Programme

School	School of Pedagogical Sciences		
Programme	4 + 1 Integrated UG and PG Programme		
Course Title	Environmental Policy and Governance		
Course Designer	Dr. Muhammed K. V.		
Course Type	MDC (Multidisciplinary Course)		
Course Level	100-199		
Course Code	MG1MDCUPS102		
Course Overview	This course provides an in-depth ex- making processes and governance international levels. Students will and evaluating environmental poli- law, regulatory frameworks, sta- development, and recent developm This course also examines the ro- institutions in addressing global climate change, biodiversity loss, and	e structures a explore form cies. Topics keholder eng nents in envir le of internat environmenta nd pollution.	at local, national, and ulating, implementing, include environmental gagement, sustainable conmental governance. tional agreements and l challenges, such as
Semester	1	Credit	3
Total Student	Instructional hours for theory	or theory Instructional hours for practical/lab work/field work	
Learning Time	30 hours	30 hours	
Pre-requisite	Basic Knowledge in Environme		
	Observation Skills and Analytical Skills		

CO No.	Expected Course Outcome	Learning Domains	PSO No.
	Upon completion of this course, students will be able to;		
1	Understand the key concepts and frameworks in environmental policy and governance.	Understand	

2	Analyse and critique environmental policies and their	Analyse
	implementation.	
3	Evaluate the role of various stakeholders in	Evaluate
	environmental governance.	
4	Apply theoretical knowledge to real-world	Apply
	environmental issues and case studies.	

*(Learning Domains: Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S))

Module 1: Fundamentals of Environmental Policy and Governance	Hours	CO No
• Environment: Concept, Meaning, Types, and Components of Earth's environment	T: 10 P: 10	
• Environmental Policy: Concept and Definition, Key Components of Environmental Policies, Challenges and		
 Considerations in Environmental Policy Environmental Governance: Meaning, Definition, 		
Significance, Types, Principles of Environmental Governance,		
Components of Environmental Governance, Challenges in		
Environmental Governance, Future Directions in		
Environmental Governance	Hanna	
Module 2: Global and National Environmental Policies Climate Change Policies	Hours T: 10	
Climate Change PoliciesAir Quality Policies	P: 10	
 Water Quality Policies 	1110	
 Biodiversity and Conservation Policies 		
Waste Management Policies		
Sustainable Development Policies		
Environmental Justice Policies		
Natural Resource Management Policies		
Energy Policy		
Marine and Coastal Policy		
Module 3: Environmental Governance	Hours	
• International and National Organisations related to Environment	T: 10 P: 10	
• International and National Agreements for environmental conservations		
Environmental Initiatives of UNO		
World & National Commissions on Environment		
 Environmental conferences and conventions 		
• Constitutional and Legal Provisions on the Environment		
Agencies of Environmental Conservation		
Recent developments in environmental conservations.		

Mode of	Classroom activities: Lectures, Discussions, Debates, Case Study Analysis		
Transaction	Field activities: Field trip to a local environmental project (e.g., waste management facility, conservation area). Follow up with a reflective writing or group presentation.		
	Lab-based activities: Familiarise environmental related measuring		
	instruments and tools.		
Mode of	Exams and Quizzes		
Assessment	Written Assignments		
	Group Projects		
	Presentations		
	Participation and Engagement		
	Practical and Experiential Learning		

- 1. "Environmental Policy: New Directions for the Twenty-First Century" by Norman J. Vig and Michael E. Kraft
- 2. "Principles of Environmental Policy: Planning, Implementation, and Evaluation" by Mazmanian and Kraft
- 3. "Environmental Governance: Policy, Politics, and Practice" by J.P. Evans
- 4. "Governing the Environment: Politics, Policy, and Organization" by Spaargaren, Mol, and Buttel
- 5. "Climate Change and Society: Sociological Perspectives" by Riley E. Dunlap and Robert J. Brulle

Relevance of Learning the Course/ Employability of the Course

Learning the course "Environmental Policy and Governance" is vital for addressing global challenges like climate change and sustainability, providing students with expertise on how policies can mitigate environmental impacts and promote sustainable development. The course offers a comprehensive view essential for solving complex environmental issues. Students develop skills in designing, implementing, and evaluating policies, which are crucial for strategic planning and policy analysis. Understanding regulatory frameworks is key for careers in compliance, advocacy, and corporate sustainability, while the inclusion of environmental justice themes underscores the importance of equitable policy-making. Students also enhance their collaborative skills, learning to engage with diverse stakeholders, which is crucial for effective environmental governance. Employability opportunities are broad, including roles in government agencies, sustainability consulting, corporate CSR, and NGOs focused on conservation and sustainability. Specialized roles such as environmental consultants, policy analysts, and sustainability managers are available, alongside academic and research positions in universities and think tanks. The course further enhances skills in analytical thinking, communication, and project management, while professional networking through industry connections, conferences, and workshops supports career growth and opportunities.



