



# **UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA**

## **LESSON PLAN**

**SESSION: 2022-2023**

**DEPARTMENT OF CERAMIC WHITE WARE**

**.SUBJECT CODE: TH-3**

**NAME OF THE SUBJECT: CERAMIC WHITE WARE**

**BRANCH: CERAMIC TECHNOLOGY**

**SEMESTER: DIPLOMA 5<sup>TH</sup> 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**

<b>Week/Date</b>	<b>Lecture</b>	<b>Topic to be covered</b>	<b>Remarks</b>
1 <sup>st</sup> week 15/09/2022 To 17/09/2022	1 <sup>st</sup>	1.1 Explain the term white ware and its classification.	
	2 <sup>nd</sup>	1.2 White ware industries in India.	
	3 <sup>rd</sup>	1.3 International scenario in manufacturing of white ware	
2 <sup>nd</sup> week 19/09/2022 To 24/09/2022	1 <sup>st</sup>	1.4 Selection of principal raw materials for use in white ware and heavy clay ware industries.	
	2 <sup>nd</sup>	1.5 Explain the qualities and Characteristics of the raw material used for white ware making.	

	3 <sup>rd</sup>	1.6 Describe the influence of raw materials on white ware and heavy clay ware products making.	
	4 <sup>th</sup>	2.1 Materials processing.	
3 <sup>rd</sup> week 26/09/31 To 01/10/2022	1 <sup>st</sup>	2.2 Fabrication: Slip casting, plastic shaping, semidry & dry press.	
	2 <sup>nd</sup>	2.3 Drying operation	
4 <sup>th</sup> week 03/10/22 TO 08/10/22	1 <sup>st</sup>	2.4 Glazing operation	
	2 <sup>nd</sup>	2.5 Firing operation  2.6 Explain the remedies for green rejection.	
5 <sup>th</sup> week 10/10/22 To 15/10/22	1 <sup>st</sup>	2.7 Describe the causes of drying & firing defects and their remedies.	
	2 <sup>nd</sup>	Revision chapter 2.0	
	3 <sup>rd</sup>	a) Fine earthen ware	
	4 <sup>th</sup>	b) Common earthen ware glaze tile (floor & wall)	
6 <sup>th</sup> week 17/10/22 To 22/10/22	1 <sup>st</sup>	c) Earthenware sanitary ware	
	2 <sup>nd</sup>	a) Fine stoneware.	
	3 <sup>rd</sup>	b) Coarse stoneware	
	4 <sup>th</sup>	c) Sanitary wares	
7 <sup>th</sup> week 24/10/22 To 29/10/22	1 <sup>st</sup>	d) Vitreous china sanitary wares	
	2 <sup>nd</sup>	e) Chemical stone ware for chemical Engineering.	
8 <sup>th</sup> week 31/10/22 TO 05/11/22	1 <sup>ST</sup>	f) Acid-resistant bricks and tiles	
	2 <sup>ND</sup>	a) Hard Porcelain	
	3 <sup>RD</sup>	b) Soft Porcelain	
9 <sup>th</sup> week 07/11/22	1 <sup>ST</sup>	c) Chemical Porcelain	

TO 12/11/22	2 <sup>ND</sup>	d) Electrical Porcelain	
	3 <sup>RD</sup>	e) Bone Chine and fritted China.	
10 <sup>th</sup> week 14/11/22 TO 26/11/22	1 <sup>st</sup>	a) Common Building bricks	
	2 <sup>nd</sup>	b) Paving brick.	
	3 <sup>rd</sup>	c) Face brick	
11 <sup>th</sup> week 28/11/22 TO 03/12/22	1 <sup>ST</sup>	d) Common Building tiles e) Salt glaze stone ware pipes	
	2 <sup>nd</sup>	Revision of chapter 3.0	
12 <sup>th</sup> week 05/12/22 TO 23/12/22	1 <sup>ST</sup>	4.1 Define glaze & classification of glaze	
	2 <sup>ND</sup>	4.2 Various types of glaze.	
	3 <sup>RD</sup>	4.3 Raw materials and their influence on glaze.	
13 <sup>th</sup> week 02/01/23 TO 07/01/23	1 <sup>ST</sup>	4.4 Preparation of glaze.	
	2 <sup>ND</sup>	4.5 Glaze frit & its preparation.	
	3 <sup>RD</sup>	4.6 Glaze application & decoration.	
	4 <sup>TH</sup>	4.7 Glaze defects & their elimination.	
14 <sup>th</sup> week 09/01/23 TO 14/01/23	1 <sup>ST</sup>	4.8 Glaze calculation. 4.9 Testing of glaze.	
	2 <sup>ND</sup>	Revision chapter 4.0	
	3 <sup>RD</sup>	5.1 Various types of plaster of Paris & their preparation	
	4 <sup>TH</sup>	5.2 Various types of plaster of pairs products.	
15 <sup>th</sup> week 16/01/23 TO 17/01/23	1 <sup>ST</sup>	5.3 Quality of plaster of Paris for ceramic use.	
	2 <sup>ND</sup>	5.4 Plaster of Paris mould for ceramic shaping. & Revision of chapter 5.0	