處理學期(Current Semester)：1091

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1091學期所開設課程『分子生物學』的課程內容

課程代碼(Course Number)	B3A03167
授課老師(Instructor)	林泓廷(Hong-Ting Lin)
中文課名(Chinese Course Title)	分子生物學
英文課名(English Course Title)	Molecular Biology
開課年班(Grade and Class)	3A
選課人數(Quantity)	55
選課類別(Course Type)	必修(Required Course)
上課時間(Course Meeting Days/Times)	303,304,406,407
上課地點(Classroom)	000,000,000,000
開課系所(Department/Institute Office of Course)	食品科學系生物科技組(Food Science, Division of B
學分(Credit(s)) 4	時數(Course Hour(s)) 4
人數上限(Maximum Number of Students) 66	人數下限(Minimum Number of Students) 10
開課期別(Course Type)	單學期(semester course)
是否實習	否
備註(Note) 林泓廷老師合上,303,304全興廳CLS109上課.,406,407本系演講廳上課.	

課程綱要

教學目標 Objective	中 文 English	Objectives: Our objective is to provide a stimulating environment in which students can obtain: a) an in-depth understanding of the organization, replication and expression of the genetic material in prokaryotic and eukaryotic cells, b) an understanding of contemporary methods and approaches used in the analysis of gene structure and function, c) experience and confidence in applying this knowledge to solve new and interesting problems in molecular biology. --- ** The purpose of this course is intended fo
先修科目 Pre Course	中 文 English	Prerequisite: Biology, Biochemistry
教材內容 Outline	中 文 English	Course Description: Structure and function of macromolecules (DNA, RNA, and protein), including chemical and physical properties, and roles they play in cellular metabolism. The synthesis of those macromolecules (DNA replication, transcription and translation) reviewed in detail. Genetic engineering and regulation of gene expression discussed
教學方式 Teaching Method	中 文 English	Lecture
參考書目 Reference	中 文 English	Required Textbook: Molecular biology of the gene" by Watson et al. 5th edition. 2004
教學進度 Syllabus	中 文 English	Topics Chapter Instructor Part I Introduction A brief history 1 The molecular nature of gene 2 Introduction to gene function 3 Genomics and proteomics 24 Part III Transcription in prokaryotes The mechanism of transcription in prokaryotes Operons: fine control of prokaryotic transcription 7 Exam (I) Major shift in prokaryotic transcription 8 DNA-protein interactions in prokaryotes 9 Part IV Transcription in eukaryotes Eukaryotic RNA polymerases and their promoters 10 General transcription factors in eukary
評量方式 Evaluation	中 文 English	4 exames arranged. Each exam will be held after lecturing of each instructor

參考網址
NO