4+1 Integrated UG and PG Programme

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School	School of Pedagogical Sciences	5		
Programme	4 + 1 Integrated UG and PG Programme			
Course Title	Indian Schools of Philosophy and Philosophical Counselling			
Course Designer	Dr. Smitha S			
Course Type	MDC (Multidisciplinary Course)			
Course Level	100-199			
Course Code	MG1MDCUPS103			
Course Overview	This course aims to provide students with a comprehensive understanding of the major Indian schools of philosophy, their historical development, and their impact on various aspects of life and thought. It emphasizes critical thinking, analytical reasoning, and the application of philosophical concepts to contemporary issues.			
Semester	1	Credit	3	
Total Student Learning Time	Instructional hours for theory	7	ctional hours for /lab work/fieldwork	
	45 hours		30 hours	
Pre-requisite	 Proficiency in critical reading and writing. Familiarity with basic philosophical concepts and historical context. Basic knowledge of Indian culture and history. 			

СО	Expected Course Outcome	Learning	PSO
No.	Upon completion of this course, students will be able to;	Domains	No.
1	Describe the evolution and key concepts of major Indian schools of philosophy.	Cognitive	
2	Analyze the philosophical arguments and theories within	Cognitive,	
2	Indian schools of philosophy.	Affective	
3	Evaluate the relevance and application of Indian schools	Cognitive	
5	of philosophy in contemporary contexts.	Cognitive	
4	Synthesize insights from different Indian schools of	Cognitive,	
4	philosophy to address modern philosophical questions.	Affective	
5	Develop and present well-reasoned arguments based on	Cognitive,	
5	the philosophical traditions of India.	Psychomotor	
6	Reflect on the ethical and social implications of Indian	Cognitive,	
6	philosophical thought.	Affective	

COURSE CONTENT

Module 1: Introduc	tion to Indian Philosophy	10 Hours (T)
Historical dev	d scope of philosophy; significance velopment and major periods in Ind orthodox (Astika) and heterodox (N	ian philosophical thought.
Module 2: Orthodo	x Schools (Astika)	15 Hours (T)+ 15 Hours (P)
 Sankhya: Du Yoga: Patanj Nyaya: Logio Vaisheshika Mimamsa: R 	y concepts, major texts, and leading nalism, prakriti and purusha, and me ali's Yoga Sutras, eight limbs of yo c and epistemology, the Nyaya Sutr c Categories (padarthas), atomism, a citualism, the philosophy of dharma	etaphysical concepts. ga, and practice. as. and natural philosophy.
 Philosophical Counselling- Practical Sessions Module 3: Heterodox Schools (Nastika) 20 Hours (T)+ 15 Hours (P) 		
 Buddhism: Four Noble Truths, the Eightfold Path, schools of thought (Theravac Mahayana). Jainism: Anekantavada, Syadvada, and ethics of non-violence (ahimsa). Carvaka: Materialism and skepticism, critique of religion and ethics. Ajivikas: Determinism and the philosophy of niyati (fate). Philosophical Counselling- Practical Sessions 		
 Mode of Transaction Classroom activities: Discussion Circles/Personal Identity and Self- Understanding Sessions Role-Playing Scenarios/Case Study Analysis Peer Counselling Sessions Field activities: Community Engagement Projects/ Workshops on Coping with Life Transitions/ Case studies and real-world applications. 		essions

Community Engagement Projects/ Workshops on Coping with Life Transitions/ Case studies and real-world applications. Lab-based activities: Philosophical debates Mode of Assessment Portfolio Development on Personal Identity and Self-Understanding Presentations/Seminar/Assignment Quizzes/MCQ Counselling Session Reports Final exam

Learning Resources

- 1. Dasgupta, S. (1922-1955). *A History of Indian Philosophy* (Vols. 1-5). Motilal Banarsidass.
- 2. King, R. (1999). *Indian Philosophy: An Introduction to Hindu and Buddhist Thought*. Edinburgh University Press.

