

中國醫藥大學 醫學院生物醫學研究所博士班 必修 畢業學分認定表 111 學年度入學適用  
China Medical University Ph.D. Program in Graduate Institute of Biomedical Sciences Requirement for Ph.D. Program (Applicable for  
2022-2023 Enrollees)

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列印日期(Date)：114年4月15日

科目名稱/課號 Course Title/Course ID	修別 Type	學分 Credits	一年級 1 <sup>st</sup> year		二年級 2 <sup>nd</sup> year		課程分類 Category	備註 Remarks
			上 1	下 2	上 1	下 2		
分子醫學(Molecular medicine)/D4D000136	必(R)	4.0	4.0				院定必修(College Required Courses )	全英文授課(Full English Course)
專題討論(一)(Seminar(I))/D4D000001	必(R)	1.0	1.0				所定必修(Required Courses )	全英文授課(Full English Course)
專題討論(二)(Seminar(II))/D4D000002	必(R)	1.0		1.0			所定必修(Required Courses )	全英文授課(Full English Course)
博士論文(Ph. D. Dissertation)/D4D000137	必(R)	12.0					校定必修-論文(University Required Courses-Thesis)	
合計 必修總學分(Requirement subtotal)		18.0	5.0	1.0				

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.

生物醫學研究所博士班注意事項

注意事項：

- 一、教育目標：(1)培養醫學科學家。(2)培育具有國際觀之人才。
- 二、111學年度入學新生實施，本所修業2年至7年，畢業至少需修習30學分始可畢業。必修10學分(含校級必修、院級必修、所定必修)，博士論文12學分、選修8學分{需有4學分為本所開設之學分(含各組選修課程)}。另其他可依學生興趣及研究方向修習本所各組選修課程或他所之課程。
- 三、核准選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。相關規定依本校「中國醫藥大學學生選修讀博士學位辦法」辦理。
- 四、新生須於一年級第二學期開學前繳交選定教學分組申請書，並經指導教授與所長同意始確立組別。於期限內繳交者得於博士資格考前申請換組乙次；逾期繳交者不得申請換組。
- 五、各組修課規定：除應修習必修學分外，各組學生需從該組選修課程中，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)，加上其他選修課程後，始可畢業。
- 六、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。
- 七、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)
- 八、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。

單位主管簽章：

Note of Ph.D. Program in Graduate Institute of Biomedical Sciences

- 1.Educational goals: (1) Cultivate medical scientists. (2) Cultivate talents with global perspective.
- 2.The doctoral program is a two-to-seven-year course. Minimum credits required for graduation is 30, including 10 credits from required courses (including University-, College-, and Institute-level courses), 8 credits from elective courses (must include 4 credits of GIBS courses) and 12 credits of doctoral thesis research.
- 3.According to the CMU Regulation for the Direct Pursuit of the PhD Degree, undergraduate students approved for PhD degree direct pursuit must complete at least 36 credits, exclude the thesis credit; master students must complete at least 30 credits (including the credits taken during master's study period, maximum of 12 credits can be counted), exclude the thesis credit. The regulations on the course of study, examination, study period, and degree review, shall be handled in accordance as the freshmen of the same year since the students start the PhD program.
- 4.Student needs to submit Curriculum Group application before the start of 2nd semester of 1st academic year. Students submit on time are allowed to apply for change of Curriculum Group once before applying for Ph. D. qualification. Those fail to submit application on time are not allowed to change Curriculum Group. If a student applies for change of Curriculum Group, he/she needs to get the consent signature of the adviser and the head of the department/institute.
- 5.Student should pass at least 1 elective course of the selected Curriculum Group. If the course has more than one lectures offered in different semester, students should pass all the lectures.
- 6.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.
- 7.Students must pass the English Proficiency Standard before graduation, according to the regulation of CMU Students' English Proficiency Assessment.(Foreign students excluded)
- 8.This list is used as the recognition basis of courses and credits required for graduation.

