

南台科技大學 98 學年度第 2 期課程資訊

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| 課程名稱 | 商用微積分 |
| 課程編碼 | 50D12601 |
| 系所代碼 | 05 |
| 開課班級 | 四技工管一甲 |
| 開課教師 | 周武男 |
| 學分 | 3.0 |
| 時數 | 3 |
| 上課節次地點 | 四 2 3 4 教室 E0409 |
| 必選修 | 必修 |
| 課程概述 | In this course, we will first review exponential and logarithmic functions. Then we introduce integration and its applications. Finally, hope to turn our attention to calculus of several variables. |
| 課程目標 | <ol style="list-style-type: none"> 1. Enable students to understand the concepts of exponential and logarithmic functions and their differentiation. 2. Enable students to understand the concept of integration and apply its skills. 3. Enable students to understand the concept of calculus of several variables and do its application. |
| 課程大綱 | <ol style="list-style-type: none"> 1. 指數與對數函數. 2. 指數與對數函數的微分. 3. 不定積分 4. 代換積分 5. 定積分與微積分基本定理 6. 定積分的應用 7. 分部積分. 8. 瑕積分 9. 多變數函數 10. 偏微分及其應用 |
| 英文大綱 | <ol style="list-style-type: none"> 1. Exponential and logarithmic functions. 2. Differentiation of logarithmic and exponential functions. 3. The indefinite integral. 4. Integration by substitution. 5. The definite integral and the fundamental theorem of calculus. 6. Applications of definite integration. 7. Integration by parts. 8. Improper integrals. |

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| | 9. Functions of several variables. 10. Partial derivatives and its applications. |
| 教學方式 | 課堂教授, |
| 評量方法 | 自行設計測驗, |
| 指定用書 | Applied Calculus |
| 參考書籍 | |
| 先修科目 | 無 |
| 教學資源 | |
| 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 | |