中國醫藥大學 藥學院藥學系碩士班 必修畢業學分認定表 113 學年度入學適用

China Medical University Graduate Institute of Pharmacy Requirement for Master Program (Applicable for 2024-2025 Enrollees)

| 第 1 頁 / 共 2 頁 | | | | | | | | | 列 | 印日期(Date):113年5月28日 |
|--|------|---------|--------|------------|-------------|--------|--|--|---|--|
| 科目名稱 | 修別 | | Fresl | 年級 hman | 二年 Sopho | omore | 可供博士班下修 (請打勾) | 可供學士班上修 (請打勾) | 課程分類 | 備註 |
| Course Title | Type | Credits | 上 1 | 下 2 | 上 1 | 下 2 | Available for Ph.D. Program (check) | Available for Undergraduate (check) | Category | Remarks |
| 分子醫學(Molecular medicine) | 必(R) | 2.0 | 2.0 | | | | | | 院定必修(College Required Courses) | 1. 院級必修; 2. 全英 授 課(1. College-levelr equired course; 2. Full English Course) |
| 專題討論(一)(Seminar (I)) | 必(R) | 1.0 | 1.0 | | | | | | 所定必修(Required Courses) | 外籍生可上修『藥學 系博士班-專題討 論』(International students can take Seminar (1)(Course Code:55D000001) as an alternative course.) |
| 藥物治療學特論(Special topics on pharmacotherapeutics) | 必(R) | 2.0 | 2.0 | | | | | | 所定必修(臨床藥學 組) | 乙組必修;分 為AB班:A班-中文授 課,B班-英文授 課(Required course(Clinical Pharmacy Group)International students can take B course.) |
| 藥學特論(Special topics on pharmacy) | 必(R) | 2.0 | 2.0 | | | | | | 所定必修(Required Courses) | 甲組必修;外籍生可 選修「生物科技學系 博士班-藥物設計和作 用」(International students can take Drug design and action (Course Code:D0D000027) as an alternative course.) |
| 專題討論(二)(Seminar (II)) | 必(R) | 1.0 | | 1.0 | | | | | 所定必修(Required Courses) | 外籍生可上修『藥學 系博士班-專題討 論』(International students can take Seminar (II)(Course Code:55D000008) as an alternative course.) |
| 臨床藥學實習(一)(Clinical practicum in pharmacy (I)) | 必(R) | 4.0 | | 4.0 | | | | | 所定必修(臨床藥學 組) | 乙組必修(Required course(Clinical Pharmacy Group)) |
| 醫學論文寫作(Writing medical research paper) | 必(R) | | | 2.0 | | | | | 所定必修(Required Courses) | 丙組必修(丙組必 修;分為AB班:A班-中 文授課,B班-英文授 課(Required course(Drug Discovery Group)International students can take B course.)) |
| 專題討論(三)(Seminar (III)) | 必(R) | 1.0 | | | 1.0 | | | | 所定必修(Required Courses) | 全英授課(Full English course) |
| 專題討論(四)(Seminar (IV)) | 必(R) | 1.0 | | | | 1.0 | | | 所定必修(Required Courses) | 全英授課(Full English course) |
| 碩士論文(M.S.Thesis) | 必(R) | 6.0 | | | | 6.0 | | | 校定必修-論 文(University Required Courses-Thesis) | |
| 合計 必修總學分 (Requirement subtota | 1) | 22.0 | 7.0 | 7.0 | 1.0 | 7.0 | | | | |

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(0 credit) and Laboratory Safety (0 credit).
- (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.

中國醫藥大學 藥學院藥學系碩士班 必修畢業學分認定表 113 學年度入學適用

China Medical University Graduate Institute of Pharmacy Requirement for Master Program (Applicable for 2024-2025 Enrollees)

