



課 綱 Course Outline
生命科學系學士班

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| 中文課程名稱 Course Name in Chinese | 遺傳學 | | | | |
| 英文課程名稱 Course Name in English | Genetics | | | | |
| 科目代碼 Course Code | LF_20800 | 班 別 Degree | 學士班 Bachelor's | | |
| 修別 Type | 學程 Program | 學分數 Credit(s) | 3.0 | 時 數 Hour(s) | 3.0 |
| 先修課程 Prerequisite | 無 | | | | |
| 課程目標 Course Objectives | | | | | |
| 了解古典遺傳學及現代遺傳學之理論及研究之法。 | | | | | |
| 系教育目標 Dept.'s Education Objectives | | | | | |
| 1 | 培養從事生命科學相關領域之人才 Cultivating talents engaged in life science | | | | |
| 2 | 培育學生具有自我學習、獨立思考與創新之能力 Fostering students to acquire the capabilities of self-learning, independent thinking, and innovation. | | | | |
| 系專業能力 Basic Learning Outcomes | | | | 課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives | |
| A | 具備生命科學相關學科之基礎知識 Having the basic knowledge of life science. | | | ● | |
| B | 具備邏輯分析與解決問題的能力 Having the capabilities of logical analysis and problem solving. | | | ● | |
| C | 具備資料整合、數據分析與書面及口頭報告之能力 Having the capabilities of data integration and analysis, and the skills of written and poster presentation. | | | ○ | |
| D | 具備終生學習的能力 Having the capability of lifelong learning. | | | ● | |
| 圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated | | | | | |
| 課程大綱 Course Outline | | | | | |

- (1) 孟德爾遺傳定律
- (2) 染色體結構及其變異
- (3) 細胞分裂
- (4) 染色體連鎖、重組及圖譜定位
- (5) 基因的分子結構
- (6) 細菌、病毒之遺傳特性
- (7) 跳躍基因
- (8) 基因表現之調控
- (9) 遺傳特性之分析
- (10) 演化及族群遺傳

資源需求評估 (師資專長之聘任、儀器設備的配合 . . . 等)

Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

現有合宜專任師資；購置訂閱結構生物學相關圖書及期刊，提供幻燈機，
投影機等教學用具。

課程要求和教學方式之建議

Course Requirements and Suggested Teaching Methods

由傳統之古典遺傳學到現代分子遺傳學帶領學生由淺入深了解複雜之遺傳
現象。

其他

Miscellaneous