# Course Details for Department of BasicSciences, CoF, UHFNauni

## Courses for M.Sc.(Agri)Microbiology

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester				
MICRO-502 (3+1) Principles of Microbiology	MICRO-503(3+1) Microbial Physiology and				
	Metabolism				
MICRO-504 (2+1) Microbial Genetics	MICRO-506 (2+1) Microbial Biotechnology				
MICRO-505 (2+1) Soil Microbiology	MICRO-511 (2+1) Biofertilizer Technology				
MICRO-507 (2+1) Food Microbiology	MICRO-591 (1+0) Master's Seminar				
	MICRO-599 (30) Master's Research				

# Courses for M.Sc. (Agri) Statistics

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester				
STAT-502 (3+1) Statistical Methods for Applied	STAT-502 (3+1) Statistical Methods for Applied				
Sciences	Sciences				
STAT-551 (2+0) Mathematics-I	STAT-511 (2+1) Experimental Designs				
STAT-552 (2+0) Probability Theory	STAT-556 (2+0) Econometrics				
STAT-553 (2+1) Statistical Methods	STAT-561 (2+0) Mathematics-II				
STAT-562 (2+1) Statistical Inference	STAT-564 (2+1) Sampling Techniques				
STAT-565 (2+1) Statistical Genetics	STAT-571 (2+1) Multivariate Analysis				
STAT-501 (2+0) Mathematics for Applied Sciences	STAT-572 (1+1) Regression Analysis				
STAT-591 (0+1) Seminar	STAT-563 (2+1) Design of Experiments				
STAT-573 (1+1) Statistical Computing	STAT-512 (2+1) Basic Sampling Techniques				
	STAT-599 (0+30) Master's Research				

# Courses for M.Sc.(Agri)Plant Physiology

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester			
PP-501 (2+1) Principles of Plant Physiology-I: Plant	PP-504 (2+1) Physiological and Molecular			
Water Relations and Mineral Nutrition	Responses of Plants to Abiotic Stresses			
PP-502 (2+1) Principles of Plant Physiology-II:	PP-505 (2+1) Hormonal Regulation of Plant Growth			
Metabolic Processes and Growth Regulation	and Development			
PP-503 (2+1) Plant Developmental Biology:	PP-506 (2+1) Physiological and Molecular			
Physiological and Molecular Basis	Mechanisms of Mineral Nutrient Acquisition and the			
	Functions			
PP-509 (2+0) Physiology of Horticulture Crops	PP-507 (2+1) Photosynthetic Processes, Cro			
	Growth and Productivity and Concepts of Crop			
	Modelling			
PP-512 (2+0) Crop Growth Regulation and	PP-511 (2+0) Phenotyping Physiological Processes			
Management				
PP-508 (2+0) Physiology of Field Crops	PP-510 (2+1) Seed Physiology			
	PP-591 (1+0) Master's Seminar			
	PP-599 (0+30) Master's Research			

#### Courses for M.Sc.(Agri) Biochemistry

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester
BIOCHEM-501 (3+1) Basic Biochemistry	BIOCHEM-507 (3+0) Plant Biochemistry
BIOCHEM-503 (2+1) Enzymology	BIOCHEM-502 (3+0) Intermediary Metabolism
BIOCHEM-505 (2+2) Techniques in Biochemistry	BIOCHEM-504 (2+1) Molecular Biochemistry
BIOCHEM-509(2+1) Nutritional Biochemistry	BIOCHEM-591 (1+0) Master'sSeminar
	BIOCHEM-599 (0+30) Master's Research

## PGS Courses for M.Sc.

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester			
PGS-502 (0+1) Technical Writing and Communication Skills	PGS-502 (0+1) Technical V Communication Skills	Nriting and		

# Courses for Ph.D. (Agri) Microbiology

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester			
MICRO-601(2+1) Improvement in fermentation	MICRO-603 (2+0) Recent Developments in Soil			
Technology	Microbiology			
MICRO-602 (2+0) Microbial Physiology & regulation	MICRO-604(2+0) Recent approaches in			
	environmental Microbiology			
MICRO-605 (2+1) Plant Microbial interactions	MICRO-692 (1+0) Doctoral Seminar II			
MICRO-691 (1+0) Doctoral Seminar I	MICRO-699 (75) Doctoral Research			

#### Courses for Ph.D.(Agri)Statistics

STAT-601 (1+2) Advanced Data Analysis	STAT-602 (1+1) Simulation Techniques			
STAT-611 (2+0) Baysian Inference	STAT-603 (2+0) Linear Models			
STAT-612 (2+1) Advanced Design of Experiments	STAT-604 (2+1) Advanced Statistical Methods			
STAT-613 (2+1) Advanced Sampling Techniques				
STAT-691 (0+1) Doctoral Seminar I	STAT-692 (0+1) Doctoral Seminar II			
	STAT-699 (45+0) Doctoral Research			

#### PGS Courses for Ph.D.

PGS-502 (0+1) Technical Writing and Communication	PGS-502	(0+1)	Technical	Writing	and
Skills	Communication Skills				