中國醫藥大學 醫學院生物醫學研究所博士班 選修 畢業學分認定表 111 學年度入學適用

China Medical University Ph.D. Program in Graduate Institute of Biomedical Sciences Elective for Ph.D. Program (Applicable for 2022-2023 Enrollees)

科目名稱/課號 Course Title/Course ID	修別 Type	學分 Credits	一年級 1 <sup>st</sup> year		二年級 2 <sup>nd</sup> year		課程分類 Category	備註 Remarks
			上 1	下 2	上 1	下 2		
			人類臉孔知覺(Human face perception)/D4D000015	選(E)	2.0	2.0		
分子生物技術實作(Molecular biotechniques practice)/D4D000017	選(E)	2.0	2.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	暑假開課(Summer Course)
分子影像(Molecular imaging)/D4D000166	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
分子癌症生物學(Molecular cancer biology)/D4D000013	選(E)	2.0	2.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
分子藥理學專題討論(一)(Seminar in molecular pharmacology (I))/D4D000018	選(E)	1.0	1.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
次世代定序數據分析特論(一)(Special topics on next generation sequencing (I))/D4D000188	選(E)	2.0	2.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
自體免疫疾病研究專題討論(一)(Seminar in autoimmune diseases (I))/D4D000170	選(E)	1.0	1.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
身心功能之生物介面(一)(Mind-body interface (I))/D4D000032	選(E)	2.0	2.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	
知覺與注意力專題討論(一)(Seminar in perception & attention (I))/D4D000036	選(E)	1.0	1.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	
染色質重組與癌症(一)(Chromatin remodeling & cancer (I))/D4D000040	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
研究設計與計畫(Study design & proposal)/D4D000044	選(E)	2.0	2.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
致病病毒特論(Special topics of pathogenic viruses)/D4D000139	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
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 & clinical trials)/D4D000177	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
神經免疫學(Neuroimmunology)/D4D000048	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
神經科學(Neuroscience)/D4D000006	選(E)	2.0	2.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課(Full English Course)
神經科學研究的先進技術(Advanced techniques in neuroscience research)/D4D000194	選(E)	2.0	2.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課, 與國際生醫學程合班(Full English Course, Combined class with IMPBS)
神經電生理期刊討論(一)(Neuroelectrophysiology (I))/D4D000049	選(E)	1.0	1.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
高等幹細胞生物學(Advanced stem cell biology)/D4D000165	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
高等癌症藥理學(一)(Advanced cancer pharmacology (I))/D4D000184	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
基因不穩定性與癌症(Genomic instability & cancer)/D4D000065	選(E)	2.0	2.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
細胞代謝與免疫治療特論(一)(Special topics on cancer cell stress, metabolism, and immunotherapy (I))/D4D000190	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
細胞骨架學專題討論(一)(Seminar in cytoskeleton (I))/D4D000067	選(E)	1.0	1.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
發炎與先天免疫專題討論(一)(Seminar in inflammation & innate immunity (I))/D4D000008	選(E)	1.0	1.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
貴重儀器原理與實習(Principle & practice of biomedical instruments)/D4D000070	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	暑假開課, 全英文授課(Summer Course, Full English Course)
進階分子生物技術原理與應用(Advanced principles & applications of molecular biotechnology)/D4D000071	選(E)	2.0	2.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	暑假開課(Summer Course)
進階分子細胞生物學(Advanced molecular cell biology)/D4D000005	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
進階心臟分子生化學專題討論(一)(Advanced seminar in molecular cardiology (I))/D4D000073	選(E)	1.0	1.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
進階生物技術研究(Advanced biomedical research technique)/D4D000077	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
進階致癌基因與標靶治療(一)(Advanced oncogene & cancer target therapy(I))/D4D000192	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
進階致癌蛋白轉譯後修飾(一)(Advanced oncoprotein post-translational modification (I))/D4D000081	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	