- 3. Chatterjee, S., & Datta, D. (1984). *An Introduction to Indian Philosophy*. University of Calcutta.
- 4. Mohanty, J. N. (2000). *Classical Indian Philosophy*. Rowman & Littlefield Publishers.
- 5. Radhakrishnan, S., & Moore, C. A. (1957). *A Sourcebook in Indian Philosophy*. Princeton University Press.

Books on Philosophical Counselling:

- 1. Raabe, P. B. (Ed.). (2001). Philosophical Counseling: Theory and Practice. Praeger.
- 2. Marinoff, L. (1999). *Plato Not Prozac! Applying Eternal Wisdom to Everyday Problems*. HarperCollins.
- 3. Cohen, E. D. (2003). *The Philosophy Clinic: Practical Wisdom at Work*. Mayfield Publishing Company.
- 4. Koestenbaum, P. (1976). *The Counseling Philosopher: Philosophical Practice, Theory, and Research.* Lexington Books.

Relevance of Learning the Course/ Employability of the Course

Studying Indian philosophy and philosophical counselling cultivates critical thinking, cultural sensitivity, and ethical reasoning. This interdisciplinary approach equips graduates to tackle complex issues in various professions. They can pursue academic roles, contribute to research, and work in counselling, education, corporate, and public sectors. Their skills are valuable in fostering personal growth, addressing societal challenges, and promoting well-being. Overall, this course enhances employability while nurturing individuals' intellectual and ethical capacities.



4 + 1 Integrated UG and PG Programme

School	School of Pedagogical Sciences			
Programme	4 + 1 Integrated UG and PG			
Course Title	Science of Science Education			
Course Designer	Dr. Sibu G. Netto			
Course Type	MDC			
Course Level	100-199			
Course Code	MG1MDCUPS104			
Course Overview	The Science Education course is a transformative experience for bachelor's degree students passionate about teaching science. It offers an in-depth exploration of effective science teaching methodologies, curriculum development, and technology integration in education. This course equips aspiring educators with the skills to inspire and engage students through interactive and innovative teaching strategies. Covering both theoretical foundations and practical applications, it prepares students to foster curiosity, critical thinking, and a love for science in their future classrooms. Embark on this journey to become a catalyst for change in science education, shaping the next generation's minds.			
Semester	1	Credit	3	
Total Student Learning Time	Instructional hours for theory		ctional hours for lab work/field work	
	30	30		
Pre-requisite	are passionate about teaching and le no prior teaching experience, just a educational methods and technolo focus on creativity and an open	d for bachelor's degree students who learning science. This course requires a readiness to engage in innovative logy integration in learning. With a mind, you're set to inspire future act science education.		

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains	PSO No.
	Upon completion of this course, students will be able to;		
1	Gain a Comprehensive Understanding of Science Education	U	
2	Elaborate on Planning and Evaluation Techniques in Science Education	Е	
3	Implement Diverse Classroom Strategies for Effective Science Teaching	S	
4	Utilise Support Systems and Resource Materials Efficiently	А	
5	Design and Implement Effective Science Education Curricula	С	
6	Foster Inquiry and Critical Thinking Skills	An	

*(Learning Domains: Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S))

Module 1	Hours	CO No
Science Education: Definitions of Science. Science as a process and product. Aims and Objectives of Teaching Science. Taxonomy of Educational Objectives. General Principles of Curriculum Development. Approaches to Curriculum Organisation.	15	1
Module 2	Hours	CO No
Planning and Evaluation in Science Education : Planning - Year Plan, Unit Plan, Lesson Plan. Evaluation - Achievement Test Construction and Administration. Standardised Test. Qualities of a good measuring tool. Continuous Evaluation (CE), Terminal Evaluation (TE)	15	2
Module 3	Hours	CO No
Classroom Strategies for Science Education: Lecture Method, Demonstration Method, Historical Method, Heuristic Method, Problem Method, Project Method, Individualised Laboratory Method, Supervised Study, Dalton Plan, Cooperative Learning, Buzz Session, Brain Storming,	15	3
Module 4	Hours	CO No
Support System and Resource Materials for Science Education: Science Laboratory, Science Library, Syllabus, Textbook, Resource Unit, Workbook, Teachers Handbook, Reference Books, Supplementary Readers, Audio-Visual Aids, Chalk/Black Boards, Charts, Models, Projectors	15	4

(Slide/OHP/CRT/LCD/DLP), Improvised Aids. Audio/ Video	
Lessons. MOOCs.	

Mode of Transaction	Classroom activities: Lecture, Discussion, Cooperative Learning, Buzz Session, Brain Storming Field activities: Lab Visit, Library Visit, Project work Lab-based activities: Demonstration Classes	
Mode of Assessment	Assignment, Seminar, Internal Examination	

- 1. Rajan, K. M., Sindhu, B. S., George, J., Netto, S. G., & Sajan, R. K. (2008). *Teaching of physical science: Theory, perspectives and practice*. St. Joseph's Training College.
- 2. Mathews, J. (Ed.) (2008). *Teaching of natural science: Theory, perspectives and practice.* St. Mary's Training College.
- 3. Rajan, K. M (2004). Science of Science Education. St. Joseph's Training College.

Relevance of Learning the Course/ Employability of the Course

Embark on a transformative journey with our cutting-edge Science Education course, meticulously designed for those who aspire to shape the future through and integrate modern technology in education; you will be at the forefront of educational excellence. Master diverse teaching strategies and the art of curriculum development to harness the power of classroom resources to bring science to life for your students. Whether you aim to light up a traditional classroom, lead online learning platforms, or contribute to educational research and policy-making, this course equips you with the skills and knowledge to thrive in various educational landscapes. Join us and be part of a community of passionate educators committed to making a difference. With this course, you are not just preparing for a career in education; you are setting the stage for a lifetime of impact, inspiring curiosity and discovery in the minds of students across the globe. Your journey to becoming a sought-after educator in the science education sector starts here.



4 + 1 Integrated UG and PG Programme

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School	School of Pedagogical Sciences			
Programme	4 + 1 Integrated UG and PG Programme			
Course Title	Digital Communication and social r	nedia		
Course Designer	Dr. Muhammed K. V.			
Course Type	MDC (Multidisciplinary Course)			
Course Level	100-199			
Course Code	MG2MDCUPS105			
Course Overview	The course "Digital Communication and Social Media" focuses on the principles, strategies, and practical applications of digital communication technologies and social media platforms in contemporary society. It is designed to give students an in-depth understanding of how digital communication transforms personal, professional, and public spheres.			
Semester	2	Credit	3	
Total Student	Instructional hours for theory	Instructional hours for practical/lab work/field work		
Learning Time	45 hours	30 hours		
Pre-requisite	 Fundamental understanding of digital technologies and internet usage Ability to use computers and basic software applications Basic knowledge of how to navigate and use major social media platforms 			

CO No.	Expected Course Outcome	Learning Domains	PSO No.
	Upon completion of this course, students will be able to;		
1	Understand and apply various applications of digital platforms and social media in day-to-day life.	Understand & Apply	
2	Create and manage high-quality digital content across various social media channels.	create	

3	Navigate ethical and privacy issues in digital	Evaluate	
	communication.		
4	Develop effective digital communication strategies	Create	
	tailored to different platforms and audiences.		

*(Learning Domains: Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S))

