

		Semester Lecture Plan					
Name of the college: Government College of Arts, Science& Commerce, Sanquelim-Goa							
Name of Faculty: Ms. Alpita Sawant Dessai				Subject:Geography			
Paper code:GOG-131Astronomical Geography				Program/Course: F,Y,B.Com MC		Division: -	
Academic year: 2026-2027				Semester: I		Total Lectures: 30	
Course Objectives: Astronomical Geography is an introductory course that provides a comprehensive overview of the science of astronomy in relation to Geography. The course covers the historical development of astronomy, celestial coordinates and time, the electromagnetic spectrum, imaging and spectroscopy, the Solar System, stars and stellar evolution, galaxies and cosmology, as well as special topics such as exoplanets, dark matter, dark energy and gravitational waves. Throughout the course, students will have opportunities to engage in hands-on activities and observations of the night sky.							
Course Learning Outcome: By the end of the course, students will be able to: 1. Analyze and evaluate the interconnections between astronomy and geography, recognizing how astronomical knowledge informs geographic understanding and vice versa. 2. Compare and contrast the planets based on their properties, categorizing them into terrestrial (inner) planets and gas giants (outer) planets. 3. Define and classify galaxies, and discuss their formation and evolution. 4. Create and maintain a detailed field diary documenting observations of the night sky, including celestial events, object sightings, and personal reflections, to enhance understanding and analysis of astronomical observations.							
Month	Lectures From:	To:	No. of lectures allotted	Topic, Subtopic to be covered	Learning Outcome	ICT Tools	Reference books

June 2026	22/06/2026	27/06/2026	02	What is astronomy?	Understand about astronomy and its importance	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
July 2026	01/07/2026	4/07/2026	02	Relationship of Astronomy with Geography	Understand about astronomy and its relation with geography	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
July 2026	6/07/2026	11/07/2026	02	Historical development of astronomy in relation to Geography	Learn about historical development	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
July 2026	13/07/2026	18/07/2026	02	The Solar System	Understand about solar system	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper

July 2026	20/07/2026	25/07/2026	02	The Sun and its properties	Understand about sun and its properties and why it is important	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
July 2026	27/07/2026	31/07/2026	02	The planets and their properties (ISA)	Learn about planets and their properties and why they are different from one another	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
August 2026	3/08/2026	8/08/2026	02	The planets and their properties	Learn about planets and their properties and why they are different from one another	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
August 2026	10/08/2026	15/08/2026	02	Dwarf planets, asteroids, comets and constellations	Understand about celestial objects	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper

August 2026	17/08/2026	22/08/2026	02	Types of stars Stellar properties and life cycle Star clusters and their properties	Learn about stars and stellar properties	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
August 2026	24/08/2026	29/08/2026	02	Galaxies and Cosmology (ISA)	Understand about meaning of cosmology and galaxies	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
September 2026	1/09/2026	5/09/2026	02	Types of galaxies Formation and evolution of galaxies	Understand about different types galaxies and to differentiate between them Understand the process of galaxy formation	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
September 2026	7/09/2026	12/09/2026	02	The Big Bang and the expanding universe	Understand the process of formation of the universe	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper

September 2026	21/09/2026	26/09/2026	02	Exoplanets and the search for life Dark matter and dark energy	Understand about exoplanets and how astronomers are searching for life on these planets. Distinguish between dark matter and energy	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
October 2026	5/10/2026	10/10/2026	02	Revision	Notes	Notes	Notes