

# DR. D. Y. PATIL VIDYAPEETH

**PIMPRI, PUNE – 411 018** 

# DR. D. Y. PATIL BIOTECHNOLOGY & BIOINFORMATICS INSTITUTE TATHAWADE, PUNE

# **SYLLABUS FOR**

# **SEMESTER I**

B. TECH BIOTECHNOLOGY, B. TECH MEDICAL BIOTECHNOLOGY, M. TECH (INT.) BIOTECHNOLOGY

(BATCH 2018-19)

# DR. D.Y. PATIL VIDYAPEETH, PUNE DR. D. Y. PATIL BIOTECHNOLOGY & BIOINFORMATICS INSTITUTE, TATHAWADE, PUNE

# B. TECH BIOTECHNOLOGY, B. TECH MEDICAL BIOTECHNOLOGY, M. TECH (INT.) BIOTECHNOLOGY

# Academic year 2018-2019

SEMESTER I									
Course Code	Course Name	L	T	P	Hr	Cr			
BS 101	Physics	3	0	2	5	4			
BS 102	Chemistry	3	0	4	7	5			
BT 101	Electronics & Instrumentation	3	0	2	5	4			
	Engineering								
BI 101	Computers & C Programming	3	0	4	7	5			
HU 101	Communication Skills	1	2	0	3	3			
BS 103	Maths I – Mathematics	3	1	0	4	4			
BT 102	Engineering Graphics	2	0	2	4	3			
HU 102	Disaster Management*	0	1	0	1	-			
Total			4	14	36	28			
*Audit course, attendance is must									

TITLE OF THE COURSE: DISASTER MANAGEMENT

COURSE CODE: HU-102 L T P Hr C MARKS: 50 0 1 0 1 -

# **LEARNING OBJECTIVE:**

• To provide student an exposure to disasters, their significance and types.

- To ensure that students begin to understand the relationship between vulnerability, disasters, disaster prevention and risk reduction
- To gain a preliminary understanding of approaches of Disaster Risk Reduction (DRR)
- To enhance awareness of institutional process in the country and
- To develop rudimentary ability to respond to their surroundings with potential disaster response in areas where they live, with due sensitivity

# **COURSE DESCRIPTION:**

Sr.	Topics	Detail syllabus	No. of
No.			Lectures
1	Introduction to Disasters	Concepts and definitions (Disaster, Hazard, Vulnerability,	04
		Resilience, Risks)	
2	Disasters: Clarification,	Differential impacts – in terms of caste, class, gender, age,	08
	Causes, Impacts	location, disability,	
	(Including social,	Global trends in disasters urban disasters, pandemics,	
	economic, political,	complex emergencies, Climate Change	
	environmental, health,		
	psychosocial, etc.)		
3	Approaches to Disasters	Phases, Culture of safety, prevention, mitigation and	08
	Risk reduction	preparedness, community based DRR, Structural –	
		nonstructural measures, roles and responsibilities of	
		community, Panchayati Raj Institution / Urban Local	
		Bodies (PRIs/ULBs), states, centre and other Satke-holders	
4	Inter-relationship	Factor affecting Vulnerabilities, differential impacts,	04
	between Disasters and	impact of Development project such as dams,	
	Development	embankments, changes in Land-ude etc. Climate Change	
		Adaptation. Relevance of indigenous knowledge,	
		appropriate technology and local resources	
5	Disaster Risk in India	Hazard and Vulnerability profile of India	06
		Components of Disaster Relief: Water, Food, Sanitation,	
		Shelter, Health, Waste Management,	

		Institutional Arrangements (Mitigation, Response and	
		Preparedness, DM Act and Policy, Other related policies,	
		Plans, programmes and legislation)	
6	Project Work	Field Work, Case Studies	06
Total Number of Lectures			36

### **METHODOLOGY**

The course will be covered through lectures, project work & classroom discussion.

### **EVALUATION SCHEME (THEORY)**

This course attendance is mandatory but university examination may not be conducted.

#### **BOOKS RECOMMENDED:**

- 1. Introduction in "Confronting Catastrophe' by A. David Oxford University Press, 2000.
- 2. Vulnerability in Disaster Discourse, by Andharia J. JTCDM, Tata Institute of Social Science working Paper no. 8, 2008
- 3. At Risk Natural Hazards, Peoples, Vulnerability and Disasters by Blaikie, P, Cannon T, Davis I, Wisner B, Rutledge. 1997
- 4. Introduction to International Disaster Management, C. P. Damon, 2007,
- 5. Disaster Management : A Disaster Manager's Handbook, Carter and Nick, Asian Development Bank, Manila Philippines, 1991.
- 6. Development and Disasters, Cuny, F., Oxford University Press, 1983.
- 7. Document on World Summit on Sustainable Development 2012
- 8. Govt. of India: Disasters Management Act 2005. Government of India, New Delhi
- 9. Government of India, National Disasters Management Policy, 2009.
- 10. Environmental Knowledge for Disasters Risk Management, A. K. Gupta, S. S. Nair, NIDM, New Delhi, 2011.