中國醫藥大學　醫學院老化醫學博士學位學程 必修 畢業學分認定表 114 學年度入學適用

China Medical University Ph.D. Program for Aging Requirement for Ph.D. Program (Applicable for 2025-2026 Enrollees)

列印日期(Date)：114年4月28日

科目名稱/課號 Course Title/Course ID	修別 Type	學分 Credits	一年級 1st year 上 1	一年級 1st year 下 2	二年級 2nd year 上 1	二年級 2nd year 下 2	課程分類 Category	備註 Remarks
分子醫學(Molecular medicine)／BAD000013	必(R)	4.0	4.0				院定必修(College Required Courses)	院級必修，英文授課(College Required Courses-Full English Course)
老化之生理病理學(Pathophysiology of aging)／48D000002	必(R)	1.0	1.0				所定必修(Required Courses)	英文授課(Full English Course)
博士論文(Ph.D. Dissertation)／48D000027	必(R)	12.0				12.0	校定必修-論文(University Required Courses-Thesis)	
合計　必修總學分(Requirement subtotal)		17.0	5.0			12.0		

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。

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.

老化醫學博士學位學程注意事項

一、教育目標：培育具國際觀及獨立思考能力的基礎老化醫學科學家與臨床老化醫師科學家，並期望畢業生成為未來老化領域的領導者。
二、114學年度入學新生實施，本學程修業2年至7年，最低畢業學分至少為32學分，含必修9學分，必選之選修課程9學分，選修2學分，博士論文學分12學分。其選修課程中之專題討論、老化分子細胞生物學、研究方法與生物統計導論、論文寫作與研究計劃撰寫為本所必須選修之課程，另其他可依學生興趣及研究方向修習本所選修課程或他所之課程。
三、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)「現代生物醫學講座」-博士班校級必修4學分。
(4)「分子醫學」-碩博士班院級必修4學分。
四、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。(外籍生免修)
五、本學分表做為畢業學分認定之依據。畢業授予學位名稱為理學博士。

Note of Ph.D. Program for Aging

1.Educational goals: Cultivate aging medical scientists with international perspective and independent thinking capability, so that graduates can become future leaders in the field of aging.
2.The doctoral program is a two-to-seven-year course. Minimum credits required for graduation is 32, including 9 credits from required courses (including University-, College-, and Institute-level courses), 9 credits from compulsory elective courses, 2 credits from elective courses, and 12 credits of doctoral thesis research.
For the elective courses, Seminar I~IV, Molecular cell biology in aging, Introduction to biomedical methods and biostatistics, and Scientific writing are compulsory elective courses for the program. For the rest of the elective credits, students can take other courses according to their interest and research directions.
3.Besides taking the required courses, students shall complete the following courses as stipulated by the university:
(1) Laboratory safety: School-level required course, 0 credits.
(2) Research Ethics: School-level required course, 0 credits.
(3) Lecture on Modern Biomedicine: School-level required course, 4 credits.
(4) Molecular medicine: College-level required course, 4 credits.
4.Students must pass the English Proficiency Standard before graduation, according to the regulation of CMU Students' English Proficiency Assessment. (International students excluded)
5.This list is used as the recognition basis of courses and credits required for graduation.

單位主管簽章：

中國醫藥大學　醫學院老化醫學博士學位學程 選修 畢業學分認定表 114 學年度入學適用

China Medical University Ph.D. Program for Aging Elective for Ph.D. Program (Applicable for 2025-2026 Enrollees)

