

Lesson Plan

Name of Faculty : **M.M EQBAL**

Discipline : CERAMIC FABRICATION

Semester : 2nd Sem.

Subject : CERAMIC FABRICATION

Lesson Plan Duration : 16 WEEKS

Work Load (Lecture /Practical) per week in hours : Lecture 4 hours Practical 4 hours

Week	Theory		Practical	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
1 ST	1	Unit-1 Introduction to ceramic fabrication		Practical-1 Identification of ceramic raw material and additives
	2	1.1 Definition of fabrication		
	3	1.2 Classification of ceramic Fabrication process with example		Practical-1 Identification of ceramic raw material and additives
	4	2 Basic Raw Material & additives		
2 nd	5	2.1 Clay- its role & Classification		Practical-2 Demonstration of Machinery used in the shaping & identification of tools according to use
	6	2.2 Properties and uses of clay		
	7	2.3 Quartz - its role , properties		Practical-2 Demonstration of Machinery used in the shaping & identification of tools according to use

	8	2.3 Quartz – its uses		
3rd	9	Feldspar - its role , properties		Practical-3 Prepares terracotta wall plates
	10	Feldspar - its uses		
	11	Additives its types		Practical-3 Prepares terracotta wall plates
	12	Additives its role		
4th	13	Water , Plasticizer		Practical-4 Prepare terracotta jewelry articles
	14	Binder		
	15	Deflocculants		Practical-4 Prepare terracotta jewelry articles
	16	Deflocculants		
5th	17	Lubricants		Practical-5 clay models having attachments/ projections
	18	Unit-2 3.1 Batch Preparation 3.1 Definition of batch preparation		
	19	Typical White ware body composition		Practical-5 clay models having attachments/ projections
	20	Dry mix , plastic		
6th	21	slip mix (flow diagram of body preparation)		Practical-6 Preparing a Bowl

	22	Demonstrate methods of body preparation by dry		
	23	Demonstrate methods of body preparation by wet method		Practical-6 Preparing a Bowl
	24	Enumerate the advantages and disadvantages of dry method		
7th	25	Enumerate the advantages and disadvantages of wet method		Practical-7 Shaping flower vase
	26	Explain Weathering		
	27	Explain Ageing		Practical-7 Shaping flower vase
	28	Blunger		
8th	29	Pugging / Explanation of pug mill (ordinary)		Practical-8 Fabricating pot
	30	Pugging / Explanation of pug mill (de - airing)		
	31	Unit-4 Shaping Illustrate the shaping process with sketches & constructional features of machinery for following processes : 4.1 Plastic Shaping - Hand moulding with potter's wheel		Practical-8 Fabricating pot
	32	Plastic Shaping - Jiggering & Jolleying		
9th	33	Plastic Shaping - Jolleying		Practical-9 Prepare a Triaxial batch composition for plastic pressing and fabricate an article.
	34	Semi - plastic Shaping - pressing		
	35	Extrusion		Practical-9 Prepare a Triaxial batch composition for plastic pressing and fabricate an article.
	36	turning		

10th	37	Dry Pressing study the Particle packing characteristics		Practical-10 Prepare a Triaxial batch composition for semi - plastic pressing and fabricate an article.
	38	Outline the important parameters of pressing (powder , die)		
	39	Outline the important parameters of pressing (pressure characteristics)		Practical-10 Prepare a Triaxial batch composition for semi - plastic pressing and fabricate an article.
	40	Stages of pressing		
11th	41	Types of presses : Toggle press , Fly press / screw press		Practical-11 Prepare single piece POP mould
	42	Friction press , Hydraulic press		
	43	Pneumatic Press		Practical-11 Prepare single piece POP mould
	44	Casting Slip		
12th	45	Slip casting (solid , hollow)		Practical-12 Prepare double triple piece POP mould

	46	Explain Surface finishing methods - Trimming , Smoothing		
	47	Unit-5 Drying & Firing 5.1 Definition and importance of drying in ceramics		Practical-12 Prepare double triple piece POP mould
	48	Definition and importance of drying in mechanism		
13th	49	Classification of driers - batch & continuous , for materials and products with examples		Practical-13 Prepare slip and leave for ageing

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