| 南台科技大學 100 學年度第 1 學期課程資訊 | | |
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| 課程名稱 | 奈米材料特論 | |
| 課程編碼 | 40D18H01 | |
| 系所代碼 | 04 | |
| 開課班級 | 四技化材四甲 四技化材四乙 | |
| 開課教師 | 王振乾 | |
| 學分 | 3.0 | |
| 時數 | 3 | |
| 上課節次地點 | 五 2 3 4 教室 E0401 | |
| 必選修 | 管制選修 | |
| 課程概述 | Six special topics on nanomaterials, including polymer nanocomposites, carbon | |
| | nanotubes and their applications, polymer nanoparticles, nanostructured polymers, | |
| | applications of self-assembly block copolymers, and nanostructures of | |
| | polyelectrolytes, are discussed in this course. | |
| 課程目標 | The goal of this course is to discuss several advanced topics on nanomaterials, | |
| | mainly related to the applications in polymer science. The students should have a | |
| | basic understanding of the principles of nanotechnology and polymer science. | |
| 課程大綱 | 1. 奈米複合材料 | |
| | 2. 奈米碳管及應用 | |
| | 3. 聚合物奈米粒子 | |
| | 4. 聚合物之奈米結構 | |
| | 5. 塊狀共聚合物自組裝之應用 | |
| | 6. 聚電解質(DNA)奈米結構 | |
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| 英文大綱 | 1. Nanocomposite | |
| | 2. Carbon nanotube and its applications | |
| | 3. Polymer nanoparticles | |
| | 4. Nanostructured polymers | |
| | 5. Applications of the self-assembly of block copolymers | |
| | 6. Nanostructures of electrolytes: DNA | |
| | 選供教授 口商報生 東顯演講 | |
| 教學方式 | 課堂教授,口頭報告,專題演講, 自行設計測驗,口頭報告,課堂討論,課程參與度(出席率), | |
| 指定用書 | 自須設計例繳,口與報告,誅星討論,誅怪参與及(山府學),自編講義 | |
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| 参考書籍 | 1.Mick Wilson, Kamali Kannangara, Geoff Smith, Michelle Simmons, Burkhard Raguse "Nanotechnogy" (basic science and emerging technologies) UNSW | |
| | Raguse Tranolectinogy (basic science and emerging technologies) ONSW | |

| | PRESS, 高立圖書 2.顧寧、付德剛、張海黔等 編著"奈米技術與應用"江禎立、許孟博校閱 滄 海書局出版 |
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| 先修科目 | |
| 教學資源 | 筆記型電腦及投影機 |
| 注意事項 | |
| 全程外語授課 | 0 |
| 授課語言1 | 華語 |
| 授課語言 2 | |
| 輔導考照1 | |
| 輔導考照 2 | |