

Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Principles of Genetics	ciples of Genetics											
Course Code	GPB-501[T]												
Course Outcomes & Bloom's Level	CO1- Define the fundame CO2- Describe the nature CO3- Conceptualize mole Apply) CO4- Apply the concepts transgenic. (BL4-Analyze	ntal concepts and and structure o cular genetics a of biochemistry)	nd theories of genetics. (BL1-Remember) of genetic material. (BL2-Understand) and hands on lab tools and techniques (BL3- and biotechnology for development of										
Course Elements	Skill Development X Entrepreneurship X Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG1(No poverty) SDG2(Zero hunger) SDG3(Good health and well-being) SDG8(Decent work and economic growth) SDG15(Life on land) SDG17(Partnerships for the goals)										

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	1	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2
CO4	-	-	2	-	-	-	3	-	-	-	-	-	-	-	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Principles of Plant Breedir	rinciples of Plant Breeding											
Course Code	GPB-502[T]												
Course Outcomes & Bloom's Level	CO1- Define the basic con Remember) CO2- Describe the various Understand) CO3- Demonstrate the skil Apply) CO4- Differentiate the inbro (BL4-Analyze) CO5- Problems based on H role of heterosis, inbreedin breeding. (BL5-Evaluate)	cept of crop im breeding meth I on emasculat ed lines and hy neritability, gen g depression, l	provement and genetic variation. (BL1- nods, their drawbacks and significance. (BL2- ion, pollination and hybridization. (BL3- /brids, composite and synthetic varieties. etic advances and genetic variations and the heritability and genetic advances in plant										
Course Elements	Skill Development ✓ Entrepreneurship × Employability ✓ Professional Ethics × Gender × Human Values × Environment ×												

COs	P01	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	2	-	-	-	-	-	-	-	3	1	-
CO2	-	-	2	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	-	3	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Principles of Cytogenetics	nciples of Cytogenetics												
Course Code	GPB-505[T]													
Course Outcomes & Bloom's Level	CO1- Describe the morpholog prokaryotes along with the mo Remember) CO2- Understand the evolution illustrate karyotype, ideogram CO3- Utilization of polyploids breeding, their maintenance a (BL3-Apply) CO4- Analyse fertilization bar manipulations in wide hybridiz Analyze) CO5- CO-5 Evaluate the synt gene transfer using bridge sp	gical and bioche olecular mechan onary significance and banding pa , aneuploids and and utilization in riers at pre-and zation and In-vitu chesis of new cro ecies. (BL5-Eva	mical architecture of eukaryotes & hism of cell cycle and cell division. (BL1- ce of chromosome aberrations and attern (BL2-Understand) d apomixes in various aspects of crop gene mapping and gene blocks transfer. post-fertilization levels, chromosome ro techniques to overcome. (BL4- ops (wheat, triticale and brassica) and aluate)											
Course Elements	Skill Development × Entrepreneurship × Employability √ Professional Ethics × Gender × Human Values × Environment ×													

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	2	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	2	-	-	-	-	-	-	-	-	-	-	-	1	2	-
CO3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2
CO4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Seed Production Principles	and Techniques i	n Field Crops								
Course Code	SST-503[T]										
Course Outcomes & Bloom's Level	CO1- Understand about role CO2- Describe the concept of Understand) CO3- Understand the classe of seed (BL3-Apply) CO4- Conceptualize the dete (BL4-Analyze) CO5- Learning about Proces CO6- Learning about Proces	 Describe the concept of IPM during seed production (DL1-Kernember) Describe the concept of IPM during seed production and storage (BL2- erstand) Understand the classes of pesticides and its use during production and storage ed (BL3-Apply) Conceptualize the detection and loss estimation due to pests in seed storage. -Analyze) Learning about Process of fumigation and its effect (BL5-Evaluate) Learning about Process of safe seed storage (BL6-Create) 									
Course Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics × Gender × Human Values × Environment ×	SDG (Goals)	SDG2(Zero hunger) SDG3(Good health and well-being) SDG4(Quality education)								

COs	P01	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	3	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	-	-	-	1	-	-	-	-	-	-	1	2	-
CO3	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2
CO4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
CO5	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Statistical Methods For App	blied Sciences	
Course Code	STAT-502[T]		
Course Outcomes & Bloom's Level	CO1- Describe the understa field of agriculture (BL1-Re CO2- Explain the concepts for agricultural data analysis CO3- Calculate the various parametric and non-parame CO4- Investigate the multiv CO5- Evaluate the use of variable test/analysis(BL5-Evaluate)	anding of basic member) of probability di s (BL2-Underst statistical parar etric tests (BL3- ariate analysis u arious statistica)	concept of statistics and probability in the stributions and various statistical tools used t and) meters of given data samples using Apply) using different software (BL4-Analyze) I software used for agricultural data sets
Course Elements	Skill Development ✓ Entrepreneurship X Employability X Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG3(Good health and well-being) SDG8(Decent work and economic growth) SDG10(Reduced inequalities)

