As Per NEP 2020

University of Mumbai



Syllabus for		
Basket of OE		
Board of Studies in GEOGRAPHY		
UG First Year Programme		
Semester - II		
Title of Paper -	Credits 2/ 4	
I) Environmental Issues and Management	2	
From the Academic Year	2024/2025	

Sr. No.	Heading	Particulars
1	Description of the course :	Environmental Issues and Management
•	becomplied of the course.	The "Environmental Issues and Management" curriculum
	Including but not limited to:	is designed specifically for First Year Students. It aims to
		explore environmental challenges, equipping students
		with the knowledge and skills necessary to understand,
		address, and manage pressing environmental issues
		facing our planet.
		In an era marked by environmental degradation, climate
		change, and resource depletion, addressing
		environmental issues has become imperative for
		sustainable development. This curriculum serves as a
		platform for students to explore the complexities of
		environmental challenges such as pollution, habitat destruction, and climate change, while also delving into
		strategies for effective environmental management and
		sustainable development. By fostering a deeper
		understanding of environmental issues and management
		principles, students are empowered to become advocates
		for positive change in their communities and beyond.
		The knowledge and skills gained from this curriculum are
		applicable across a wide range of sectors and
		professions. Students will develop critical thinking,
		problem-solving, and decision-making skills essential for
		identifying environmental issues, implementing mitigation
		measures, and promoting sustainable practices. Whether
		pursuing careers in environmental consulting, resource management, urban planning, or policy development,
		students will find the principles and concepts explored in
		this course invaluable for addressing contemporary
		environmental challenges and contributing to a more
		sustainable future.
		Professionals with expertise in environmental issues and
		management are in high demand across various
		industries and sectors. Companies and organizations are
		increasingly recognizing the importance of integrating
		environmental considerations into their operations and
		decision-making processes, driving the need for
		individuals capable of navigating complex environmental
		challenges and implementing sustainable solutions. Graduates of this program can pursue diverse career
		paths, including environmental managers, sustainability
		patris, including environmental managers, sustainability

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		consultants, policy analysts, conservation scientists, and environmental educators, among others, contributing to a	
		more sustainable and resilient future for society and the	
		planet.	
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2	Vertical :	Open Elective	
3	Type:	Theory	
4	Credit:	2 credits (1 credit = 15 Hours for Theory)	
5	Hours Allotted :	30 Hours	
6	Marks Allotted:	100 Marks	
8	 Course Objectives: (List some of the course objectives) To create awareness among the students about environmental sustainability. To make awareness about the impact of pollution and climate change. To understand the techniques and practices of environmental impact assessment. To understand the environmental movements and environmental management in India. Course Outcomes: (List some of the course outcomes) On successful completion of this course, students will be able to: Understand the concept of pollution and climate change and control measures. Understand the concept of environmental management and its need to save the environment. Understand the Concept and Methods for Sustainable Development. 		
9	Modules:- Per credit One module can be created		
	Module 1: Environmental Pollution and Controlling Measures (7 Hours) 1. Air Pollution: Causes, Effects, and Control Measures 2. Water Pollution: Causes, Effects, and Control Measures 3. Land Pollution: Causes, Effects, and Control Measures 4. Noise Pollution: Causes, Effects, and Control Measures		
	Module 2: Environmental Issu	ues and Movements (8 Hours)	

- 1. Climate Change: Concept, Global warming and Ozone Depletion
- 2. Global Climatic Assessment -IPCC
- 3. Impact of climate change and mitigation: Agriculture and water, flora and fauna, Human health, and mitigation plan
- 4. Environmental Movements in India

Module 3: Environmental Management (7 Hours)

- 1. Waste: Sources and Types, Waste Management Methods
- 2. Environmental Management: Concept, need and relevance
- 3. Environmental laws, and policies in India
- 4. Environmental Impact Assessment

Module 4: Sustainable Development (8 Hours)

- 1. Sustainable Development: Concept, Need and Factors
- 2. Sustainable Development Goals and Methods
- 3. Appropriate Technology
- 4. Eco-friendly Lifestyles and Practices

10 Text Books:

- 1. Bharucha Erach, 2004, Textbook for Environmental Studies, University Grants Commission, New Delhi (Available free on the web)
- 2. Rajagopalan, R. (2011). Environmental Studies: From Crisis to Cure. India: Oxford University Press.
- 3. घारप्रे विठ्ठल (२०१९) 'पर्यावरण शास्त्र' पिंपळाप्रे अँड पाब्लीशर्स, नागपूर.
- 4. देवरे, परमार, बुटाला (२०१३) 'पर्यावरण भूगोल' हिमालया पब्लिशिंग हाउस, मुंबई.
- 5. परमार, बोरसे व इतर (२०२२) 'पर्यावरण भूगोल' हिमालया पब्लिशिंग हाउस, म्ंबई.