Μ	odule 1: Basics of Communication	Hours	CO No
•	Communication: Meaning, characteristics of communication,	T: 15	
	Elements of Communication, Functions of Communication,	P: 10	
	Communication Cycle.		
•	Types of Communication: Verbal and Non-verbal, Formal		
	and Informal, Intrapersonal and Interpersonal		
	Communication		
•	Group Communication: Meaning, Multimedia, Mass		
	Communication, Mass Media		
٠	Barriers to effective communication		
Μ	odule 2: Digital Communication	Hours	
•	Digital Communication: Meaning, definition, origin and	T: 15	
	development of digital communication, Principles of	P: 10	
	Effective Digital Communication		
•	Digital Technologies: Internet, Mobile Devices, Computers		
	and Software, etc.		
•	Communication Platforms: Social media, Messaging Apps,		
	Email, Video Conferencing, Blogs and Websites etc.		
•	Applications of Digital Communication: Personal		
	Communication, Professional Communication, News and		
	Publications, Marketing and Advertising, Public Relations,		
	Education etc.		
•	Trends in Digital Communication: Artificial Intelligence and		
	Automation, Interactive Content, Augmented Reality (AR)		
	and Virtual Reality (VR), etc.		
•	Digital Initiatives in Higher Education		
•	Challenges in Digital Communication		
٠	Recent developments in Digital communication		
Μ	odule 3: Social media	Hours	
٠	Introduction to Social Media Communication: Meaning,	T: 15	
	Definition and Scope, History and Evolution	P: 10	
٠	Social Media Platforms and Tools: Purposes and Benefits,		
	Social Media Strategies, Audience Engagement and		
	Community Building, social media in day-to-day life.		
•	Ethical Considerations: Transparency and Honesty, Privacy		
	and Confidentiality, Authenticity and Originality, Cultural		
	Sensitivity, Responsible Influencing, Challenges and Issues		
•	Legal Considerations: Intellectual Property Rights, Privacy		
	Laws, Advertising and Marketing Regulations, Content		
	Moderation and Liability, etc.		

Mode of	Classroom activities: Lectures and Demonstrations, Interactive			
Transaction	Workshops, Group Projects and Collaborations, Case Studies and Real-			
	World Scenarios, Discussion Forums and Online Communities, Simulations			
	Field activities: Content Creation Projects, Online Surveys, Public			
	Interactions and discussions			
	Lab-based activities: Social Media Platform Simulation, Content Creation			
	and Editing			
Mode of	Exams and Quizzes			
Assessment	Written Assignments			
	Group Projects			
	• Presentations			
	Participation and Engagement			
	Practical and Experiential Learning			

- "Digital Communication: A Practical Guide for Media Professionals" by Steven M. C. Smith
- 2. "The Digital Mindset: What It Really Takes to Thrive in the Age of Data, Algorithms, and AI" by Maarten Vanneste
- 3. Contagious: How to Build Word of Mouth in the Digital Age" by Jonah Berger

Relevance of Learning the Course/ Employability of the Course

Learning this course is very relevant in today's digitally interconnected world, where digital platforms play a central role in personal, professional, and academic communication. Understanding digital communication strategies and social media dynamics allows individuals and organisations to effectively reach and engage with diverse audiences and foster meaningful relationships. As today's world increasingly prioritizes online presence, proficiency in digital communication and social media becomes a valuable asset, enhancing career opportunities and equipping learners with the tools to drive innovation and growth in various industries. Moreover, the course emphasizes ethical practices and data-driven decision-making, ensuring that students are prepared to handle the responsibilities and challenges of modern digital communication effectively. The course "Digital Communication and Social Media" significantly boosts employability by equipping students with essential, in-demand skills in digital marketing, content creation, social media strategy, and analytics. These competencies are essential for a wide range of roles, including social media manager, digital marketing specialist, content strategist and analyst making graduates highly attractive to employers across various industries. The hands-on, practical approach of the course, combined with its focus on current digital trends and technologies, ensures that students are well-prepared to meet the demands of the modern job market.



4 + 1 Integrated UG and PG Programme

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School	School of Pedagogical Sciences		
Programme	4 + 1 Integrated UG and PG Programme		
Course Title	History of Indian Education		
Course Designer	Dr. Ismail Thamarasseri		
Course Type	MDC (Multidisciplinary Course)		
Course Level	100-199		
Course Code	MG2MDCUPS106		
Course Overview	The course "History of Indian Education" provides an extensive overview of the evolution of education in India from ancient times to the present. It covers key educational developments, philosophies, and reforms across different historical periods, highlighting their impact on contemporary education in India.		
Semester	2	Credit	3
Total Student Learning	Instructional hours for theory	Instructional hours for practical/lab work/field work	
Time	45 hours	30 hours	
Pre-requisite	 Basic knowledge of Indian history Interest in educational systems and policies Ability to engage with historical texts and educational theories 		

CO No.	Expected Course Outcome	Learning Domains	PSO No.
	Upon completion of this course, students will be able to;	•	
1	Understand the historical evolution of education in India from ancient to modern times.	U	
2	Analyze the impact of colonial and post-colonial educational policies	An	
3	Evaluate the contributions of key educational thinkers and reformers in India	Е	

4	Develop a comprehensive view of contemporary	С	
	educational challenges in the context of historical		
	developments		

*(Learning Domains: Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S))

