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## ②國玄東華大學

## 捚 Course Outline

	課網	Course O	utline			
	生化暨分子	醫學科學系博士	班國際組			
中文課程名稱 Course Name ir Chinese	核醣核酸科技	核醣核酸科技				
英文課程名稱 Course Name ir English	RNA technology					
科目代碼 Course Code	BMM_D0150	班 別 Degree	博士班 Ph. D.			
修別 Type	選修 Elective	學分數 Credit(s)	3. 0	時 數 Hour(s)	3. 0	
先修課程 Prerequisite						
	Co	課程目標 urse Objectives				
to analyze RNA 瞭解RNA的結構。 培養從事生	化及生物醫學之高階專業人	ecules. 近術之原理與應用。 系教育目標 Education Object 才。	tives		11ques	
1 Cultivatin medicine.	cultivating high-level professionals engaged in biochemistry and molecular medicine.					
2 Fostering	有自我學習、獨立思考與創 students to acquire the and innovation.		self-learni	ng, independen	t	
•	系專業能 Basic Learning			力相關性 Correlati between ( Objective	Course es and Education	
	物醫學專業研究及解決問題 bility to conduct biomed problems.		l research	OBJECTIVE	•	
	知、終身學習及創新應用能	カ。			•	

Establishing the ability to absorb new knowledge, engage in

lifelong learning, and apply innovation.

perspective.

具備專業領域的研究素養,並具有國際視野之科學涵養。

Having expertise in the professional field of study and possessing a scientific cultivation with an international

D	具備計畫書與論文撰寫之能力。 Possessing the ability to write project proposals and papers.	•
Е	具備培養年輕生物醫學工作人員之能力。 Have the ability to cultivate young biomedical workers.	•

圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated

## 課程大綱 Course Outline

The course will describe DNA vs. RNA, RNA world and Evolution, methods for RNA structural determination, methods for analyzing RNA-protein interactions, sitedirected mutagenesis, RNAi and CRISPR technologies, and functions of noncoding RNAs.

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.)

Each lecture will use PowerPoint presentations and multimedia demonstrations regarding various topics.

期刊論文。筆電及單槍投影機。

## 課程要求和教學方式之建議

Course Requirements and Suggested Teaching Methods

The lecturer will explain the rationale and techniques of the indicated topics. Related journal articles will be assigned for student reading. 教授各種研究核酸結構與功能之技術。

其他 Miscellaneous