Tamkang University Academic Year 114, 1st Semester Course Syllabus

Course Title	RESEARCH METHODOLOGY	Instructor	GER, MENG-YO
Course Class	TZIBM1A MASTER'S PROGRAM, DIVISION OF GERONTECHNOLOGY, GRADUATE INSTITUTE OF INTELLIGENT HEALTHCARE INDUSTRY, 1A	Details	◆ General Course ◆ Required ◆ One Semester ◆ 3 Credits
Relevance to SDGs	SDG3 Good health and well-being for people SDG4 Quality education SDG15 Life on land SDG16 Peace, justice and strong institutions		

Departmental Aim of Education

Ⅰ. Development of problem solving capacity.

Ⅱ. Development of reserch and innovation capacity.

Ⅲ. Enhancement of cross-disciplinary capactiy.

Ⅳ. Development of lifelong self learning capacity.

Subject Departmental core competences

A. Capacity of problem solving.(ratio:15.00)

B. Capacity of senior health managemnt.(ratio:15.00)

C. Capacity of Healthcare Industry Management.(ratio:20.00)

D. Analytical capacity of health informatics.(ratio:15.00)

E. Capacity of research and innovation.(ratio:20.00)

F. Capacity of Scientific Paper Writing.(ratio:5.00)

G. Capacity of lifelong self learning.(ratio:5.00)

H. Creative Capacity.(ratio:5.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:15.00)

2. Information literacy. (ratio:15.00)

3. A vision for the future. (ratio:20.00)

4. Moral integrity. (ratio:15.00)

5. Independent thinking. (ratio:20.00)

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:5.00)

8. A sense of aesthetic appreciation. (ratio:5.00)

Course Introduction	This course aims to provide master's students with comprehensive knowledge of research methodologies, covering both the theoretical foundations and practical applications of quantitative and qualitative research. The course is designed to develop students' research skills, enabling them to effectively apply these methods in academic research and practical applications. The quantitative research section will introduce basic concepts and methods of statistics, including data collection, data analysis, and data interpretation.

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Through theoretical explanations and practical exercises, students will be able to master various research methods and apply them flexibly to their research topics.	Cognitive

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEFGH	12345678	Lecture, Discussion, Experience	Study Assignments, Discussion(including classroom and online), Report(including oral and written)

Course Schedule

Week	Date	Course Contents	Note
1	114/09/15 ~ 114/09/21	Course Introduction and Textbook Overview	
2	114/09/22 ~ 114/09/28	Basic Concepts of the Scientific Method and Research Aspects	

3	114/09/29 ~ 114/10/05	Research Procedures and Research Design	
4	114/10/06 ~ 114/10/12	Literature Review and Secondary Data	
5	114/10/13 ~ 114/10/19	Testing for Reliability and Validity	
6	114/10/20 ~ 114/10/26	Questionnaire Design and Sampling Design	
7	114/10/27 ~ 114/11/02	Survey Method, Observation Method, Experimental Method	
8	114/11/03 ~ 114/11/09	Variance Analysis and Multivariate Analysis	
9	114/11/10 ~ 114/11/16	Regression Analysis and Multiple Regression Analysis	
10	114/11/17 ~ 114/11/23	Factor Analysis	
11	114/11/24 ~ 114/11/30	Logistic and Probit Regression Analysis, Canonical Correlation Analysis	
12	114/12/01 ~ 114/12/07	Cluster Analysis and Discriminant Analysis	
13	114/12/08 ~ 114/12/14	Multidimensional Scaling and Conjoint Analysis, Structural Equation Modeling	
14	114/12/15 ~ 114/12/21	Qualitative Research (1)	
15	114/12/22 ~ 114/12/28	Qualitative Research (2)	
16	114/12/29 ~ 115/01/04	Final Report Week	
17	115/01/05 ~ 115/01/11	New Year's Day Holiday	
18	115/01/12 ~ 115/01/18	Self-Study	

Key capabilities	self-directed learning Information Technology Problem solving
Interdisciplinary	Competency-based education 'competency exploration' sustained competency or global issues STEEP (Society, Technology, Economy, Environment, and Politics) In addition to teaching content of the teacher's professional field, integrate other subjects or invite experts and scholars in other fields to share knowledge or teaching
Distinctive teaching	Project implementation course Special/Problem-Based(PBL) Courses

Course Content	Logical Thinking Sustainability issue
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Textbooks Name of teaching materials: 吳萬益(2023)．企業研究方法．6版．華泰出版。 Using teaching materials from other writers:Textbooks Name of teaching materials: 蔡義清、俞洪亮、莊懿妃(2024)．商管研究資料分析：SPSS的應用．4版．華泰出版。
References	
Grading Policy	◆ Attendance： 30.0 % ◆ Mark of Usual：20.0 % ◆ Midterm Exam： % ◆ Final Exam： 50.0 % ◆ Other〈 〉： %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php. ※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.