

國立中興大學教學大綱（修訂版）

NCHU Course Outline

課程名稱 (course name)	(中)						
	(Eng.)						
開課單位 (offering dept.)							
課程類別 (course type)	<input type="checkbox"/> 必修 Required <input type="checkbox"/> 選修 Elective	學分 (credits)		授課教師 (teacher)			
選課單位 (department)		授課語言 (language)		英文/EMI	<input type="checkbox"/> Y <input type="checkbox"/> N	開課學期 (semester)	
課程簡述 (course description)							
先修課程名稱 (prerequisites)				課程含自主學習 (self-directed learning in the course)	Y		
課程目標與核心能力關聯配比(%) (relevance of course objectives and core learning outcomes)				課程目標之教學方法與評量方法 (teaching and assessment methods for course objectives)			
課程目標 (Course Objectives)	核心能力 (Competency Indicators)	配比 Ratio (%)	教學方法 (Teaching Methods)		評量方法 (Assessment Methods)		
			<input type="checkbox"/> 專題探討/製作 (topic Discussion/Production) <input type="checkbox"/> 網路/遠距教學 (Networking/Distance Education) <input type="checkbox"/> 參訪 (Visit) <input type="checkbox"/> 習作 (Exercises) <input type="checkbox"/> 討論 (Discussion) <input type="checkbox"/> 實習 (Practicum) <input type="checkbox"/> 其他 (Other) <input type="checkbox"/> 講授 (Lecturing)		<input type="checkbox"/> 書面報告 (Written Presentation) <input type="checkbox"/> 出席狀況 (Attendance) <input type="checkbox"/> 口頭報告 (Oral Presentation) <input type="checkbox"/> 作業 (Assignment) <input type="checkbox"/> 作品 (Study Outcome) <input type="checkbox"/> 測驗 (Quiz) <input type="checkbox"/> 實作 (Internship) <input type="checkbox"/> 其他 (Other)		
授課內容（單元名稱與內容、習作/每週授課進度、考試進度-共16週加自主學習） (course content and homework/schedule/tests schedule -16weeks+ self-directed learning)							
週次 (Week)	授課內容(Course Content)						
第1週							
第2週							
第3週							
第4週							
第5週							
第6週							
第7週							

第8週																			
第9週																			
第10週																			
第11週																			
第12週																			
第13週																			
第14週																			
第15週																			
第16週																			
自主學習內容	<p>依大學法施行細則，大學學分之計算原則以授課滿18小時為1學分。以1學分課程為例，自主學習內容須為2小時；實習或實驗滿36至54小時為1學分，1學分實習或實驗自主學習內容須為4-6小時…以此類推。</p> <table border="1"> <thead> <tr> <th>項目 (Item)</th><th>自主學習內容 (Self-directed Learning Contents)</th></tr> </thead> <tbody> <tr> <td>□01.</td><td>參與專業論壇、講座、企業分享等產官學研相關交流活動 Participation in professional forums, lectures, and corporate sharing sessions related to industry-government-academia-research exchange activities.</td></tr> <tr> <td>□02.</td><td>閱覽產業及學術相關多媒體資料 Viewing multimedia materials related to industry and academia.</td></tr> <tr> <td>□03.</td><td>製作專題報告 Preparing presentations or reports related to industry and academia.</td></tr> <tr> <td>□04.</td><td>產官學機構參訪與實務體驗 Participation in visits or internships at industry, government, or academic institutions.</td></tr> <tr> <td>□05.</td><td>參與本校各單位舉辦之各類工作坊活動 Participation in various workshops organized by different departments of NCHU.</td></tr> <tr> <td>□06.</td><td>本校其它校區/分部(含實驗林場或試驗場)戶外教學參訪課程活動 Participation in field trips and outdoor instructional activities at other NCHU campuses or branches, including experimental forests or test sites.</td></tr> <tr> <td colspan="2">請於下方空白欄位說明有助學生學習之自主學習方式或內容 Please use the space below to provide additional details on self-directed learning methods or content that could support student learning.</td></tr> <tr><td colspan="2"></td></tr> </tbody> </table>	項目 (Item)	自主學習內容 (Self-directed Learning Contents)	□01.	參與專業論壇、講座、企業分享等產官學研相關交流活動 Participation in professional forums, lectures, and corporate sharing sessions related to industry-government-academia-research exchange activities.	□02.	閱覽產業及學術相關多媒體資料 Viewing multimedia materials related to industry and academia.	□03.	製作專題報告 Preparing presentations or reports related to industry and academia.	□04.	產官學機構參訪與實務體驗 Participation in visits or internships at industry, government, or academic institutions.	□05.	參與本校各單位舉辦之各類工作坊活動 Participation in various workshops organized by different departments of NCHU.	□06.	本校其它校區/分部(含實驗林場或試驗場)戶外教學參訪課程活動 Participation in field trips and outdoor instructional activities at other NCHU campuses or branches, including experimental forests or test sites.	請於下方空白欄位說明有助學生學習之自主學習方式或內容 Please use the space below to provide additional details on self-directed learning methods or content that could support student learning.			
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學習評量方式 (evaluation)																			
教科書&參考書目(書名、作者、書局、代理商、說明) (textbook & other reference)																			
課程教材 (教師個人網址請列在本校內之網址) (teaching aids & teacher's website)																			
課程輔導時間 (office hours)																			
聯合國全球永續發展目標(授課教師可依實際課程內容勾選，並可複選。) Sustainable Development Goals, SDGs (Teachers may select based on the actual course content and can choose multiple options.)																			
目標 (Goal)	目標內容 (Target content)																		
□01. 消除貧窮 (No Poverty)	消除全球一切形式的貧窮 End poverty in all its forms everywhere.																		
□02. 消除飢餓 (Zero Hunger)	消除飢餓，實現糧食安全，改善營養及促進永續農業。																		

