# 朝陽科技大學 095學年度第2學期教學大綱
# Special Topics in Applied Microbiology 應用微生物特論

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| 當期課號 | 7181 | Course Number | 7181 |
| 授課教師 | 賴龍山 | Instructor | LAI,LONG SHAN |
| 中文課名 | 應用微生物特論 | Course Name | Special Topics in Applied Microbiology |
| 開課單位 | 應用化學系碩士班一A | Department | |
| 修習別 | 選修 | Required/Elective | Elective |
| 學分數 | 3 | Credits | 3 |
| 課程目標 | 本課程之目的在於提供瞭解的理論、背景與應用，一般而言，人們大都會將微生物視爲不潔的、可怕的，它們無所不在也是肉眼所看不見的微小生物（註：肉眼不能看小於100um的物體，即0.01cm）；這些生物由於體型很小而必需藉助放大工具(如顯微鏡)來觀察，由於其工業應用潛力，本課程特別強調的是真核細胞之放線菌與真菌兩類，由於上課時數之限制，本課程將不涵蓋微生物之基因工程與重組DNA技術，此部份學生可藉由參與本系之專題討論以獲取相關資訊。 | Objectives | This course, named as Speecial Topics on Applied Microbiology, will be designed to provide an appropriate balance between microbilogical fundamentals and potential applications. The overall theme of this course is the relationship betweeen microbes and our lifes. The relationship involved not only the harmful effects of certain microorganisms but also their beneficial effects. In the course, we primarily concentrate on actinomyces and fungi bacause of their potential applications in industry. Due to time limitations, microbial genetics and recombinant DNA technology will not be covered in the class, however, students themselves are urged to gain wider microbiological background through the attendance in the microbiology-related seminar. |
| 教材 | Two references:<br>1. Microbiology (8th edition) by G. J. Tortora, B. R. Funke and C. L. Case<br>2. Biochemical engineering fundamentals (2nd edition) by J. E. Bailey and D. F. Ollis | Teaching Materials | See the references as the left. |
| 成績評量方式 | 一般的上課方式採取同學對事先指定閱讀之內容作報告,再由老師作補充說明並提出問題討論,學期總成績依同學每節報告與討論來評定(除第一週全由老師報告外,若以17週計則每週最高5分,視參與討論的程度,每節上課可得2-5分).期中考照常上課.而期末考則爲open-book測驗(約20-25%) | Grading | Course grading will be calculated mainly based on the performance of the students in the class. While attending in the class every week, 2-5% will be given for individual performance. There will be no Mid-term; meanwhile, the class will be normally held. Open-book test will be used for the final examination, and it deserves 20-25% of the total grading. Bonus credits with the maximum of 10% of the course evaluation will also given based on questions raised and problem discussions. |
| 教師網頁 | _ | | |
| 教學內容 | 本課程之目的在於提供瞭解的理論,背景與應用.一般而言，人們大都會將微生物視爲不潔的、可怕的，它們無所不在也是肉眼所看不見的微小生物(註：肉眼不能看小於100um的物體，即0.01cm)；這些生物由於體型很小而必需藉助放大工具(如顯微鏡)來觀察，由於其工業應用潛力,本課程特別強調的是真核細胞之放線菌與真菌兩類.由於上課時數之限制,本課程將不涵蓋微生物之基因工程與重組DNA技術,此部份學生可藉由參與本系之專題討論以獲取相關資訊. | Syllabus | This course, named as Speecial Topics on Applied Microbiology, will be designed to provide an appropriate balance between microbilogical fundamentals and potential applications. The overall theme of this course is the relationship betweeen microbes and our lifes. The relationship involved not only the harmful effects of certain microorganisms but also their beneficial effects. In the course, we primarily concentrate on actinomyces and fungi bacause of their potential |

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