

## I-SHOU UNIVERSITY Department of medical Laboratory Science 4-Year Curriculum for Students Admitted in Academic Year 2024

\*本系總畢業學分數為 135 學分，分下列七項：

### Required Credits for Graduation: 135 Credits

1. 通識核心課程必修 18 學分 GE core courses: required, 18 credits
2. 通識博雅課程選修 10 學分 GE liberal arts education: elective, 10 credits
3. 體育健康課程必修 0 學分 Physical Education Courses 0 Credit
4. 院必修 3 學分（包括 1 門院共同基礎核心必修課程）  
College-required courses: 3 credits (including 1 college-level cornerstone courses)
5. 系必修 76 學分：學術暨實務課程 14 學分，學術課程 34 學分，實務課程 8 學分，校外實習課程 18 學分，總結課程 2 學分  
Department-required courses: 76 credits, including academic + practical courses: 14 credits, academic courses: 34 credits, practical courses: 8 credits, Off-campus internship courses: 18 credits and capstone courses: 2 credits
6. 系選修 13 學分
  1. 學術課程 11 學分： 26 學分選 11 學分
  2. 實務課程 2 學分： 22 學分選 2 學分(可選修校外見習課程 3 學分)Departmental electives: 13 credits
  - a. Academic courses: 11 credits; taking 26 credits out of 11 credits
  - b. Practical courses: 2 credits; taking 11 credits out of 2 credits; at least 3 credits from off-campus internship
7. 其餘選修 15 學分（學生可從本系或外系課程自由選課）  
Other electives: 15 credits

### 備註 Note:

1. 學生於修業年限內，除須修滿總畢業學分外，並應通過本系「英語能力」畢業資格檢定作業規定，方具畢業資格。  
Students are required to meet the requirements set by the Department for “English Proficiency,” in addition to earning the required number of credits to be eligible for graduation.
2. 學生於畢業至少應修畢一門外院共同基礎核心必修課程，並以實際修畢之學分數承認為通識博雅學分，以 4 學分為上限。（各院共同基礎核心必修課程表，請參閱課務組網頁公告）  
Before graduation, students are required to take at least one required cornerstone course offered by another college. The credits earned from such courses may be recognized as part of the credits under the category of Liberal Arts Education, but only a maximum of four credits will be recognized accordingly. (For more details about required cornerstone course offered by different colleges, please refer to the announcement on the website of the Curriculum Section.)

大一課程表(113) Freshman Year (2024)