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進階計算生物學(Advanced computational biology)/D4D000085	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
進階發育神經科學專題討論(一)(Advanced seminar in developmental neuroscience (I))/D4D000086	選(E)	1.0	1.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課(Full English Course)
進階傳統中草藥與腫瘤治療(一)(Advanced traditional Chinese herbal medicines & cancer treatment (I))/D4D000088	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
進階轉譯醫學之理論與實務(一)(Advanced Theory and practice of translationmedicine(I))/D4D000180	選(E)	1.0	1.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	全英文授課(Full English Course)
腫瘤細胞生物學研究法(Biotechnology of tumor cell biology)/D4D000159	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
腦瘤中代謝與刺蝟信號(一)(Targeting hedgehog signaling & cancer metabolism in brain tumor (I))/D4D000186	選(E)	2.0	2.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課(Full English Course)
實證轉譯醫學(Translational medicine in practice)/D4D000098	選(E)	2.0	2.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	全英文授課(Full English Course)
認知神經科學(Cognitive neuroscience)/D4D000007	選(E)	3.0	3.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	
螢光顯微技術(Fluorescence microscopy techniques)/D4D000174	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
癌症外遺傳學(一)(Cancer epigenetics (I))/D4D000100	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
癌症訊號傳遞(Cancer signaling pathways)/D4D000106	選(E)	2.0	2.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
臨床與基礎研究實習(一)(Clinical & basic research practice)/D4D000114	選(E)	1.0	1.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
臨床與基礎醫學整合課程(Integrated course in clinical & basic medicine)/D4D000116	選(E)	2.0	2.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	暑假開課(Summer Course)
臨床癌症與轉譯醫學(Clinical oncology & translation medicine)/D4D000012	選(E)	2.0	2.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
轉譯內分泌醫學期刊討論(一)(Seminar on the modern translational endocrinology (I))/D4D000117	選(E)	1.0	1.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
轉譯科學論文之寫作、發表與賞析(Getting start writing, submitting & evaluating translational scientific papers)/D4D000121	選(E)	2.0	2.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	全英文授課(Full English Course)
藥理學之藥物研發專題討論(一)(Seminar in drug discovery (I))/D4D000132	選(E)	1.0	1.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	全英文授課(Full English Course)
分子藥理學專題討論(二)(Seminar in molecular pharmacology (II))/D4D000019	選(E)	1.0	1.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
光遺傳學(Optogenetics)/D4D000028	選(E)	2.0	2.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
次世代定序數據分析特論(二)(Special topics on next generation sequencing (II))/D4D000189	選(E)	2.0	2.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
自體免疫疾病研究專題討論(二)(Seminar in autoimmune diseases (II))/D4D000171	選(E)	1.0	1.0				所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
身心功能之生物介面(二)(Mind-body interface (II))/D4D000033	選(E)	2.0	2.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	
奈米醫學(Nanomedicine)/D4D000175	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
知覺與注意力專題討論(二)(Seminar in perception & attention (II))/D4D000037	選(E)	1.0	1.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	
染色質重組與癌症(二)(Chromatin remodeling & cancer (II))/D4D000041	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
神經電生理期刊討論(二)(Neuroelectrophysiology (II))/D4D000050	選(E)	1.0	1.0				所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
神經膠細胞與神經性發炎特論(Special topics on glia & neuroinflammation)/D4D000183	選(E)	1.0	1.0				所定選修(神經科學組)(GIBS courses(neuroscience group))	
高等奈米生物醫學(Advanced nanobiomedicine)/D4D000058	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
高等癌症藥理學(二)(Advanced cancer pharmacology (II))/D4D000185	選(E)	1.0	1.0				所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
高等囊泡運輸(Advanced vesicular trafficking)/D4D000063	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
基因轉殖及剔除鼠技術(Transgenic & knockout mice)/D4D000066	選(E)	2.0	2.0				所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	

中國醫藥大學 醫學院生物醫學研究所博士班 選修 畢業學分認定表 111 學年度入學適用

China Medical University Ph.D. Program in Graduate Institute of Biomedical Sciences Elective for Ph.D. Program (Applicable for 2022-2023 Enrollees)

