Lecture Plan

Name of the College: Government College of Arts, Science and Commerce, Sanquelim-Goa

Name of Faculty: Aaron Alphonso Subject: Mathematics

Paper code: MAT-5002 Program: M.Sc. Division: -

Academic year: 2025-26 Semester: | Total Lectures: 60

Course Objectives:

- 1. To prepare students to handle solving problems involving linear equations
- 2. Determining the qualitative properties of the solution set.

Expected Course Outcome:

- 1) Display familiarity and knowledge of Vector Spaces, Linear Transformations and associated concepts
- 2) Demonstrate proofs to establish truths related to Vector Spaces, Linear Transformations and associated concepts
- 3) Choose the appropriate procedures and modify then if needed to solve method-based problems in Linear Algebra
- 4) Analyze and solve unseen problems in Linear Algebra and invent mathematically precise arguments to justify their solutions.

Student Learning Outcome: Student will be able to

- 1) Display familiarity and knowledge of Vector Spaces, Linear Transformations and associated concepts
- 2) Demonstrate proofs to establish truths related to Vector Spaces, Linear Transformations and associated concepts

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
June	27/06/2025	28/06/2025	2			Smart Board PDF	John B. Fraleigh,
July	30/06/2025	05/07/2025	4			Smart Board PDF	Kenneth Hoffmann and Ray Kunze, Linear Algebra
	07/07/2025	12/07/2025	4				Kenneth Hoffmann and Ray Kunze, Linear Algebra
	14/07/2025	19/07/2025	4			Data projec tor	Kenneth Hoffmann and Ray Kunze, Linear Algebra
	21/07/2025	26/07/2025	4				Kenneth Hoffmann and Ray Kunze, Linear Algebra
July August	28/07/2025	02/08/2025	4				Kenneth Hoffmann and Ray Kunze, Linear Algebra
	04/08/2025	09/08/2025	4			Smart Board	Kenneth Hoffmann and Ray Kunze, Linear Algebra
August	11/08/2025	16/08/2025	3 Independ enceDay				Kenneth Hoffmann and Ray Kunze, Linear Algebra

	18/08/2025	23/08/2025			Smart	Kenneth Hoffmann
	18/08/2025	23/08/2025	4		Board	and Ray Kunze,
			•		PDF	Linear Algebra
	25/08/2025	30/08/2025	0			Kenneth Hoffmann
	23,00,2023	30,00,2023	Chaturthi			and Ray Kunze,
			Break			Linear Algebra
			26/08/25			<i>3.1. 3.1. 1.1.</i>
			70 To			
			_			
			01/09/25			
	02/09/2025	06/09/2025			Smart	Kenneth Hoffmann
			3		Board	and Ray Kunze,
						Linear Algebra
	08/09/2025	13/09/2025				Kenneth Hoffmann
September			4			and Ray Kunze,
						Linear Algebra
	15/09/2025	20/09/2025			Smart	Kenneth Hoffmann
			4	F	Board	and Ray Kunze,
						Linear Algebra
	22/09/2025	27/09/2025	4		Smart	
	ļ			I	Board	
September October	29/09/2025	04/10/2025	3			Kenneth Hoffmann
			Gandhi			and Ray Kunze,
			Jayanti /			Linear Algebra
			Dussehra			
October	06/10/2025	11/10/2025				Kenneth Hoffmann
			4			and Ray Kunze,
						Linear Algebra
	13/10/2025	18/10/2025				Kenneth Hoffmann
			4			and Ray Kunze,
						Linear Algebra

* Assessment Rubrics

Component	Max Marks
ISA 1	20
ISA 2	20
ISA 3	20
Practical	Nil
Project	Nil
Semester End	
Exam	40