中國醫藥大學 生命科學院生物科技學系博士班 必修 畢業學分認定表 112 學年度入學適用

China Medical University Graduate Institute of Biological Science and Technology Requirement for Ph.D. Program (Applicable for 2023-2024 Enrollees)

第 1 頁 / 共 1 頁 列印日期(Date): 112年10月16日

科目名稱 Course Title	1/5 11		一年級 1 st year		二年級 2 nd year		an as A die	M
	修別 Type		上 1	下 2	上 1	下 2	課程分類 Category	備註 Remarks
分子醫學(Molecular medicine)	必(R)	2.0	2.0				院定必修(College Required Courses)	全英文課程(Full English)
專題討論(一)(Seminar(I))	必(R)	1.0	1.0				所定必修(Required Courses)	全英文課程(Full English)
進階分子細胞生物學(Advanced molecular cell biology)	必(R)	2.0	2.0				院定必修(College Required Courses)	院級必修課程,碩、博士班合班上課(由博士班開課),外籍生可修「進階癌症生物學與抗癌藥物-2學分」來進行抵免。(College Required Courses, International students can take 「Advanced cancer oncology & anti-cancer drug」for transferring credits))
專題討論(二)(Seminar (II))	必(R)	1.0		1.0			所定必修(Required Courses)	全英文課程(Full English)
專題討論(三)(Seminar (III))	必(R)	1.0			1.0		所定必修(Required Courses)	全英文課程(Full English)
專題討論(四)(Seminar (IV))	必(R)	1.0				1.0	所定必修(Required Courses)	全英文課程(Full English)
博士論文(Ph.D. Dissertation)	必(R)	12.0				12.0	校定必修-論文(University Required Courses-Thesis)	
合計 必修總學分(Requirement subtota	al)	20.0	5.0	1.0	1.0	13.0		

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、「研究倫理」0學分及「現代生物醫學講座」4學分課程。
- (二)須通過校定博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:博士生須完成至少2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。

生物科技學系博士班注意事項

- 一、教育目標:1.以生物科技之創新研究為基礎 2.培育高級生醫領域之專門研究人才
- 二、112學年度入學新生實施。本系博士班修業3年,最低畢業學分為30學分,含校級必修「現代生物醫學講座」4學分、院級必修「分子醫學」2學分、「進階分子細胞生物學」2學分和系必修4學分,選修6學分,博士論文12學分。
- 三、依中國醫藥大學學生逕修讀博士學位辦法第七條規定:核准逕修讀博士學位之學士學位應屆畢業生至少應修滿36學分,論文學分另計;碩士班學生至少應修滿30學分(含碩士班期間所修學分數,至多採計12學分),論文學分另計;其修讀課程、成績考查及修業年限、學位審查等,自轉入博士班起,悉比照博士班當學年度新生辦理。

Note of CMU

- 1. University requirement for graduation.
- (1)Students must take and pass the courses: Research Ethics (0 credit), Laboratory Safety (0 credit), and Lecture on Modern Biomedicine (4 credits).
- (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 PhD students must complete at least two semester of teaching assistant training.

(Foreign students excluded)

2. This list is used as the recognition basis of courses and credits required for graduation.

Note of Graduate Institute of Biological Science and Technology
Note of Graduate Institute of Biological Science and Technology
*The doctoral program is a two-to-seven-year course. Minimum credits required for graduation is 30 credits, including 8 credits from required courses (including School-, College-, and Institute-level courses), 6 credits from elective courses and 12 credits of doctoral thesis research.
*Besides taking the required courses as stipulated by each department in

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.

the study period, graduate students shall complete the training of the

- (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 2 credits.
- (5)" Advanced molecular cell biology" A college-level required course in the Master's Program and Doctoral Program with 2 credits. But it is Chinese, use "Advanced cancer oncology & anti-cancer drug" to do the Alternative Curriculum Application.

