



Evidence UI GreenMetric Questionnaire

University : Muhammad Nawaz Shareef, University of Agriculture Multan.

Country: Pakistan..

Web Address : <u>www.mnsuam.edu.pk</u>

[6] Education and Research (ED)

[6.1] Number of Courses/Subjects Related to Sustainability Offered

Original

Sr. No	Courses/Modules related to Sustainability	Department		
1.	Field Crop Production			
2.	Principles of Agronomy			
3.	Agro-Ecology			
4.	Sustainable Agriculture and Organic Farming			
5.	Fodders and Forages	1		
6.	Crop Management under stressful Environments			
7.	Arid Zone Agriculture	1		
8.	Agro-technology of Major Field Crops	Department of		
9.	Management of Field Crop Nutrition	Agronomy		
10.	Biological Crop Potential	3		
11.	Environmental Physiology and Crop			
	Improvement			
12.	Farming System and Farm Record			
13.	Application of Allelopathy in Agriculture			
14.	Field Crop Physiology			
15.	Applied Crop Ecology			
16.	Farming and Cropping Systems			
17.	Sustainable Agriculture			
18.	Climate Change and Agriculture			
19.	Postharvest Technology of Crops			
Sr. No	Courses/Modules related to Sustainability	Department		

Sr. No	Courses/Modules related to Sustainability	Department
20.	Introduction to Environmental Science	
21.	Soil, Water and Air Pollution	
22.	Carbon Sequestration and Environment	1
23.	Soil Fertility Evaluation	
24.	Nutrient Management in Degraded Soils	5
25.	Plant Growth under Stress Environment	
26.	Municipal Wastes and its Transformations	
27.	Soil Fertility Evaluation	
28.	Salt-Affected Soils and Water Quality	Department of Soil &
29.	Soil Fertility and Fertilizer Use	Environmental
30.	GIS in Soil Survey and Land Use Planning	Sciences
31.	Soil Microbiology and Environment	
32.	Environment Pollution and Management	4 2
33.	Soil, Water and Environment Conservation	4
34.	Saline Agriculture	
35.	Soil Fertility and Plant Nutrition	
36.	Soil Microbiology and Biotechnology	
37.	Advances in Soil Fertility	2
38.	Soil and Environmental Microbiology	

Sr. No	Courses/Modules related to Sustainability	Department
39.	Essentials of Food Science and Technology	998
40.	Food Quality Management	0.
41.	Poultry and Egg Processing	0.
42.	Principles of Human Nutrition	
43.	Fruit and Vegetable Processing	70
44.	Meat Technology	Food Sciences &
45.	Technology of Oils and Fats	Technology
46.	Food Toxicology & Safety	121250
47.	Community Nutrition & Dietetics	**
48.	Food Safety and Quality Management	3) 6
49.	Advances in Food Microbiology	3
50.	Technology of Edible fat and oil	99
51.	Advances in Processed Meat Technology	
52.	Food Industrial Waste Management	7
53.	Post Harvest Management	

38.	Soil and Environmental Microbiology	
Sr. No	Courses/Modules related to Sustainability	Department
54.	Apiculture and Sericulture	9
55.	Insect Ecology and Behavior	
56	Insect Pests of Household, Human & Animals	
57	Sustainable Pest Management of Highly Valued Crops	
58	Insect Biodiversity Management	**
59	Insect Biodiversity & Evolution Entomole	
60	Stored Products Pests & their Management	
61	Beneficial Insects	
62	Insecticides and Environmental Pollution	
63	Range and Forest Entomology	
64	Post-Harvest Protection of Cereals	
65	Stored Products Pests & their Management	
66	Advances in Pest Management Research	
67	Insecticide Resistance and Management	
68	Insect Rearing Techniques	
69	Insecticides and Public Health	





