

		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: 2025-2026				Semester:I		Total Lectures: 15	
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
July 2025	21/07/2025	26/07/2025	01	Galaxies and Cosmology	Understand about meaning of cosmology and galaxies	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines

							Newspaper
July 2025	28/07/2025	31/07/2025	01	Galaxies and Cosmology	Understand about meaning of cosmology and galaxies	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
August	4/08/2025	9/08/2025	01	Types of galaxies	Understand about different types galaxies and to differentiate between them	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
August 2025	11/08/2025	16/08/2025	01	Formation and evolution of galaxies	Understand the process of galaxy formation	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
August 2025	18/08/2025	23/08/2025	01	Formation and evolution of galaxies	Understand the process of galaxy formation	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
September	2/09/2025	6/09/2025	01	The Big Bang and the	Understand the	PowerPoint	Greene, Brian. The

2025				expanding universe	process of formation of the universe	Presentation	Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
September 2025	8/09/2025	13/09/2025	01	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 2025	15/09/2025	20/09/2025	01	Exoplanets and the search for life	Understand about exoplanets and how astronomers are searching for life on these planets	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
September 2025	22/09/2025	27/09/2025	01	Dark matter and dark energy	Understand about dark matter	PowerPoint Presentation	Greene, Brian. The Elegant Universe. Vintage Books, 2000. Online sources Magazines Newspaper
September 2025	29/09/2025	30/09/2025	01	Introduction to the night sky Celestial coordinates and time Observing the Sky	Learn sky observation skills and to record the changes Appreciate the beauty of the sky	PowerPoint Presentation	Online sources Magazines Newspaper

October 2025	6/10/2025	11/10/2025	01	Night sky Celestial coordinates and time Observing the Sky	Learn sky observation skills and to record the changes Appreciate the beauty of the sky	PowerPoint Presentation	Online sources Magazines Newspaper
October 2025	13/10/2025	18/10/2025	01	Night sky Celestial coordinates and time Observing the Sky	Learn sky observation skills and to record the changes Appreciate the beauty of the sky	PowerPoint Presentation	Online sources Magazines Newspaper