

Course Title	Microbiology			Course Code	BST 21192		
Year	2	Semester	1	Credits	02	Theory (hr)	20
						Practical (hr)	20
						Independent Learning (hr)	

**Aim of the Course:**

To provide the background information pertaining to microorganisms and their use

**Intended Learning Outcomes:**

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

- Classify the microorganisms based on a given criterion.
- Explain the microbial cell structure and arrangement.
- Use the aseptic techniques to handle microorganisms.
- Describe and identify microbial crop pests and disease causing microorganisms.
- Explain the microbial processes use in food industry and soil fertility.

**Course Capsule:**

<b>Theory</b>
Classification, nomenclature and habitats of microorganisms; Cell structure, forms, arrangements and identification of microorganisms; Nutrient requirements and growth of microorganisms; Control of microorganisms; Microorganisms in soil processes and their role in soil fertility; Microbial involvement in food production and preservation; Application of microorganisms in industries

<b>Practical</b>
Familiar with microbiological lab, equipment and tools; Good microbiological laboratory practices; Microscopic examination of microorganisms; Staining techniques for microorganisms; Laboratory techniques for isolation and cultivation of microorganisms; Symbiotic microorganisms; Enumeration of microorganisms; Identification of crop pests and diseases

**Assessment:**

Continuous assessment: 40%  
 End semester assessment: 60%