中臺科技大學通識教育微學分課程簡介

Course Syllabus

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| 開課學期 | 107-1 | 部別 | 日間部  |
| 開課系科 | 通識教育中心 | 學制 | 大學部（二技、四技） |
| 課程名稱 | 繽紛染布動手做 | 授課教師 | 張瓊云 |
| 課程類別 | □學理基礎 ■應用實作□跨領域探索□其他：＿＿＿＿＿＿＿＿ | 授課方式 | ■授課□演講□參訪□工作坊□遠距教學■實作研習營□其他：＿＿＿＿＿＿＿ |
| 學分數 | 0.4 | 授課時間 | □週五上午1-4節， ■週三下午5-8節，5.6週 |
| 科目代碼 |  | 請益時間 | W5 (5-6) |
| 開課代號 |  | 聯絡方式 | cychang3@ctust.edu.tw |
| 課程描述Course Description |
| 認識科學對生活與環境的重要性，瞭解天然染料與合成染料的差異，學習染布原理與操作技巧，啟發對科學實作的興趣，建立積極參與課室內外學習活動的態度。 |
| 課程目標Course Objectives |
| 強化對科學整合性學習活動之正確理念，促進科學專業知識與概念之統整，培養設計與操作實作活動之能力，學習將理論與實作經驗應用於生活中，提升實作之實務技能。 |
| 授課進度Course Schedule |
| 第5週 | 天然染料與合成染料 | 傳統天然染料與現代合成染料的種類、色系、優點與缺點之比較。 |
| 自製布料染劑 | 利用植物根、莖、葉、花、果實製作天然性染料，利用化學藥劑製作合成性染料。 |
| 第6週 | 染布原理與技術 | 直接染色、媒染染色、甕染染色、靛藍染色對不同布料纖維牢固度之比較。 |
| 動手做染布 | 利用自製的天然性染料與合成性染料進行染布實作，製作出實用性的生活用品。 |
| 教學方式Teaching Method |
| 藉由「做中學，學中做」的學習模式，將傳統「想像」的學習方式，轉變為「實作」的學習課程，除了學習生活科學相關知識，也能從實作課程中享受動手做的樂趣與成就感，並將科學知識實踐到日常生活中。 |
| 學習評量方式與配分Evaluation Methods & Ratio |
| □隨堂作業 \_\_\_\_\_\_ % ■上課參與度 20 % ■出席 20 % ■書面報告 20 %■實作精神 30 % ■實作結果 30 % |
| 教科書(書名、作者、出版社、備註)Textbook (Title, Author, Publisher, Remarks ) |
| 書名Title | 作者Author | 出版社Publisher | 備註Remarks |
| 自編教材 | 張瓊云 |  |  |
| 參考書目(書名、作者、出版社、期刊、備註)Reference Materials (Title, Author, Publisher/Journal, Remarks ) |
| 書名Title | 作者Author | 出版社/期刊Publisher/Journal | 備註Remarks |
| 化學實驗−生活實用版 | 莊麗貞 | 新文京開發出版有限公司 |  |

Central Taiwan University of Science and Technology

General Education Micro Credit Course Syllabus

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| Academic Year/Semester | 107-1 | Day/Night School | Day |
| Department | Center for General Education | Program | University department |
| Course Title | DIY Colorful Dyeing Cloths | Instructor | Chiung-Yun Chang |
| Course type | □ Theoretical Foundation■ Application and Implementation□ Interdisciplinary Learning□ Other：＿＿＿＿＿＿＿＿ | Teaching methods | ■ Teaching □ Speech □ Visit □ Workshop□ Distance Learning ■ Practical Study Camp□ Other： \_\_\_\_\_\_\_ |
| Credit Hour | 0.4 | Hour(s) | □W5，Section 1-4，■W3，Section 5-8，5th .6th week |
| Course Code |  | Advisory Time | W5 (5-6) |
| Subject Code |  | Email  | cychang3@ctust.edu.tw |
| Course Description |
| In order to recognize the importance of science for life and the environment, students must understand the differences between natural dyes and synthetic dyes, and learn the principles and operation skills of dyeing cloths. They can increase their interest in scientific practice and establish an attitude of active participation in learning. |
| Course Objectives |
| Students can strengthen the correct concept of scientific knowledges, and cultivate the ability to design and operate practical activities. They can learn to apply some theories and practical experiences into life, and enhance practical skills. |
| Course Schedule |
| 5th week  | The natural dyes and synthetic dyes. | DIY natural dyes and synthetic dyes. |
| 6th week | The principles and operation skills of dyeing cloths. | DIY colorful dyeing cloths. |
| Teaching Method |
| Through the "doing by learning, learning by doing" learning mode and the practical courses. Students can learn life science related knowledges, and enjoy learning from the practical courses. They can have fun and a sense of accomplishment. They can practice scientific knowledges into everyday life. |
| Evaluation Methods & Ratio |
| 1. participation discussions 20%2. Attendance and absence in class 20%3. experimental reports 20%4. learning attitudes 20%5. experimental results 20% |
| Textbook (Title, Author, Publisher, Remarks ) |
| Title | Author | Publisher | Remarks |
| Practical life scientific laboratory | Chiung-Yun Chang |  |  |
| Reference Materials (Title, Author, Publisher/Journal, Remarks ) |
| Title | Author | Publisher/Journal | Remarks |
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