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列印日期(Date)：114年4月15日

科目名稱/課號 Course Title/Course ID	修別 Type	學分 Credits	一年級 1 <sup>st</sup> year		二年級 2 <sup>nd</sup> year		課程分類 Category	備註 Remarks
			上 1	下 2	上 1	下 2		
細胞代謝與免疫治療特論(二)(Special topics on cancer cell stress, metabolism, and immunotherapy (II))/D4D000191	選(E)	1.0		1.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
細胞骨架學專題討論(二)(Seminar in cytoskeleton (II))/D4D000068	選(E)	1.0		1.0			所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
發育神經科學(Developmental neuroscience)/D4D000069	選(E)	2.0		2.0			所定選修(神經科學組)(GIBS courses(neuroscience group))	
發炎與先天免疫專題討論(二)(Seminar in inflammation & innate immunity (II))/D4D000009	選(E)	1.0		1.0			所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
進階心血管藥理學(Advanced cardiovascular pharmacology)/D4D000072	選(E)	2.0		2.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
進階心臟分子生化學專題討論(二)(Advanced seminar in molecular cardiology (II))/D4D000074	選(E)	1.0		1.0			所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
進階血管與代謝(Advanced blood vessel & metabolism)/D4D000182	選(E)	2.0		2.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
進階胚複製與多能性幹細胞(Advanced embryo cloning & pluripotent stem cells)/D4D000080	選(E)	2.0		2.0			所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
進階致癌基因與標靶治療 (二)(Advanced oncogene & cancer target therapy(II))/D4D000193	選(E)	1.0		1.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
進階致癌蛋白轉譯後修飾(二)(Advanced oncoprotein post-translational modification (II))/D4D000082	選(E)	1.0		1.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	
進階動脈粥狀硬化(Advanced molecular pathology of atherosclerosis)/D4D000157	選(E)	2.0		2.0			所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
進階發育神經科學專題討論(二)(Advanced seminar in developmental neuroscience (II))/D4D000087	選(E)	1.0		1.0			所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課(Full English Course)
進階傳統中草藥與腫瘤治療(二)(Advanced traditional Chinese herbal medicines & cancer treatment (II))/D4D000089	選(E)	1.0		1.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
進階轉譯醫學之理論與實務(二)(Advanced Theory and practice of translationmedicine(II))/D4D000181	選(E)	1.0		1.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	全英文授課(Full English Course)
腫瘤發展與惡化(Tumor development & progression)/D4D000160	選(E)	2.0		2.0			所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
腫瘤醫學(Tumor medicine)/D4D000167	選(E)	2.0		2.0			所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
腦瘤中代謝與刺蝟信號(二)(Targeting hedgehog signaling and cancer metabolism in brain tumor(II))/D4D000187	選(E)	2.0		2.0			所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課(Full English Course)
電腦輔助藥物設計(Computer-aided drug design)/D4D000097	選(E)	2.0		2.0			所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	
癌症外遺傳學(二)(Cancer epigenetics (II))/D4D000101	選(E)	1.0		1.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
癌症免疫學之轉譯研究(Transnational immunology in cancer research)/D4D000176	選(E)	2.0		2.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
癌症細胞死亡之調控(Regulation of cell death in cancer)/D4D000107	選(E)	2.0		2.0			所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
臨床試驗(Clinical trials)/D4D000113	選(E)	2.0		2.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
臨床與基礎研究實習(二)(Clinical & basic research practice (II))/D4D000115	選(E)	1.0		1.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
轉譯內分泌醫學期刊討論(二)(Seminar on the modern translational endocrinology (II))/D4D000118	選(E)	1.0		1.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
轉譯醫學期刊論解析(Translational journal paper analysis)/D4D000128	選(E)	2.0		2.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	
離子通道及相關疾病(Ion channels & disease)/D4D000131	選(E)	2.0		2.0			所定選修(神經科學組)(GIBS courses(neuroscience group))	全英文授課(Full English Course)
藥理學之藥物研發專題討論(二)(Seminar in drug discovery (II))/D4D000133	選(E)	1.0		1.0			所定選修(臨床醫學組)(GIBS course (clinical medicine group))	全英文授課(Full English Course)
分子藥理學專題討論(三)(Seminar in molecular pharmacology (III))/D4D000020	選(E)	1.0			1.0		所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
自體免疫疾病研究專題討論(三)(Seminar in autoimmune diseases (III))/D4D000172	選(E)	1.0			1.0		所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
知覺與注意力專題討論(三)(Seminar in perception & attention (III))/D4D000038	選(E)	1.0			1.0		所定選修(神經科學組)(GIBS courses(neuroscience group))	