藥學系碩士班注意事項

- 一、教育目標:以中西醫藥之基礎研究與課程學習,培育符合藥學領域之研究人才。
- 二、113學年度入學新生實施,碩士班修業2-4年,最低畢業學分為33學分,甲組(藥學組)必修14學分(含碩士論文6學
- 分為50字分,下組(樂字組)必修14字分(含碩士編文0字分),選修19學分;乙組(臨床藥學組)必修20學分(含碩士論文6學分),選修13學分,且必須完成「臨床實習(一)」及「臨床實習(二)」者(共計完成36週實習),始得有「臨床藥學」之註記;丙組(藥物開發組)必修14學分(含碩士論文6學分),選修19學分。
- 三、修業期間除修習本學程規定應修課程外,尚須完成下列校 定課程之研修:
- (一)「實驗室安全」-校級必修0學分
- (二)「研究倫理」-校級必修0學分。
- (三)「分子醫學」-院級必修2學分:
- (1)非臨床藥學背景之外籍生可選修國際針灸學程「分子醫學」或國際生物醫學碩士學位學程「分子醫學」。
- (2)臨床藥學背景之外籍生可選修「公共衛生學系博士班一年級」之「流行病學」。
- 四、依據「社團法人臺灣臨床藥學會(105)臨藥字第105051號 來函」及本校105.02.16「收發文號1050001699」之簽核記錄 辦理:
- (一)依『台灣臨床藥學會醫院藥師專業進階制度』規範:一般藥學研究所畢業者跳升P3,執業年資得減免一年;具國內外臨藥所/組碩士或Pharm. D. 學位者,跳升P3時,執業年資得減免兩年。查貴校臨床藥學組畢業生,依現有辦法可歸屬「國內臨藥組碩士」折抵執業年資兩年。
- (二)學校得於本系「臨床藥學組」畢業學生之成績單備註欄及 畢業證書下方,加註「研究領域:臨床藥學」。
- 五、本學分表做為畢業學分認定之依據。

Note of Graduate Institute of Pharmacy

- 1.Educational goals: Cultivate research talents in the field of pharmacy with basic research and course of Chinese and Western medicine.

 2.For students enrolled in 2024: The study period of the master program ranges between two to four years. The minimum number of credits required for graduation is 33. For General Pharmacy Group: 14 required courses credits (including M.S. Thesis 6 credits) and 19 elective courses credits. For Clinical Pharmacy Group: 20 required courses credits (including M.S. Thesis 6 credits) and 13 elective courses credits, and students must complete Clinical Practice (1) and Clinical Practice (2) (a total of 36 weeks of practice). For Drug Discovery Group: 14 required courses credits (including M.S. Thesis 6 credits) and 19 elective courses credits.
- 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) Molecular medicine: College-level required course, 2 credits.
 a. International students with non-clinical pharmacy background can take "Molecular Medicine" offered by the International Master Program in Acupuncture or the International Master's Program of Biomedical Sciences.
- b. International students with clinical pharmacy background can take "Epidemiology" offered in the first-year of PhD program of Department of Public Health.
- 4.According to the Official Document No. 105051 from Taiwan Society of Health-System Pharmacists (105) and CMU Official Document No. 1050001699:
- (1)According to the "Professional Advancement System for Pharmacists" offered by Taiwan Society of Health-System Pharmacists: Graduates of general pharmacy will be promoted to P3, and the practice years will be exempted for one year; graduates with a master's degree or Pharm.D. degree, the practice years will be exempted for two years. Graduates of the clinical pharmacy group can be classified as "domestic masters of clinical pharmacy group" and the practice years will be exempted for two years.
- (2)CMU may add "Research field: clinical pharmacy" to the transcript or gradation certificate of students of the "clinical pharmacy group".
- 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 藥學院藥學系碩士班 選修畢業學分認定表 113 學年度入學適用

China Medical University Graduate Institute of Pharmacy Elective for Master Program (Applicable for 2024-2025 Enrollees)