Courses/Modules related to Sustainability	Department	Sr. No	Courses/Modules related to Sustainability	Department
Peri-Urban Horticulture				Department
Environmental Horticulture Medicinal and Aromatic Plants		101.	Soil Science and Crop Production	
Nutrient Management of Horticultural Crops		102.	Orchard Planning and Management	
	_	103.	Farm Mechanization	
	Department of		Energy Resources and Utilization	BBA
Propagation and Nursery Management	Horticulture			AGRIBUSINESS
Commercial Flower Production		10.500.000		AOMBOSINESS
	-	106.	Agribusiness Entrepreneurship	
		107.	Poultry Business Management	
Rootstocks for Horticultural Crops		100000000000000000000000000000000000000		-
	3			_
Mushroom Biology and Technology				
Courses/Modules related to Sustainability	Department	110.	Harvest Technology	
	4		<u>-</u>	
Grain Science for Industry	AGRO-INDUSTRIAL	1		
Feed Milling Technology		Sr. No	Courses/Modules related to Sustainability	Department
Industry	TECHNOLOG I	111		
Entrepreneurship			Salt to grad or the control of the salt to the control of the salt to the control of the control	-
Technology of Oils and Fats	-			_
	10 10	113.	Poultry Feeding Practices	
Courses/Modules related to Sustainability	Department	114.	Broiler Production and Management	POULTRY SCIENCE
Plant diversity Eigh Nutrition				-
Fish and Fisheries Biology	FISHERIES AND			4
Fishery Technology	AQUACULTURE			_
	-	117.	Poultry Farm Practices-I	
Inland Fisheries Management		118		
	Department			Department
		193000000000000000000000000000000000000		
				Plant Pathology
		100000000000000000000000000000000000000		
		143.		
Bio-Safety Measures in GM Crops	PLANT BREEDING	144.	Integrated Plant Disease Management	
Hybrid Seed Production Technology	AND GENETICS	327		
Biosafety Measures in Crop Improvement		Su No	Courses Medules valeted to Sustainability	Donautment
Crop Breeding for Biotic and Abiotic Stresses		Sr. No	Courses/Modules related to Sustainability	Department BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification		145.	Modern Concepts in Biotechnology	Department BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart		145. 146.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding		145. 146. 147.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart		145. 146.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding	Donartment	145. 146. 147. 148.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability	Department	145. 146. 147. 148. Sr. No	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour	Department	145. 146. 147. 148. Sr. No 149.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability	Department	145. 146. 147. 148. Sr. No 149. 150.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops		145. 146. 147. 148. Sr. No 149.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife	
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement	SEED SCIENCE	145. 146. 147. 148. Sr. No 149. 150.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production		145. 146. 147. 148. Sr. No 149. 150. 151.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine	SEED SCIENCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures	SEED SCIENCE	145. 146. 147. 148. Sr. No 149. 150. 151.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry	SEED SCIENCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students)	SEED SCIENCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology	SEED SCIENCE AND TECHNOLOGY	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition	Elective Courses
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability	SEED SCIENCE AND TECHNOLOGY Department	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy	SEED SCIENCE AND TECHNOLOGY	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection	BIOTECHNOLOGY
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172. 173. 174. 175.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 16. 172. 173. 174. 175.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 176. 177. 176. 177.	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE ECONOMICS	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution Aquatic macrophytes and Management	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management	Department AGRICULTURAL AND RESOURCE ECONOMICS Department	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE ECONOMICS Department MS	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177 178 179 180	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution Aquatic macrophytes and Management	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management Environmental Management Environmental Management Environmental Management Entrepreneurship in Agriculture	Department AGRICULTURAL AND RESOURCE ECONOMICS Department	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177 178 179 180	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution Aquatic macrophytes and Management Aquatic toxicology	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE ECONOMICS Department MS	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177 178 179 180 181	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution Aquatic macrophytes and Management Aquatic toxicology Fish Post harvest Technology	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management Entrepreneurship in Agriculture Advanced Food Marketing Strategic Agribusiness Management Agro Value Chain Management	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE ECONOMICS Department MS	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177 178 179 180 181	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution Aquatic macrophytes and Management Aquatic toxicology Fish Post harvest Technology Fodders and Forages	Elective Courses Department of Veterinar
