॥ सा विद्या या विमुक्तये ॥ स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड ·ज्ञानतीर्थ', विष्णुपुरी, नांदेड - ४३१ ६०६ (महाराष्ट्र राज्य) भारत SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED 'Dnyanteerth', Vishnupuri, Nanded - 431 606 (Maharashtra State) INDIA न्वामी रामानंद तीर्थ Heidenisi Fasirida, aides Established on 17th September, 1994, Recognized By the UGC U/s 2(f) and 12(B), NAAC Re-accredited with'B++' grade Fax : (02462) 215572 website: srtmun.ac.in

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राष्ट्रीय शैक्षणिक धोरण— २०२० नुसार पदवी प्रथम वर्षासाठी Environmental Studies या विषयाचे सर्व विद्याशाखेसाठी Common Syllabus शैक्षणिक वर्ष २०२३-- २४ पासन लागु करण्याबाबत.

प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, दिनांक १६ जून २०२३ रोजी संपन्न झालेल्या मा. विद्यापरिषदेच्या बैठकीतील ऐनवेळचा विषय कमांक १२/५६–२०२३ अन्वये मान्यता दिल्यानुसार विज्ञान व तंत्रज्ञान विद्याशाखा, मानवविज्ञान विद्याशाखा, आंतर विद्याशाखीय अभ्यास विद्याशाखा आणि वाणिज्य व व्यवस्थापन विद्याशाखेसाठी, राष्ट्रीय शैक्षणिक धोरण–२०२० नुसार पदवी अभ्यासकम आराखडयातील पदवी प्रथम वर्षाच्या (द्वितीय सत्रासाठीचा) आराखडयातील स्तंभ ७ मधील Value Education Courses (VEC) अंतर्गत Environmental Studies या विषयाचे Common Syllabus शैक्षणिक वर्ष २०२३-२४ पासून विद्यापीठ संकुले व विद्यापीठ संचलित न्य मॉडल डिग्री कॉलेज हिंगोली यासाठी लागू करण्यात येत आहेत.

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी, ही विनंती.

'ज्ञानतीर्थ' परिसर, विष्णुपुरी, नांदेड - ४३१ ६०६. जा.क.:शै-१/एनइपी२०२०/पदवी VEC/ 2023-281465 दिनांक : ०५.०३.२०२४

आपली विश्वास्

डॉ. सरिता लोसरवार सहाय्यक कुलसचिव,

- प्रत : १) मा. कुलगुरू महोदयांचे कार्यालय, प्रस्तुत विद्यापीठ.
 - २) मा. अधिष्ठाता, सर्व विद्याशाखा, प्रस्तुत विद्यापीठ.
 - मा. सहयोगी अधिष्ठाता, सर्व विद्याशाखा, प्रस्तुत विद्यापीठ.
 - ३) मा. संचालक, परीक्षा व मुंल्यमापन मंडळ, प्रस्तुत विद्यापीठ.
 - १) मा. प्राचार्य, न्यू मॉडल डिग्री कॉलेज, हिंगोली.
 - २) मा. संचालक, ललीत व प्रयोगजिवी कला संकुल, प्रस्तुत विद्यापीठ
 - ५) सिस्टीम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. याना देवुन कळविण्यात येते की, सदर परिपत्रक संकेतस्थळावर प्रसिध्द करण्यात यावे.



SYLLABUS OF ENVIRONMETNAL STUDIES

(**R-2023**)

UNDER NATIONAL EDUCATION POLICY (NEP 2020)

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VECES 151: Environmental Studies Teaching Scheme

		Theory				Practical		Total
Course Code	Course Name	СА			ESA	SA		
		Test I	Test II	Avg (T1+T2)/2		CA	ESA	
VECES 151	Environmental Studies	10	10	10	40			50

Assessment Scheme

Course Code	Course Name	Teaching Scheme (Hrs.)		Credits Assigned			
		Theory	Practical	Theory	Practical	Total	
VECES 151	Environmental Studies	02		02		02	

Course pre-requisite :

- 1. Basic knowledge of components of Environmental Sciences and need of awareness and information for nature conservation
- 2. Must have knowledge of different environmental fields

Course Objectives: This course aims to:

- 1. Stimulate interest in the environment.
- 2. Develop an understanding of the interdisciplinary and holistic nature of the environment.
- 3. Develop knowledge and understanding of environmental pollution for healthy ecosystem.
- 4. Develop the interest in conservation and management of natural resources.
- 5. Develop the ability to collect, collate, analyze and interpret environmental data.

Course Outcomes: After completion of this course student can:

- 1. Develop the ability to communicate environmental information and ideas logically and concisely in a variety of forms.
- 2. Provide an understanding of interactions between people and the environment.
- 3. Increase an awareness of the importance of living in harmony with the environment.
- 4. Recognize and evaluate the socio-economic, political and ethical issues in Environmental Science.
- 5. Foster positive attitudes, values and commitment in identifying, solving and preventing environmental problems.
- 6. Develop an understanding of how natural resources and the environment affect quality of life and the quest for sustainable development.

Curriculum Details

Module No.	UnitNo.	Торіс	Hrs.
1.0		Unit I: Introduction & Natural Resources	
	1.1	 Environment: Definition, Scope, Importance, need for public awareness. Natural Resources: Renewable and Non-Renewable resources, Natural resources and associated problems. A) Forest Resources: Utility and natural renewal balance, Uses and over exploitation of forest resources, Deforestation case studies, Mining, Dams and their effects on forests 	
	1.2	 B) Water resources: Uses of water, over utilization of surface ground water, Floods, Draughts, Dams: Benefits and problems. C) Mineral Resources: Environmental effects of Extracting and using mineral resources. 	15
	1.3	Definition of Pollution; Causes, effects and control measures of (A) Air pollution, (B) Water pollution, (C) Soil pollution, (D) Noise pollution.	
	1.4	 E) Land Resources: Land as a resource, effects on productivity, Man induced landslides, soil erosion, Desertification. F) Energy Resources: Needs, Types of energy and quantities available, growing energy needs, renewable and non-renewable resources, use of alternative energy sources. 	
2.0		Unit II: Ecosystems	
	2.1	Concepts of an ecosystems, Structure and function of an ecosystem, Producers, Consumers, and Decomposers, Energy flow in an ecosystem	
	2.2	Ecological succession, Food chain, Food webs, Ecological pyramids.	
	2.3	Introduction, Types, Characteristic features & Structure of following ecosystems (01) Forest ecosystem, (02) Grassland ecosystem, (03) Desert ecosystem (04) Aquatic ecosystem (Ponds, Streams, Lakes, Rivers, Oceans, Estuaries)	15
	2.4	Visit to local area to document environmental assets – River, Forest, Grass land, Hill, Mountain etc. Visit to local polluted site: Urban, Industrial, Agricultural Study of common plants, Insects, birds etc. Study of simple ecosystems: Pond, River, Hill, Slopes etc.	
		Total	30

Reference Books

- 1. Sastri, M. N. Introduction to Environment, Himalaya Publishing House, New Delhi, 2005.
- 2. Kaur, H. Environmental Studies, Pragati Prakashan, Meerut, 2006.
- 3. Bharucha, Erach A text book of Environmental Studies, University press Pvt. Ltd., Hyderabad, 2005.
- 4. Rana, S. V. S. Environmental Studies, Rastogi Publication, Meerut, 2007.
- 5. Kaushik, C. P. Environmental Studies, New age international Ltd., New Delhi, 2007.
- 6. Arumugam Environmental Studies Saras Publication, Kanyakumari, 2016.