

中國醫藥大學 醫學院院 生物醫學研究所碩士班 必選修課程學分表 107 學年度入學適用
 China Medical University Graduate Institute of Biomedical Sciences
 Curriculum for Master Program

The confirmation form of graduation credits for 107 school year

科目名稱 Course Name	授課教師 Teacher	修別 Type	Credits	First year		Second year		備註 Remarks
				Semester				
				1	2	1	2	
研究倫理 Research ethics		Required	0	0				校級必修 School-level required course
實驗室安全 Laboratory Safety		Required	0	0				校級必修 School-level required course
分子醫學 Molecular medicine		Required	4	4				院級必修 College-level required course 請至博士班選課 Please go to Curriculum Section of the doctor program
專題討論 Seminar	全所老師 All the teachers	Required	4	1	1	1	1	全英授課 Full-English course
碩士論文 M.S.Thesis		Required					6	
合計 必修總學分 Total Required Credits			8					
分子化學暨細胞生物學組 Molecular And Cellular Biology Group								
分子細胞生物學 Molecular cell biology	謝佳宏等 Chia-Hung Hsieh etc.	Elected	3	3				分生組核心選修課 MCB Group Core Course 全英授課 Full-English course

生物技術研究法 Biomedical research technique	陳慧婕等 Hui-Jye Chen etc.	Elected	2	2				分生組核心選修課 MCB Group Core Course
奈米生物科技與再生醫學特論 Special topic on nanobiotechnology & regeneration medicine	洪慧珊 Huei-Shan Hung	Elected	2	2				
計算生物學 Computational biology	陸志豪 Chih-Hao Lu	Elected	3	3				
哺乳類胚與動物複製技術 Embryo & animal cloning technology	朱志成 Jyh-Cherng Ju	Elected	2	2				全英授課 Full-English course
蛋白質修飾與基因調控特論 Special topics on protein modification & gene regulation	陳慧婕 Hui-Jye Chen	Elected	2	2				
幹細胞技術研究法 Stem cells research technique	劉詩平 Shih-Ping Liu	Elected	2	2				暑假上課 Summer vacation course
幹細胞技術專題討論(一)(二) Seminar in stem cell technology(I)(II)	劉詩平 Shih-Ping Liu	Elected	2	1	1			
藥物遺傳學 Pharmacogenetics	吳世欣 Shin-Hsin Wu	Elected	2	2				
生物訊息傳遞特論 Special topics on signal transduction	陳慧婕 Hui-Jye Chen	Elected	2		2			
組織工程與生物醫學特論 Special topics on tissue engineering & biomedicine	洪慧珊 Huei-Shan Hung	Elected	2		2			
動物實驗與實驗技術 Animal experiment & experimental technique	盧大宇 Dah-Yuu Lu	Elected	2		2			
遺傳流行病學 Genetic epidemiology	吳世欣 Shin-Hsin Wu	Elected	2		2			

結構生物資訊與機器學習 Structural bioinformatics & machine learning	陸志豪 Chih-Hao Lu	Elected	2		2			
動物行為實驗設計 Design for animal behavior experiment	盧大宇 Dah-Yuu Lu	Elected	2				2	
神經科學組 Neural Science Group								
小鼠胚胎發育解剖學 Anatomy and embryology of the mouse	張璦云 Sunny LY Chang	Elected	2	2				
發育神經科學專題討論(一)(二) Seminar in developmental neuroscience (I) (II)	張璦云 Sunny LY Chang	Elected	2	1	1			
臨床認知與神經科學特論 Special topic on clinical cognitive & neural sciences	呂明桂等 Ming-Kuei Lu etc.	Elected	2	2				
人類注意力 Human attention	李金鈴 Jing-Ling Li	Elected	2		2			
知覺發展特論 Special topics on perceptual development	簡惠玲 Sarina Hui-Lin Chien	Elected	3		3			
認知科學論文寫作 Paper writing in cognitive sciences	簡惠玲 Sarina Hui-Lin Chien	Elected	1		1			全英授課 Full-English course
生醫顯微成像技術特論 Special topics on microscopy techniques in biomedical research	周寧 Ning Zhou	Elected	1		1			寒假上課 Winter vacation course
認知神經科學病例研究 Patient-based approaches to cognitive neuroscience	李金鈴 Jing-Ling Li	Elected	2			2		
微生物暨免疫學組 Microbiology and Immunology Group								

免疫學特論(一)(二) Special topics on immunology(I)(II)	徐偉成等 Woei-Cheang Shyu etc.	Elected	4	2	2			微免組核心選修課 MI Group Core Course
疫苗學特論 Special topics on vaccinology	劉士任等 Shih-Jen Liu etc.	Elected	2	2				微免組核心選修課 MI Group Core Course
線蟲模式生物及其應用 Caenorhabditis elegans in biomedical Research	傅如輝 Ru-Huei Fu	Elected	2	2				
中草藥與免疫學特論 Special topics on herb/phytocompounds and immunology	邱紹智 Shao-Chih Chiu	Elected	2	2				
癌症病毒學特論 Special topics on cancer virology	鄧喬方 Chiao-Fang Teng	Elected	2	2				
微免新知與探索 Exploring new concepts in microbiology & immunology	盧敏吉等 Min-Chi Lu etc.	Elected	1	1				
RNA 生物學特論 Special topics on RNA biology	傅如輝 Ru-Huei Fu	Elected	2		2			
免疫學生物技術特論 Special topics on biotechnology in immunology	邱紹智 Shao-Chih Chiu	Elected	2		2			
偽慢病毒應用與實作 Application & practice of pseudotyped lentivirus	蘇文琪 Wen-Chi Su	Elected	2		2			全英授課 Full-English course
癌症生物標記特論 Special topics on cancer biomarker	鄧喬方 Chiao-Fang Teng	Elected	2		2			
呼吸道免疫學專題討論 (一)(二)(三)(四)Seminar in respiratory immunology (I)(II)(III)(IV)	李珍珍 Chen-Chen Lee	Elected	4	1	1	1	1	

藥物流行病學原理 Pharmacoepidemiology theory	周煦文 Hsu-Wen Chou	Elected	2				2	
腫瘤醫學組 Tumor Medicine Group								
癌症生物技術 Biotechnology for cancer research	謝哲宗客座教授 Visiting Professor Jer-Tsong Hsieh	Elected	1	1				腫瘤醫學組核心選修課 TM Group Core Course 暑期課程 Summer vacation course
轉譯醫學 Translational medicine	余永倫 Yung-Luen Yu	Elected				2		腫瘤醫學組核心選修課 TM Group Core Course
癌症生物學 Cancer biology	余永倫 Yung-Luen Yu	Elected	2		2			腫瘤醫學組核心選修課 TM Group Core Course
癌症內分泌特論(一)(二)(三)(四) Special topics on oncoendocrinology(I)(II)(III)(IV)	劉哲育 Jer-Yuh Liu	Elected	4	1	1	1	1	全英授課 Full-English course
胰臟癌研究專題討論(一)(二)(三)(四) Special topics on pancreatic cancer research (I)(II)(III)(IV)	吳恒祥 Heng-Hsiung Wu	Elected	4	1	1	1	1	
腫瘤標靶治療與抗藥性(一)(二) Tumor targeted therapy and drug resistance (I)(II)	黃偉謙 Wei-Chien Huang	Elected	4	2	2			全英授課 Full-English course
癌症能量代謝特論(一)(二) Special topics on cancer metabolism(I)(II)	陳雅惠 Ya-Huey Chen	Elected	2	1	1			全英授課 Full-English course
癌症與發炎特論(一)(二)(三)(四) Special topics on cancer & inflammation (I)(II)(III)(IV)	余玉萍 Yuh-Pyng Sher	Elected	4	1	1	1	1	全英授課 Full-English course
癌症分子影像 (一)(二) Cancer molecular imaging(I)(II)	謝佳宏 Chia-Hung Hsieh	Elected	4	2	2			

