

Hours Per Week :

L	T	P	C
2	0	2	3

Total Hours :

L	T	P	WA/RA	SSH/HS	CS	SA	S	BS
30	-	30	5	40	-	8	5	-



Source :

<https://www.ag1source.com/wp-content/uploads/2018/01/banner-expertise-agronomy.jpg>

COURSE DESCRIPTION AND OBJECTIVES:

To train and equip the students with necessary theoretical and practical knowledge on basic principles of cropping systems and acquaints them with the cultivation practice of various crops in Indian agriculture.

COURSE OUTCOMES:

Upon completion of the course, student will able to achieve the following outcomes:

COs	Course Outcomes	POs
1	Understand the cropping patterns, package of practices and impact of weather and atmosphere on day to day agriculture.	9
2	Apply their knowledge and acquired principles on cereals, pulses, oilseeds and commercial crops in agriculture for increasing yields and reducing cost of cultivation.	1
3	Analyse the problems faced by the farmers in agriculture in view of increasing yields and reducing cost of cultivation.	2
4	Evaluate the trend and current scenario of investments and returns on local and global agriculture.	4
5	Apply and develop new package of practices for various crops in agriculture, horticulture and sericulture.	2
6	Create and manifest the scientific aptitude and attitude of agronomy at individual capacity and also with a team work approach for overall development of farmers in Indian agriculture.	3

SKILLS:

- ✓ Practice of ploughing in field.
- ✓ Practice of puddling in paddy field.
- ✓ Practice of sowing in field for various crops.

UNIT - I	L-06
Introduction and scope of agronomy: Classification of crops, Effect of different weather parameters on crop growth and development. Principles of tillage, tith and its characteristics.	
UNIT - II	L-06
Crop seasons: Methods, time and depth of sowing of major field crops. Methods and time of application of manures and fertilizers.	
UNIT - III	L-06
Organic farming: Sustainable agriculture.	
UNIT - IV	L-06
Soil water plant relationship: Crop coefficients, water requirement of crops and critical stages for irrigation, weeds and their control.	
UNIT - V	L-06
Crop rotation: Cropping systems, Relay cropping and mixed cropping.	

LABORATORY EXPERIMENTS

LIST OF EXPERIMENTS	TOTAL HOURS-30
1. Identification of crops and their varieties.	
2. Identification of various crop varieties.	
3. Identification of various seeds for food crops and pulses.	
4. List out various manures for food crops.	
5. Study on various fertilizers and weeds.	
6. Different fertilizer application methods.	
7. Different weed control methods and practices in agriculture.	
8. Practice of ploughing in field.	
9. Practice of puddling in paddy field.	
10. Practice of sowing in field for various crops.	
11. Visit to any regional agricultural research station.	
12. Practical examinations.	

TEXT BOOKS :

1. Reddy G.H. Shankara Reddy T. allamanda Reddy,by "A text book on Principles of Agronomy".
2. V C Srivastava, by "A text book on Modern Principles of Agronomy".

REFERENCE BOOKS:

1. Gupta O P. 1984, "Scientific Weed Management" in the Tropics and Sub- Tropics. Today and Tomorrow's Printers and Publishers. New Delhi.
2. Rao V S. 1992, "Principles of Weed Science". Oxford and IBH Publishing Co. Ltd. New Delhi.
3. Reddy Yellamanda T and Shankar Reddy G H. 1995, "Principles of Agronomy". Kalyani Publishers Ludhiana.