

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA

SHRI VAISHNAV INSTITUTE OF AGRICULTURE

GUAGRI GPB 102 Generic Elective Introduction to Biological Concepts

Course Code	Course Name	TEACHING & EVALUATION SCHEME							
		THEORY			PRACTICAL		L	P	Credits
		END SEM University Exam	Mid-term exam	Teachers Assessment	END SEM University Exam	Teachers Assessment			
GUAGRI GPB 102	Introduction to Biological Concepts	60	40	00	00	00	3	0	3

Legends: L- Lecture; P- Practical; C-Credit.

*Teacher Assessment shall be based on following components: Quiz / Assignment / Project /

Participation in Class,

Course Objective: To prepare students for further exploration and application of biological sciences.

Course Outcomes

- Students will delve into the dynamic processes of life, examining how organisms' function, evolve, and interact within their environments.
- Student will be able to understand basic systematic of plant species
- Students will be able to understand the morphology of flowering plants and seed development.

Unit-1:

Exploring the Diversity and Characteristics of Life, the Origin of Life, Evolutionary Processes, and the Principles of Eugenics.

Unit-2:

Taxonomic Classification and Binomial Nomenclature, Cellular Structure and Function, and Mechanisms of Cell Division

Unit-3

Morphology of Flowering Plants, Seed Structure and Development, and the Process of Seed Germination

Unit-4

Plant Systematics: An Examination of the Brassicaceae, Fabaceae, and Poaceae Families

Unit-5

The Role of Animals in Agriculture, Selective breeding for improved traits, Genetic resources and biodiversity conservation.

Suggested books

- Concepts of Biology (2013) Samantha Fowler, Rebecca Roush, James Wise, Publisher: OpenStax ISBN 13: 9781947172036 <https://openstax.org/books/concepts-biology/pages/1-introduction>
- Paper back, Mader Sylvia S., Essentials of Biology, McGraw-Hill Education– Europe, ISBN 9781259921773