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	1	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Library and Information S	ary and Information Services											
Course Code	PGS-501[P]												
Course Outcomes & Bloom's Level	CO1- Describe about the CO2- Carry out literature s CO3- Apply the modern to search (BL3-Apply) CO4- Equip the students/s efficiently (BL4-Analyze) CO5- Formulate information	information and survey (BL2-Ur pols (Internet, O scholars with sk on search strate	knowledge resources (BL1-Remember) Iderstand) IPAC, search engines, etc.) of information Kills to trace information from libraries Egies (BL5-Evaluate)										
Course Elements	Skill Development X Entrepreneurship X Employability X Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG2(Zero hunger) SDG3(Good health and well-being) SDG4(Quality education) SDG8(Decent work and economic growth) SDG17(Partnerships for the goals)										

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	-	-	-	-	-	-	2	1	-
CO2	3	-	-	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Technical Writing and C	echnical Writing and Communication Skill										
Course Code	STAT-501[P]											
Course Outcomes & Bloom's Level												
Course Elements	Skill Development ✓ Entrepreneurship × Employability × Professional Ethics × Gender × Human Values × Environment ×	SDG (Goals)	SDG2(Zero hunger) SDG3(Good health and well-being) SDG4(Quality education) SDG8(Decent work and economic growth) SDG17(Partnerships for the goals)									

COs	P01	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	1	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Fundamentals Of Quantita	damentals Of Quantitative Genetics											
Course Code	GPB-503[T]												
Course Outcomes & Bloom's Level	CO1- Develop foundationa complex traits.(BL1-Remei CO2- Explore breeding stra CO3- Apply statistical meth CO4- Aanlyze different vari help of statistical packages CO5- Develop a statistical Create)	 a) Develop ionidational understanding of quantitative genetics and back of applex traits.(BL1-Remember) 2- Explore breeding strategies and selection methods(BL2-Understand) 3- Apply statistical methods for analyzing quantitative traits.(BL4-Analyze) 4- Aanlyze different variable of a population and advanced biometric model with the o of statistical packages(BL5-Evaluate) 5- Develop a statistical model to assess the divergence of mapping population(BL6-bate) 											
Course Elements	Skill Development X Entrepreneurship X Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG4(Quality education) SDG8(Decent work and economic growth) SDG13(Climate action) SDG17(Partnerships for the goals)										

COs	P01	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	-	2	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2
CO4	-	-	-	-	2	-	-	1	-	-	-	-	-	-	-
CO5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Varietal Development A	etal Development And Maintenance Breeding										
Course Code	GPB-504[T]											
Course Outcomes & Bloom's Level	CO1- Define the fundan Remember) CO2- Describe the natu CO3- Conceptualize cro (BL3-Apply) CO4- Apply the concept Analyze)	nental concept re and structur op breeding ex ts of crop bree	s and theories of crop breeding. (BL1- re of crop breeding practices. (BL2-Understand) ercises and hands on lab tools and techniques ding for development of transgenic. (BL4-									
Course Elements	Skill Development X Entrepreneurship X Employability √ Professional Ethics √ Gender X Human Values X Environment X	SDG (Goals)	SDG2(Zero hunger) SDG3(Good health and well-being) SDG4(Quality education) SDG8(Decent work and economic growth) SDG12(Responsible consuption and production) SDG15(Life on land) SDG17(Partnerships for the goals)									

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	3	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Crop Breeding-II(Rabi	op Breeding-II(Rabi Crop)										
Course Code	GPB-512[T]	-512[T]										
Course Outcomes & Bloom's Level	CO1- Define the fundan Remember) CO2- Describe the natu CO3- Conceptualize cro (BL3-Apply) CO4- Apply the concept Analyze)	 nember) 2- Describe the nature and structure of crop breeding practices. (BL2-Understand) 3- Conceptualize crop breeding exercises and hands on lab tools and techniques .3-Apply) 4- Apply the concepts of crop breeding for development of transgenic.(BL4- alyze) 										
Course Elements	Skill Development X Entrepreneurship X Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG4(Quality education) SDG8(Decent work and economic growth) SDG11(Sustainable cities and economies) SDG12(Responsible consuption and production) SDG13(Climate action)									

