#### BSc. Botany (NEP 2020)

#### Program Outcomes (PO):

- 1. Demonstrate and apply the fundamental knowledge of the basic principles of major fields of biology
- 2. Apply knowledge to solve the issues related to plant sciences with the help of computer technology
- 3. Apply knowledge for conservation of endenic and endangered plant species

#### Program Specific Outcomes (PSO):

- 1. Collaborate effectively on team-oriented projects in the field of life sciences.
- 2. Communicate scientific information in a clear and concise manner both orally and in writing
- 3. Explain Biodiversity, climate change and plant pathology.
- 4. Apply Biotechnology, Ecology, Genetics and Plant b reding techniques in plant sciences
- 5. Apply knowledge of Medicinal and Economic botany in day to day life.
- 6. Apply the knowledge to develop the sustainable and eco-friendly technology.

## BOSC 01 T 1st Sem

#### **Course Learning Outcome**

At the end of this course, the students will be able to

- > Understand the Basics of Botany and its branches.
- Get acquainted with complex interrelationship between organisms and environment.
- Develop a comprehensive understanding of the identification, cultivation, and processing of medicinal plants, and their chemical constituents.
- Utilize plants resources for livelihood.

## BOSC 01 P 1st Sem

#### **Course Learning Outcome**

## At the end of this course, the students will be able to

- Understand structure of plant cell, prokaryotic cell and eukaryotic
- > Identify pteridophytes of college campus.
- > Learn about the different types of plant tissues.
- > Learn about Ayurvedic system of medicine.

## BOSC 02 T 2<sup>nd</sup> Sem

## **Course Learning Outcome**

# At the end of this course, the students will be able to

- 1. Understand about the Microbes and their Importance.
- 2. Identify edible mushrooms and learn cultivation techniques.
- 3. Learn about bio-fertilizers and their uses.
- Understand life cycles of different algae and fungi.

## BOSC 02 P 2<sup>nd</sup> Sem

#### Course Learning Outcome

- Understand the Viruses, Bacteria, Phycology, Mycology and Plant pathology
- 2. Learn microbial techniques which will be beneficial for agriculture and industry.
- 3. Learn life cycles of selected genera of different groups
- 4. Understand etiology of plant diseases
- 5. Apply their knowledge in the crop fields to eradicate or avoid the

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## BOSC 03 T 3rd Sem **Course Learning Outcome**

- > students will be familiar with amphibians and reptiles plants
- > progressive evolution in plants
- relics of past plants
- > diversity in plants
- be development of seeds.

## BOSC 03 P 3rd Sem **Course Learning Outcome**

At the end of the course students will be familiar

- with amphibians and reptiles plants
- progressive evolution in plants
- relics of past plants
- be diversity in plants
- Development of seeds.

## BOSC 04 T 4th Sem **Course Learning Outcome**

At the end of the course, the students will be able:

- > Understand basics of plant identification, classification and nomenclature
- Understand the concept, diversity and evolution of Angiosperm plants.
- Become familiar with the internal structure of plants and concept of plant tissues with its revolutionary concept.
- Understand the reproductive system in flowering plants.

## BOSC 04 P 4th Sem **Course Learning Outcome**

At the end of this course, students will be able to:

- Understand the systematic status of flowering plants.
- Learn collection of local flora, identification and herbarium preparation.
- Understand internal structure of different plant parts.
- Understand the pollination and seed dispersal mechanism.
- Understand about reproduction system in flowering plants.

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## BSc. Botany (NEP 2020)

# Program Outcomes (PO):

- 1. Demonstrate and apply the fundamental knowledge of the basic principles of major fields of biology 2. Apply knowledge to solve the issues related to plant sciences with the help of computer technology
- 3. Apply knowledge for conservation of endemic and endangered plant species Program Specific Outcomes (PSO):
  - 1. Collaborate effectively on team-oriented projects in the field of life sciences.
  - 2. Communicate scientific information in a clear and concise manner both orally and in writing 3. Explain Biodiversity, climate change and plant pathology.

  - 4. Apply Biotechnology, Ecology, Genetics and Plant breeding techniques in plant sciences
  - 5. Apply knowledge of Medicinal and Economic botany in day to day life.
  - 6. Apply the knowledge to develop the sustainable and eco-friendly technology.

## BSc. Botany (NEP 2020) BOSE -01 T 3rd SEM

# At the end of this course, the students will be able to

- Understand natural resources and their sustainable utilization.
- > Knowledge on land, water, energy, and forest resources.
- Students will learn about the practices of natural resource management.
- Knowledge on the international and national efforts of natural resource

## BSc. Botany (NEP 2020) BOSE -01 P 3rd SEM

#### at the end og then of the sesu

- To understand natural resources and their sustainable utilization.
- O Acquire knowledge on land, water, energy, and forest resources.
- O Students will learn about the practices of natural resource management.
- O Acquire knowledge on the international and national efforts of natural

## BSc. Botany (NEP 2020) BOSE -02 T 4th SEM

At the end of this course, the students will be able to get

- > Basic idea of different microbes present in biotic and abiotic environment.
- > Knowledge of principle concept and methods in the field of Microbiology
- > Idea of living, non living and environmental causes of plant diseases. > Knowledge of different technique to isolate microbes study their cultural
- > How disease occurs by microbes, their identification and control measures.

## BSc. Botany (NEP 2020) BOSE -02 T 4th SEM

At the end of this course, the students will be able to get

- > Basic idea of microbes.
- > Culture of microbes in the laboratory
- ➤ How disease occurs by microbes
- > Basic idea of host parasite interrelationship
- > Control measure of pathogen by different biological sources.

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5	Course Title	Herbal Plant & Human Health	•	The second secon	
	Pro-roomini	Value Addition Course (BOVAC-01)		I SALA	
		As per program			
	Course Learning. Outcomes (CLO)	After completion of this course, the students will be able to —  > Understand the value of herbs, herbal medicine and use of herbal medicine.  > Know about botanical medicine professionals in the complementary and alternative medicine (CAM)  > Demonstrates the knowledge of the toxicity of plant and essential oil ingredients,  > Understand the possibility for allergic and unpleasant reactions to herbal products and the impact of herbal quality on potential toxicity.  > Use the herbal plants in their daily life  > Adopt the value of herbal medicine to save their health.			

1	Course Code	BOSEC-01
$\begin{vmatrix} 2 \\ 3 \end{vmatrix}$	Course Title	Gardening and Floriculture
	Course Type	Skill Enhance Course (POSTG or)
	Pre-requisite (if, any	As per program
5	Course Learning. Outcomes (CLO)	After completion of this course, the students will be able to -  > understand the concept of Gardening & Floriculture  > learn about the gardening technique and familiar with gardening  tools  > adopt the skill of gardening as well as floriculture  > student may delelop entrepreneurship in this field.