

Course Title	Harvesting and Postharvest Handling of Crop Produce			Course Code	BST 22263		
Year	2	Semester	2	Credits	3	Theory (hr)	30
						Practical (hr)	30
						Independent Learning (hr)	

Aim of the Course:

To provide knowledge and skills on post-harvest quality management practices to minimize losses in crop produce

Intended Learning Outcomes:

After completion of this course, the learner should be able to:

- Describe the principles and practices that are fundamental to postharvest quality management of horticultural and field crops
- Explain the biological factors and physiological processes that determine the quality of harvested crops, and the processes that contribute to product deterioration.
- Explain the strategies and technologies available to extend the shelf life and improve the postharvest quality.
- Provide appropriate solutions to the problems in handling and storage of crop produce.
- Judge the quality parameters of a crop produce and interpret the results.

Course Capsule:

Theory
Postharvest losses: Causes of postharvest losses of fresh produce, factors affecting quality of fresh harvested crop produce; Biological and physiological basis of postharvest handling; Maturity and maturity indices; Fruit ripening; Senescence processes; Postharvest technology procedures: Control of postharvest quality deterioration; Fundamentals of postharvest handling and storage of horticultural crops (fruits, vegetables, cut-flowers and foliage) and field crops; Pack house operations; Warehouse operations; Temperature management; Storage systems; Ethylene management; Recent trends in perishables handling

Practical
Classification of postharvest characteristics of crops; Identification of maturity and harvesting indices for crop produce; Non-destructive and Destructive methods of quality evaluation of fruits and vegetables; Storage environments and percentage weight loss of fresh produce; Artificial ripening of fruits; Postharvest quality evaluation of cut ornamentals; Identification of packaging materials and packaging technologies; Preparation of minimally processed products / fresh-cut produce; Identification of postharvest diseases and disorders of fruits and vegetables; Quality attributes of non-horticultural crop produce; Field visit: Fresh fruit and vegetable exporter

Assessment:

Continuous assessment: 40%
 End semester assessment: 60%