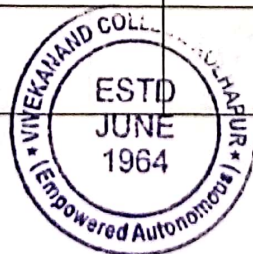


Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany

Content with Cross-cutting Issues

Sr. No.	Name of the Course	Course Code	Year of Introduction	Professional Ethics	Gender	Human Values	Environment and Sustainability	Sustainable Development Goals	NEP – 2020 (truth (satya), righteous conduct (dharma), peace (shanti), love (prem), nonviolence (ahimsa), scientific temper, citizenship values, life-skills; lessons in seva/service and participation in community service education)
B.Sc. Botany (Newly Introduced between 2018-19 and 2020-21)									
1	Biodiversity in Cryptogams and Gymnosperms	DSC-1007A	2018-19				The course describe the importance of cryptogams and gymnosperms in environment.		
2	Plant Ecology and Taxonomy	DSC-1007B	2018-19			Course provides insights	The course discusses importance of		



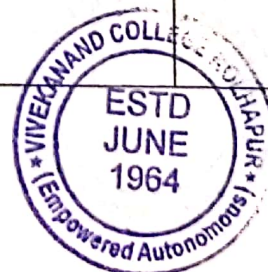
						about protection of Intellectual Property rights.	ecology, its benefits.		
3	Taxonomy, Embryology	DSC-1007C1	2019-20				Basic understanding of taxonomy helps in maintaining environmental sustainability.		
4	General Agriculture	DSC-1012C 2 Sec - I	2019-20					Sustainable agriculture	
5	Insect Pest	DSC-1011 D 2 Sec - II	2019-20			Course provides insights about protection of Intellectual Property rights.	The course discuss the importance of insect in environmental sustainability.		
6	Microbiology , Plant Pathology and Biofertilizers	DSE – 1007 E 1 Sec- II	2020-21	Business Environment			The course helps the students understand and assess the use of biofertilizers in sustainable		



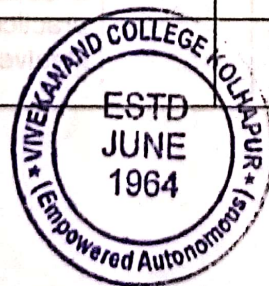
7	Plant Biochemistry and Stress Physiology	DSE – 1007 E 2 Sec- 1	2020-21				agriculture.	
8	Plant Systematics and Paleobotany	DSE – 1019 E 2 Sec – II	2020-21				The course helps the student's use of in-situ and ex-situ methods in biodiversity conservation.	
9	Technique of Life Science	SEC-E	2020-21	Scientific Management		Course provides insights into the ethical practices to be followed during scientific research.	Techniques applicable in the field of botany, agriculture, microbiology and biotechnology.	
10	Genetics and Plant Breeding	DSE – 1007 F 1 Sec – I	2020-21				Students should be aware of traditional knowledge and protection of plant varieties helps in maintaining biodiversity and	



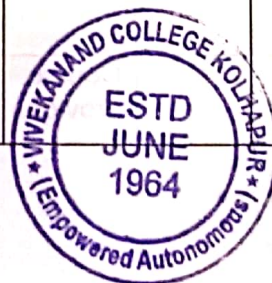
							sustainability.		
11	Biostatistics, Economic Botany and Ethnobotany	DSE – 1007 F 1 Sec – II					Course provides insights into the ethical practices to be followed during scientific research.	Basic understanding of ethnobotany helps in maintaining environmental sustainability.	
12	Molecular Biology and Biotechnology	DSE – 1007 F 2 Sec – I	2020-21				Course provides experientially learning in ethical practices involved in scientific research.	Plant biotechnology is relevant for its applications towards a sustainable environment.	
13	Horticulture, Forestry and Herbal Technology	DSE – 1007 F 2 Sec - II	2020-21					Herbal technology is the eco-friendly technology and helps to conserve environment sustainability.	
14	Techniques in Plant Diversity and Crop	SEC-F	2020-21	Scientific Management				Students should be aware of	



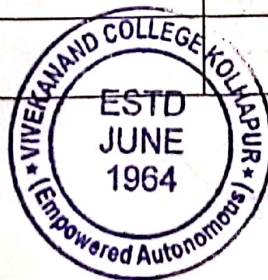
	Improvement						traditional knowledge and protection of plant varieties help in maintaining biodiversity and sustainability.		
B.Sc. Botany (Revised between 2021-22 and 2023-24)									
15	Biodiversity in Microbes, Algae and Fungi	DSC-1007 -A- 1	2021-22				Course provides insights about protection of intellectual property rights.	The course describe the importance of cryptogams and gymnosperms in environment.	
16	Plant Ecology	DSC-1007 B-1	2022-23					The course discusses importance of ecology, its benefits.	
17	Angiosperms Taxonomy	DSC-1007 B-2	2022-23					The course describes the importance of angiosperms taxonomy in environment and biodiversity conservation.	
18	Cytology and Research	DSE – 1007 E 1	2023-24				Course provides	Techniques applicable in	



	Technique in Life Sciences	Sec – I				experientially learning in ethical practices involved in scientific research.	the field of botany, agriculture, microbiology and biotechnology.		
19	Microbiology, Plant Pathology and Biofertilizers	DSE – 1007 E 1 Sec - II	2023-24	Scientific Management			The course helps the students understand and assess the use of biofertilizers in sustainable agriculture.		
20	Plant Systematics and Paleobotany	DSE – 1007 E 2 Sec – II	2023-24				The course helps the student's use of in-situ and ex-situ methods in biodiversity conservation.		
21	Technique of Life Science	SEC- E	2023-24	Scientific Management		Course provides experientially learning in ethical practices involved	Techniques applicable in the field of botany, agriculture, microbiology and biotechnology		



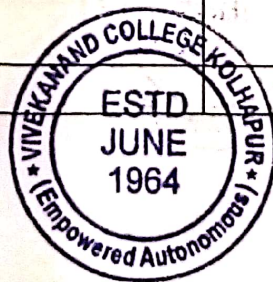
						in scientific research.			
22	Genetics and Plant Breeding	DSE – 1007 F 1 Sec – I	2023-24				Students should be aware of traditional knowledge and protection of plant varieties helps in maintaining biodiversity and sustainability.		
23	Biostatistics , Economic Botany and Ethnobotany	DSE – 1007 F 1 Sec – II	2023-24				Basic understanding of ethnobotany helps in maintaining environmental sustainability.		
24	Molecular Biology and Biotechnology	DSE – 1007 F 2 Sec – I	2023-24			Course provides insights into the ethical practices to be followed during scientific research.	Plant biotechnology is relevant for its applications towards a sustainable environment.		
25	Horticulture, Forestry and	DSE – 1007 F 2	2023-24			Course provides	Herbal technology is		



	Herbal Technology	Sec - II				experientially learning in ethical practices involved in scientific research.	the eco-friendly technology and helps to conserve environment sustainability.		
26	Technique in Plant Diversity and Crop Improvement	SEC- F	2023-24	Scientific Management			Students should be aware of traditional knowledge and protection of plant varieties help in maintaining biodiversity and sustainability.		
B. Sc. I Botany introduced under NEP 2020 from the year 2023-24									
27	Basics in Botany	DSC03BOT11	2023-24						
28	Plant Morphology	DSC03BOT12	2023-24						
29	Basics in Botany	MIN03BOT11	2023-24						
30	Plant Morphology	MIN03BOT11	2023-24						
31	Agri Based Microenterprises - I	OEC03BOT11	2023-24				Students should be aware of traditional		



							knowledge and helps in maintaining sustainability.		
32	Agri Based Microenterprises - II	OEC03BOT12	2023-24						
33	Introduction to Ayurveda	IKS03BOT11	2023-24					Basic understanding of Ayurveda helps in maintaining community health and mental health	
34	Reproductive Botany	DSC03BOT21	2023-24						
35	Diversity and Conservation of Plants	DSC03BOT22	2023-24				Students should be comparing in -situ and ex-situ conservation of biodiversity.		
36	Reproductive Botany	MIN03BOT21	2023-24						
37	Diversity and Conservation of Plants	MIN03BOT22	2023-24				Students should be comparing in -situ and ex-situ conservation of biodiversity.		
38	Herbal	OEL03BOT21	2023-24			Course	Herbal drug		



	Technology - I					provides insights about protection of intellectual property rights.	production is the eco-friendly technology and helps to conserve environmental sustainability.		
39	Herbal Technology - II	OEL03BOT22	2023-24						
40	Basic Tools of Life Sciences	SEC03BOT29	2023-24			Course provides experientially learning in ethical practices involved in scientific research.	Techniques applicable in the field of botany, agriculture, microbiology and biotechnology		

B. T. Dangat
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