



UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA

LESSON PLAN

SESSION: 2022 - 2023

DEPARTMENT OF CERAMIC TECHNOLOGY

.SUBJECT CODE: TH-2

NAME OF THE SUBJECT: CERAMICS COATING AND COMPOSITES

BRANCH: CERAMIC TECHNOLOGY

SEMESTER: DIPLOMA 6th SEM

NUMBER OF CLASS ALLOTTED PER WEEK: 4

TOTAL PERIODS ALLOTTED TO THE SUBJECT ACCORDING TO STEVT: 60

NAME OF THE FACULTY : RAMESH CHANDRA PRUSTY

Week/Date	Lecture	Topic to be covered	Remarks
1 st week 14/02/23 To 16/02/23	1 st	2. Definition and classification of composites.	
	2 nd	3. Fibers and whiskers and their use as composites.	
	3 rd	4. Ceramic matrix composites	
2 nd week 20/02/23 To 23/02/23	1 st	properties and application.	
	2 nd	5. Alumina and mullite matrix	

	3 rd	composites and application.	
	4 th	6. Carbon – carbon composites.	
3 rd week 27/02/23 To 28/02/23	1 st	2.0 GLASS CERAMIC:	
	2 nd	2.1 Introduction and classification	
4 TH week 01/03/23 To 02/03/23	1 st	composites.	
	2 nd	2.2 Glass ceramic	
5 TH week 06/03/23 To 09/03/23	1 st	matrix composites.	
	2 nd	2.3 Manufacturing	
	3 rd	glass ceramic.	
	4 th	2.4 Properties& application	
6 TH week 13/03/23 To 16/03/23	1 st	of glass ceramic composites	
	2 nd	3.0 FIBER REINFORCED GLASS:	
	3 rd	3.1 Introduction to glass fiber & fiber glass.	
	4 th	3.2 Portland cement	
7 TH week 20/03/23 To 23/03/23	1 st	glass fiber composite.	
	2 nd	3.3 Properties & uses	
8 TH week 27/03/23 To 29/03/23	1 ST	of glass fiber composite.	
	2 ND	3.4 Glass reinforced gypsum	
	3 RD	application & properties	
9 TH week 03/04/23	1 ST	3.5 Glass reinforced polymer	

To 06/04/23	2 ND	properties & application.	
	3 RD	4.0 CERMET:	
10 TH week 10/04/23 To 15/04/23	1 st	4.1 Introduction to cermets.	
	2 nd	4.2 Various cermets products.	
	3 rd	4.3 Manufacturing of cermets	
11 TH week 17/04/23 To 21/04/23	1 ST	4.4 Properties& uses of cermets	
	2 nd	4.5 How cermets is different from glass, ceramic and metal?	
12 TH week 24/04/23 To 29/04/23	1 ST	5.0 CERAMIC COATING	
	2 ND	5.1 Define ceramic coating	
	3 RD	5.2 vapor deposition process.	
13 TH week 01/05/23 To 04/05/23	1 ST	5.3Sol –Gel technology	
	2 ND	5.4Plasma spray process	
	3 RD	5.5Advance ceramic coating methods	
	4 TH	5.6Ceramic coating on implants	
14 TH week 08/05/23 To 12/05/23	1 ST	6. VITREOUS COATING	
	2 ND	6.1 Introduction to Glassy coating	
	3 RD	6.2 Various types of glassy coating	
	4 TH	6.3 Application of vitreous enamel coating.	
15 TH week 15/05/23 To 18/05/23	1 ST	6.4 Properties and uses	
	2 ND	of various glassy coated products.	