LESSON PLAN				
Discipline: **Metallurgical Engineering**			Semester: **4TH Semester**	Name of the Teaching Faculty: **Er Sitanjali Khuntia**
Subject: **MATERIAL CHARCTERIZATION LAB** Sub code: **(PR 3) M2**			No of days /week class allotted:**2**	Semester from Date: **22/12/2025 to 18/04/2026** No of weeks: **16**
Month	*week*	*No of periods available*	*Class Day*	*Theory topics*
DECEMBER	1st	4P	24/12/25	Briefing about the Syllabus
	2nd	4P	31/12/25	Metallographic study of cylindrical/cubical nonferrous alloy sample by grinding, polishing and etching.
JANUARY	3rd	4P	07/01/26	Lab Record Write Lab Record Submission and Check
	4th	4P	21/01/26	Metallographic study of thin sheet of ferrous sample by using mounting press
	5th	4P	28/01/26	Lab Record Write Lab Record Submission and Check
FEBRUARY	6th	4P	04/02/26	Preparation of sample for study in SEM using electro polishing technique
	7th	4P	11/02/26	Lab Record Write Lab Record Submission and Check
	8th	4P	18/02/26	Determination of grain size by linear intercept method using photomicrography
	9th	4P	25/02/26	Lab Record Write Lab Record Submission and Check
MARCH	10th	4P	11/03/26	Fractographic study of tensile tested sample
	11th	4P	18/03/26	Lab Record Write Lab Record Submission and Check
	12th	4P	25/03/26	Determining the crystal structure and lattice parameters of a material using XRD. Lab Record Write Lab Record Submission and Check
APRIL	13th	4P	08/04/26	Studying phase transitions and heat capacity changes with temperature using DSC Lab Record Write Lab Record Submission and Check
	14th	4P	15/04/26	Study of various SEM and TEM micrographs Lab Record Write Lab Record Submission and Check

22.12.25

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