

課程大綱及進度表

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| 開課系所 | 建築甲乙 |
| 開課學年 | 97 學年度 |
| 開課學期 | 1 |
| 課程名稱(中文) | 微積分(一) |
| 課程名稱(英文) | CALCULUS (1) |
| 課程碼 | E715611 |
| 分班碼 | |
| 先修科目或先備能力 | 高中數學 |
| 學分數 | 3 |
| 開課教師 | 方永富 |
| e-mail | fang@math.ncku.edu.tw |
| 電話 | 275-7575 轉 65131 |
| Office Hours | 星期三, 五: 12:10-13:00 |
| 課程概述 | <p>We want to study the concept of limits and continuity, and then apply to differentiation.</p> <p>We then discuss mean-value theorem and its applications.</p> <p>Then we investigate the idea of integration and its applications and techniques of Integration. Finally we will talk about transcendental functions, polar Coordinates, and Parametric Equations.</p> |
| 教學目標 | <p>We expect to grab the basic idea and concept of calculus for one variable function, then to extend those to functions of several variables.</p> |

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| 授課課程大綱明細 | Ch1: Precalculus Review Ch2: Limits and Continuity Ch3: Differentiation Ch4: Mean-Value Theorem and Applications Ch5: Integration Ch6: Applications of the Integral Ch7: Transcendental Functions Ch8: Techniques of Integration Ch9: Conic Sections:Polar Coordinates; Parametric Equations Ch10: Sequences Ch11: Infinite Series |
| 參考書目 | Calculus (one and several variables) (Chapter 1 - 11) by Salas, Hille, and Etgen, (Ninth edition) |
| 課程要求 | High School Math |
| 評量方式 | Quizzes: 20% Midterm I: 20% Midterm II: 22% Final: 35% TA: 3% |
| 課程網址 | http://math.ncku.edu.tw/~fang |
| 助教資訊 | |
| 備註 | |