| 類別<br>Category                                 | 課程代碼<br>Code | 課程名稱 Subject                                                                  | 上學期<br>Fall | 下學期<br>Spring | 必/選<br>修(R/E) | 備註<br>Remark     |
|------------------------------------------------|--------------|-------------------------------------------------------------------------------|-------------|---------------|---------------|------------------|
| 通識必修<br>GE Core                                | A93A22       | 華語文學 1.0：閱讀與敘事溝通 Chinese Literature 1.0- Reading, Narration and communication |             | 2             | 必/ R          | 核心/Core          |
|                                                | A93A28       | 健康醫學密碼 Unraveling the Mystery of Health                                       | 2           |               | 必/ R          | 核心/Core          |
|                                                | A93A30       | 實用英語<一> English in Practice I                                                 | 1           |               | 必/ R          | 核心/ Core         |
|                                                | A93A31       | 實用英語<二> English in Practice II                                                |             | 1             | 必/ R          | 核心/ Core         |
|                                                | A93A20       | 程式設計 Programming                                                              | 2           |               | 必/ R          | 核心/ Core         |
|                                                | A93A21       | 全球化之公民素養 Civic Literacy in the Era of Globalization                           |             | 2             | 必/ R          | 核心/ Core         |
|                                                | A93A29       | 智慧科技密碼 Smart Tech 101                                                         |             | 2             | 必/ R          | 核心/Core          |
| 院必修<br>IC Core                                 | A8EE01       | 基礎醫學概論 Introduction to fundamental medicine                                   | 1           |               | 必/ R          |                  |
|                                                | A8E201       | 普通化學 General Chemistry                                                        | 2           |               | 必/ R          |                  |
| 系必修<br>IF Core                                 | A58005       | 普通生物學 General Biology                                                         | 3           |               | 必/ R          | 學術/<br>Academic  |
|                                                | A58021       | 普通生物學實驗 General Biology Lab                                                   | 1           |               | 必/ R          | 實務/<br>Practical |
|                                                | A58075       | 檢驗醫學概論 Introduction to Medical Laboratory Science                             | 1           |               | 必/ R          | 實務/<br>Practical |
|                                                | A58001       | 解剖及組織學(含實驗) Anatomy & Histology (including practice)                          |             | 4             | 必/ R          | 共同/<br>Common    |
|                                                | A58083       | 有機化學 Organic Chemistry                                                        |             | 2             | 必/ R          | 學術/<br>Academic  |
|                                                | A58084       | 分析化學 Analytical Chemistry                                                     |             | 2             | 必/ R          | 學術/<br>Academic  |
| 系選修<br>IF Elective                             | A58044       | 細胞生物學 Cell Biology                                                            | 2           |               | 選/E           | 學術/<br>Academic  |
|                                                | A58050       | 公共衛生學概論 Introduction to Public Health                                         | 2           |               | 選/E           | 學術/<br>Academic  |
|                                                | A58066       | 醫技生涯規劃 Career Planing in Medical Technology                                   | 2           |               | 選/E           | 實務/<br>Practical |
|                                                | A58067       | 基本實驗室技術 Basic Laboratory Technology                                           | 2           |               | 選/E           | 實務/<br>Practical |
|                                                | A58095       | 實驗動物學 Laboratory Animal Science                                               | 2           |               | 選/E           | 實務/<br>Practical |
|                                                | A58098       | 生物統計學 Biostatistics                                                           | 2           |               | 選/E           | 學術/<br>Academic  |
| 本學年度必修學分數 Total Required credits for this year |              |                                                                               | 28          |               |               |                  |

大二課程表(114) Sophomore Year (2025)

| 類別<br>Category                                 | 課程代<br>碼<br>Code | 課程名稱 Subject                                                                          | 上學期<br>Fall | 下學<br>期<br>Spring | 必/選<br>修<br>(R/E) | 備註<br>Remark     |
|------------------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------|-------------------|-------------------|------------------|
| 通識必修<br>GE Core                                | A93A32           | 實用英語<三> English in Practice III                                                       | 2           |                   | 必/ R              | 核心/ Core         |
|                                                | A93A33           | 實用英語<四> English in Practice IV                                                        |             | 2                 | 必/ R              | 核心/ Core         |
|                                                | A93A15           | 體育(一) Physical Education (I)                                                          | 0           |                   | 必/ R              |                  |
|                                                | A93A16           | 體育(二) Physical Education (II)                                                         |             | 0                 | 必/ R              |                  |
|                                                | A93A23           | 華語文學 2.0: 思辨與文案創作 Chinese Literature 2.0- Critical thinking and creativity in writing | 2           |                   | 必/ R              | 核心/ Core         |
| 系必修<br>IF Core                                 | A58008           | 生物化學 Biochemistry                                                                     | 4           |                   | 必/ R              | 學術/<br>Academic  |
|                                                | A58009           | 生理學 Physiology                                                                        | 2           |                   | 必/ R              | 學術/<br>Academic  |
|                                                | A58010           | 寄生蟲學(含實驗) Parasitology(including practice)                                            | 2           |                   | 必/ R              | 共同/<br>Common    |
|                                                | A58023           | 生物化學實驗 Biochemical Lab                                                                | 1           |                   | 必/ R              | 實務/<br>Practical |
|                                                | A58011           | 微生物學 Microbiology                                                                     |             | 3                 | 必/ R              | 學術/<br>Academic  |
|                                                | A58012           | 免疫學 Immunology                                                                        |             | 2                 | 必/ R              | 學術/<br>Academic  |
|                                                | A58026           | 微生物學實驗 Microbiology Lab                                                               |             | 1                 | 必/ R              | 實務/<br>Practical |
|                                                | A58081           | 病理學(含病切技術) Pathology (including histopathologic techniques)                           |             | 3                 | 必/ R              | 共同/<br>Common    |
|                                                | A58014           | 臨床生理學 Physiology                                                                      |             | 2                 | 必/ R              | 學術/<br>Academic  |
| 系選修<br>IF Elective                             | A58045           | 專題討論(一) Seminar(1)                                                                    | 1           |                   | 選/E               | 學術/<br>Academic  |
|                                                | A58046           | 專題討論(二) Seminar(2)                                                                    | 1           |                   | 選/E               | 學術/<br>Academic  |
|                                                | A58048           | 生物技術 Biotechnology                                                                    | 2           |                   | 選/E               | 學術/<br>Academic  |
|                                                | A58049           | 毒物檢驗學 Toxicology                                                                      | 2           |                   | 選/E               | 學術/<br>Academic  |
|                                                | A58088           | 抽血技術(含實驗) Phlebotomy (including practice)                                             | 2           |                   | 選/E               | 實務/<br>Practical |
|                                                | A58089           | 分子生物學 Molecular Biology                                                               | 2           |                   | 選/E               | 學術/<br>Academic  |
| 本學年度必修學分數 Total Required credits for this year |                  |                                                                                       | 26          |                   |                   |                  |