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	3	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Intellectual Property and	llectual Property and Its Management in Agriculture										
Course Code	PGS-503[T]											
Course Outcomes & Bloom's Level	CO1- Define various aspo CO2- Elaborate scope of CO3- Understand the sig biodiversity protection. (E CO4- Apply the approach CO5- Equip the students/	Define various aspects of IPR. (BL1-Remember) Elaborate scope of various types of IPRs in agriculture. (BL2-Understand) Understand the significance of various national and international initiatives for ersity protection. (BL3-Apply) Apply the approach of IPRs for protection. (BL4-Analyze) Equip the students/scholars with skills to apply for IPR.										
Course Elements	Skill Development X Entrepreneurship X Employability X Professional Ethics √ Gender X Human Values X Environment X	SDG (Goals)	SDG3(Good health and well-being) SDG4(Quality education) SDG8(Decent work and economic growth) SDG11(Sustainable cities and economies) SDG12(Responsible consuption and production) SDG13(Climate action)									

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	2	-	-	-	-	-	-	-	-	-	-	2	1	-
CO2	2	-	-	-	-	-	-	-	-	-	-	-	1	2	-
CO3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2
CO4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Seed Developmental Biolo	ed Developmental Biology											
Course Code	SST-501[T]												
Course Outcomes & Bloom's Level	CO1- Define the fundamer Understand) CO2- Understanding on fu CO3- Conceptualize the ad Analyze) CO4- Examine the process CO5- Application of plant h process of germination and (BL5-Evaluate)	ntal concepts or ndamental asp dvanced resear s of Seed matu normones and r d to determine	f reproduction in flowering plants. (BL2- ects of gametogenesis. (BL2-Understand) rch on seed developmental biology (BL4- rity indices. (BL1-Remember) novel signaling molecules to understand the signal transduction mechanisms in seeds.										
Course Elements	Skill Development X Entrepreneurship X Employability X Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG11(Sustainable cities and economies) SDG12(Responsible consuption and production)										

COs	P01	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	1	-	-	1	-	-	-	-	-	-	-	-	-
CO2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO3	-	-	2	-	-	2	1	-	-	-	-	-	-	-	-
CO4	1	-	-	-	-	1	2	-	-	-	-	-	-	-	-
CO5	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Experimental Designs	xperimental Designs											
Course Code	STAT-512[T]												
Course Outcomes & Bloom's Level	CO1- Describe the basic of CO2- Compare the different (BL2-Understand) CO3- Demonstrate the ana factorial experiments (BL3 CO4- Analyse the result of (BL4-Analyze) CO5- Assess the suitability designs for different sets of	oncept of designt alysis of covari -Apply) f various statist y of different So of experimental	gning of field experiment (BL1-Remember) I designs used in agriculture field experiments ance in basic designs and confounding in tical designs along give scientific interpretation oftware for the statistical analysis of different conditions (BL5-Evaluate)										
Course Elements	Skill Development ✓ Entrepreneurship X Employability X Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG4(Quality education) SDG8(Decent work and economic growth) SDG11(Sustainable cities and economies) SDG12(Responsible consuption and production)										

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	-	-	-	-	-	-	3	1	-
CO2	-	-	1	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Master Seminar	
Course Code	GPB-591[P]	
Course Outcomes & Bloom's Level	CO1- Demonstrate a sound knowledge of selected se CO2- Identify the problem, formulate a solution, and in CO3- Engage in dialogue with individuals and the larg CO4- Provide solutions for challenging issues in the fi	eminar topic.(BL1-Remember) mplement it.(BL2-Understand) ger community.(BL3-Apply) ield(BL4-Analyze)
Course Elements	Skill Development ✓ Entrepreneurship × Employability × Professional Ethics × Gender × Human Values × Environment ×	SDG (Goals)

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO2	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-
CO3	-	-	-	1	-	1	-	-	-	3	-	2	-	-	-
CO4	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Basic Concept in Laborate	asic Concept in Laboratory Techniques											
Course Code	PGS-504[P]												
Course Outcomes & Bloom's Level	CO1- Describe the basic c instruments and technique CO2- Explain the SOPs of laboratories (BL2-Undersi CO3- Demonstrate the ana equipments and technique CO4- Examine the results Analyze) CO5- Assess the precision suitable methods for perfor	oncepts and w s (BL1-Remer various equipr tand) alysis of physic s and solve pro of various lab a n level of labora rming the differ	orking principles of common laboratory mber) ments and techniques used in different ochemical, molecular analysis using different oblems with trouble shooting. (BL3-Apply) analysis with scientific explanation (BL4- atory instruments and techniques and find the rent lab analyses(BL5-Evaluate)										
Course Elements	Skill Development X Entrepreneurship X Employability X Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG3(Good health and well-being) SDG4(Quality education) SDG8(Decent work and economic growth) SDG11(Sustainable cities and economies) SDG12(Responsible consuption and production) SDG13(Climate action) SDG15(Life on land) SDG17(Partnerships for the goals)										

