

Tamkang University Academic Year 109, 2nd Semester Course Syllabus

Course Title	APPLIED STATISTICAL ANALYSIS	Instructor	MENG-IA CHUNG
Course Class	TLQXM1A MASTER'S PROGRAM IN BUSINESS AND MANAGEMENT (ENGLISH-TAUGHT PROGRAM), 1A	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG4 Quality education		
Departmental Aim of Education			
<ul style="list-style-type: none"> I. Develop a business and management perspective for students. II. Train the professionals in the integrated fields of business and management. III. Cultivate the talents with both theory and practices in business and management. 			
Subject Departmental core competences			
<ul style="list-style-type: none"> A. Provide the basic knowledge of both theory and practices.(ratio:20.00) B. Enhance the practical training for the current trends.(ratio:40.00) D. Obtain the ability of analyzing industrial and business problems.(ratio:40.00) 			
Subject Schoolwide essential virtues			
<ul style="list-style-type: none"> 1. A global perspective. (ratio:20.00) 2. Information literacy. (ratio:50.00) 3. A vision for the future. (ratio:10.00) 5. Independent thinking. (ratio:20.00) 			

Course Introduction	<p>This course aims to teach students commonly seen applied statistical analytic techniques. It is not meant to be a tutorial on how to use a specific software. The course is intended to be very applied in the sense of how to estimate models, evaluate them, revise them, and report the results. The course will provide a rigorous treatment of the theory underlying SEM, including discussions of causality and inference, model assumptions and consequences of their violation, and limitations.</p>
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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	This course expects students to learn general linear models, generalized linear models and structural equation modeling.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABD	1235	Lecture	Study Assignments

Course Schedule

Week	Date	Course Contents	Note
1	110/02/22 ~ 110/02/28	Introduction	
2	110/03/01 ~ 110/03/07	Review of Probability	
3	110/03/08 ~ 110/03/14	General Linear Models I	
4	110/03/15 ~ 110/03/21	General Linear Models II	
5	110/03/22 ~ 110/03/28	Generalized Linear Model	
6	110/03/29 ~ 110/04/04	Holiday	

7	110/04/05 ~ 110/04/11	Review 1	
8	110/04/12 ~ 110/04/18	Path Analysis	
9	110/04/19 ~ 110/04/25	Measurement Models I	
10	110/04/26 ~ 110/05/02	Measurement Models II	
11	110/05/03 ~ 110/05/09	Measurement Models III	
12	110/05/10 ~ 110/05/16	Review II	
13	110/05/17 ~ 110/05/23	Structural Models I	
14	110/05/24 ~ 110/05/30	Structural Models II	
15	110/05/31 ~ 110/06/06	Multilevel Models I	
16	110/06/07 ~ 110/06/13	Multilevel Models II	
17	110/06/14 ~ 110/06/20	Review III	
18	110/06/21 ~ 110/06/27	TBD	
Requirement			
Teaching Facility	Computer, Projector		
Textbooks and Teaching Materials	Lecture notes		
References	Principles and Practice of Structural Equation Modeling 4th edition by Rex Kline		
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 90.0 % ◆ Midterm Exam : % ◆ Final Exam : % ◆ Other () : %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.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 . ※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.		