AMITY UNIVERSITY
UTTAR PRADESH

FORMAT FOR COURSE CURRICULUM

Course Title: AGRONOMY OF COMMERCIAL CROPS
Course Code: AGRI617
Course Level: PG
Credit Units: 4

L	T	P/S	SW/FW	No. of PSDA	TOTAL CREDIT UNITS
2	-	2	2	3	4

Course Objectives:
The objective of the course is to familiarize students with the agronomy of commercial crops and importance of medicinal and aromatic crops.

Pre-requisites:
Knowledge of the production technique of the commercial crops, medicinal and aromatic plants

Course Contents/Syllabus:

	Weightage (%)
Module I Production and Value Addition of Commercial Crops	**25%**
Descriptors/Topics Importance, origin, history, adaptability, production, distribution, constraints, growth and development, varietal improvement, water and nutrient requirements, weed management, cropping systems, produce quality and value addition in respect of cotton, jute, sugarcane and tobacco crops.	

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Module II Production and Value Addition of Vegetable Crops	**20%**
Descriptors/Topics Importance, origin, history, adaptability, production, distribution, constraints, growth and development, varietal improvement, water and nutrient requirements, weed management, cropping systems, produce quality and value addition in respect of potato, chilli and tomato crops.	
Module III Production and Value Addition of Aromatic Crops	**35%**
Descriptors/Topics Importance of medicinal and aromatic plants in human health and national economy, classification according to botanical characteristics and uses, adaptability, climate, seed, water and nutrient requirements, cultural practices, plant protection, yield and important constituents, produce quality, processing and value addition in respect of mentha, lemon grass, aloe vera, celery etc.	
Module IV Production and Value Addition of Plantation Crops	**20%**
Descriptors/Topics Importance, origin, history, adaptability, production trend, distribution, plant growth and development, varietal improvement, soil, water and nutrient requirements, weed management and crop protection, factors affecting produce quality, processing and value addition in respect of tea and coffee.	

Course learning outcome:
Student will be able to:

- Comprehend the distribution, growth and development of commercial crops
- Studythe production techniques of commercial crops.
- Understand the importance of aromatic and medicinal crops.

Pedagogy for Course Delivery:

The course pedagogy will include lectures, discussion on applications of the topics covered.

List of Professional Skill Development Activities (PSDA):

- Collection and identification of some medicinal/commercial plants
- Study about the post harvesting activities
- Control measurements of weeds and insect pest

Lab/ Practicals details, if applicable:

- Seed / seedling treatment in different crops.
- Delinting in cotton and visit to cotton gin.
- Estimationof seed rate in cotton and jute based on different parameters.
- Estimation of crop yield on the basisof yield attributes.
- Quality characteristics in medicinal and aromatic plants.
- Working out cost ofcultivation of different crops.
- Raising of herbarium of medicinal, aromatic and under-utilizedplants.
- Visit to the processing plant (medicinal and aromatic, sugarcane, potato etc.).
- Preparation of project report for commercial cultivation of crops.
- Field visits to acquaint the students about the plant growth and important cultural practices in the crops under study.

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)

75	**25**

Theory Assessment (L&T):

Continuous Assessment/Internal Assessment (40%)					**End Term Examination (60%)**
Components (Drop down)	**HA**	**Q**	**C**	**A**	**End Sem Exam**
Linkage of PSDA with Internal Assessment Component, if any	**PSDA-1 to 4**		**PSDA-1 to 4**		
Weightage (%)	10	15	10	05	60

Lab/ Practical/ Studio Assessment:

	Continuous Assessment/Internal Assessment				**End Term Examination**
Components (Drop down)	**Q**	**Viva Voce**	**P**	**A**	**End Sem Exam**
Weightage (%)	15	10	10	5	60

Mapping Continuous Evaluation Components/PSDA with CLOs:

Bloom's Level >	Remembering	Understanding , Analysing and Applying	Evaluating and Creating
Course Learning Outcomes	CLO1	CLO2	CLO3

Assessment type/PSDA			
Assessment Component 1	✓		✓
•		✓	
•	✓		
•	✓	✓	✓
•			
•			✓
Assessment Component ‘n’	✓	✓	

Text Reading:

References:

- Chadha, K.L. and Gupta, R. 1995. Advances in Horticulture. Vol. II. Medicinal and Aromatic Plants. Malhotra Publ.
- Das, N.R. 2007. Introduction to Crops of India. Scientific Publ.
- Handa, S.S. 1984. Cultivation and Utilization of Medicinal Plants. RRL, CSIR, Jammu. Hussain, A. 1984. Essential Oil Plants and their Cultivation. CIMAP, Lucknow. Hussain, A. 1993. Medicinal Plants and their Cultivation. CIMAP, Lucknow.
- ICAR. 2006. Hand Book of Agriculture. ICAR, New Delhi.
- Kumar, N., Khader, Md. Abdul, Rangaswami, J.B.M. and Irulappan. 1997. Introduction to Spices, Plantation Crops, Medicinal and Aromatic Plants. Oxford & IBH.
- Prajapati, N.D., Purohit, S.S., Sharma, A.K. and Kumar, T. 2003. A Hand Book of Medicinal Plants: A Complete Source Book. Agrobios.
- Prasad, R. 2002. Text Book of Field Crops Production. ICAR Publ.
- Sharma, R. 2004. Agro-techniques of Medicinal Plants. Daya Publ. House, New Delhi.

Additional Reading:
Any other Study Material: