

中臺科技大學大學部四年制日間部醫學檢驗生物技術系 112學年度入學課程標準表
Central Taiwan University of Science and Technology Undergraduate 4-Year Daytime Department of Medical Laboratory Science and Biotechnology Program Curriculum Standards for the 113th Academic Year

1120208系課程委員會會議通過
 1120309院課程委員會會議通過
 1120315校課程委員會會議通過
 1120907系課程委員會會議通過
 1121019院課程委員會會議通過
 1121025校課程委員會會議通過

學年 Academic Year	科目 Course	學分數 Credits	時數 Teaching hours	上學期 First Semester		下學期 Second Semester		備註 Remarks
				授課 Teaching	實習 Internship	授課 Teaching	實習 Internship	
基本素養(24學分) Basic Competencies (24 Credits)								
第一學年 1 st Academic Year	文學與人生 Literature and Life	2	2	2				
	實用生活美學 Aesthetics for Life	2	2			2		
	法律學概論 Introduction to Law	2	2			2		
	資訊科技與應用 Information Technology and Application	2	2	2				電腦課程 Computer Course
	人際關係與溝通 Interpersonal Relationships and Communication	2	2	2				
	時間、空間、多元文化 Multi-cultures	2	2	2				
	普通生物學 General Biology	2	2	2				
	微積分 Calculus	2	2			2		
	文學領域 Literature Studies	2	2			2		
	大一英文 (一) Freshman English (I)	2	2	2				
大一英文 (二) Freshman English (II)	2	2			2			
第三學年 3 th Academic Year	文化領域 Cultural Studies	2	2	2				
軍訊與體育(2學分) Military Training and Physical Education (2 Credits)								
第一學年 1 st Academic Year	全民國防教育軍事訓練-國防科技 All-out Defense Education Military Training - Defense Technology	0	2	2				
	體育 (一) Physical Education (I)	1	2	2				
	體育 (二) Physical Education (II)	1	2			2		
第二學年 2 nd Academic Year	體育 (三) Physical Education (III)	0	2	2				
專業必修(86學分) Professional Required Courses (84 Credits)								
核心基礎(16學分) Core Foundations (14 Credits)								
第一學年 1 st Academic Year	有機化學 Organic Chemistry	2	2			2		
	普通化學 General Chemistry	2	2	2				
	生理學 Physiology	2	2			2		
	有機化學實驗 Organic Chemistry Laboratory	1	2				2	
	解剖學 Anatomy	2	2	2				
	解剖學實驗 Anatomy Laboratory	1	2		2			
	生理學實驗 Physiology Laboratory	1	2				2	

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				第二學年 2 nd Academic Year	分析化學 Analytical Chemistry	2	2		2
	分析化學實驗 Analytical Chemistry Laboratory	1	2		2				
	分子生物學 Molecular Biology	2	2			2			
核心專業(70學分) Core Professional Courses (70 Credits)									
第二學年 2 nd Academic Year	病理學 Pathology	2	2			2			
	寄生蟲學 Parasitology	2	2	2					
	寄生蟲學實驗 Parasitology Laboratory	1	2		2			含「服務學習」 includes Service Learning	
	生物化學(一) Biochemistry (I)	2	2	2				含「服務學習」 includes Service Learning	
	生物化學實驗 Biochemistry Laboratory	1	2		2				
	生物化學(二) Biochemistry (II)	2	2			2		含「服務學習」 includes Service Learning	
	微生物學(一) Microbiology (I)	2	2	2					
	微生物學(二) Microbiology (II)	2	2			2			
	微生物學實驗 Microbiology Laboratory	1	2				2		
	病理切片技術含實驗 Histopathology Techniques and	1	2				1	1	
	臨床鏡檢學 Clinical Microscopy	2	2				2		
臨床鏡檢學實驗 Clinical Microscopy Laboratory	1	2					2	含「服務學習」 includes Service Learning	
第三學年 3 th Academic Year	免疫學 Immunology	3	3	3					
	臨床血液學(一) Clinical Hematology (I)	2	2	2					
	臨床血液學實驗(一) Clinical Hematology Laboratory (I)	1	2		2			含「服務學習」 includes Service Learning	
	臨床血液學(二) Clinical Hematology (II)	2	2			2			
	臨床血液學實驗(二) Clinical Hematology Laboratory (II)	1	2				2	含「服務學習」 includes Service Learning	
	臨床生物化學(一) Clinical Biochemistry (I)	2	2	2					
	臨床生物化學實驗(一) Clinical Biochemistry Laboratory	1	2		2			含「服務學習」 includes Service Learning	
	臨床生物化學(二) Clinical Biochemistry (II)	2	2			2			
	臨床生物化學實驗(二) Clinical Biochemistry Laboratory	1	2				2	含「服務學習」 includes Service Learning	
	臨床生理學 Clinical physiology	2	2	2					
	臨床生理學實驗 Clinical Physiology Laboratory	1	2		2			含「服務學習」 includes Service Learning	
	臨床病毒學 Clinical Virology	2	2			2			
	血庫學 Immunoematology	2	2			2			
	臨床血清免疫學 Clinical Seroimmunology	2	2			2			
	臨床血清免疫學實驗 Clinical Seroimmunology Laboratory	1	2				2	含「服務學習」 includes Service Learning	
	臨床微生物學 Clinical Microbiology	3	3			3			
	臨床微生物學實驗 Clinical Microbiology Laboratory	2	4				4	含「服務學習」 includes Service Learning	
醫學分子檢驗學 Molecular Diagnosis in Medicine	3	3				3			
臨床血液學與血庫學證照實務 License Practice of Clinical Hematology and Immunoematology	1	2				2			
醫學分子檢驗學與臨床鏡檢學證照實務 License Practice of Molecular Medicine and Clinical Microscopy	1	2				2			
臨床生理學與病理學證照實務 License Practice of Clinical Physiology and Clinical Pathology	1	2				2			

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第四學年 4 th Academic Year	生物化學與臨床生化學證照實務 License Practice of Biochemistry and Clinical Biochemistry	1	2			2		
	微生物學與臨床微生物學證照實務 License Practice of Microbiology and Clinical microbiology	1	2			2		
	臨床血清免疫學與臨床病毒學證照實務 License Practice of Clinical Seroimmunology and Clinical Virology	1	2			2		
	臨床生化實習 Clinical Biochemistry Practice	2	4		4			校外實習，實習3週Off-Campus Internship Internship Duration: 3weeks
	臨床微生物實習 Clinical Microbiology Practice	2	4		4			校外實習，實習5週Off-Campus Internship Internship Duration: 5weeks
	臨床血液實習 Clinical Hematology Practice	1	2		2			校外實習，實習2週Off-Campus Internship Internship Duration: 2weeks
	臨床血庫實習 Immunoematology Practice	1	2		2			校外實習，實習1週Off-Campus Internship Internship Duration: 1weeks
	臨床鏡檢實習 Clinical Microscopy Practice	2	4		4			校外實習，實習3週Off-Campus Internship Internship Duration: 3weeks
	臨床血清免疫實習 Clinical Serology and Immunology	1	2		2			校外實習，實習2週Off-Campus Internship Internship Duration: 2weeks
	臨床生理實習 Clinical Physiology Practice	1	2		2			校外實習，實習2週Off-Campus Internship Internship Duration: 2weeks
	病理切片與細胞診斷實習 Clinical Pathology Practice	1	2		2			校外實習，實習1週Off-Campus Internship Internship Duration: 1weeks
醫學分子檢驗實習 Molecular Medicine Practice	1	2		2			校外實習，實習1週Off-Campus Internship Internship Duration: 1 weeks	
博學涵養(4學分) Liberal Education (4 Credits)								
第二學年 2 nd Academic Year	博學涵養 Liberal Education	2	2	2				
	博學涵養 Liberal Education	2	2			2		
專業選修(38學分) Professional Electives Courses (38 Credits)								
醫學檢驗類 Medical Laboratory Science								
第二學年 2 nd Academic Year	腫瘤生物學 Cancer Biology	2	2			2		
	臨床神經生理學 Clinical Neurophysiology	2	2			2		含「服務學習」 includes Service Learning
第三學年 3 th Academic Year	◎細胞診斷學 Diagnostic Cytology	2	2	2				
	◎黴菌學含實驗 Clinical Mycology and Laboratory	1	2	2				
	實驗室開發檢測 Laboratory Developed Tests	2	2	2				
	睡眠醫學技術 Sleep Medicine and Technology	2	2			2		
生物技術類 Biotechnology								
第一學年 1 st Academic Year	普通生物學實驗 General Biological Laboratory	1	2		2			
	普通化學實驗 General Chemistry Laboratory	1	2		2			
第二學年 2 nd Academic Year	◎專題討論(一) Seminar I	1	2	2				學術倫理課程 Academic Ethics Course
	細胞培養技術 Cell Culture Technique	2	2			2		
	專題討論(二) Seminar II	1	2			2		
	細胞遺傳學 Cytogenetics	2	2	2				
第三學年 3 th Academic Year	◎生物技術學實驗 Biotechnology Laboratory	2	4	2	2			
管理資訊類 Management Information								
第一學年 1 st Academic Year	◎健康產業與職業倫理 Ethics and Health Industry	1	1	1				定錨課程 Anchoring Course 職業倫理 Ethics Course
	◎醫技英文(一) English in Medical Technology I	1	1			1		
	論文導讀 Reading Skills for Science Literature	2	2			2		
	日文 Japanese	2	2			2		

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第二學年 2 nd Academic Year	◎生物統計學 Biostatistics	2	2	2				
	流行病學 Epidemiology	2	2			2		
第三學年 3 th Academic Year	◎醫技英文(二) English in Medical Technology II	1	1	1				
第四學年 4 th Academic Year	生物資訊學概論 Introduction to Bioinformatics	2	2			2		電腦課程 Computer Course
	臨床檢驗諮詢評估 Assessment of Clinical Data	2	2			2		
	◎實驗室管理與認證 Laboratory Management and Certification	2	2			2		
第一學年小計(1) 1st Academic Year Credits Subtotal (1)		43	52	21	6	21	4	
第二學年小計(2) 2nd Academic Year Credits Subtotal (2)		42	52	18	6	23	5	
第三學年小計(3) 3th Academic Year Credits Subtotal (3)		45	56	20	8	18	10	
第四學年小計(4) 4th Academic Year Credits Subtotal (4)		24	42	0	24	18	0	
合計 Total = (1)+(2)+(3)+(4)		154	202	59	44	80	19	

畢業規定及其他相關說明：

一	最低畢業學分為128學分，必修112學分【含基本素養24學分(文學領域與文化領域各2學分)、軍訓與體育2學分、專業必修86學分】，博學涵養4學分，選修至少12學分(其中含具◎之專業選修至少6學分) The minimum graduation requirement is 128 credits, including mandatory 112 credits [comprising 24 credits for basic competencies (2 credits each for literature studies and cultural studies), 2 credits for military training and physical education, 86 credits for professional core courses], 4 credits for broad knowledge. Elective credits must be at least 12 credits [with a minimum number of 6 credits for professional electives includes ◎].
二	◎為系定專業選修，學生畢業前須選修具◎之專業選修課程始得畢業。◎ These are professional elective courses required by the Department of Medical Laboratory Science. Students must complete these ◎ courses before graduation.
三	畢業前需取得本校「資訊能力」畢業資格審定暨實施要點所列之資訊相關證照，始得畢業。 Before graduation, students must obtain the qualifications as stipulated in the "Regulations for the Assessment and Implementation of Information Literacy Graduation Qualifications" of our university, which includes obtaining the information-related certifications listed therein, in order to graduate.
四	在本校就學期間必須取得心肺復甦術(CPR)畢業門檻之相關規定，依照「中臺科技大學健康科學院心肺復甦術(CPR)證照畢業門檻實施要點」之規定辦理 During the period of study, it is required to fulfill the graduation threshold for CPR in accordance with the 'Implementation Guidelines for Graduation Threshold of CPR Certification at the College of Health Science, Central Taiwan University of Science and Technology.
五	有關英文能力畢業門檻之相關規定，依照「中臺科技大學大學部英文畢業門檻實施要點」之規定辦理。The regulations regarding the graduation requirements for English proficiency are implemented in accordance with the "Implementation Guidelines for the English Graduation Thresholds for Undergraduate Programs at CTUST."
六	畢業前需修完普通化學「General Chemistry」2學分、普通生物學「General Biology」2學分、生物統計學「Biostatistics」2學分 三項健康科學院院定共同課程；普通化學、普通生物學需及格、生物統計學為選修需有修讀紀錄，始得畢業。Prior to graduation, students must to complete three required courses from the College of Health Sciences: 2 credits of General Chemistry, 2 credits of General Biology, and 2 credits of Biostatistics. General Chemistry and General Biology must be passed, while Biostatistics is an elective requiring documented enrollment for graduation.
七	有關「生活與服務」畢業門檻之相關規定，依照中臺科技大學「生活與服務」畢業門檻施行細則之規定辦理。 In accordance with the regulations outlined in the Implementation Rules for the Graduation Threshold of 'Life and Service' at the Central Taiwan University of Science and Technology, all requirements related to 'Life and Service' graduation threshold shall be adhered to.
八	修習「專題討論(一)」課程之學生，需透過「臺灣學術倫理教育資源中心」網路教學平臺研習至少6小時課程並通過總測驗，於該網站下載修課證明後，提交任課老師列入成績考核。 "Seminar I" is an elective course. Undergraduate students are required to complete relevant courses on academic ethics education in accordance with the 'Implementation Guidelines for Academic Ethics Education Courses at the Central Taiwan University of Science and Technology. After completing the courses, students must submit their performance to the respective instructors for grading.