Module 1: Ancient and Medieval Education in India	Hours	CO No
• Education in Ancient India: Vedic, Buddhist, and Jain	T: 15	
educational systems	P: 10	
• Gurukul system: Structure and Function		
• Education during the Mauryan and Gupta periods		
Medieval India: Influence of Islamic education and Madrasas		
Educational philosophies of ancient and medieval India		
Module 2: Colonial Education Policies and their Impact	Hours	
Introduction to colonial education in India: Objectives and	T: 15	
Policies	P: 10	
Macaulay's Minute and the English Education Act of 1835		
Establishment of universities and colleges in the 19th century		
Impact of British educational policies on Indian society		
Education and Indian Renaissance: Contributions of Raja		
Ram Mohan Roy, Swami Vivekananda, and others		
Nationalist movements and education: Role of Mahatma		
Gandhi and Rabindranath Tagore		
Challenges in colonial education		
Aodule 3: Post-Independence Education in India	Hours	
Educational reforms in independent India: Radhakrishnan	T: 15	
Commission, Kothari Commission, and subsequent policies	P: 10	
Development of primary, secondary, and higher education		
Role of government and private sectors in education		
Education for all: Policies and programs for inclusive		
education		
Contemporary challenges: Quality, access, equity, and		
technology integration		
Recent developments and future trends in Indian education		

Mode of Transaction	 Classroom activities: Lectures and Demonstrations, Interactive Workshops, Group Projects and Collaborations, Case Studies and Real-World Scenarios, Discussion Forums and Online Communities, Simulations Field activities: Educational Institution Visits, Historical Site Visits, Interviews with Educators and Historians, Community Surveys Lab-based activities: Archival Research, Digital Database Exploration, Creation of Educational Timelines and Visual Aids
Mode of Assessment	 Exams and Quizzes Written Assignments Group Projects

 Presentations Participation and Engagement
Practical and Experiential Learning

- Radhakrishnan, S. (1947). A history of education in ancient India. Hind Kitabs.
- Basu, B. D. (1974). *Education in India under the British rule*. Cosmo Publications.
- Kumar, K. (2005). Education and social change in South Asia. Orient Longman.
- Thamarasseri, I. (2017). *History of Western Philosophy*. New Delhi: Dominant Publishers & Distributors (P) Ltd.
- Thamarasseri, I. (2018). *History of Indian Education*. New Delhi: Wisdom Press

Relevance of Learning the Course/ Employability of the Course

Learning this course is highly relevant for understanding the complex historical backdrop that shapes contemporary education in India. The course provides critical insights into the evolution of educational philosophies and practices, enabling students to appreciate the diversity and richness of India's educational heritage. Proficiency in the history of Indian education enhances career opportunities in academia, policy-making, educational consultancy, and research. It equips students with a deep understanding of historical contexts, essential for addressing current educational challenges and contributing to the development of effective educational policies and practices. The course fosters critical thinking and analytical skills, making graduates valuable assets in various professional domains, including education, social sciences, and cultural studies. The hands-on, practical approach ensures that students are well-prepared to apply historical knowledge to contemporary educational contexts and innovations.



4 + 1 Integrated UG and PG Programme

School	School of Pedagogical Sciences			
Programme	4 + 1 Integrated UG and PG Programme			
Course Title	Indian Indigenous Knowledge Systems			
Course Designer	Dr. Smitha S			
Course Type	MDC (Multidisciplinary Course)			
Course Level	200-299			
Course Code	MG2MDCUPS107			
Course Overview	This course aims to provide students with a comprehensive understanding of Indian indigenous knowledge systems (IIKS), their historical development, and their impact on various aspects of life and thought. It emphasizes critical thinking, analytical reasoning, and the application of IIKS concepts to contemporary issues, with special focus on Kerala's mathematical heritage, Indian scientific heritage, and Indian technological heritage.			
Semester	Second Semester	Credit	3	
Total Student				
Learning Time	45 hours	30 hours		
Pre-requisite	 Proficiency in critical reading and writing. Familiarity with basic cultural and historical contexts of Indian indigenous communities. Basic knowledge of global indigenous cultures and histories. 			

