



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG402	Title of the Course	Rural Agricultural Work Experience (RAWEx) and Agro-Industrial Attachment (AIA)	L	T	P	C
Year	4	Semester	VII			20	20
Course Objectives	<ol style="list-style-type: none"> 1. To provide an opportunity to the students to understand the rural setting in relation to agriculture and allied activities. 2. To make the students familiar with socio-economic conditions of the farmers and their problems. 3. To impart diagnostic and remedial knowledge to the students relevant to real field situations through practical training. 4. To develop communication skills in students using extension teaching methods in transfer of technology. 5. To develop confidence and competence to solve agricultural problems. 						

Course Outcomes	
CO1	Students will get opportunity to gain the Field and Industrial Experience, their values and ethics
CO2	It will include team spirit, working in group, working with team members, cooperation between team members, time management and logical approach to the problems
CO3	It will build social approach between students and farmers as well as industry
CO4	It will help in development of good entrepreneurial skill
CO5	It will help students in capacity building.

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	3	3	3	2	3	2	2	2	2	2	2	3	2
CO2	2	3	3	1	2	1	3	2	2	2	3	2	2	3	2
CO3	2	2	1	1	2	1	3	2	1	2	2	2	2	3	2
CO4	2	2	2	2	3	1	3	2	2	2	3	2	2	3	2
CO5	2	3	3	1	3	1	3	3	2	3	3	2	2	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG 469	Title of the Course	MUSHROOM CULTIVATION TECHNOLOGY	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	6. Students will have Basic knowledge of Mushrooms. 7. To learn about the morphology and types of Mushrooms. 8. To impart the knowledge to the students regarding the spawn production technique. 9. To aware the identification of edible and poisonous Mushrooms. 10. To learn the prospects and scope of mushroom cultivation in small scale industry.						

Course Outcomes	
CO1	Students will learn about the basics of Mushroom
CO2	Students will learn about the morphology and types of Mushrooms
CO3	Students will familiarize with spawn production technique
CO4	They will be aware regarding the identification of edible and poisonous Mushrooms
CO5	Studied will be able to commercialize the mushroom which will help in sustainable development along with a part of earning

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	3	3	2	3	3	2	3
CO2	3	2	3	2	2	2	3	3	3	3	2	3	3	2	3
CO3	3	2	3	2	2	2	3	3	3	3	2	3	3	2	1
CO4	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3
CO5	3	2	3	2	2	2	3	3	3	3	2	3	3	2	1

2- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG 470	Title of the Course	ORGANIC PRODUCTION TECHNOLOGY	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	<ol style="list-style-type: none"> 1. To have knowledge of Conserving environment and natural resources, re- establishing. 2. To have knowledge of Ecological balance, encouraging sustainable agriculture. 3. To have knowledge of Improving soil fertility, conserving flora and fauna, improving genetic diversity. 4. To produce food of high nutritional quality in sufficient quantity. 5. To maintain and increase long term fertility of soil. 						

Course Outcomes	
CO1	Acquire knowledge on concepts of organic agriculture.
CO2	Gain the information about the impact of organic farming and indigenous practices on environment.
CO3	Understand the procedure followed for organic certification as per NPOP guidelines namely production standards, labelling and accreditation.
CO4	Equip students with geostatistical techniques and variables of crop yield mapping.
CO5	Understand GIS based nutrient delivery system and DSSAT for variable crop yield mapping.

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO- PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	3	1	3	2	3	2	3	2	3	2	2	3
CO2	3	3	3	1	1	3	3	3	3	3	1	2	2	1	2
CO3	3	2	1	1	2	2	2	3	1	1	1	3	2	3	2
CO4	3	2	2	2	2	3	3	3	3	2	1	3	2	3	2
CO5	3	1	2	1	2	2	3	3	2	2	1	3	1	3	3

3- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG 471	Title of the Course	PRODUCTION TECHNOLOGY FOR BIOAGENTS AND BIOFERTILIZER	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	1. To gain the knowledge of production of Bioagents 2. To know about Biofertilizers production 3. To assess the importance of biofertilizer and bioagents use 4. To know about how environment can be sustained by bioagents and biofertilizers 5. To learn how to create wealth from Bioagents and Biofertilizers						

Course Outcomes	
CO1	To gain the knowledge of production of Bioagents
CO2	To know about Biofertilizers production
CO3	To assess the importance of biofertilizer and bioagents use
CO4	To know about how environment can be sustained by bioagents and biofertilizers
CO5	To learn how to create wealth from Bioagents and Biofertilizers

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	3	3	3	1	3	2	3	2	3	3
CO2	3	2	2	2	2	3	3	3	1	3	3	3	2	2	3
CO3	3	2	2	3	2	2	3	3	1	2	2	3	2	3	3
CO4	3	2	2	3	2	3	3	3	2	2	3	3	2	2	3
CO5	3	3	2	3	2	2	3	3	2	2	3	3	2	3	3

4- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG 472	Title of the Course	Commercial Horticulture	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	<ol style="list-style-type: none"> 1. Student will learn basic field knowledge and practical problems in production of horticultural crops 2. Applying the propagation and various sowing methods 3. Dissemination of advanced Horticultural technology 4. Area expansion under Horticulture crops based on agro-climatic suitability 5. Production and distribution of quality planting materials of various Horticultural plants 						

Course Outcomes	
CO1	Students can become eligible to undertake end to end technical and management aspects of a commercial nursery
CO2	Have practical knowledge on different Horti-based industries situated in and around the neighboring districts
CO3	Applying and analyzing the food safety methods
CO4	Understanding the importance of commercial horticulture and protected cultivation
CO5	Can practice skills in various organic production techniques and regulatory practices

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																
PO- PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
	CO1	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3
CO2	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	
CO3	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	
CO4	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	
CO5	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	

5- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



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Effective from Session: 2021-2022							
Course Code	AG 473	Title of the Course	FOOD PROCESSING	L	T	P	C
Year	4	Semester	VIII			10	10
Course Objectives	<ol style="list-style-type: none"> 1. Basic knowledge regarding importance and scope processing of food. 2. To learn about the different unit operations in food processing 3. To impart the knowledge to the students regarding the raw material handling and processing. 4. To commercialize the processed products after processing and packaging of food. 5. To impart knowledge to the students that the food processing is also a part of livelihood and plays important role in our economy. 						

Course Outcomes	
CO1	Students will learn about the importance and scope processing of food
CO2	Students will learn about the different unit operations in food processing
CO3	Students will familiarize with the different types of raw material handling and processing
CO4	They will gain knowledge of the processed products after processing and packaging of food
CO5	Studied will be able to commercialize the food processing is also a part of livelihood and plays important role in our economy

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO- PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
	CO1	2	3	3	3	3	2	3	3	3	3	3	3	2	2
CO2	3	3	2	3	3	2	3	3	3	2	3	3	3	2	3
CO3	3	2	3	3	3	2	3	3	3	3	2	3	2	2	3
CO4	3	3	3	3	3	2	3	3	3	3	3	3	3	2	3
CO5	2	3	2	3	3	2	3	3	3	2	3	3	2	2	3

6- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG 474	Title of the Course	POULTRY PRODUCTION TECHNOLOGY	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	<ol style="list-style-type: none"> 1. To gain the basic knowledge of poultry birds. 2. To learn about the different indigenous and breeds. 3. To impart the knowledge to the students regarding the housing and feeding management. 4. To provide the basics knowledge of poultry diseases and vaccinations schedules. 5. To impart knowledge to the students that the meat and eggs is also a part of livelihood for a number of people. 						

Course Outcomes	
CO1	To gain the basic knowledge of poultry birds.
CO2	To learn about the different indigenous and breeds.
CO3	To impart the knowledge to the students regarding the housing and feeding management.
CO4	To provide the basics knowledge of poultry diseases and vaccinations schedules.
CO5	To impart knowledge to the students that the meat and eggs is also a part of livelihood for a number of people.

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO- PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3
CO2	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3
CO3	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3
CO4	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3
CO5	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3

7- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-22							
Course Code	AG475	Title of the Course	SEED PRODUCTION TECHNOLOGY	L	T	P	C
Year	4 th	Semester	8 th	-	-	10	10
Course Objectives	<ol style="list-style-type: none"> 1. To gain the basic knowledge of Seeds. 2. To learn about the different seed production techniques. 3. To impart the knowledge to the students regarding the companies involved in seed production. 4. To provide the basics knowledge of management techniques involved in production of seeds. 5. To impart knowledge to the students that seed production more necessary for sustainable development of the country. 						

Course Outcomes	
CO1	To gain the basic knowledge of seed production.
CO2	To learn about the different companies involved in seed production.
CO3	To impart the knowledge to the students regarding the techniques that companies used for the production of seeds
CO4	To provide the basics knowledge of management techniques involved in production of seeds.
CO5	Students will learn that seed production more necessary for sustainable development.

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	3	3	3	3	3	2	3	3	2	3
CO2	3	3	3	3	3	2	3	3	3	3	2	3	3	2	3
CO3	3	3	3	2	2	3	3	3	3	3	2	3	3	2	3
CO4	3	3	3	2	2	3	3	3	3	3	2	3	3	2	3
CO5	3	2	3	2	2	2	3	3	3	3	2	3	3	2	3

8- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG465	Title of the Course	AGRICULTURE WASTE MANAGEMENT	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	11. To gain the basic knowledge of waste products in agriculture and related area. 12. To learn about the processing of waste products. 13. To impart the knowledge to the students regarding the use of waste products 14. To provide the knowledge of processing technique and marketing strategies. 15. To impart knowledge to the students that waste can be utilized in the form of manures.						