**大三課程表(115) Junior Year (2026)**

| 類別<br>Category                                 | 課程代<br>碼<br>Code | 課程名稱 Subject                                                                    | 上學期<br>Fall | 下學期<br>Spring | 必/選<br>修<br>(R/E) | 備註<br>Remark            |
|------------------------------------------------|------------------|---------------------------------------------------------------------------------|-------------|---------------|-------------------|-------------------------|
| 系必修<br>IF Core                                 | A58004           | 臨床病毒學(含實驗) Clinical Virology (including practice)                               | 1           |               | 必/R               | 共同/<br><b>Common</b>    |
|                                                | A58099           | 血庫學 Blood Banking                                                               | 2           |               | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58019           | 臨床微生物學 Clinical Microbiology                                                    | 2           |               | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58036           | 臨床微生物學實驗 Clinical Microbiology Lab                                              | 1           |               | 必/R               | 實務/<br><b>Practical</b> |
|                                                | A58076           | 臨床血清免疫學(含實驗) Clinical Serology & Immunology (including practice)                | 2           |               | 必/R               | 共同/<br><b>Common</b>    |
|                                                | A58087           | 血液及血庫實驗 Hematology & Blood Banking Lab                                          | 1           |               | 必/R               | 實務/<br><b>Practical</b> |
|                                                | A58092           | 血液學 Hematology                                                                  | 2           |               | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58093           | 職能與倫理 Working Capability and Occupational Ethics                                | 1           |               | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58003           | 醫學分子檢驗學(含實驗) Medical Molecular Diagnosis (including practice)                   |             | 2             | 必/R               | 共同/<br><b>Common</b>    |
|                                                | A58016           | 臨床血液學 Clinical hematology                                                       |             | 2             | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58017           | 臨床鏡檢學 Clinical Microscopy                                                       |             | 1             | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58100           | 臨床生化學 Clinical Biochemistry                                                     |             | 4             | 必/R               | 學術/<br><b>Academic</b>  |
|                                                | A58035           | 臨床生化實驗 Clinical Chemistry Lab                                                   |             | 1             | 必/R               | 實務/<br><b>Practical</b> |
|                                                | A58073           | 臨床鏡檢實驗 Clinical Microscopy Lab                                                  |             | 1             | 必/R               | 實務/<br><b>Practical</b> |
|                                                | A58094           | 實驗室品質系統與管理 Quality Control & Laboratory Management                              |             | 2             | 必/R               | 總結/<br>capstone         |
| 系選修<br>IF Elective                             | A58051           | 環境毒理學 Environmental Toxicology                                                  | 2           |               | 選/E               | 學術/<br>Academic         |
|                                                | A58052           | 文獻導讀 Journal Reading                                                            | 2           |               | 選/E               | 學術/<br>Academic         |
|                                                | A58060           | 檢驗數據判讀 Interpretation of Lab Data                                               | 2           |               | 選/E               | 學術/<br>Academic         |
|                                                | A58077           | 新型分子檢驗技術平台演練實作<br>Implementation of new molecular detection technology platform | 2           |               | 選/E               | 實務/<br><b>Practical</b> |
|                                                | A58096           | 基因檢測技術理論與實務 Theory and practice of genetic detection technology                 | 2           |               | 選/E               | 實務/<br><b>Practical</b> |
|                                                | A58097           | 環境微生物菌相剖析 Analysis of microbiota in environments                                | 2           |               | 選/E               | 實務/<br><b>Practical</b> |
|                                                | A58082           | 生物資訊分析(含實作) Bioinformatics Analysis (including practice)                        | 3           |               | 選/E               | 實務/<br><b>Practical</b> |
| 本學年度必修學分數 Total Required credits for this year |                  |                                                                                 | <b>25</b>   |               |                   |                         |

**大四課程表(116) Senior Year (2027)**

| 類別<br>Category                                        | 課程代碼<br>Code | 課程名稱 Subject                                            | 上學期<br>Fall | 下學期<br>Spring | 必/選<br>修<br>(C/E) | 備註<br>Remark            |
|-------------------------------------------------------|--------------|---------------------------------------------------------|-------------|---------------|-------------------|-------------------------|
| 系必修<br>IF Core                                        | A58029       | 病理切片與細胞診斷實習<br>Histopathologic & Cytodiagnosis Practice | 1           |               | 必/R               | 校外/                     |
|                                                       | A58030       | 醫學分子檢驗實習 Molecular Diagnosis Practice                   | 1           |               | 必/R               | 校外/                     |
|                                                       | A58031       | 臨床血庫學實習 Blood Bank Practice                             | 1           |               | 必/R               | 校外/                     |
|                                                       | A58032       | 臨床血液學實習 Clinical Hematology Practice                    | 3           |               | 必/R               | 校外/                     |
|                                                       | A58033       | 臨床生理學實習 Clinical Physiology Practice                    | 2           |               | 必/R               | 校外/                     |
|                                                       | A58034       | 臨床鏡檢學實習 Clinical Microscopy Practice                    | 2           |               | 必/R               | 校外/                     |
|                                                       | A58037       | 臨床生化實習 Clinical Chemistry Practice                      | 2           |               | 必/R               | 校外/                     |
|                                                       | A58038       | 臨床微生物實習 Clinical Microbiology Practice                  | 3           |               | 必/R               | 校外/                     |
|                                                       | A58039       | 臨床血清免疫實習 Clinical Serology & Immunology Practice        | 2           |               | 必/R               | 校外/                     |
|                                                       | A58040       | 臨床病毒學實習 Clinical Virology practice                      | 1           |               | 必/R               | 校外/                     |
| 系選修<br>IF Elective                                    | A58063       | 醫學遺傳學 Medical Genetics                                  | 2           |               | 選/E               | 學術/<br><b>Academic</b>  |
|                                                       | A58064       | 研究論文 Research Thesis                                    | 2           |               | 選/E               | 學術/<br><b>Academic</b>  |
|                                                       | A58068       | 產業見習 Internship in health industry                      | 3           |               | 選/E               | 校外/                     |
|                                                       | A58080       | 檢驗醫學人工智慧技術應用 AI in Medical Laboratory Science           | 2           |               | 選/E               | 實務/<br><b>Practical</b> |
|                                                       | A58090       | 精準醫療暨實驗室自行研發檢測<br>Precision Laboratory Medicine         | 2           |               | 選/E               | 學術/<br><b>Academic</b>  |
|                                                       | A58091       | 細胞治療與再生醫學 Cell Therapy and Regenerative Medicine        | 2           |               | 選/E               | 學術/<br><b>Academic</b>  |
| <b>本學年度必修學分數 Total Required credits for this year</b> |              |                                                         | <b>18</b>   |               |                   |                         |