

PDM UNIVERSITY
FACULTY OF AGRICULTURE

COURSE CATALOGUE AND SYLLABI

B.Sc. (Hons.) AGRICULTURE PROGRAMME



PDM University, Bahadurgarh, Haryana - 124507

Course Catalogue for B. Sc. (Hons.) Agriculture, 4-Year Programme

Subject Code	Course Title	Credits	Faculty/ Department
I Semester			
AGRI1101	Agriculture Heritage and Introductory Agriculture	3 (2+1)	Agriculture
AGRI1102	Fundamentals of Soil Science	3 (2+1)	Agriculture
AGRI1103	Fundamentals of Genetics	3 (2+1)	Agriculture
AGRI1104	Fundamentals of Crop Physiology	3 (2+1)	Agriculture
AGRI1105	Elements of Plant Bio-chemistry	3 (2+1)	Agriculture
MATH0109	Elementary Mathematics (Students from Bio. stream)	3 (2+1)	Mathematics
BIOL0107	Introductory Biology (Students from Maths stream)	3 (2+1)	Life Science
ENGL0106	Comprehension & Communication Skills in English	2 (2+0)	English
COAP0101	Introduction to Computer Applications	3 (2+1)	Com. Science
LANF0101	Foreign Language - I (French)	2 (2+0)	Tr. & Placement
LANG0102	Foreign Language - I (German)	2 (2+0)	Tr. & Placement
LANS0103	Foreign Language - I (Spanish)	2 (2+0)	Tr. & Placement
Academic mentorship		1 (1+0) NC	
Total		28 (20+8)	
II Semester			
AGRI1106	Agriculture Meteorology and Climate Change	3 (2+1)	Agriculture
AGRI1107	Principles of Agronomy	3 (2+1)	Agriculture
AGRI1108	Soil Chemistry, Soil Fertility and Nutrient Management	3 (2+1)	Agriculture
AGRI1109	Principles of Plant Bio-technology	3 (2+1)	Agriculture
AGRI1110	Production Technology of Fruit and Plantation Crops	3 (2+1)	Agriculture
AGRI1111	Principles of Seed Technology	3 (2+1)	Agriculture
AGRI1112	Fundamentals of Soil and Water Conservation Engineering	2 (1+1)	Agriculture
AGRI1113	Rural Sociology & Educational Psychology	2 (2+0)	Soc. Sci./Psych.
COMM0102	Fundamentals of Agricultural Economics	2 (2+0)	Com.& Mgmt.
LANF0104	Foreign Language - II (French)	2 (2+0)	Tr. & Placement
LANG0105	Foreign Language - II (German)	2 (2+0)	Tr. & Placement
LANS0106	Foreign Language - II (Spanish)	2 (2+0)	Tr. & Placement
Academic mentorship		1 (1+0) NC	
Total		26 (19+7)	

III Semester			
AGRI2101	Crop Production Technology - I (<i>Kharif</i> Crops)	3 (2+1)	Agriculture
AGRI2102	Principles of Plant Breeding	3 (2+1)	Agriculture
AGRI2103	Introduction to Forestry and Agro-forestry	2 (1+1)	Agriculture
AGRI2104	Production Technology of Vegetables and Spices	3 (2+1)	Agriculture
AGRI2105	Manures and Fertilizer Management	3 (2+1)	Agriculture
AGRI2106	Plant Pathogens and Principles of Plant Pathology	3 (2+1)	Agriculture
AGRI2107	Irrigation Water Management	3 (2+1)	Agriculture
AGRI2108	Agricultural Microbiology	2 (1+1)	Agriculture
MATH0111	Introductory Statistics	2 (2+0)	Mathematics
COMM0101	Agricultural Finance and Cooperation	3 (2+1)	Com.& Mgmt.
VALU0121	NCC	2 (0+2)	
VALU0122	NSS	2 (0+2)	
Academic mentorship		1 (1+0) NC	
Total		27 (18+9)	
IV Semester			
AGRI2109	Crop Production Technology - II (<i>Rabi</i> Crops)	3 (2+1)	Agriculture
AGRI2110	Insect Morphology and Systematics	3 (2+1)	Agriculture
AGRI2111	Production Technology of Flowers, Medicinal and Aromatic Plants, Ornamental Crops and Landscaping	3 (2+1)	Agriculture
AGRI2112	Weed Management	3 (2+1)	Agriculture
AGRI2113	Introductory Nematology	2 (1+1)	Agriculture
AGRI2114	Problematic Soils and their Management	2 (2+0)	Agriculture
AGRI2115	Agricultural Waste Management	2 (1+1)	Agri./Life Sci.
AGRI2116	Dimensions of Agricultural Extension	2 (2+0)	Social Science
AGRI2117	Power Engineering, Farm Machinery & Renewable Energy	3 (2+1)	Agri./Engg.
COMM0103	Agricultural Marketing Trade & Prices	2 (2+0)	Com. & Mgmt.
ENGL0208	Communication Skill and Personality Development	2 (1+1)	English
VALU0129	NCC	2 (0+2)	
VALU0130	NSS	2 (0+2)	
Academic mentorship		1 (1+0) NC	
Total		27 (19+8)	