Course Outcomes	
CO1	Students will learn about the basics of waste products in agriculture and related area.
CO2	Students will learn about the processing of waste products
CO3	Students will familiarize with the different processing technique and marketing strategies.
CO4	They will gain knowledge of the various products like manures FYM.
CO5	Studied will be able to commercialize waste products for survival

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO															
CO1	2	2	3	2	2	3	3	2	3	3	2	3	3	2	3
CO2	3	2	3	2	3	2	3	3	3	3	2	3	3	2	3
CO3	2	2	3	3	3	2	3	3	3	3	2	3	3	2	1
CO4	3	2	3	2	2	3	3	3	3	3	2	3	3	3	3
CO5	3	2	3	2	2	3	3	3	3	3	2	3	3	2	1

9- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG466	Title of the Course	MUSHROOM CULTIVATION TECHNOLOGY	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	16. To gain the basic knowledge of raw milk, adulterated milk and pasteurized milk and standardized milk. 17. To learn about the milk processing. 18. To impart the knowledge to the students regarding the value-addition of milk. 19. To provide the knowledge of processing technique and marketing strategies. 20. To impart knowledge to the students that the milk and milk products is also a part of livelihood for a number of people.						

Course Outcomes	
CO1	Students will learn about the basics of raw milk platform test and adulteration.
CO2	Students will learn about the dairy plants management.
CO3	Students will familiarize with the different processing technique and marketing strategies about milk and milk based products.
CO4	They will gain knowledge of the various products of milk including like Ghee, Paneer, Butter, Dahi, Lassi etc.
CO5	Studied will be able to commercialize the milk and milk based products which will help in sustainable development along with a part of earning.

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	3	3	2	3	3	2	3
CO2	3	2	3	2	2	2	3	3	3	3	2	3	3	2	3
CO3	3	2	3	2	2	2	3	3	3	3	2	3	3	2	1
CO4	3	2	3	2	2	2	3	3	3	3	2	3	3	3	3
CO5	3	2	3	2	2	2	3	3	3	3	2	3	3	2	1

10- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG467	Title of the Course	Floriculture and Landscaping	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	6. The student will gain skill in manual drawing and execution of garden 7. To improve and conserve natural resources by reducing soil erosion 8. To create recreational grounds to provide places for relaxation and community interaction 9. To blend concrete and architectural creations into the natural scenery 10. To modify environmental factors						

Course Outcomes	
CO1	Student will be able to landscaping terrace gardening, vertical gardening, garden components, adornments etc
CO2	Students will learn about climber and creepers: importance, selection, propagation, planting
CO3	Students can make landscape and gardening and interior landscaping plans
CO4	Student will become eligible to manage a commercial floriculture unit
CO5	The student will be able to practice production technology of cut flowers, loose flowers and principle of growing commercial flowers

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO- PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
	CO1	3	3	2	3	1	3	2	3	2	3	2	3	2	2
CO2	3	3	3	1	1	3	3	3	3	3	1	2	2	1	2
CO3	3	2	1	1	2	2	2	3	1	1	1	3	2	3	2
CO4	3	2	2	2	2	3	3	3	3	2	1	3	2	3	2
CO5	3	1	2	1	2	2	3	3	2	2	1	3	1	3	3

1-Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2021-2022							
Course Code	AG468	Title of the Course	COMMERCIAL BEEKEEPING	L	T	P	C
Year	4 th	Semester	8 th			10	10
Course Objectives	6. To gain the knowledge of production technology of honey bees 7. To know about honey production 8. To assess the importance of caste in honey bees 9. To know about how environment can be sustained by honey bees 10. To learn how to create wealth from bee products						

Course Outcomes	
CO1	To gain the knowledge of production of honey products
CO2	To know about commercialization of bee keeping
CO3	To assess the importance of bee products
CO4	To know about how environment can be sustained by honey bees
CO5	To learn how to create commercial bee keeping units

Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	2	3	2	3	3	3	1	3	2	3	2	3	2
CO2	3	2	2	2	2	3	3	3	1	3	3	2	2	2	2
CO3	2	2	2	3	2	2	3	3	1	2	2	2	2	3	2
CO4	3	2	2	3	2	3	3	3	2	2	3	3	2	2	3
CO5	3	3	2	3	2	2	3	3	2	2	3	3	2	3	2

1-Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation