STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

COURSE PLAN (June - November 2026)

Department : **Mathematics**

Name/s of the Faculty : **Dr. P. Subbulakshmi**

Course Title : **Celestial Wonders**

Course Code : **23MT/GE/CW22**

Shift : **II**

COURSE OUTCOMES (COs)

COs	Description	CL
CO1	acquire some basic knowledge in astronomy	K1
CO2	classify the reasons behind the celestial events	K2
CO3	examine and critique the expansive and dynamic nature of our universe	K3

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Jun 15 – 22, 2026 (Day Order 1- 6)	1	**Celestial Sphere and Diurnal Motion** 1.1 Celestial Sphere 1.2 Diurnal Motion – Celestial Axis and Equator	K1-K3	2	CO1-3	Lecture Video	Questioning

		1.3 Celestial Horizon					
Jun 23 – July 1, 2026 (Day Order 1- 6)	1	**Celestial Sphere and Diurnal Motion** 1.4 Zenith and Nadir – Celestial Meridian 1.5 Cardinal Points – Different Hemispheres	K1-K3	2	CO1-3	Lecture	Slip Test
July 2 – July 8, 2026 (Day Order 1- 6)	1	**Celestial Sphere and Diurnal Motion** 1.6 Visible and invisible Hemispheres 1.7 Declination circles, verticals 1.8 Rising and Setting	K1-K3	2	CO1-3	Lecture	Questioning
July 9 – 16, 2026 (Day Order 1- 6)	1	**Celestial Sphere and Diurnal Motion** 1.9 Transit or Culmination 1.10 Annual Motion of the Sun – First Point of Aries, First point of Libra, Equinoxes and Solistices	K1-K3	2	CO1-3	Lecture	Questioning
July 17 – 24, 2026 (Day Order 1- 6)	1 & 2	**Celestial Sphere and Diurnal Motion** 1.11 Circumpolar Stars **Unit 2** **The Stellar Universe** 2.1 The Milky Way Galaxy 2.2 Zodiacal Constellations	K1-K3	2	CO1-3	Lecture Video	Questioning
July 25 – 28, 2026 (Day Order 1- 3)	2	**The Stellar Universe** 2.3 Stars – Double Stars, Multiple Stars and	K1-K3	1	CO1-3	Lecture	Questioning

		Variable Stars					
July 29 – Aug 3, 2026	**No C.A.**						
Aug 4 - 6, 2026 (Day Order 4 - 6)	2	**The Stellar Universe** 2.3 Stars – Double Stars, Multiple Stars and Variable Stars	K1-K3	1	CO1-3	Lecture	Questioning
Aug 7 – 14, 2026 (Day Order 1- 6)	2	**Planetary Phenomena** 2.4 Direct Motion and Retrograde Motion 2.5 Stationary Points	K1-K3	2	CO1-3	Lecture Video	Questioning
Aug 17 - 24, 2026 (Day Order 1- 6)	2	**The Solar System** 2.6 Sun, Planets, Comets, Meteors and Meteoroids	K1-K3	2	CO1-3	Lecture	Questioning
Aug 25 – Sep 2, 2026 (Day Order 1- 6)	2	**The Solar System** 2.7 Space Probes	K1-K3	2	CO1-3	Lecture	**III Component Group Presentation [Unit 2] (15 Marks)**
Sep 3 – 11, 2026	3	**Moon and Eclipses**	K1-K3	2	CO1-3	Lecture	Questioning

(Day Order 1- 6)		3.1 Elongation –Conjunction, Opposition, Quadratures 3.2 Daily Motion of the Moon – Age of Moon					
Sep 15-17, 2026 (Day Order 1 - 3)	3	**Moon and Eclipses** 3.3 Phase of Moon (definition only) – Successive Phases of Moon	K1-K3	1	CO1-3	Lecture	Questioning
Sep 18 –23, 2026	**C.A. Test [Unit 1]**						
Sep 24 - 28, 2026 (Day 4 – 6)	3	**Moon and Eclipses** 3.4 Moon Exhibits the same side to the Earth	K1-K3	1	CO1-3	Lecture	Questioning
Sep 29 – Oct 7, 2026 (Day Order 1 - 6)	3	**Moon and Eclipses** 3.5 Surface Structure of Moon 3.6 The Tides – Tsunami	K1-K3	2	CO1-3	Lecture	Questioning
Oct 8 - 14, 2026 (Day Order 1 - 6)	3	**Moon and Eclipses** 3.7 Types of Eclipses – Lunar and Solar Eclipse (no derivations), Duration of a Solar Eclipse 3.8 Importance of Total Solar Eclipses 3.9 Comparison of Solar and Lunar Eclipses	K1-K3	2	CO1-3	Lecture Video	**III Component Quiz [Unit 3] (10 Marks)**
Oct 15 - 21, 2026 (Day Order 1- 4)	**REVISION**						