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		②图至束	文華大	學				
	教导	學計劃表			abus			
課程名稱(中文) Course Name in Chinese	科學寫作				學年/學期 Academic Year/Sem	112/1		
課程名稱(英文) Course Name in English	Scientific Writing							
科目代碼 Course Code	NRESM0200	系級 Department & Year	碩士		開課單位 Course-Offering 自然 Department		資源與環境學系	
修別 Type	選修 Elective	學分數/時 Credit(s)/Hou			3.0/3.0			
授課教師 Instructor	/蔡金河							
先修課程 Prerequisite								
	課	程描述 Cours	se Descr	ript	ion			
This course is designed as in science majors. Student conference abstracts or po	s will practic	e writing/pre	paring	acad	demic CVs, researc	_		
	課	程目標 Cour	se Obje	ectiv	ves			
To help students write a s	scientific pape	r for publica	tion in	an	international jou	ırnal.		
						課	程目標與系專業能 力相關性	

	系專業能力 Basic Learning Outcomes	課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
A	能覺知多元的自然科學與社會科學理論並具備研究能力To have knowledge of natural and social science theories.	•
В	具備自然資源與人類社會議題之調查分析、規劃與經營之能力To be able to investigate, analyze, plan, and manage both natural resource and human social issues.	•
С	具備將環境倫理與生態思想落實於永續性生活型態的能力To implement sustainable lifestyles based on environmental ethics and ecological principles.	
D	能以整全式的觀點來解析環境問題,並具備發展系統性解決方案的能力To resolve environmental issues and develop systematic solutions with a global perspective	•
Е	具備系統分析、未來思考、溝通協調與團隊合作的能力The ability to analyze, plan, communicate, and coordinate with others (teamwork).	0
F	具備終身學習、國際視野與外語溝通的能力To instill the values of lifelong learning, an	

圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated

international perspective, and the ability to communicate in a foreign language

授課進度表 Teaching Schedule & Content

週次Week	內容 Subject/Topics	備註Remarks
1	Introduction	
2	Academic CV	
3	Before You Write	
4	Searching and Reviewing Scientific Literature	
5	Proposals	

6	Theses					
7	Publishing in Scientific Journals					
8	How to Write a Good Introduction					
9	Discussion; First Assignment Due	mid-term week				
10	Abstract and Conclusion					
11	Reviewing and Revising					
12	Professionalism, Ethics, and Legal Issues					
13	Peer Review					
14	How to Do a Good Oral Presentation					
15	How to Do a Good Poster Presentation					
16	Student Presentations (I)					
17	Student Presentations (II)					
18	Second Assignment Due; Final Discussion	Final week				
教學策略 Teaching Strategies						
✓ 課堂講授 Lecture ✓ 分組討論Group Discussion						
其他Miscellaneous:						
教學創新自評Teaching Self-Evaluation						
創新教學(Innovative Teaching)						
問題導向學習(PBL) ■ 團體合作學習(TBL) ■ 解決導向學習(SBL)						
翻轉教室 Flipped Classroom						
社會責任(Social Responsibility)						
□ 在地實踐Community Practice □ 產學合作 Industy-Academia Cooperation						
跨域合作(Transdisciplinary Projects)						
□ 跨界教學Transdisciplinary Teaching □ 跨院系教學Inter-collegiate Teaching						
──業師合授 Courses Co-taught with Industry Practitioners						
其它 other:						

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	頁目 配分比例 多元評量方式 Assessments								
Items	Percentage	測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance	20%			~			~		
期中考成績 Midterm Exam									
期末考成績 Final Exam	40%			~			~		
作業成績 Homework and/or Assignments	40%			~			~		
其他 Miscellaneous ()									

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目(書名、作者、書局、代理商、説明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

Alley, M. (2018) The Craft of Scientific Writing, Springer.

Bates, R.L., Adkins-Heljeson, M.D., and Buchanan, R.C. (1995) Geowriting (5th Ed.), American Geological Institute.

Carter, M. (2020) Designing Science Presentations, Elsevier.

Copeland, P. (2011) Communicating Rocks, Pearson.

Davis, M. Davis, K.J., and Dunagan, M.M. (2012) Scientific Papers and Presentations (5th Ed.), Elsevier.

Donovan, S.K. (2017) Writing for Earth Scientists, Wiley-Blackwell.

Hofmannn, A.H. (2020) Scientific Writing and Communication (4th Ed.), Oxford University Press. Katz, M.J. (2009) From Research to Manuscript, Springer.

Shoja, M. et al. (2019) A Guide to the Scientific Career: Virtues, Communication, Research and Academic Writing, Wiley.

Oruc, A.Y. (2011) Handbook of Scientific Proposal Writing, CRC Press.

Ross, C and Ross, G. (2019) Real Science in Clear English: A Guide to Scientific Writing for the Global Market, Springer.

Stüwe, K. and Drescher, A. (2012) How to Write a Manuscript for a Journal, Mitteilungen des naturwissenschaftlichen Vereines für Steiermark.

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

其他補充說明(Supplemental instructions)