| 第 1 頁 / 共 3 頁 | | | | | | | | | <i>5</i> | 可印日期(Date):113年5月28 |
|--|------------|---------|-------------------------------|--------|---|--------|--------------------------------------|-------------------------------------|---------------------------|--|
| 科目名稱 | | 學分 | 一年級 二年級 Freshman Sophomore | | | | 可供博士班下修 (請打勾) | 可供學士班上修 (請打勾) | 課程分類 | 備註 |
| Course Title | 修別 Type | Credits | 上 | 下 2 | 上 | 下 2 | Available for Ph.D. Program (check) | Available for Undergraduate (check) | Category | Remarks |
| AI人工智慧藥學特論(Special topics on Artificial Intelligence in Pharmacy) | 選(E) | 2.0 | 2.0 | 2 | | | rogram (check) | Ondergraduate (eneck) | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 工業天然藥物學特論(Special topics on industrial natural drug) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 分子細胞生物學特論(Special topics on molecular cell biology) | 選(E) | 2.0 | 2.0 | | | | V | | 所定選修(Elective Courses) | 外籍生可選修『國際 生物醫學碩士學位學 程-分子細胞生物學特 論』(International students can take Special topics on molecular cell biology(Course Code:M5M000002) as an alternative course.) |
| 天然物化學特論(Special topics on natural product chemistry) | 選(E) | 2.0 | 2.0 | | | | V | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 生化藥理學特論(Special topics on biochemical pharmacology) | 選(E) | | 2.0 | | | | V | | 所定選修(Elective Courses) | 外籍生可選修『中西醫結合研究所碩士 班-腫瘤生物學特 論』(International students can take Special topics on molecular biology of cancer(Course Code:67M000127) as an alternative course.) |
| 生技醫藥儀器應用特論(Special topics on biomedical instrument application) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 生物統計學特論(一)(Special topics on biostatistics (I)) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 生物藥劑學特論(Special topics on biopharmaceutics) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙組選修 |
| 有機化學特論(Special topics on organic chemistry) | 選(E) | 2.0 | 2.0 | | | | V | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 有機光譜學特論(Special topic on organic spectroscopy) | 選(E) | 3.0 | 3.0 | | | | | V | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 前導生產(Scale up) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 細胞分子診斷學特論(Special topics on cellular & biological diagnosis) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 藥用方言特論(Special topics on medicinal dialect) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙組選修 |
| 藥物毒理學特論(Special topics on drug toxicology) | 選(E) | 2.0 | 2.0 | | | | ٧ | | 所定選修(Elective Courses) | 1. 甲/乙組選修; 2. 全 英授課(Full English course) |
| 藥物流行病學原理與方法特論(Special topics on principles & methods of pharmacoepidemiology) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 藥物傷害及其防治特論(Special topics on drug misadventure and prevention) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 藥物濫用防治研究實務(The practice of drug abuse prevention) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 1. 甲/乙組選修; 2. 全 英授課; 3. 與『健康 風險管理學系風險管 理碩士班』合班上 課(Full English course) |
| 藥品研製特論(Special topics on product development) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 藥劑學特論(Special topics on pharmaceutics) | 選(E) | 2.0 | 2.0 | | | | | | 所定選修(Elective Courses) | 甲/乙組選修 |
| 中藥製劑學特論(Special topics on pharmaceutics of Chinese medicine) | 選(E) | 2.0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙組選修 |
| 反應機轉(Reaction mechanism) | 選(E) | 2.0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 天然物結構鑑定特論-NMR(Special topics on structural elucidation of natural compounds-NMR) | 選(E) | 2.0 | | 2.0 | | | ٧ | ٧ | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 生技藥學特論(Special topics on biotechnologic pharmacy) | 選(E) | 2.0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙組選修 |
| 生物統計學特論(二)(Special topics on biostatistics (II)) | 選(E) | 2.0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 奈米材料特論(Special topics on nanomaterial) | 選(E) | 2.0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 非處方藥特論(Special topics on non-prescription drugs) | 選(E) | 2.0 | | 2.0 | | | | | 所定選修(臨床藥學 組) | 1. 全英授課; 2. 乙組 選修(Full English course) |

中國醫藥大學 藥學院藥學系碩士班 選修畢業學分認定表 113 學年度入學適用

China Medical University Graduate Institute of Pharmacy Elective for Master Program (Applicable for 2024-2025 Enrollees)

第2頁/共3頁

| 第 2 頁 / 共 3 頁 | | | | | | | | | 列 | 印日期(Date):113年5月28 |
|--|------|---------|---------|--------|--------|-----------|--|--|---------------------------|---|
| | | | 一年級 二年級 | | | F級 | 可供博士班下修 | 可供學士班上修 | | |
| 科目名稱 | 修別 | 學分 | | hman | | more | (請打勾) | (請打勾) | 課程分類 | 備註 |
| Course Title | Type | Credits | 上 1 | 下 2 | 上 1 | 下 2 | Available for Ph.D. Program (check) | Available for Undergraduate (check) | Category | Remarks |
| 研究設計特論(Special topics on research design) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 1. 甲/乙/丙組選 修;2全英授 課;3. 與『國際針灸 碩士學位學程』合班 上課;本課程二年 開1次(Full English course) |
| 健康保險學特論(Special topics on health insurance) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 1. 甲/乙組選修; 2. 全 英授課; 3. 與『公共 衛生國際碩士學位學 程』合班上課(Full English course) |
| 應用分子生物學(The application of molecular biology) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 癌症生物學與治療(Cancer biology and therapy) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 1. 甲/乙組選修; 2. 全 英授課; 3. 與『國際 生物醫學碩士學位學 程』合班上課(Full English course) |
| 臨床檢驗學特論(Special topics on clinical laboratory medicine) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 臨床藥學成效研究特論(Special topics on clininical pharmaceutical outcomes research) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 臨床藥學特論(Special topics on clinical pharmacy) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 醣生化學(Glycobiology) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 醫療資訊系統(Healthcare information systems) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 1. 甲/乙組選修; 2. 全 英授課; 3. 與『醫務 管理學系碩士班』合 班上課(Full English course) |
| 藥物不良反應臨床討論特論(Special topics on Clinical study of adverse drug reactions) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 藥物化學特論(Special topics on pharmaceutical chemistry) | 選(E) | 2. 0 | | 2.0 | | | V | | 所定選修(Elective Courses) | 甲/乙/丙組選修 |
| 藥效學特論(Special topics on pharmacodynamics) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(臨床藥學 組) | 甲/乙組選修 |
| 藥學特論(Special topics on pharmacy) | 選(E) | 2. 0 | | 2.0 | | | | | 所定選修(Elective Courses) | 甲/乙組選修 |
| 臨床藥學實習(二)(Clinical practicum in pharmacy (II)) | 選(E) | 4. 0 | | | 4.0 | | | | 所定選修(臨床藥學 組) | 乙組選修 |
| 藥物基因體學特論(Special topics on pharmacogenomics) | 選(E) | 2. 0 | | | 2.0 | | | | 所定選修(臨床藥學 組) | 甲/乙組選修 |
| 合計 選修總學分 (Elective subtotal |) | 85.0 | 39.0 | 40.0 | 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(0 credit) and Laboratory Safety (0 credit).
- (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.