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	-	-	-	-	-	-	2	1	-
CO2	3	-	-	-	-	-	-	-	-	-	-	-	1	2	-
CO3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2
CO4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Molecular Breeding and Bi	olecular Breeding and Bioinformatics												
Course Code	GPB-506[T]													
Course Outcomes & Bloom's Level	CO1- Study the structure at CO2- Understand the princ (BL2-Understand) CO3- Examine the structure Central Dogma of life (BL3- CO4- Mechanism of recom Analyze) CO5- Conceptualize the me (BL5-Evaluate)	nd function of co iples of bioenery e and function c - Apply) binant DNA tech echanism of unr	ell and cell cycle (BL1-Remember) getics and the history of molecular genetics. If genetic material and its regulation and nnology and gene amplification. (BL4- regulated cell cycle (cancer ancell aging).											
Course Elements	Skill Development ✓ Entrepreneurship X Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG2(Zero hunger) SDG8(Decent work and economic growth) SDG15(Life on land)											

COs	P01	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	-	-	-	-	-	1	-	-	-	-	3	-	-
CO2	-	-	1	-	-	-	-	-	-	-	-	-	1	3	-
CO3	-	2	-	-	-	-	2	-	-	-	-	-	-	-	2
CO4	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
CO5	-	-	1	-	-	-	1	2	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Breeding for Stress Resistance and Climate Change											
Course Code	GPB-516[T]											
Course Outcomes & Bloom's Level	CO1- Define the fundame change. (BL1-Remembe CO2- Describe the nature change. (BL2-Understar CO3- Conceptualize stres techniques (BL3-Apply) CO4- Apply the concepts Analyze) CO5- Problems based or (BL5-Evaluate)	ental concepts e and structure nd) ss resistance r of breeding fc n breeding stra	and theories of stress resistance and climate of breeding for stress resistance and climate nanagement and hands on lab tools and or stress resistance and climate change. (BL4- tegies for stress resistance and climate change.									
Course Elements	Skill Development ✓ Entrepreneurship × Employability ✓ Professional Ethics × Gender × Human Values × Environment ✓SDG2(Zero hunger) SDG3(Good health and well-being) SDG4(Quality education) SDG8(Decent work and economic growth) SDG11(Sustainable cities and economies) SDG12(Responsible consuption and production)											

COs	P01	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	2	-	-	-	-	-	-	-	3	2	-
CO2	-	3	2	-	-	-	-	-	-	-	-	-	-	3	1
CO3	1	-	-	-	3	-	-	-	-	-	-	-	-	-	1
CO4	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
CO5	-	2	-	-	-	1	-	1	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Agriculture Research Rese	iculture Research Research Ethics and Rural development Programmes											
Course Code	PGS-505[T]												
Course Outcomes & Bloom's Level	CO1- Define various aspect CO2- Understand the resear CO3- Apply the skill for rura CO4- Relate the functioning international levels. (BL4-A CO5- Equip the students/se	ets of agricultura arch ethics. (BL al development g of agricultural Analyze) cholars with skil	al research. (BL1-Remember) . 2-Understand) programmes. (BL3-Apply) research systems at national and Is to perform research. (BL5-Evaluate)										
Course Elements	Skill Development X Entrepreneurship X Employability X Professional Ethics X Gender X Human Values √ Environment X	SDG (Goals)	SDG4(Quality education) SDG8(Decent work and economic growth)										

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	P011	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	-	-	1	-	-	-	-	3	-	-
CO2	2	2	-	-	-	-	-	-	-	-	-	-	-	3	-
CO3	1	-	-	2	-	-	-	-	-	-	-	-	2	-	1
CO4	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-
CO5	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Course mapping with relevance to the local, regional, national, and global developmental needs

Title of the Course	Post Harvest Handeling and Storage of Seeds									
Course Code	SST-508[T]									
Course Outcomes & Bloom's Level	 CO1- Define the basic mechanism involved in seed processing.(BL1-Remember) CO2- Understanding on fundamental aspects of storage techniques and quality management practices.(BL2-Understand) CO3- Conceptualize the advanced research on seed developmental biology.(BL3-Apply) CO4- Examine the process of seed deterioration(BL4-Analyze) CO5- Acquire the skill on seed handling and storage methods on commercial basis. (BL5-Evaluate) 									
Course Elements	Skill Development ✓ Entrepreneurship X Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG8(Decent work and economic growth)							

-	-					-	-		-	-		-	-	-	
COs	P01	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CO2	1	-	2	-	-	-	1	-	-	-	-	-	-	-	-
CO3	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-
CO4	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	2	-	-	2	1	1	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-