

中國醫藥大學 醫學院醫學檢驗生物技術學系碩士班 必修畢業學分認定表 112 學年度入學適用
China Medical University Graduate Institute of Medical Laboratory Science and Biotechnology Requirement for Master Program (Applicable for 2023-2024 Enrollees)

第 1 頁 / 共 2 頁

列印日期(Date)：112年3月27日

科目名稱 Course Title	修別 Type	學分 Credits	一年級 Freshman		二年級 Sophomore		可供博士班下修 (請打勾) Available for Ph.D. Program (check)	可供學士班上修 (請打勾) Available for Undergraduate (check)	課程分類 Category	備註 Remarks
			上	下	上	下				
			1	2	1	2				
分子細胞生物學(Molecular & cellular biology)	必(R)	2.0	2.0				√	√	所定必修(Required Courses)	外籍學生可選「進階生物技術原理與應用」(Advanced principles and applications of biotechnology)(課號M5000011)、「腫瘤細胞生物學研究法」(Biomethodology of tumor cell biology)(課號M5000017)之其中1門課程，做為替代課程。
分子醫學(Molecular medicine)	必(R)	4.0	4.0				√	√	院定必修(College Required Courses)	全英語授課課程
專題討論(一)(Seminar (I))	必(R)	1.0	1.0				√	√	所定必修(Required Courses)	外籍學生可選「專題討論(一)」(Seminar (I))(課號D9000001)做為替代課程。
專題討論(二)(Seminar (II))	必(R)	1.0		1.0			√	√	所定必修(Required Courses)	外籍學生可選「專題討論(二)」(Seminar (II))(課號D9000002)做為替代課程。
醫學檢驗生物技術學特論(Special topics on medical technology and biotechnology)	必(R)	3.0		3.0			√	√	所定必修(Required Courses)	外籍學生可選「腫瘤發展與惡化」(Tumor development & progression)(課號:M5000018)、「癌症生物學」(Cancerbiology)(課號:M0000019)、「腫瘤標靶治療與抗藥性(二)」(Tumor targeted therapy & drug resistance (II))(課號:M9M000042)之其中2門課程，做為替代課程。
專題討論(三)(Seminar (III))	必(R)	1.0			1.0		√		所定必修(Required Courses)	全英文授課課程
碩士論文(M. S. Thesis)	必(R)	6.0				6.0			校定必修(University Required Courses)	
合計 必修總學分 (Requirement subtotal)		18.0	7.0	4.0	1.0	6.0				

校內注意事項

- 一、校級畢業規定
- (一)須完成修讀「實驗室安全」0學分及「研究倫理」0學分課程。
- (二)須通過校定碩士生英文能力鑑定標準，相關規定依本校「學生英文能力鑑定實施辦法」辦理。(外籍生免修)
- (三)教學助理訓練：碩士生須完成至少1學期之教學助理訓練。(外籍生免修)
- 二、本學分表做為畢業應修課程學分之認定依據。

Note of CMU

- University requirement for graduation
- (1)Students must take and pass the courses Research ethics and Laboratory safety. (0 credit courses)
- (2)According to the regulation of CMU Students' English Proficiency Assessment, students must pass the English Proficiency requirement before graduation.
(Foreign students excluded)
- (3)Teaching assistant training: All Master students must complete at least one semester of teaching assistant training.
(Foreign students excluded)
- 2.This list is used as the recognition basis of courses and credits required for graduation.

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醫學檢驗生物技術學系碩士班注意事項

Note of Graduate Institute of Medical Laboratory Science and
Biotechnology

一、112學年度入學起新生實施，最低畢業學分為31學分，含必修12學分，若為外籍學生身分者，則由本所主管輔導外籍學生選讀本校其他系所已開與本所必修課程屬性相近之全英文課程修讀，並依規定辦理課程變動替代方案之申請。

選修13學分（需有6學分為本所教師所開之學分，外籍學生除外）及碩士論文學分6學分。

二、需有論文發表，如下列條件之一：

（一）參加國內或國外研討會議發表口頭報告論文1篇（需為第一作者）。

（二）參加國內或國外研討會議張貼論文壁報1篇（需為第一作者）。

（三）發表國內或國外期刊論文1篇。

三、本學分表做為畢業學分認定。

- 1.Applicable to the students enrolled in 2023 academic year.
- 2.Students must complete a minimum of 31 credits of coursework for graduation, including 12 required credits and a minimum of 13 elective credits. As for international students, they may select related Full English courses required courses offered by other departments of the university under the guidance of department head. They also need to file an application of curriculum modification alternative according to regulations.
- 3.Among 13 elective credits, graduate students ,excluding international students, must take a minimum of six-credit courses offered by our department and six credits of thesis for all graduate students.
- 4.A paper needs to be published in one of the following ways of the following:
 - (1) To attend a domestic or foreign conference and publish an oral report paper as the first author.
 - (2) To participate in a domestic or foreign conference and present a poster paper as the first author.
 - (3) Publish a paper in a domestic or foreign journal.
- 5.Completion of school-level graduation requirements.

單位主管簽章：

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			上	下	上	下				
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人工生殖技術學(Assisted reproduction technology)	選(E)	1.0	1.0				√	√	所定選修(Elective Courses)	
分子免疫及疫苗學(Molecular immunology and vaccinology)	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
分子細菌學技術(Technology in molecular bacteriology)	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
生物醫學研究的設計與方法(一)(Methods In biomedical research (I))	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
細菌基因學(Bacterial genetics)	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
腫瘤分子診斷(Molecular diagnosis of cancer)	選(E)	2.0	2.0					√	所定選修(Elective Courses)	學士班上修學生需為莊淨媛老師實驗室之專題研究生
酵素反應機轉(Enzyme mechanism)	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
儀器分析特論(Special topics on instrument analysis)	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
醫用病毒學研究方法(Research methods in medical virology)	選(E)	2.0	2.0				√	√	所定選修(Elective Courses)	
分子病毒學特論(Special topics on advanced topics in molecular virology)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	全英語授課課程
生物資料庫(Bioinformatic database)	選(E)	1.0		1.0			√	√	所定選修(Elective Courses)	
生物醫學研究的設計與方法(二)(Methods in biomedical research (II))	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
多體學技術在醫學檢驗應用(Omics in laboratory)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
原核生物基因之表現與調控(Gene expression & regulation in prokaryote)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
細胞凋亡及流式細胞分析技術(Cell apoptosis & flow cytometry assays)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
細胞激素特論(Special topics on the cytokine network)	選(E)	2.0		2.0				√	所定選修(Elective Courses)	
細菌抗藥性特論(Special topics on antibiotic resistance in bacteria)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
精準醫療之訊息傳導特論(Special topics on signal transduction of precision medicine)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
臨床實驗室管理與行銷(Clinical laboratory management certification and health services marketing)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
臨床應用免疫學(Clinical application of immunology)	選(E)	2.0		2.0			√	√	所定選修(Elective Courses)	
奈米生物科技(Nanobiotechnology)	選(E)	2.0			2.0		√	√	所定選修(Elective Courses)	
病毒致病機轉特論(Special topics on mechanisms of viral pathogenicity)	選(E)	1.0			1.0		√	√	所定選修(Elective Courses)	全英文授課課程
合計 選修總學分 (Elective subtotal)		41.0	17.0	21.0	3.0					

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