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

Department : **MATHEMATICS**
Name of the Faculty : **DR. ARPUTHA CHRISTY K**
Course Title : **THE FASCINATING WORLD OF MATHEMATICS**
Course Code : **23MT/GE/WM22**
Shift : **II**

COURSE OUTCOMES (COs)

COs	Description	CL
CO1	Acquire knowledge of some fascinating aspects of mathematics	K1
CO2	Understand the various interesting facets of Mathematics	K2
CO3	Demonstrate solutions to real world problems using Mathematical approach	K3

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Jun 19 – 26, 2024 (Day Order 1 - 6)	1	UNIT I – **Some Indian Contributors to Mathematics** 1.1 Baudhayana 1.2 Aryabhata 1.3 Bhaskara I	K1-K3	2	CO1-3	Lecture and Group Discussion	Presentation, Seminar
Jun 27 – July 4, 2024 (Day Order 1 - 6)	1	UNIT I – **Some Indian Contributors to Mathematics** 1.4 Shridhara 1.3 1.5 Bhaskara II	K1-K3	2	CO1-3	Lecture and Group Discussion	Presentation, Seminar
July 5 – 12, 2024 (Day Order 1 - 6)	1	UNIT I – **Some Indian Contributors to Mathematics** 1.6 Srinivasa Ramanujan 1.7 A.A. Krishnaswami Ayyangar 1.8 Ramaswamy S. Vaidyanathaswamy 1.9 Alladi Ramakrishnan 1.10 P.C. Mahalanobis 1.11 C. R. Rao	K1-K3	2	CO1-3	Lecture and Group Discussion	Presentation, Seminar

July 15 – 23, 2024 (Day Order 1 - 6)	1	UNIT I – **Some Indian Contributors to Mathematics** 1.12 Harish Chandra 1.13 C. S. Seshadri 1.14 Sakunthala Devi 1.15 S. R. Srinivasa Varadhan	K1-K3	2	CO1-3	Lecture and Group Discussion	Presentation, Seminar
July 24 – 31, 2024 (Day Order 1 - 6)	1	UNIT I – **Some Indian Contributors to Mathematics** 1.16 R. Parimala 1.17 Other Contemporary Mathematicians	K1-K3	2	CO1-3	Lecture and Group Discussion	Presentation, Seminar
Aug 1 – 5, 2024 (Day Order 1 - 3)	2	UNIT II – **Mathematical Puzzles and Paradoxes** 2.1 Magic Squares 2.2 Sleeping Beauty Puzzle	K1-K3	1	CO1-3	Lecture and Group Discussion	**III Component** Unit 2 Presentation/Seminar and Assignmnet (15 Marks)
Aug 6 – 10, 2024	**C.A. Test I (No Internals)**						

Aug 12 – 14, 2024 (Day Order 4-6)	2	UNIT II – **Mathematical Puzzles and Paradoxes** 2.3 Monty Hall Probability Puzzle 2.4 Crossword	K1-K3	1	CO1-3	Lecture and Group Discussion	Short Q/A Quiz
Aug 16 – 23, 2024 (Day Order 1-6)	2	UNIT II – **Mathematical Puzzles and Paradoxes** 2.5 Number Puzzles by Shakuntala Devi 2.6 Missing Square Paradox 2.7 Potato Paradox	K1-K3	2	CO1-3	Lecture and Group Discussion	Short Q/A Quiz
Aug 27 – Sep 3, 2024 (Day Order 1-6)	2	UNIT II – **Mathematical Puzzles and Paradoxes** 2.8 Zeno's Paradox 2.9 Necktie Paradox 2.10 Three Prisoner's Paradox 2.11 Boy or Girl Paradox	K1-K3	2	CO1-3	Lecture and Group Discussion	Short Q/A Quiz

Sep 4 – 11, 2024 (Day Order 1-6)	2	UNIT II – **Mathematical Puzzles and Paradoxes** 2.12 Sorites Paradox 2.13 Elevator Paradox 2.14 Barber's Paradox	K1-K3	2	CO1-3	Lecture and Group Discussion	Short Q/A Quiz
Sep 12 - 20, 2024 (Day Order 1-6)	2 & 3	UNIT II – **Mathematical Puzzles and Paradoxes** 2.12 Sorites Paradox 2.13 Elevator Paradox 2.14 Barber's Paradox UNIT III – **Project** 3.1 Mathematical Model – Applications of Mathematics in real life	K1-K3	2	CO1-3	Lecture and Group Discussion	**CA Test** Unit I & II (25 Marks)
Sep 23 - 26, 2024 (Day Order 1-4)	3	UNIT III – **Project** 3.1 Mathematical Model – Applications of Mathematics in real life	K1-K3	1	CO1-3	Lecture and Group Discussion	Short Q/A Quiz
Sep 27 – Oct 3, 2024	**C.A. Test II (No Internals)**						
Oct 4 – 5, 2024 (Day 5 & 6)	3	UNIT III – **Project** 3.1 Mathematical Model – Applications of Mathematics in real life	K1-K3	1	CO1-3	Lecture and Group Discussion	Short Q/A Quiz

Oct 7 - 15, 2024 (Day Order 1 to 6)	3	UNIT III – **Project** 3.1 Mathematical Model – Applications of Mathematics in real life	K1-K3	2	CO1-3	Lecture and Group Discussion	**III Component** Unit III Model Project (15 Marks)
Oct 16 - 22, 2024 (Day Order 1 to 6)	3	UNIT III – **Project** 3.1 Mathematical Model – Applications of Mathematics in real life	K1-K3	2	CO1-3	Lecture and Group Discussion	Short Q/A Quiz