V Semester			
AGRI3101	Practical Crop Production - I (<i>Kharif</i> crops)	4 (0+4)	Agriculture
AGRI3102	Crop Improvement - I (<i>Kharif</i> Crops)	3 (2+1)	Agriculture
AGRI3103	Diseases of <i>Kharif</i> Field Crops and Horticultural Crops and their Management	3 (2+1)	Agriculture
AGRI3104	Farming System & Sustainable Agriculture	3 (2+1)	Agriculture
AGRI3105	Principles of Organic Farming	2 (1+1)	Agriculture
AGRI3106	Post-harvest Management and Value Addition of Fruits and Vegetables	2 (1+1)	Agriculture
AGRI3107	Insect Ecology, IPM & Beneficial Insects	3 (2+1)	Agriculture
AGRI3108	Livestock and Poultry Management	3 (2+1)	Agriculture
AGRI3109	Environmental Studies	2 (2+0)	Agriculture
COMM0104	Entrepreneurship Development in Agri-Business	2 (1+1)	Com.& Mgmt.
VALU0137	NCC	2 (0+2)	
VALU0138	NSS	2 (0+2)	
Academic mentorship		1 (1+0) NC	
Total		27 (15+12)	
VI Semester			
AGRI3110	Practical Crop Production - II (<i>Rabi</i> crops)	4 (0+4)	Agriculture
AGRI3111	Rainfed Agriculture & Watershed Management	3 (2+1)	Agriculture
AGRI3112	Crop Improvement - II (<i>Rabi</i> crops)	3 (2+1)	Agriculture
AGRI3113	Protected Cultivation and Secondary Agriculture	3 (2+1)	Agriculture
AGRI3114	Diseases of <i>Rabi</i> Field crops and Horticultural Crops and their Management	3 (2+1)	Agriculture
AGRI3115	Pest of Crops and Stored Grain and their Management	3 (2+1)	Agriculture
AGRI3116	Geoinformatics and Nano-technology for Precision Farming	3 (2+1)	Agriculture
COAP0102	Agriculture Informatics	2 (1+1)	Agriculture
COMM0105	Farm Management, Production & Resource Economics	2 (1+1)	Com.& Mgmt.
VALU0145	NCC	2 (0+2)	
VALU0146	NSS	2 (0+2)	
Academic mentorship		1 (1+0) NC	
Total		26(14 + 12)	

VII Semester			
RAWE4101	Rural Agricultural Work Experience and Agro-industrial Attachment (RAWE &AIA)		
S. No.	Activities	No. of weeks	Credit Hr.
1	General Orientation & On Campus Training by Different Faculties	1	
2	Village Attachment/Unit Attachment in University/ College/ KVK/ Research Station	10	
3	Agro-Industrial Attachment	6	
4	Project Report Preparation, Presentation and Evaluation	1	
Total weeks for RAWE & AIA		18	20

VIII Semester (Experiential Learning Programme/ Hands on Training (HOT))			
Subject Code	Title of the Module	Credit	Faculty
AGRI4201	Seed Production and Technology	10 (0+10)	Agriculture
AGRI4202	Mushroom Cultivation	10 (0+10)	Agriculture
AGRI4203	Soil, Plant , Water and Fertilizer Testing Services	10 (0+10)	Agriculture
AGRI4204	Beekeeping	10 (0+10)	Agriculture
AGRI4205	Commercial Vegetable Production	10 (0+10)	Agriculture
AGRI4206	Organic Production Technology	10 (0+10)	Agriculture
AGRI4207	Bioagents and Biofertilizer Production	10 (0+10)	Agriculture

Modules for Skill Development and Entrepreneurship: Out of seven, a student has to opt/register two modules, each (0+10) credits. A total 20 credits from the package of modules in the VIII semester.

S.No.	Module	Credit	Faculty
1	Module-I	10 (0+10)	Agriculture
2	Module-II	10 (0+10)	Agriculture
Total		20 (0+20)	

N.B: Bio = Biology, Com. Science = Computer Science, Com & Mgmt = Commerce & Management, Soc. Sci = Social Science, Psych = Psychology, Engg = Engineering, Agri = Agriculture, Life Sci = Life Science, IPM = Integrated Pest Management, Tr. & Placement = Training & Placement, PHM = Post-harvest Management, NCC = National Cadet Corps, NSS = National Service Scheme