科學性文章賞析與撰寫(一)(二) Scientific paper writing(I)(II)	胡春美 Chun-Mei Hu	Elected	2	1	1		
基因損傷調控 Regulation of DNA damage response	王紹椿 Shao-Chun Wang	Elected	2	2			全英授課 Full-English course
癌症免疫學 Cancer immunology	吳恒祥 Heng-Hsiung Wu	Elected	2	2			
非編碼 RNA 及表觀遺傳學特論 (Special topics on noncoding RNA biology & epigenetics)	吳恒祥 Heng-Hsiung Wu	Elected	2	2			
生物資料庫應用與實作 Application & practice of biological database	鄭維中 Wei-Chung Cheng	Elected	2	2			
生物資料庫與數據分析 Biological database and data analysis	鄭維中 Wei-Chung Cheng	Elected	2		2		
癌症免疫學之轉譯研究 Transnational immunology in cancer research	吳恒祥 Heng-Hsiung Wu	Elected	2		2		
基因工程與生物技術特論 Special topics on gene engineering & biotechnology	吳恒祥等 Heng-Hsiung Wu etc.	Elected	2		2		
癌症生物學研究法 Biomethodology of cancer research	吳恒祥等 Heng-Hsiung Wu etc.	Elected	2			2	暑假上課 Summer vacation course
臨床醫學組 Clinical Medicine Group							
轉譯基因體醫學特論 Translational genomics	包大龍 Ba-Tian Bau	Elected	2		2		臨床醫學組核心選修課 CM Group Core Course
分子內分泌體學 Molecular endocrinomics	馬文隆 Wen-Lung Ma	Elected	2	2			
藥物設計與研發 Drug design and development	賴威達 Ted Weita Lai	Elected	2	2			全英授課 Full-English course

血栓與發炎研究新趨勢 New research trends in thrombosis and inflammation	沈明毅 Ming-Yi Shen	Elected	2	2			
脂質學之現代觀點 Current opinion in lipidology	沈明毅 Ming-Yi Shen	Elected	2	2			
生物基礎統計 Biostatistics	陳怡文 Yi-Wen Chen	Elected	2	2			
醫療 3D 列印原理 3D printing in medical application introduction	陳怡文 Yi-Wen Chen	Elected	2	2			
近代轉譯研究原理 Principle of modern translational research	馬文隆 Wen-Lung Ma	Elected	1		1		
近代轉譯研究實作 Practice of modern translational research	馬文隆 Wen-Lung Ma	Elected	2		2		
醫療 3D 列印 3D printing in medical application	陳怡文 Yi-Wen Chen	Elected	2		2		

注意事項：

- 1、教育目標：(1)強化學生生物醫學與生物資訊專業知識。(2)培養學生獨立思考、具有發覺及解決問題能力。(3)培育具有國際觀之人才。
- 2、本課程表呈報教育部核備，自 107 學年度新生入學起實施，本所修業二年。
- 3、本所學位規定應修學分，至少應修 **34 學分 (含碩士論文 6 學分)** 始得畢業。**(必修 8 學分{含院級必修 4 學分}、論文 6 學分、選修 20 學分{含各組核心選修課程})**
- 4、各組修課規定：除應修習必修學分外，各組學生需從核心選修課程中，至少擇一門課修習(如該課程有分上、下學期，則皆需修畢，始可認列)，加上選修課程後，始可畢業。
- 5、**研究生修業期間除修習各系所規定應修課程外，尚須完成下列校定課程之研修：**
 - (1)「實驗室安全」-碩博士班校級必修 0 學分。
 - (2)「研究倫理」-碩博士班校級必修 0 學分。
 - (3)「分子醫學」-碩博士班院級必修 4 學分
- 6、畢業前必須通過英文鑑定，方能畢業。相關規定依本校「學生英文能力鑑定實施辦法」辦理。

Curriculum for Master Program:

1. The master program is a one-to-four-year course. Minimum credits required for graduation is 34 credits, including 8 credits from required courses, 20 credits from elective courses and 6 credits of master's thesis research.
2. Each group should take **at least one Core Course** (two credits).
3. Besides taking the required courses as stipulated by each department in the study period, graduate students shall complete the training of the following courses as stipulated by the school:
 - (1) "Laboratory safety" – A school-level required course in the Master's Program and Doctoral Program with 0 credits.
 - (2) "Research Ethics" - A school-level required course in the Master's Program and Doctoral Program with 0 credits
 - (3) "Lecture on Modern Biomedicine" - A school-level required course in the Doctoral Program with 4 credits.
 - (4) "Molecular medicine" - A college-level required course in the Master's Program and Doctoral Program with 4 credits.