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			上 1	下 2	上 1	下 2		
發炎與先天免疫專題討論(三)(Seminar in inflammation & innate immunity (III))/D4D000010	選(E)	1.0			1.0		所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
進階傳統中草藥與腫瘤治療(三)(Advanced traditional Chinese herbal medicines & cancer treatment (III))/D4D000090	選(E)	1.0			1.0		所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
分子藥理學專題討論(四)(Seminar in molecular pharmacology (IV))/D4D000021	選(E)	1.0				1.0	所定選修(分子化學暨細胞生物學組)(GIBS courses (Molecular and cellular biology group))	全英文授課(Full English Course)
自體免疫疾病研究專題討論(四)(Seminar in autoimmune diseases (IV))/D4D000173	選(E)	1.0				1.0	所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課(Full English Course)
知覺與注意力專題討論(四)(Seminar in perception & attention (IV))/D4D000039	選(E)	1.0				1.0	所定選修(神經科學組)(GIBS courses(neuroscience group))	
發炎與先天免疫專題討論(四)(Seminar in inflammation & innate immunity (IV))/D4D000011	選(E)	1.0				1.0	所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	
進階傳統中草藥與腫瘤治療(四)(Advanced traditional Chinese herbal medicines & cancer treatment (IV))/D4D000091	選(E)	1.0				1.0	所定選修(腫瘤醫學組)(GIBS courses(tumor medicine group))	全英文授課(Full English Course)
論文寫作與研究計劃撰寫(Scientific writing)/D4D000099	選(E)	1.0				1.0	所定選修(微生物暨免疫學組)(GIBS course (microbiology and immunology group))	全英文授課，與老化博、藥學博合班(Full English Course, Combined class with Phd. of Aging, Pharmacy.)
合計 選修總學分(Elective subtotal)		149.0	76.0	62.0	5.0	6.0		

校內注意事項

Note of CMU

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。

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.

生物醫學研究所博士班注意事項

注意事項：

- 一、教育目標：(1)培養醫學科學家。(2)培育具有國際觀之人才。
- 二、111學年度入學新生實施，本所修業2年至7年，畢業至少需修習30學分始可畢業。必修10學分(含校級必修、院級必修、所定必修)，博士論文12學分、選修8學分{需有4學分為本所開設之學分(含各組選修課程)}。另其他可依學生興趣及研究方向修習本所各組選修課程或他所之課程。
- 三、核准選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。相關規定依本校「中國醫藥大學學生選修讀博士學位辦法」辦理。
- 四、新生須於一年級第二學期開學前繳交選定教學分組申請書，並經指導教授與所長同意始確立組別。於期限內繳交者得於博士資格考前申請換組乙次；逾期繳交者不得申請換組。
- 五、各組修課規定：除應修習必修學分外，各組學生需從該組選修課程中，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)，加上其他選修課程後，始可畢業。
- 六、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。
- 七、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)
- 八、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。

單位主管簽章：

Note of Ph.D. Program in Graduate Institute of Biomedical Sciences

- 1.Educational goals: (1) Cultivate medical scientists. (2) Cultivate talents with global perspective.
- 2.The doctoral program is a two-to-seven-year course. Minimum credits required for graduation is 30, including 10 credits from required courses (including University-, College-, and Institute-level courses), 8 credits from elective courses (must include 4 credits of GIBS courses) and 12 credits of doctoral thesis research.
- 3.According to the CMU Regulation for the Direct Pursuit of the PhD Degree, undergraduate students approved for PhD degree direct pursuit must complete at least 36 credits, exclude the thesis credit; master students must complete at least 30 credits (including the credits taken during master's study period, maximum of 12 credits can be counted), exclude the thesis credit. The regulations on the course of study, examination, study period, and degree review, shall be handled in accordance as the freshmen of the same year since the students start the PhD program.
- 4.Student needs to submit Curriculum Group application before the start of 2nd semester of 1st academic year. Students submit on time are allowed to apply for change of Curriculum Group once before applying for Ph. D. qualification. Those fail to submit application on time are not allowed to change Curriculum Group. If a student applies for change of Curriculum Group, he/she needs to get the consent signature of the adviser and the head of the department/institute.
- 5.Student should pass at least 1 elective course of the selected Curriculum Group. If the course has more than one lectures offered in different semester, students should pass all the lectures.
- 6.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.
- 7.Students must pass the English Proficiency Standard before graduation, according to the regulation of CMU Students' English Proficiency Assessment.(Foreign students excluded)
- 8.This list is used as the recognition basis of courses and credits required for graduation.