中國醫藥大學 藥學院藥學系碩士班 選修畢業學分認定表 113 學年度入學適用

China Medical University Graduate Institute of Pharmacy Elective for Master Program (Applicable for 2024-2025 Enrollees)

<u>藥學系碩士班注意事項</u>

Note of Graduate Institute of Pharmacy

- 一、教育目標:以中西醫藥之基礎研究與課程學習,培育符合藥學領域之研究人才。
- 二、113學年度入學新生實施,碩士班修業2-4年,最低畢業學分為33學分,甲組(藥學組)必修14學分(含碩士論文6學分),選修19學分;乙組(臨床藥學組)必修20學分(含碩士論文6學分),選修13學分,且必須完成「臨床實習(一)」及「臨床實習(二)」者(共計完成36週實習),始得有「臨床藥學」之註記;丙組(藥物開發組)必修14學分(含碩士論文6學分),選修19學分。
- 三、修業期間除修習本學程規定應修課程外,尚須完成下列校 定課程之研修:
- (一)「實驗室安全」-校級必修0學分
- (二)「研究倫理」-校級必修0學分。
- (三)「分子醫學」-院級必修2學分:
- (1)非臨床藥學背景之外籍生可選修國際針灸學程「分子醫學」或國際生物醫學碩士學位學程「分子醫學」。
- (2)臨床藥學背景之外籍生可選修「公共衛生學系博士班一年級」之「流行病學」。
- 四、依據「社團法人臺灣臨床藥學會(105)臨藥字第105051號 來函」及本校105.02.16「收發文號1050001699」之簽核記錄 辦理:
- (一)依『台灣臨床藥學會醫院藥師專業進階制度』規範:一般藥學研究所畢業者跳升P3,執業年資得減免一年;具國內外臨藥所/組碩士或Pharm. D. 學位者,跳升P3時,執業年資得減免兩年。查貴校臨床藥學組畢業生,依現有辦法可歸屬「國內臨藥組碩士」折抵執業年資兩年。
- (二)學校得於本系「臨床藥學組」畢業學生之成績單備註欄及 畢業證書下方,加註「研究領域:臨床藥學」。
- 五、本學分表做為畢業學分認定之依據。

- 1.Educational goals: Cultivate research talents in the field of pharmacy with basic research and course of Chinese and Western medicine.

 2.For students enrolled in 2024: The study period of the master program ranges between two to four years. The minimum number of credits required for graduation is 33. For General Pharmacy Group: 14 required courses credits (including M.S. Thesis 6 credits) and 19 elective courses credits. For Clinical Pharmacy Group: 20 required courses credits (including M.S. Thesis 6 credits) and 13 elective courses credits, and students must complete Clinical Practice (1) and Clinical Practice (2) (a total of 36 weeks of practice). For Drug Discovery Group: 14 required courses credits (including M.S. Thesis 6 credits) and 19 elective courses credits.
- 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) Molecular medicine: College-level required course, 2 credits.

 a. International students with non-clinical pharmacy background can take "Molecular Medicine" offered by the International Master Program in Acupuncture or the International Master's Program of Biomedical
- b. International students with clinical pharmacy background can take "Epidemiology" offered in the first-year of PhD program of Department of Public Health.
- 4.According to the Official Document No. 105051 from Taiwan Society of Health-System Pharmacists (105) and CMU Official Document No. 1050001699:
- (1)According to the "Professional Advancement System for Pharmacists" offered by Taiwan Society of Health-System Pharmacists: Graduates of general pharmacy will be promoted to P3, and the practice years will be exempted for one year; graduates with a master's degree or Pharm.D. degree, the practice years will be exempted for two years. Graduates of the clinical pharmacy group can be classified as "domestic masters of clinical pharmacy group" and the practice years will be exempted for two years.
- (2)CMU may add "Research field: clinical pharmacy" to the transcript or gradation certificate of students of the "clinical pharmacy group".
- 5. This list is used as the recognition basis of courses and credits required for graduation.

單位主管簽章: