

I-SHOU UNIVERSITY Department of medical Laboratory Science
4-Year Curriculum for Students Admitted in Academic Year 2020

*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 16 學分 GE core courses: required, 16 credits
2. 通識博雅課程選修 10 學分 GE liberal arts education: elective, 10 credits
3. 服務與知識實踐課程必修 2 學分、服務教育課程必修 0 學分
Service and Knowledge for Practice: required, 2 credits. Service Education: required, 0 credits
4. 體育健康課程必修 0 學分 Physical Education Courses 0 Credit
5. 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)
6. 系必修 76 學分：學術暨實務課程 14 學分，學術課程 31 學分，實務課程 10 學分，校外實習課程 18 學分，總結課程 3 學分
Department-required courses: 76 credits, including academic + practical courses: 14 credits, academic courses: 31 credits, practical courses: 10 credits, Off-campus internship courses: 18 credits and capstone courses: 3 credits
7. 系選修 13 學分
 1. 學術課程 11 學分： 34 學分選 11 學分
 2. 實務課程 2 學分： 11 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 34 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
8. 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(109) Freshman Year (2020)

類別 Category	課程代碼 Code	課程名稱 Subject	上學期 Fall	下學期 Spring	必/選 修 (R/E)	備註 Remark
通識必修 GE Core	A93A17	服務教育 (一) Service Education (I)	0		必/ R	
	A93A18	服務教育 (二) Service Education (II)		0	必/ R	
	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
	A93A24	數位英語溝通 (一) Digital English communication I	1		必/ R	核心/ Core
	A93A25	數位英語溝通 (二) Digital English communication 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
院必修 IC Core	A84E01	基礎醫學概論 Introduction to fundamental medicine	1		必/ R	
	A84707	普通化學 General Chemistry	2		必/ R	共同/ Common
系必修 IF Core	A58005	普通生物學 General Biology	3		必/ R	學術/ Academic
	A58007	生物統計學 Biostatistics	2		必/ R	學術/ Academic
	A58021	普通生物學實驗 General Biology Lab	1		必/ R	實務/ Practical
	A58075	檢驗醫學概論 Introduction to Medical Laboratory Science	1		必/ R	實務/ Practical
	A58010	寄生蟲學(含實驗) Parasitology(including practice)		2	必/ R	共同/ Common
	A58001	解剖及組織學(含實驗) Anatomy & Histology (including practice)		4	必/ R	共同/ Common
	A58009	生理學 Physiology		2	必/ R	學術/ Academic
系選修 IF Elective	A58042	有機化學 Organic Chemistry	2		選/E	學術/ Academic
	A58043	分析化學 Analytical Chemistry	3		選/E	學術/ Academic
	A58044	細胞生物學 Cell Biology	2		選/E	學術/ Academic
	A58049	毒物檢驗學 Toxicology	2		選/E	學術/ Academic
	A58050	公共衛生學概論 Introduction to Public Health	2		選/E	學術/ Academic
本學年度必修學分數 Total Required credits for this year			28			

大二課程表(110) Sophomore Year (2021)

類別 Category	課程代碼 Code	課程名稱 Subject	上學期 Fall	下學期 Spring	必/選 修 (R/E)	備註 Remark
通識必修 GE Core	A93A26	智慧英文實作(一) Smart English Practice I	2		必/ R	核心/ Core
	A93A27	智慧英文實作(二) Smart English Practice II		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	
	A93A14	服務與知識實踐 Service and Knowledge for Practice		2	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 IF Core	A58008	生物化學 Biochemistry	4		必/ R	學術/ Academic
	A58012	免疫學 Immunology	2		必/ R	學術/ Academic
	A58014	臨床生理學 Clinical physiology	2		必/ R	學術/ Academic
	A58023	生物化學實驗 Biochemical Lab	1		必/ R	實務/ Practical
	A58081	病理學(含病切技術) Pathology (including histopathologic techniques)	3		必/ R	共同/ Common
	A58011	微生物學 Microbiology		3	必/ R	學術/ Academic
	A58013	基礎血液學 Basic Hematology		2	必/ R	學術/ Academic
	A58017	臨床鏡檢學 Clinical Microscopy		1	必/ R	學術/ Academic
	A58026	微生物學實驗 Microbiology Lab		1	必/ R	實務/ Practical
	A58076	臨床血清免疫學(含實驗) Clinical Serology & Immunology (including practice)		2	必/ R	共同/ Common
系選修 IF Elective	A58045	專題討論(一) Seminar(1)	1		選/E	學術/ Academic
	A58046	專題討論(二) Seminar(2)	1		選/E	學術/ Academic
	A58048	生物技術 Biotechnology	2		選/E	學術/ Academic
	A58066	醫技生涯規劃 Career Planing in Medical Technology	2		選/E	實務/ Practical
	A58067	基本實驗室技術 Basic Laboratory Technology	2		選/E	實務/ Practical
	A58082	生物資訊分析(含實作) Bioinformatics Analysis (including practice)	3		選/E	實務/ Practical
本學年度必修學分數 Total Required credits for this year			29			

大三課程表(111) Junior Year (2022)

類別 Category	課程代碼 Code	課程名稱 Subject	上學期 Fall	下學期 Spring	必/選 修 (R/E)	備註 Remark
系必修 IF Core	A58003	醫學分子檢驗學(含實驗) Medical Molecular Diagnosis (including practice)	2		必/R	共同/ Common
	A58004	臨床病毒學(含實驗) Clinical Virology (including practice)	1		必/R	共同/ Common
	A58015	血庫學 Blood Banking	1		必/R	學術/ Academic
	A58016	臨床血液學 Clinical hematology	2		必/R	學術/ Academic
	A58018	臨床生化學 Clinical Biochemistry	3		必/R	學術/ Academic
	A58019	臨床微生物學 Clinical Microbiology	2		必/R	學術/ Academic
	A58028	抽血技術實驗 Phelotomy Practice	1		必/R	實務/ Practical
	A58027	血液學實驗(B) Hematology Lab(B)		1	必/R	實務/ Practical
	A58035	臨床生化實驗(B) Clinical Chemistry Lab(B)		1	必/R	實務/ Practical
	A58036	臨床微生物學實驗(B) Clinical Microbiology Lab(B)		1	必/R	實務/ Practical
	A58072	血庫實驗(B) Blood Banking Lab(B)		1	必/R	實務/ Practical
	A58073	臨床鏡檢實驗(B) Clinical Microscopy Lab(B)		1	必/R	實務/ Practical
	A58029	病理切片與細胞診斷實習(A) Histopathologic & Cytodiagnosis Practice(A)		1	必/R	校外/ Off-campus internship
	A58030	醫學分子檢驗實習(A) Molecular Diagnosis Practice(A)		1	必/R	校外/ Off-campus internship
	A58031	臨床血庫學實習(A) Blood Bank Practice(A)		1	必/R	校外/ Off-campus internship
	A58032	臨床血液學實習(A) Clinical Hematology Practice(A)		3	必/R	校外/ Off-campus internship
	A58033	臨床生理學實習(A) Clinical Physiology Practice(A)		2	必/R	校外/ Off-campus internship
	A58034	臨床鏡檢學實習(A) Clinical Microscopy Practice(A)		2	必/R	校外/ Off-campus internship
	A58037	臨床生化實習(A) Clinical Chemistry Practice(A)		2	必/R	校外/ Off-campus internship

	A58038	臨床微生物實習(A) Clinical Microbiology Practice(A)		3	必/R	校外/ Off-campus internship
	A58039	臨床血清免疫實習(A) Clinical Serology & Immunology Practice(A)		2	必/R	校外/ Off-campus internship
	A58040	臨床病毒學實習(A) Clinical Virology practice(A)		1	必/R	校外/ Off-campus internship
系選修 IF Elective	A58052	文獻導讀(B) Journal Reading(B)		2	選/E	學術/ Academic
	A58051	環境毒理學 Environmental Toxicology	2		選/E	學術/ Academi
	A58077	新型分子檢驗技術平台演練實作 Implementation of new molecular detection technology platform	2		選/E	實務/ Practical
	A58078	基因檢測技術理論與實務 Theory and practice of genetic detection technology	1		選/E	實務/ Practical
	A58079	環境微生物菌相剖析 Analysis of microbiota in enviroments	1		選/E	實務/ Practical
本學年度必修學分數 Total Required credits for this year			35			

大四課程表(112) Senior Year (2023)

類別 Category	課程代碼 Code	課程名稱 Subject	上學期 Fall	下學期 Spring	必/選 修 (C/E)	備註 Remark
	A58041	實驗室品質系統與管理 Quality Control & Laboratory Management		3	必/R	總結/ capstone
	A58071	職能與倫理 Working Capability and Occupational Ethics		2	必/R	學術/ Academic
	A58027	血液學實驗(A) Hematology Lab(A)	1		必/R	實務/ Practical
	A58035	臨床生化實驗(A) Clinical Chemistry Lab(A)	1		必/R	實務/ Practical
	A58036	臨床微生物學實驗(A) Clinical Microbiology Lab(A)	1		必/R	實務/ Practical
	A58072	血庫實驗(A) Blood Banking Lab(A)	1		必/R	實務/ Practical
	A58073	臨床鏡檢實驗(A) Clinical Microscopy Lab(A)	1		必/R	實務/ Practical
	A58029	病理切片與細胞診斷實習(B) Histopathologic & Cytodiagnosis Practice(B)	1		必/R	校外/ Off-campus internship
	A58030	醫學分子檢驗實習(B) Molecular Diagnosis Practice(B)	1		必/R	校外/ Off-campus internship
	A58031	臨床血庫學實習(B) Blood Bank Practice(B)	1		必/R	校外/ Off-campus internship
	A58032	臨床血液學實習(B) Clinical Hematology Practice(B)	3		必/R	校外/ Off-campus internship
	A58033	臨床生理學實習(B) Clinical Physiology Practice(B)	2		必/R	校外/ Off-campus internship
	A58034	臨床鏡檢學實習(B) Clinical Microscopy Practice(B)	2		必/R	校外/ Off-campus internship
	A58037	臨床生化實習(B) Clinical Chemistry Practice(B)	2		必/R	校外/ Off-campus internship
	A58038	臨床微生物實習(B) Clinical Microbiology Practice(B)	3		必/R	校外/ Off-campus internship
	A58039	臨床血清免疫實習(B) Clinical Serology & Immunology Practice(B)	2		必/R	校外/ Off-campus internship
	A58040	臨床病毒學實習(B) Clinical Virology practice(B)	1		必/R	校外/ Off-campus internship
系選修 IF Elective	A58052	文獻導讀(A) Journal Reading(A)	2		選/E	學術/ Academic

A58053	臨床生化學特論 Advance in Clinical Chemistry	1	選/E	學術/ Academic
A58054	臨床血清與病毒學特論 Advance in Immunology & Virology	1	選/E	學術/ Academic
A58056	分子檢驗與鏡檢學特論 Advance in Molecular Diagnosis & Clinical Microscopy	1	選/E	學術/ Academic
A58057	臨床生理與病理學特論 Advance in Physiology & Pathology	1	選/E	學術/ Academic
A58058	臨床微生物學特論 Advance in Clinical Microbiology	1	選/E	學術/ Academic
A58059	臨床血液及血庫特論 Advance in Hematology & Blood Banking	1	選/E	學術/ Academic
A58060	檢驗數據判讀 Interpretation of Lab Data	2	選/E	學術/ Academic
A58063	醫學遺傳學 Medical Genetics	2	選/E	學術/ Academic
A58064	研究論文 Research Thesis	2	選/E	學術/ Academic
A58068	產業見習 Internship in health industry	3	選/E	校外/ Off-campus internship
A58080	檢驗醫學人工智慧技術應用 AI in Medical Laboratory Science	2	選/E	實務/ Practical
A58090	精準醫療暨實驗室自行研發檢測 Precision Laboratory Medicine	2	選/E	學術/ Academic
A58091	細胞治療與再生醫學 Cell Therapy and Regenerative Medicine	2	選/E	學術/ Academic
本學年度必修學分數 Total Required credits for this year		5		