

陶瓷工藝材料與釉藥實驗 課程大綱

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| 科號 | | 組別 | | 學分 | 2 | 人數限制 | |
| 上課時間 | 5、6 (四) | | | 教室 | 藝設系工藝大樓二樓陶藝教室 | | |
| 科目名稱 | 陶瓷窯爐與燒製 | | | | | | |
| 任課教師 | 林瑞龍 | | | | | | |

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| 一、課程說明 | <ol style="list-style-type: none"> 1. 講解各種窯爐設備與功能 2. 實做數種釉藥配方並講解其機制 3. 作品製作 施釉 與入窯燒製完成 4. 培養修課同學 認知各種窯爐的特性 並 具備自行配釉的能力 | |
| 二、指定用書 | 自編講義 | |
| 三、參考書籍 | <ol style="list-style-type: none"> 1. 薛瑞芳老師 釉藥學 2. 孫超先生 窯火中的創造 | |
| 四、教學方式 | <ol style="list-style-type: none"> 1. 課程講授(以講義 PPT 影片 輔助) 2. 配釉實作教學與試片檢討 | |
| 五、教學進度 | 週次 | 教學內容 |
| | 第 01 週 | 各種陶瓷窯爐介紹與解說 電窯 兩用窯 瓦斯窯 鹽燒窯 柴燒窯 隧道窯 (I) |
| | 第 02 週 | 各種陶瓷窯爐介紹與解說 電窯 兩用窯 瓦斯窯 鹽燒窯 柴燒窯 隧道窯 (II) |
| | 第 03 週 | 各種陶瓷窯爐介紹與解說 電窯 兩用窯 瓦斯窯 鹽燒窯 柴燒窯 隧道窯 (III) |
| | 第 04 週 | 透明釉形成機制與試片解說 與 顏色釉 原料調配 試片製作及燒窯(鐵系列) |
| | 第 05 週 | 顏色釉 原料調配 試片製作及燒窯(銅綠系列) 與試片講解 |
| | 第 06 週 | 顏色釉 原料調配 試片製作及燒窯(鉻系列) 與試片講解 |
| | 第 07 週 | 顏色釉 原料調配 試片製作及燒窯(錳系列) 與試片講解 |
| | 第 08 週 | 顏色釉 原料調配 試片製作及燒窯(鈷系列) 與試片講解 |
| | 第 09 週 | 顏色釉 原料調配 試片製作及燒窯(鎳系列) 與試片講解 |
| | 第 10 週 | 青瓷釉 原料調配 試片製作 與試片講解 |
| | 第 11 週 | 銅紅釉 原料調配 試片製作 |
| | 第 12 週 | 鈞釉 原料調配 試片製作 |
| | 第 13 週 | 兩用電窯還原燒的燒成操作 與 原理解說 |

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| | 第 14 週 | 銻錫紅 原料調配 試片製作及燒窯(I) 與 試片講解 |
| | 第 15 週 | 銻錫紅 原料調配 試片製作及燒窯(II) 與 試片講解 |
| | 第 16 週 | 從釉藥的角度欣賞與解析五大名窯作品、期末總檢討 |
| 六、成績考核 | <ul style="list-style-type: none"> * 平時課堂表現 (課堂參與討論、出席) 15% * 釉藥作品評量 35% (試片與釉色應用於作品需參與期末共評) * 期末心得報告 50% | |

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| 上課時間 | 5、6 (Thu.) | | | 教室 | 藝設系工藝大樓二樓陶藝教室 | | |
| 科目名稱 | Ceramic kiln and firing | | | | | | |
| 任課教師 | Jui-Lung Lin | | | | | | |
| 一、course description | 1. Explain various kiln equipment and functions 2. Practice several glaze formulas and explain their mechanism 3. The production of the work is completed by glazing and firing in the kiln 4. Cultivate course students to recognize the characteristics of various kilns and have the ability to prepare glazes by themselves | | | | | | |
| 二、Specified book | Self-written handouts | | | | | | |
| 三、reference books | 1. Teacher Xue Ruifang Glaze Pharmacy 2. Mr. Sun Chao's Creation in the Kiln Fire | | | | | | |
| 四、teaching methods | 1. Lectures (assisted by lecture notes and PPT videos) 2. Teaching of glaze preparation and review of test pieces | | | | | | |
| 五、teaching progress | Week | teaching content | | | | | |
| | Week 01 | Introduction and explanation of various ceramic kilns Electric kiln Dual-purpose kiln Gas kiln Salt-fired kiln Wood-fired kiln Tunnel kiln (I) | | | | | |
| | Week 02 | Introduction and explanation of various ceramic kilns Electric kiln Dual-purpose kiln Gas kiln Salt-fired kiln Wood-fired kiln Tunnel kiln (II) | | | | | |
| | Week 03 | Introduction and explanation of various ceramic kilns Electric kiln Dual-purpose kiln Gas kiln Salt-fired kiln Wood-fired kiln Tunnel kiln (III) | | | | | |
| | Week 04 | Transparent glaze formation mechanism and test piece explanation and color glaze raw material preparation, test piece production and kiln firing (iron series) | | | | | |
| | Week 05 | Color glaze, raw material blending, test piece production and kiln firing (copper green series) and test piece explanation | | | | | |
| | Week 06 | Color glaze, raw material blending, test piece | | | | | |

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| | | production and kiln firing (chrome series) and test piece explanation |
| | Week 07 | olor glaze, raw material blending, test piece production and kiln firing (manganese series) and test piece explanation |
| | Week 08 | Color glaze Raw material blending Test piece production and kiln firing (cobalt series) and test piece explanation |
| | Week 09 | Color glaze Raw material blending Test piece production and kiln firing (nickel series) and test piece explanation |
| | Week 10 | Celadon glaze Raw material deployment Test piece production and test piece explanation |
| | Week 11 | Copper red glaze Raw material preparation Test piece production and kiln firing |
| | Week 12 | Jun glaze Raw material preparation Test piece production and kiln firing |
| | Week 13 | Firing operation and principle explanation of dual-purpose electric kiln reduction firing |
| | Week 14 | Chromium tin red Raw material blending Test piece production and kiln firing (I) and test piece explanation |
| | Week 15 | Chromium tin red Raw material preparation Test piece production and kiln firing (II) and test piece explanation |
| | Week 16 | Appreciate and analyze the works of five famous kilns from the perspective of glaze · final review |
| 六、performance assessment | | <p>* Normal class performance (class participation in discussion, attendance) 15%</p> <p>* Glaze work evaluation 35% (test pieces and glaze application in the artwork requires participation in the final joint assessment)</p> <p>* Final report 50%</p> |