Crop Breeding for Biotic and Abiotic Stresses Crop Breeding for Quality and Bio-fortification Participatory and Integrated Climate Smart Plant Breeding Entrepreneurship in Plant Breeding Courses/Modules related to Sustainability Seed Health and Vigour Biological Potential of Various Crops Seed Enhancement Seed Production of Transgenic Crops Environmental Factors and Seed Crop Production Seed Health Management and Quarantine Measures Quality Assurance Systems in Seed Industry (For PhD students) Post-harvest Physiology Courses/Modules related to Sustainability Resource and Environmental issues of Agrarian Economy Agricultural issues and Policies of Pakistan Agribusiness Supply Chain Management Economics of Climate Change Energy Economics Environmental Economics Courses/Modules related to Sustainability Agro Value Chain Management Entrepreneurship in Agriculture Advanced Food Marketing Strategic Agribusiness Management	SEED SCIENCE AND TECHNOLOGY Department AGRICULTURAL AND RESOURCE ECONOMICS Department MS	145. 146. 147. 148. Sr. No 149. 150. 151. 152. 153. 154. 155. 156. 172 173 174 175 176 177 178 179 180 181	Modern Concepts in Biotechnology Fundamentals of Seed Molecular Biology Biotechnology: Principles and Applications Bioremediation and Biodegradation Courses/Modules related to Sustainability Rural Sociology and Development Introduction to Veterinary Preventive Medicine Agro-Forestry, Range and Wildlife Management Metabolism of Primary Nutrients Biodiversity Mineral and Vitamin Metabolism General Microbiology and Immunology Principles of Poultry Nutrition Biodiversity Poultry Meat Inspection Veterinary Epidemiology and public health Poultry Feed Industry Plant diversity Ecology Water pollution Aquatic macrophytes and Management Aquatic toxicology Fish Post harvest Technology	Elective Courses Department of Veterinar
	Nutrient Management of Horticultural Crops Organic Horticulture Production Good Agricultural Practices in Horticulture Business Management in Horticulture Propagation and Nursery Management Commercial Flower Production Vegetable and Flower Seed production Food Safety in Horticultural Crops Propagation and Nursery Management. Rootstocks for Horticultural Crops Horticultural Production under Abiotic Stresses Mushroom Biology and Technology Courses/Modules related to Sustainability Introduction to Agro-Based Industry Post-Harvest Processes Grain Science for Industry Feed Milling Technology Environmental Management System for Industry Entrepreneurship Grain Milling Technology Technology of Oils and Fats Courses/Modules related to Sustainability Plant diversity Fish Nutrition Fish and Fisheries Biology Fishery Technology Water Pollution Integrated Fish Farming Inland Fisheries Management Fish Post-harvest Technology Courses/Modules related to Sustainability Preeding for Plant Quality Traits Hybrid Seed Production Technology Breeding Climate Smart Crops Genetics and Breeding of High-value (Minor and Medicinal) Crops Genetics and Breeding of Cereal Crops Bio-Safety Measures in GM Crops	Nutrient Management of Horticultural Crops Organic Horticulture Production Good Agricultural Practices in Horticulture Propagation and Nursery Management Commercial Flower Production Vegetable and Flower Seed production Food Safety in Horticultural Crops Propagation and Nursery Management. Rootstocks for Horticultural Crops Horticultural Production under Abiotic Stresses Mushroom Biology and Technology Courses/Modules related to Sustainability Introduction to Agro-Based Industry Post-Harvest Processes Grain Science for Industry Feed Milling Technology Environmental Management System for Industry Entrepreneurship Grain Milling Technology Technology of Oils and Fats Courses/Modules related to Sustainability Plant diversity Fish Nutrition Fish and Fisheries Biology Water Pollution Integrated Fish Farming Inland Fisheries Management Fish Post-harvest Technology Courses/Modules related to Sustainability Preeding for Plant Quality Traits Hybrid Seed Production Technology Breeding Climate Smart Crops Genetics and Breeding of Cereal Crops Bio-Safety Measures in GM Crops PLANT BREEDING	Nutrient Management of Horticultural Crops Organic Horticulture Production Good Agricultural Practices in Horticulture Business Management in Horticulture Propagation and Nursery Management Commercial Flower Production Vegetable and Flower Seed production Food Safety in Horticultural Crops Propagation and Nursery Management. Rootstocks for Horticultural Crops Horticultural Production under Abiotic Stresses Mushroom Biology and Technology Horticultural Production under Abiotic Stresses Mushroom Biology and Technology Post-Harvest Processes Grain Science for Industry Post-Harvest Processes Grain Science for Industry Entrepreneurship Grain Milling Technology Environmental Management System for Industry Entrepreneurship Grain Milling Technology Technology of Oils and Fats Till. T	Nutrient Management of Horticulture Department of Good Agricultural Practices in Horticulture Business Management in Horticulture Propagation and Nursery Management Commercial Flower Production Vegetable and Flower Seed production Food Safety in Horticultural Crops Propagation and Nursery Management. Rootstocks for Horticultural Crops Horticultural Production under Abiotic Stresses Mushroom Biology and Technology Courses Modules related to Sustainability Introduction to Agro-Based Industry Post-Harvest Processes Grain Science for Industry Endustry Encylonomental Management System for Industry Encylonomental Management System for Industry Entrepreneurship Technology of Oils and Fats Courses Modules related to Sustainability Enhancement of Horticulture Production





186 Remote Sensing and GIS Applications in Animal Science	nces
187 Utilization and Conservation of Animal Genetic Resources	
188 Marine and Fresh Water Microbiology	_
189 Basic Biotechnology	
190 Environmental Microbiology	
191 Industrial Microbiology	
192 Biorisk Management (Biosafety and Biosecurity)	
193 Food and Dairy Microbiology	
194 Animal Biodiversity	
195 Plant Diversity	
196 Aquatic Biology	_
197 Biodiversity	
198 Environmental Biology	
199 Aquatic toxicology	
200 Zoogeography & Paleontology	
201 Epidemiology and Public Health	

Description:

Number of courses/modules related to environment and sustainability offered in 2020 = 190+ courses