單位主管簽章:

中國醫藥大學 生命科學院生物科技學系博士班 選修 畢業學分認定表 112 學年度入學適用

China Medical University Graduate Institute of Biological Science and Technology Elective for Ph.D. Program (Applicable for 2023-2024 Enrollees)

第 1 頁 / 共 1 頁 列印日期(Date): 112年10月16日

科目名稱 Course Title	修別 Type	學分 Credits	一年級 I st year		二年級 2 nd year		NII en à der	<i>1</i> 4
			上 1	下 2	上 1	下 2	課程分類 Category	備註 Remarks
高等免疫生技學(Advanced immunology & bio-technology)	選(E)	2.0	2.0				所定選修(Elective Courses)	
貴重儀器原理與實習(practice of biomedical instruments)	選(E)	2.0	2.0				所定選修(Elective Courses)	
新藥開發之智財權規範(Intellectual property rights and regulations of drug development)	選(E)	1.0	1.0				所定選修(Elective Courses)	
高等訊息傳遞路徑(Advanced signal transduction)	選(E)	2.0		2.0			所定選修(Elective Courses)	
進階微生物致病機轉(Advanced Microbial Pathogenesis)	選(E)	2.0		2.0			所定選修(Elective Courses)	全英文課程(Full English)
進階癌症生物學與抗癌藥物(Advanced cancer oncology & anti-cancer drug)	選(E)	2.0		2.0			所定選修(Elective Courses)	全英文課程(Full English)
藥物設計和作用(Drug design and action)	選(E)	2.0		2.0			所定選修(Elective Courses)	全英文課程(Full English)
高等生物晶片技術(Advanced biochip technology)	選(E)	2.0			2.0		所定選修(Elective Courses)	
成功生技產業創業家之專題講座(Lecture on successful biotech entrepreneurship)	選(E)	1.0				1.0	所定選修(Elective Courses)	
高等心臟血管生物學(Advanced cardiovascular biology)	選(E)	2.0				2.0	所定選修(Elective Courses)	
學術論文寫作與發表(Academic writing and integrity)	選(E)	1.0				1.0	所定選修(Elective Courses)	全英文課程(Full English)
合計 選修總學分(Elective subtotal))	19.0	5.0	8.0	2.0	4.0		

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、「研究倫理」0學分及「現代生物醫學講座」4學分課程。
- (二)須通過校定博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:博士生須完成至少2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。

生物科技學系博士班注意事項

- 一、教育目標:1.以生物科技之創新研究為基礎? 地名亨姆女 殿 短线 文東 問 研究 人士
- 2. 培育高級生醫領域之專門研究人才
- 二、112學年度入學新生實施。本系博士班修業3年,最低畢業學分為30學分,含校級必修「現代生物醫學講座」4學分、院級必修「分子醫學」2學分、「進階分子細胞生物學」2學分和系必修4學分,選修6學分,博士論文12學分。
- 三、依中國醫藥大學學生逕修讀博士學位辦法第七條規定:核准逕修讀博士學位之學士學位應屆畢業生至少應修滿36學分,論文學分另計;碩士班學生至少應修滿30學分(含碩士班期間所修學分數,至多採計12學分),論文學分另計;其修讀課程、成績考查及修業年限、學位審查等,自轉入博士班起,悉比照博士班當學年度新生辦理。

Note of CMU

- 1. University requirement for graduation.
- (1)Students must take and pass the courses: Research Ethics (0 credit), Laboratory Safety (0 credit), and Lecture on Modern Biomedicine (4 credits).
- (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 PhD students must complete at least two semester of teaching assistant training.

(Foreign students excluded)

2. This list is used as the recognition basis of courses and credits required for graduation.

Note of Graduate Institute of Biological Science and Technology

- Note of Graduate Institute of Biological Science and Technology
 *The doctoral program is a two-to-seven-year course. Minimum credits
 required for graduation is 30 credits, including 8 credits from required
 courses (including School-, College-, and Institute-level courses), 6
 credits from elective courses and 12 credits of doctoral thesis research.
 *Besides taking the required courses as stipulated by each department in
- *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 2 credits.
- (5)" Advanced molecular cell biology" A college-level required course in the Master's Program and Doctoral Program with 2 credits. But it is Chinese, use "Advanced cancer oncology & anti-cancer drug" to do the Alternative Curriculum Application.