	End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
□03. 健康與福祉 (Good Health and Well-Being)	確保健康的生活方式，促進各年齡層人群的福祉。 Ensure healthy lives and promote well-being for all at all ages
□04. 教育品質 (Quality Education)	確保包容與公平的優質教育，讓全民享有終身學習機會 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
□05. 性別平等 (Gender Equality)	實現性別平等，提升婦女與女童權能 Achieve gender equality and empower all women and girls.
□06. 淨水與衛生 (Clean Water and Sanitation)	確保人人享有水及環境衛生及其永續管理 Ensure availability and sustainable management of water and sanitation for all
□07. 可負擔能源 (Affordable and Clean Energy)	確保人人取得可負擔、可靠及永續的現代能源 Ensure access to affordable, reliable, sustainable and clean energy for all
□08. 就業與經濟成長 (Decent Work and Economic Growth)	促進持久、包容與永續的經濟成長，促進充分的生產性就業，讓所有人都有合宜的工作 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
□09. 工業、創新基礎建設 (Industry, Innovation and Infrastructure)	建立韌性的基礎建設，促進包容且永續的工業，並加速創新 Build infrastructure, promote inclusive and sustainable industrialization and foster innovation
□10. 減少不平等 (Reduced Inequalities)	降低國內及國家之間的不平等 Reduce inequality within and among countries
□11. 永續城市 (Sustainable Cities and Communities)	建設包容、安全、韌性及永續的城市與人類住區 Make cities and human settlements inclusive, safe, resilient and sustainable
□12. 責任消費與生產 (Responsible Consumption)	確保永續消費及生產模式 Ensure sustainable consumption and production patterns
□13. 氣候行動 (Climate Action)	採取緊急行動以因應氣候變遷及其影響 Take urgent action to combat climate change and its impacts
□14. 海洋生態 (Life Below Water)	保護及永續利用海洋與海洋資源，確保永續發展 Conserve and sustainably use the oceans, seas and marine resources for sustainable development
□15. 陸地生態 (Life On Land)	保護、恢復及促進永續利用陸地生態系統，永續管理森林，防治沙漠化，終止及改善土地退化，遏止生物多樣性的喪失 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
□16. 和平與正義制度 (Peace and Justice)	建立和平與包容的社會促進永續發展，讓所有人都能訴諸司法，建立有效、負責與包容的各級機構 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
□17. 全球夥伴 (Partnerships for the Goals)	加強執行方法，重振永續發展全球夥伴關係 Strengthen the implementation and revitalize the global partnership for sustainable development
□提供體驗課程 (include experience courses)	提供實驗、實習、實作之永續體驗課程 Courses of Sustainability provide experiment, internship and practice:

請遵守智慧財產權及性別平等意識，不得非法影印他人著作。

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