## 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		
		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 consultants, policy analysts, conservation scientists, and environmental educators, among others, contributing to a					
		more sustainable and resilient future for society and the					
2	Vertical :	planet.					
	vertical .	Open Elective					
3	Type:	Theory					
4	Credit:	2 credits (1 credit = 15 Hours for Theory)					
5	Hours Allotted :	30 Hours					
6	Marks Allotted:	50 Marks					
7	Course Objectives: (List some of the course objectives)  1. To create awareness among the students about environmental sustainability.  2. To make awareness about the impact of pollution and climate change.  3. To understand the techniques and practices of environmental impact assessment.  4. To understand the environmental movements and environmental management in India.						
8	Course Outcomes: (List some of the course outcomes) On successful completion of this course, students will be able to: 1. Understand the concept of pollution and climate change and control measures. 2. Understand the concept of environmental management and its need to save the environment. 3. Understand the Concept and Methods for Sustainable Development.						
9	Modules:- Per credit One module can be created						
	Module 1: Environmental Pollution (7 Hours)  1. Air Pollution: Causes, Effects, and Measures 2. Water Pollution: Causes, Effects, and Measures 3. Land Pollution: Causes, Effects, and Measures						
	Module 2: Environmental Issues and Movements (8 Hours)						
	Climate Change and Global warming     Ozone Depletion     Environmental Movements in India						
	Module 3: Environmental Man	odule 3: Environmental Management (7 Hours)					
	Waste: Sources, Types and Management     Environmental Management: Concept and Need     Environmental Impact Assessment						

Module 4: Sustainable Development (8 Hours)

- 1. Sustainable Development: Concept, Need and Factors
- 2. Sustainable Development Goals
- 3. 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, नागप्र.
- 4. देवरे, परमार, ब्टाला (२०१३) 'पर्यावरण भूगोल' हिमालया पब्लिशिंग हाउस, म्ंबई.
- 5. परमार, बोरसे व इतर (२०२२) 'पर्यावरण भूगोल' हिमालया पब्लिशिंग हाउस, मुंबई.

#### 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. सुभाषचंद्र सारंग (१९९९) पर्यावरण भूगोल, विदया प्रकाशन, नागप्र.
- 21. घोलप (२०००) 'पर्यावरण शास्त्र' निशिकांत प्रकाशन, पूणे

#### 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 20 **Marks**

- 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 – 10)
- 2. One online/ offline class test (Marks 5)
- 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 – 5)

### Semester-End Examination of 30 Marks

- 1. This examination shall be of 1 Hour duration. Maximum marks 30.
- 2. There shall be two questions each of 15 marks.
- 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 & 2 (15 Marks)
- Q. 2. Based on Module 3 & 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 Offq. Dean Name of the Offg. Dean Name of the Faculty