

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI**  
**COURSE PLAN June - November 2024**

**Department** : **BOTANY**  
**Name/s of the Faculty** : **\*Dr. DIANA VINODHINI & Ms. NANDHINI. K**  
**Course Title** : **TAXONOMY OF ANGIOSPERMS AND ECONOMIC BOTANY**  
**Course Code** : **23BT/MC/TE34**  
**Shift** : **I**

**COURSE OUTCOMES (COs)**

<b>COs</b>	<b>Description</b>	<b>CL</b>
<b>CO1</b>	recognize the fundamental concept on morphology; recollect technical description and nomenclature of angiosperm plants	<b>K1</b>
<b>CO2</b>	classify taxonomic structure, hierarchy and examine systems of classification and nomenclature rules	<b>K2</b>
<b>CO3</b>	identify the diagnostic features of various angiosperm plants and interpret their family characters	<b>K3</b>
<b>CO4</b>	analyze the diagnostic features and explain the economic importance of selected families	<b>K4</b>
<b>CO5</b>	evaluate and create taxonomic key & herbarium specimens by compiling the knowledge on plant identification	<b>K5</b>

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Jun 19 – 26, 2024 (Day Order 1 - 6)	1	* <b>Classification and Plant Morphology</b> 1.1 Overview of Plant Morphology - Habit, Roots, Stems, Leaves	K1-K5  K1, K2, K5	3	CO1-5	PPT, Lecture	
	2	<b>2 Nomenclature and Herbaria</b> 2.1 Plant Nomenclature: Binomial and Polynomial		2			
Jun 27 – July 4, 2024 (Day Order 1 - 6)	1	*1.1 Overview of Plant Morphology - Inflorescence, Flowers and Fruits	K1-K5	3	CO1-5	Field work  Lecture through, PPT and video presentations	
	2	2.1 ICN –Typification, Effective and Valid Publication, Author Citation	K1, K2, K5	2			
July 5 – 12, 2024 (Day Order 1 - 6)	1	*1.2 Phenetic (Linnaean, Bentham and Hooker)	K1-K5	3	CO1-5	Lecture through, PPT and video presentations  Group discussions	<b>PRESENTATION (10 MARKS)</b>
	2	2.1 Important Botanical Gardens – Kew Gardens, London; Acharya Jagadish Chandra Bose Botanic garden, Calcutta.	K1, K2, K5	2			

July 15 – 23, 2024 (Day Order 1 - 6)	2	* 1.2 Phylogenetic (Angiosperm Phylogeny Group IV (APG IV) Systems of Classification  2.2 Herbarium Techniques: Collection, Pressing, Drying, Poisoning, Mounting and Preservation of Plant Specimens	K1, K2, K5	3  2	CO1-5	Lecture cum Practical exposure	<b>MCQ test on unit 1.1 (15 marks)</b>
July 24 – 31, 2024 (Day Order 1 - 6)	2	* 1.3 Introduction to Chemotaxonomy, Numerical taxonomy  2.2 Important Herbaria – BSI, Coimbatore; Rapinat Herbarium, Trichy	K1, K2, K5	3  2	CO1-5	Group discussions	
Aug 1 – 5, 2024 (Day Order 1 - 3)	2	*1.3 Introduction to Molecular taxonomy  2.3 Taxonomic Keys	K1, K2, K5	2  1	CO1-5	Lecture cum Practical	
Aug 6 – 10, 2024	<b>C.A. Test - I</b>						

<p>Aug 12 – 14, 2024 (Day Order 4-6)</p>	<p>3         2</p>	<p>*A Detailed Study and Economic Importance of the following Families: 3.1 Polypetalae - Annonaceae,  2.3 Taxonomic Keys (Intended and Bracketed keys) and their uses</p>	<p>K3, K4, K5</p>	<p>1         1</p>	<p>CO1-5</p>	<p>PPT, Lecture</p>	
<p>Aug 16 – 23, 2024 (Day Order 1-6)</p>	<p>3         4</p>	<p>*3.1 Rutaceae, Fabaceae (including the subfamilies)  <b>A Detailed Study and Economic Importance of the following Families</b></p>	<p>K3, K4, K5</p>	<p>3         2</p>	<p>CO1-5</p>	<p>PPT, Lecture</p>	
<p>Aug 27 – Sep 3, 2024 (Day Order 1-6)</p>	<p>3         4</p>	<p>*3.1 Cucurbitaceae  <b>Detailed Study and Economic Importance of the following Families:</b> 4.1 Gamopetalae Solanaceae</p>	<p>K3, K4, K5</p>	<p>3         2</p>	<p>CO1-5</p>	<p>PPT, Lecture</p>	

Sep 4 – 11, 2024 (Day Order 1-6)	3	*3.2 Gamopetalae - Rubiaceae, Sapotaceae, Apocynaceae and Asclepiadaceae	K3, K4, K5	3	CO1-5	Lecture cum Practical	<b>QUIZ (25 MARKS)</b>
	4	<b>Detailed Study and Economic Importance of the following Families</b> 4.1 Gamopetalae- Lamiaceae		2			
Sep 12 - 20, 2024 (Day Order 1-6)	5	*5.1 A Brief Study of the Morphology, Processing and Uses of the following: Beverages (Camellia sinensis), Sugar (Saccharum officinarum), Oil (Arachis hypogaea)	K3, K4, K5	3	CO1-5	Lecture cum Practical	
	4	<b>Detailed Study and Economic Importance of the following Families</b> 4.2 Monochlamydeae – Amaranthaceae		2			

<p>Sep 23 - 26, 2024 (Day Order 1-4)</p>	<p>5</p>	<p>*5.2 Botanical name, Common name, Family, Morphology of useful part and Uses of :Cereals(Triticum aestivum, Oryza sativa and Avena sativa), Millets (Sorghum bicolor, Setaria italica and Eleusine coracana), fibre yielding plants (Gossypium spp, Corchorus spp and Cannabis sativa) and dye yielding plants (Indigofera tinctoria, Acacia catechu and Haematoxylum campechianum)</p>	<p>K3, K4, K5</p>	<p>2</p>	<p>CO1-5</p>	<p>Lecture cum Practical</p>	
<p>Sep 27 – Oct 3, 2024</p>	<p>4</p>	<p><b>Families</b> 4.2 Monochlamydeae- Euphorbiaceae</p>		<p>1</p>	<p><b>C.A. Test - II</b></p>		

Oct 4 – 5, 2024 (Day 5 & 6)	5          4	*5.3 Botanical name, Common name, Family, Morphology of useful part and Uses of:Oil yielding plants(mustard, Sesamum indicum and Cocos nucifera)Medicinal plants (Asparagus racemosus, Catharanthus roseus and Withania somniaifera) <b>Detailed Study and Economic Importance of the following Families</b> 4.3 Monocotyledones – Orchidaceae	K3, K4, K5	2          1	CO1-5	Lecture cum Practical	
Oct 7 - 15, 2024 (Day Order 1 to 6)	5          4	*5.3 Botanical name, Common name, Family, Morphology of useful part and Uses of Medicinal plants (Asparagus racemosus, Catharanthus roseus and Withania somnifera)  <b>Detailed Study and Economic Importance of the following Families</b> 4.3 Monocotyledones – Orchidaceae	K3, K4, K5	3          2	CO1-5	Lecture cum Practical	

Oct 16 - 22, 2024 (Day Order 1 to 6)	5    4	5*.3 Spices and condiments (Piper nigrum, Coriandrum sativum and Laurus nobilis)Uses of Fumitories and Masticatories (Nicotiana tabacum, Areca catechu and Piper betle)  <b>Detailed Study and Economic Importance of the following Families</b> 4.3 Monocotyledones- Poaceae	K3, K4, K5	2  2	CO1-5	Lecture cum Practical	
Oct 23 - 24, 2024 (Day Order 1 to 2)	<b>REVISION</b>						