



課 綱 Course Outline  
生命科學系學士班

中文課程名稱 Course Name in Chinese	免疫學				
英文課程名稱 Course Name in English	Immunology				
科目代碼 Course Code	LF_30300	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					
建立免疫學之基本概念及知識。					
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) Introduction to Vertebrate Immunity
- (2) The Origins of Immune Response
- (3) Cells of the Immune System
- (4) Immunoglobulins and B-Cell Receptors
- (5) T-Cell Factors and Receptors
- (6) The Major Histocompatibility Complex
- (7) Complement and Other Activation Systems
- (8) Lymphocyte-Activating Substances
- (9) Immune Responses Dominated by Cells of the Monocytic Series
- (10) Responses Dominated by T Lymphocytes
- (11) Responses Dominated by B Lymphocytes
- (12) Systemic and Regional Immune Responses
- (13) Immunological Tolerance
- (14) Allergies and Other Antibody-Mediated Hypersensitivities
- (15) Autoimmunity and Autoimmune Diseases
- (16) Immunodeficiency Diseases

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；購置訂閱免疫學相關圖書及期刊，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

本課程除主題講授外，並說明重要實驗設計方法及指導相關儀器設備操作。另外，適時進行免疫學領域代表性新發表期刊學術論文之選讀與討論。

其他

Miscellaneous