CO	Expected Course Outcome	Learning	PSO
No.	Upon completion of this course, students will be able to;	Domains	No.
1	Describe the evolution and key concepts of major Indian indigenous knowledge systems.	Cognitive	
2	Analyze the cultural and philosophical arguments within	Cognitive,	
2	Indian indigenous knowledge systems.	Affective	
3	Evaluate the relevance and application of Indian	Cognitive	
5	indigenous knowledge systems in contemporary contexts.		
4	Synthesize insights from different Indian indigenous	Cognitive,	
4	knowledge systems to address modern questions.	Affective	
5	Develop and present well-reasoned arguments based on	Cognitive,	
3	the traditions of Indian indigenous knowledge systems.	Psychomotor	

6	Reflect on the ethical and social implications of Indian	Cognitive,	
0	indigenous knowledge systems.	Affective	

Module 1: Introdu Systems	ction to Indian Indigenous Knowledge	10 Hours (T)		
Definition an studying IIK		ystems; significance of		
	velopment and major periods in IIKS. indigenous knowledge in various regions o	of India.		
	ian Indigenous Knowledge Systems	15 Hours (T)+ 15 Hours (P)		
 management Ayurvedic K Vedic and Pomathematics Kerala's Mat 	nowledge Systems: Traditional medicine, l st-Vedic Indigenous Knowledge: Agricult	holistic health practices. ural practices, astronomy, a mathematicians, such as		
	tion of Indian Indigenous Knowledge	20 Hours (T)+ 15 Hours (P)		
 Education: In Indian Scient engineering; Indian Techn 	ealth strategies. Idigenous pedagogies, learning methods, a ific Heritage: Contributions to fields like n significant scientific texts and treatises. ological Heritage: Traditional crafts, innov textile technology, and other indigenous t	netallurgy, architecture, and vations in water		
Mada af				
Mode of Transaction	 Classroom activities: Discussion Circles/Perse Understanding Sessions Role-Playing Scenarios/ Peer Counselling Session Field activities: Community Engagement 	Case Study Analysis		
 Workshops on Coping with Life Transitions/ Case studies and real-world applications. Lab-based activities: Philosophical debates 				
Mode of Assessment	 Portfolio Development Presentations/Seminar/Assignment Quizzes/MCQ Final exam 	ıt		

Core Books on Indian Indigenous Knowledge Systems:

- 1. Agrawal, A. (1995). Indigenous and Scientific Knowledge: Some Critical Comments.Indigenous Knowledge and Development Monitor, 3(3).
- 2. Gadgil, M., Berkes, F., & Folke, C. (1993). Indigenous Knowledge for BiodiversityConservation. Ambio, 22(2/3), 151-156.
- 3. Gupta, A. K. (2012). Anil K. Gupta: Science, Sustainability and Society. Springer.
- 4. Pati, R. N., & Lalitha, K. (2002). Tribal Development in India: Past, Present and Future.Sarup & Sons.
- 5. Sen, S. N. (1999). Ancient Indian History and Civilization. New Age International.

Books on Kerala's Mathematical Heritage:

- 1. Joseph, G. G. (2000). The Crest of the Peacock: Non-European Roots of Mathematics.Princeton University Press.
- 2. Plofker, K. (2009). Mathematics in India. Princeton University Press.
- 3. Bag, A. K. (1979). Mathematics in Ancient and Medieval India. Chaukhamba SurbharatiPrakashan.

Books on Indian Scientific and Technological Heritage:

- 1. Subbarayappa, B. V. (1989). Contributions to the History of Indian Science. Indian NationalScience Academy.
- 2. Chattopadhyaya, D. (1986). History of Science and Technology in Ancient India: TheBeginnings. Firma KLM.
- 3. Kumar, D. (Ed.). (2000). Science and Empire: Essays in Indian Context, 1700-1947. Anamika Prakashan.

Relevance of Learning the Course/ Employability of the Course

Studying Indian indigenous knowledge systems cultivates critical thinking, cultural sensitivity, and ethical reasoning. This interdisciplinary approach equips graduates to tackle complex issues in various professions. They can pursue academic roles, contribute to research, and work in education, corporate, and public sectors. Their skills are valuable in fostering personal growth, addressing societal challenges, and promoting well-being. Overall, this course enhances employability while nurturing individuals' intellectual and ethical capacities.



