

Course Objectives:

- To understand the basic concepts of plant classification and Nomenclature
- To study the methods of Taxonomy
- To study the Herbarium Techniques
- To acquire knowledge on Flora and related aspects

Course Outcomes:

CO1: Knowledge on the significance of plant identification, classification

CO2: Awareness on taxonomic methods and plant nomenclature

CO3: Skill of conducting floristic surveys and Herbarium techniques

CO4: Skill to identify the local flora

Syllabus**Unit – 1**

Introduction to plant taxonomy, Development of Plant classification (Pre-Linnaean, Linnaean, Post Linnaean systems and APG Classification)

Unit – 2

Hierarchical Classification(Taxonomic groups and categories

Taxonomic Literature, plant Identification, Taxonomic Keys, Variation and Speciation

Unit – 3

Source of Taxonomic Characters: Morphology, Anatomy, Embryology, palynology, Micromorphology and others)Cytotaxonomy, Chemotaxonomy, Numerical Taxonomy, Molecular Taxonomy, Botanical Nomenclature

Unit – 4

Taxonomic methods: Herbaria, Botanical gardens, Plant preservation, Taxonomic Literature, Plant Identification, Taxonomic Keys, Flora of Karnataka.

Evaluation Pattern:

Assessment	Internal	External
Mid-Term Examination	30	0
Continuous Assessment (CA)*	30	0
End Semester Examination	0	40
Total Marks	60	40

*CA - Can be Quizzes, Assignments, Projects, and Reports.

Further Reading

- Bridson, D. and Forman, L. 1992. The Herbarium Handbook. Royal Botanic Gardens, Kew.
- Cronquist A. 1981. An integrated system of classification of flowering plants. Columbia.
- Gurucharan Singh. 2010. Plant systematics and integrated approach, Science Publishers, Enfield, NH, USA.
- Simpson M.G. 2006. Plant Systematics. Elsevier, Amsterdam. University Press, New York.
- Naqshi A R. An Introduction to Botanical Nomenclature. Scientific publishers, Jodhpur, India.

References

- Angiosperm Phylogeny Group (2003) An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG II. Botanical Journal of the Linnaean Society 141: 399-436.
- Karnataka Biodiversity Board, 2019. FLORA OF KARNATAKA, A Checklist, Volume – 2: Gymnosperms and Angiosperms. 1 - 1002 (Published by Karnataka Biodiversity Board).
- Sanjappa, M. And A.N. Sringeriswara 2019. Flora of Karnataka – A Checklist. Volume 2: Gymnosperms & Angiosperms. Karnataka Biodiversity Board, Bengaluru.
- Lakshminarasimhan, P., S.S. Dash, P. Singh, N.P Singh, M.K. Vasudeva And P.S.N. Rao (eds), 2019. Flora of Karnataka (Monocotyledons) Vol.3, Botanical Survey of India. Kolkata.