列印日期(Date)：114年10月27日

科目名稱/課號 Course Title/Course ID	修別 Type	學分 Credits	一年級 1st year 上 1	一年級 1st year 下 2	二年級 2nd year 上 1	二年級 2nd year 下 2	課程分類 Category	備註 Remarks
真實世界數據與臨床試驗之應用(The use of big healthcare data to examine Real World Evidence and clinical trials)／48D000037	選(E)	2.0	2.0				自由選修(Free Electives)	
神經科學(Neuroscience)／D4D000006	選(E)	2.0	2.0				自由選修(Free Electives)	英文授課(Full English Course)
專題討論(Seminar)／BAD000015	選(E)	1.0	1.0				所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
老化分子細胞生物學(Molecular cell biology in aging)／48D000029	選(E)	2.0		2.0			所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
老化生物學與長壽基因(Biology of aging & longevity genes)／48D000040	選(E)	1.0		1.0			自由選修(Free Electives)	
老化與長壽(Ageing & longevity)／48D000038	選(E)	2.0		2.0			自由選修(Free Electives)	
老化轉譯醫學研究(Translational research on aging)／48D000030	選(E)	2.0		2.0			自由選修(Free Electives)	
行為與臨床科學論文寫作(Scientific Writing in Behavioral and Clinical Sciences)／48D000041	選(E)	1.0		1.0			自由選修(Free Electives)	英文授課(Full English Compulsory Elective Course)
研究方法與生物統計導論(Introduction to biomedical methods and biostatistics)／48D000011	選(E)	2.0		2.0			所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
神經遺傳疾病與訊息路徑(Neurogenetic diseases & signal transduction)／48D000039	選(E)	2.0		2.0			自由選修(Free Electives)	英文授課(Full English Course)
專題討論(Seminar)／BAD000016	選(E)	1.0		1.0			所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
幹細胞於老化疾病上的應用(The application of stem cells for aging-associated disease)／48D000028	選(E)	2.0		2.0			自由選修(Free Electives)	
生物醫學工程特論(Special topics on biomedical engineering)／48D000022	選(E)	2.0			2.0		自由選修(Free Electives)	
老化流行病學(Epidemiology of aging)／48D000025	選(E)	2.0			2.0		自由選修(Free Electives)	
老化與癌症生物學(Aging and cancer biology)／48D000015	選(E)	2.0			2.0		自由選修(Free Electives)	
奈米再生醫學(Nanotechnology and regeneration medicine)／48D000023	選(E)	2.0			2.0		自由選修(Free Electives)	
研究設計與計畫(Study design & proposal)／48D000036	選(E)	2.0			2.0		自由選修(Free Electives)	
專題討論(Seminar)／BAD000017	選(E)	1.0			1.0		所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
認知神經科學(Cognitive neuroscience)／D4D000007	選(E)	3.0			3.0		自由選修(Free Electives)	英文授課(Full English Course)
老化與心血管疾病(Aging and cardiovascular diseases)／48D000020	選(E)	2.0				2.0	自由選修(Free Electives)	
老化與免疫學(Aging and immunology)／48D000018	選(E)	2.0				2.0	自由選修(Free Electives)	
老化與幹細胞(Aging and stem cell biology)／48D000016	選(E)	2.0				2.0	自由選修(Free Electives)	
老化與營養代謝(Aging and nutritional biochemistry)／48D000014	選(E)	2.0				2.0	自由選修(Free Electives)	
專題討論(Seminar)／BAD000018	選(E)	1.0				1.0	所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
論文寫作與研究計劃撰寫(Scientific writing)／GCD000017	選(E)	1.0				1.0	所定選修(Elective Courses)	本學程學生必選，英文授課(Full English Compulsory Elective Course)
合計　選修總學分(Elective subtotal)		44.0	5.0	15.0	14.0	10.0		

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。

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.

中國醫藥大學　醫學院老化醫學博士學位學程 選修 畢業學分認定表 114 學年度入學適用

China Medical University Ph.D. Program for Aging Elective for Ph.D. Program (Applicable for 2025-2026 Enrollees)

老化醫學博士學位學程注意事項

一、教育目標：培育具國際觀及獨立思考能力的基礎老化醫學科學家與臨床老化醫師科學家，並期望畢業生成為未來老化領域的領導者。
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三、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：
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(2)「研究倫理」-碩博士班校級必修0學分。
(3)「現代生物醫學講座」-博士班校級必修4學分。
(4)「分子醫學」-碩博士班院級必修4學分。
四、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。(外籍生免修)
五、本學分表做為畢業學分認定之依據。畢業授予學位名稱為理學博士。

Note of Ph.D. Program for Aging

1.Educational goals: Cultivate aging medical scientists with international perspective and independent thinking capability, so that graduates can become future leaders in the field of aging.
2.The doctoral program is a two-to-seven-year course. Minimum credits required for graduation is 32, including 9 credits from required courses (including University-, College-, and Institute-level courses), 9 credits from compulsory elective courses, 2 credits from elective courses, and 12 credits of doctoral thesis research.
For the elective courses, Seminar I~IV, Molecular cell biology in aging, Introduction to biomedical methods and biostatistics, and Scientific writing are compulsory elective courses for the program. For the rest of the elective credits, students can take other courses according to their interest and research directions.
3.Besides taking the required courses, students shall complete the following courses as stipulated by the university:
(1) Laboratory safety: School-level required course, 0 credits.
(2) Research Ethics: School-level required course, 0 credits.
(3) Lecture on Modern Biomedicine: School-level required course, 4 credits.
(4) Molecular medicine: College-level required course, 4 credits.
4.Students must pass the English Proficiency Standard before graduation, according to the regulation of CMU Students' English Proficiency Assessment. (International students excluded)
5.This list is used as the recognition basis of courses and credits required for graduation. The degree of Doctor of Philosophy (Ph.D.) will be conferred.

單位主管簽章：