11 Reference Books:

- 1. Ahluwalia, V. K. (2015). Environmental Pollution, and Health. The Energy and Resources Institute (TERI).
- 2. Asolekar S, Gopichandran R. 2005, 'Preventive Environmental Management an Indian perspective', CEE, Ahmedabad, Foundation Books Pvt Ltd, Daryaganj
- 3. Chambers N., Simons C., Wackernagel M., 2006, 'Sharing Nature's Interest Ecological footprints as an indicator of sustainability'.
- 4. IPCC (2014): Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA
- 5. Kanchi Kohli and Manju Menon (2021) Development of Environment Laws in India, Cambridge University Press.
- 6. Miller, G. T., & Spoolman, S. (2015) Environmental Science. Cengage Learning.
- 7. OECD (2008): Climate Change Mitigation: "What do we do?" (Organisation and Economic Co-operation and Development).
- 8. Pittock, Barrie (2009) Climate Change: The Science, Impacts and Solutions. 2nd Edition. Routledge.
- 9. Prabu P.C., Udayasooriyan C., Balasubramanian G, 2009, 'An introduction to Ecology and Environmental Science', Avinash Paperbacks, New Delhi.
- 10. Reddy K. P., Reddy D. N., 2003, 'Environmental Education', Neelkanth Publication, Hyderabad.

- 11. Santra S.C., 2004, 'Environmental Science', New Central Book agency Pvt Ltd, Kolkata.
- 12. Saxena H.M., 2000, 'Environmental Management', Rawat Publication, New Delhi, pp.
- 13. Singh, R.B., Mal, Suraj, and Huggel, Christian (2018): Climate Change, Extreme Events and Disaster Risk Reduction, Springer, Switzerland, pages 309.
- 14. Swarup R.S., Mishra S.N., Juahari V.P, 1992, 'Encyclopedia of Ecology, environment and pollution control 20', Mittal publication, New Delhi
- 15. Tiefenbacher, J (ed.) (2022), Environmental Management Pollution, Habitat, Ecology, and Sustainability, Intech Open, London. 10.5772/
- 16. Tiwari V., 2009, 'A textbook of Environmental studies', Himalaya Publications House, New Delhi
- 17. Tomar A., 2007, 'Environmental Education', Kalpaz publication, New Delhi
- 18. Uberoi N.K., 2007, 'Environmental Management', Excel Books, New Delhi
- 19. Wright R., 2008, 'Environmental Science Towards sustainable future', Eastern Economy Edition, Prentice Hall Inc, New Jersey, U.S.A
- 20. स्भाषचंद्र सारंग (१९९९) पर्यावरण भूगोल, विद्या प्रकाशन, नागप्र.
- 21. घोलप (२०००) 'पर्यावरण शास्त्र' निशिकांत प्रकाशन, प्णे

12 Internal Continuous Assessment: 40%

External, Semester End Examination 60% Individual Passing in Internal and

External Examination

13 Continuous Evaluation through:

Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments etc.(at least 3)

Internal Continuous Assessment of 40 Marks

- 1. One Assignment/Project work/Case study /Presentation /Seminar /Field visit report/Book review etc. to be conducted in the given semester before the Semester end examination. (Marks 20)
- One online/ offline class test (Marks 10)
- 3. Active participation in regular class instructional deliveries and fieldwork. & Overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing environment-related activities (Marks 10)

Semester-End Examination of 60 Marks

- 1. This examination shall be of 2 Hours duration. Maximum marks 60.
- 2. There shall be four questions each of 15 marks. In each Unit, there will be one question.
- 3. All questions shall be compulsory with internal choice within the questions. (Each question will be of 15 marks with options.)

14 Format of Question Paper: for the final examination

Q. 1. Based on Module – 1 (15 Marks)
Q. 2. Based on Module – 2 (15 Marks)
Q. 3. Based on Module – 3 (15 Marks)
Q. 4. Based on Module – 4 (15 Marks)



Sign of the BOS Chairman Name of the Chairman Name of the BOS Sign of the Offg. Associate Dean Name of the Associate Dean Name of the Faculty Sign of the Offg. Dean Name of the Offg. Dean Name of the Faculty