國立中正大學課程大綱

National Chung Cheng University Syllabus

課號 course code	3407006		全英文授課 EMI	■ yes　　□ no
課程類別 course type	□ humanistic care course　　□ competition　　□ problem-based course □ project-based course　　□ capstone course　　□ practical course □ internship　　■ others			
課程名稱（中文） course name （Chinese）	成人教育學量化方法論			
課程名稱（英文） course name （English）	Quantitative Methodology for Andragogy			
學年 academic year /semester	2026/ Spring		學分 credits	2 credits
學系（所） department	Department of Adult and Continuing Education		必選修 required/selected	■ required　□ elective
上課時間 class hours	Tuesday, 9:10-11:00 a.m.		上課地點 classroom	College of Education Hall Building II 557 R
教師 instructor	Yu-Shu Chen		教師 email Instructor's email	tasmj3000@gmail.com
助教 teaching assistant	Yi-Zhen Lai		助教 email TA's email	
先修科目或 先備能力 prerequisites	Statistical methods in education and computer application (3 credits) or Introduction to statistics (3 credits)			
課程概述 course descriptions	Research that establishes mechanisms by which effects operate or the conditions that facilitate and inhibit such effects deepens our understanding of the social phenomena. Mediation, moderation, and moderated mediation analysis are frequently used to establish evidence or test hypotheses about such mechanisms. This course will provide a conceptual overview and examples of quantitative methodology related to moderation, mediation, and conditional process analysis.			
學習目標 learning objectives	On completion of this course students should be able to: ● understand knowledge of statistical methodologies (including the main concepts and methods of inference and modelling) ● apply statistical techniques based on the main theories and concepts about moderation, mediation, and conditional process analysis ● analyze parameter estimates, including testing hypotheses on the effects of moderation, mediation, and conditional process analysis ● evaluate the education on matters relating to and/or requiring the use of mediation,			

	moderation, and conditional process analysis.
教科書及參考書 **textbooks and references**	**Textbooks** ● Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). New York: Guilford **Suggested Readings** ● Leech, N. L., Barrett, K. C., & Morgan, & G. A. (2014). I*BM SPSS for intermediate statistics: Use and interpretation* (5th ed.). Routledge. ● Howell, D. C. (2012). *Statistical methods for psychology* (8th ed.). Stamford, CT: Cengage Learning. ● MacKinnon, D. P. (2012). Introduction to statistical mediation analysis. Routledge. **Journals** ● Applied Measurement in Education ● Applied Psychological Measurement ● Educational and Psychological Measurement ● Journal of Applied Measurement ● Journal of Educational Measurement ● Multivariate Behavioral Research ● Organizational Research Methods ● Psychological Bulletin ● Psychological Methods ● Sociological Methodology ● Sociological Methods and Research ● Structural Equation Modeling **Software** The following software (programs) will be explored during the course: ● IBM SPSS (Statistical Package for Social Sciences). ● Microsoft Excel. Note: Please respect copyrights and intellectual property rights.

教學要點概述		
教材編選 **teaching materials**	■ self-editing ppt ■ handouts ☐ self-edition textbooks ☐ teaching computer programs ☐ self-editing films ☐ others	
教學方法 **teaching method**	■ lecture ■ small discussion ■ oral presentation ☐ PBL ☐ case study ☐ others	
評量方法 **evaluation tools**	☐ midterm exam 0% ☐ final exam 0% ☐ quizzes 0% ☐ in-class assignments ■ take-home assignments 40% ☐ midterm report 0% ■ final report 30% ☐ projects 0% ☐ rubrics 10% ■ participation 30% ■ Students can get extra credits by collecting stickers.	

	Assignments
	● Assignment 1 (10%): Please refer to the sample provided by the professor to create your own resume. ● Assignment 2 (20%): Students are required to collect 3 qualifying exam questions related to quantitative methodology from the U.S. universities doctoral programs and 3 from domestic universities doctoral programs over the past 3 years. Please indicate the publication year, university and department that issued each question. ● Assignment 3 (30%): students have to choose an empirical paper, using mediation, moderation, and/or moderated mediation models as research frameworks, from SSCI. Make PowerPoint slides and do a 10-min oral presentation. ● Assignment 4 (10%): the feedback from. **Classroom rules** ● Be punctual ● Be prepared ● Be engaged ● Make contributions to the happy learning climate.
教學資源 **teaching resources**	■ eCourse 2　　　☐ digital files　　　☐ the website of intern
與 SDGs 目標的關聯 **related to objectives of SDGs**	☐SDG 1 no poverty　　　　　　　　　☐SDG 2 zero hunger ☐SDG 3 good health and well-being　　■SDG 4 quality education ☐SDG 5 gender equality　　　　　　　☐SDG 6 clean water and sanitation ☐SDG 7 affordable and clean energy　☐SDG 8 decent work and economic growth ☐SDG 9 industry, innovation, and infrastructure ☐SDG 10 reduce inequalities ☐SDG 11 sustainable cities and communities ☐SDG 12 responsible consumption and production ☐SDG 13 climate action　　　　　　　☐SDG 14 life below water ☐SDG 15 lif in land　　　　　　　　　☐SDG 16 peace, justice, and strong institution ☐SDG 17 partnerships for the goals　　☐ not relevant
教師 相關訊息 **instructor's information**	● Prof. Yu-Shu Chen ● University of Minnesota, Ph.D. (human resource development) ● Research interests: organizational creativity, creativity development, creative problem solving, human resource development, statistical methodology ● Office location: the College of Education Hall 314 R ● Office hours: Tuesday, 12:10 to 14:00 p.m. ● Telephone: (05) 2720411 ext. 36114

每週課程內容 **weekly scheduled contents**
Week 1 (2/25) ● Topic: Introduction ● Readings: syllabus & handouts
Week 2 (3/4)

● Topic: statistical modeling ● Readings: Hayes, chap1 & handouts
Week 3 (3/11) ● Topic: simple linear regression ● Readings: Hayes, chap.2 & handouts
Week 4 (3/18) ● Topic: multiple regression ● Readings: Hayes, chap. 3 & handouts
Week 5 (3/25) ● Topic: the simple mediation model 1 ● Readings: Hayes, chap. 4 & handouts
Week 6 (4/1) ● Topic: the simple mediation model 2 ● Readings: Hayes, chap. 4 & handouts
Week 7 (4/8) Topic: multiple mediator models 1 Readings: Hayes, chap. 5 & handouts
Week 8 (4/15) ● Topic: multiple mediator models 2 ● Readings: Hayes, chap. 5 & handouts
Week 9 (4/22) Topic: The midterm exam Readings: handouts
Week 10 (4/29) ● Topic: the simple moderation model 1 ● Readings: Hayes, chap. 7 & handouts
Week 11 (5/6) ● Topic: the simple moderation model 2 ● Readings: Hayes, chap. 7 & handouts
Week 12 (5/13) ● Topic: extending moderation analysis principles 1 ● Readings: Hayes, chap. 8 & handouts
Week 13 (5/20) ● Topic: extending moderation analysis principles 2 ● Readings: Hayes, chap. 8 & handouts
Week 14 (5/27) ● Topic: the conditional process model 1 ● Readings: Hayes, chap. 10 & handouts
Week 15 (6/3) ● Topic: the conditional process model 2 ● Readings: Hayes, chap. 10 & handouts
Week 16 (6/10) ● Topic: self-direct learning (a field trip) ● Readings: handouts
Week 17 (6/17) ● Topic: self-direct learning

	Readings: handouts

Week 18 (6/24)
- Topic: The final exam
- Readings: handouts

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