4 + 1 Integrated UG and PG Programme

School	School of Pedagogical Sciences	5			
Programme	4 + 1 Integrated UG and PG	4 + 1 Integrated UG and PG			
Course Title	Reflective Teaching Practices				
	5				
Course Designer	Dr. Sibu G. Netto				
Course Type	MDC				
Course Level	200-299				
Course Code	MG2MDCUPS108				
Course Overview	This course is tailored for first-year students enrolled in a 4+1-year degree programme. It is designed to introduce the theory and practice of reflective practices in teaching. The course will cover foundational concepts, practical techniques, and strategies for implementing reflective teaching in educational settings. Through three comprehensive modules, students will learn to critically analyse their teaching methods and continuously improve their instructional				
	effectiveness.				
Semester	effectiveness.		Credit	3	
Semester Total Student Learning Time		ry	Instru		
Total Student	1	ry	Instru	3 ctional hours for	

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, students will be able to;	Learning Domains	PSO No.
1	Familiarise different models and frameworks of reflection	U	
2	Identify personal and professional benefits of reflective practice	An	
3	Develop a personal plan for ongoing reflective practice	S	
4	Implement reflective practices in the classroom	Α	
5	Monitor and adjust teaching methods based on reflective insights	Е	
6	Development and implementation of a reflective practice plan	С	

*(Learning Domains: Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S))

Module 1	Hours	CO No
Foundations of Reflective Teaching: Definition, key concepts and significance of reflective teaching. Historical context and development of reflective practices. Key theorists and contributions of Dewey. Schön's Reflective Practice Model, Kolb's Experiential Learning Cycle, and Gibbs' Reflective Cycle.	15	1
Module 2	Hours	CO No
Techniques and Tools for Reflection: Reflective Writing - Journals and diaries, Blogs and online platforms, Peer Observation and Feedback - Methods for peer observation, Constructive feedback techniques, and Collaborative reflection. Video Analysis and Self-observation - Recording and analysing teaching sessions, Implementing Reflective Teaching - Before, during and after lessons. Developing Reflective Learners, modelling reflective practices, promoting metacognition and self-regulation, and Creating a Culture of Reflection.	15	2, 4
Module 3	Hours	CO No
Implementing Reflective Practices: Designing a Reflective Practice Plan - Setting goals and objectives, selecting appropriate reflective techniques, creating a timeline and action plan, and developing strategies for integrating reflection into daily routines. Encouraging student feedback and participation, Overcoming common challenges. Monitoring Progress and Making Adjustments - Tracking progress, documenting reflections, analysing feedback, making adjustments and using reflective practice in collaborative settings. Long-term strategies for maintaining reflective practices, Continual professional	15	3, 5, 6

developmen	nt through	reflection,	Reflecting	on	the	impact	of
reflective p	ractices on	teaching an	d learning				

Mode of Transaction	Classroom activities: Lecture, Discussion, Cooperative Learning, Buzz Session, Brain Storming Field activities: Lab Visit, Library Visit, Project work Lab-based activities: Demonstration Classes				
Mode of Assessment	Assignment, Seminar, Internal Examination				

- 1. Brookfield, S. D. (2017). *Becoming a Critically Reflective Teacher* (2nd ed.). San Francisco, CA: Jossey-Bass.
- 2. Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York, NY: Basic Books.
- 3. Gibbs, G. (1988). *Learning by Doing: A Guide to Teaching and Learning Methods*. Oxford: Further Education Unit, Oxford Polytechnic.
- 4. Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process.* Boston, MA: D.C. Heath.
- 5. Boud, D., Keogh, R., & Walker, D. (1985). *Reflection: Turning Experience into Learning*. London: Kogan Page.

Relevance of Learning the Course/ Employability of the Course

Learning the "Reflective Teaching Practices" course is essential for educators seeking to enhance their teaching effectiveness. By engaging in reflective practices, teachers gain insights into their instructional methods, identify areas for improvement, and adapt their strategies to meet diverse student needs. This continuous self-assessment fosters personal and professional growth. Employers highly value educators who practice reflective teaching, as it demonstrates a commitment to excellence and adaptability. Reflective teachers are better equipped to handle classroom challenges, implement innovative teaching techniques, and create inclusive learning environments, making them desirable candidates in education. Furthermore, this course enhances employability by equipping educators with critical thinking, self-awareness, and problem-solving skills. Graduates can confidently contribute to educational reforms, mentor colleagues, and lead professional development initiatives, advancing their careers and positively impacting the education system.