Tamkang University Academic Year 111, 2nd Semester Course Syllabus

Course Title	STATISTICS (II)	Instructor	MATEUS LEE
Course Class	TRDXB2A DEPARTMENT OF DIPLOMACY AND INTERNATIONAL RELATIONS (ENGLISH-TAUGHT PROGRAM), 2A	Details	◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG3 Good health and well-being for people SDG4 Quality education SDG5 Gender equality SDG9 Industry, Innovation, and Infrastructure		

Departmental Aim of Education

To provide students with an understanding of the major theories in diplomacy & international relations and to equip students with practical skills and help them become outstanding members of the diplomatic and international relations community.

Subject Departmental core competences

A. Every student will process essential understanding of theories of international relations. (ratio:5.00)

B. Every student will have primary perception of current international issues.(ratio:5.00)

C. Every student will become capable of Independent thinking and information processing to further improve international relations.(ratio:40.00)

D. Every student will process essential knowledge of participation in governmental & non-governmental affairs.(ratio:10.00)

E. Every student will display high-level competence in English.(ratio:40.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:5.00)

2. Information literacy. (ratio:30.00)

3. A vision for the future. (ratio:5.00)

4. Moral integrity. (ratio:10.00)

5. Independent thinking. (ratio:30.00)

6. A cheerful attitude and healthy lifestyle. (ratio:10.00)

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

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

	Course Introduction	The course introduces the basic concepts of statistics with practical applications. Popular statistical software (for example, the EXCEL) is also introduced to help students understanding how to apply statistics with software in their daily life. The course aims to establish fundamental capabilities for students in organizing, analyzing and interpreting data. This semester, we are going to learn more about inferential statistics and how to apply in our daily life.

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	Understand the basic concepts of statistics, especially the inferential statistics.	Cognitive
2	Help the students to acknowledge how to apply statistics in their daily life.	Cognitive
3	Strengthen the students' capabilities of independent thinking, analyzing and solving problems.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	123457	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation
2	ABCDE	12345678	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written), Activity Participation

3	CDE	2578	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	112/02/13~112/02/19	Course Introduction and Chapter 8. Sampling, Sampling Methods (I): Sampling	
2	112/02/20~112/02/26	Chapter 8. Sampling, Sampling Methods (II): Sampling Methods	
3	112/02/27~112/03/05	Chapter 9. Estimation and Confidence Intervals (I): Confidence Intervals for a Population Mean	Software Practice
4	112/03/06~112/03/12	Chapter 9. Estimation and Confidence Intervals (II): Confidence Intervals for a Population Proportion	Software Practice
5	112/03/13~112/03/19	Chapter 9. Estimation and Confidence Intervals (III): Choosing an Appropriate Sample Size	
6	112/03/20~112/03/26	Chapter 10. One-Sample Tests of Hypothesis (I): Six-Step Procedure for Testing a Hypothesis	
7	112/03/27~112/04/02	Chapter 10. One-Sample Tests of Hypothesis (II): Hypothesis Testing for a Population Mean with Known and Unknown Population Standard Deviation	
8	112/04/03~112/04/09	Holiday (Day off)	
9	112/04/10~112/04/16	Chapter 10. One-Sample Tests of Hypothesis (III): p-Value in Hypothesis Testing and Type II Error	Software Practice
10	112/04/17~112/04/23	Midterm Exam Week	
11	112/04/24~112/04/30	Chapter 11. Two-Sample Tests of Hypothesis (I): Independent Samples	Software Practice
12	112/05/01~112/05/07	Chapter 11. Two-Sample Tests of Hypothesis (II): Dependent Samples	Software Practice
13	112/05/08~112/05/14	Chapter 12. Analysis of Variance (I): One-way ANOVA	
14	112/05/15~112/05/21	Chapter 12. Analysis of Variance (II): Two-Way ANOVA	Software Practice
15	112/05/22~112/05/28	Chapter 13. Correlation and Linear Regression (I): The Correlation Coefficient	

16	112/05/29~ 112/06/04	Chapter 13. Correlation and Linear Regression (II): The Least Squares Principle in Regression Analysis	
17	112/06/05~ 112/06/11	Chapter 13. Correlation and Linear Regression (III): Testing the Significance of the Slope and Evaluating a Regression Equation's Ability to Predict	Software Practice
18	112/06/12~ 112/06/18	Final Exam Week	

Requirement	(1) No Eating and Talking in the Class. (2) Behave Well and Do Not Use Any 3C Devices in the Class. (3) Being in Class On Time. (4) Asking Question is a Credit. (5) Lesson Preview and Review are Strongly Recommended.
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	(1) Lind D.A., Marchal W.G. and Wathen S.A. (2020). Statistical Techniques in Business & Economics (18e). McGraw Hill. (2) Lecture notes and materials will be uploaded online every week.
References	(1) Weiss, Neil A. (2017). Introductory Statistics (10e). Pearson. (2) Moore D., McCabe G.P. and Craig B.A. (2017). Introduction to the Practice of Statistics (9e). Macmillan Learning.
Number of Assignment(s)	**6** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 10.0 ％ ◆ Mark of Usual：20.0 ％ ◆ Midterm Exam： 20.0 ％ ◆ Final Exam： 30.0 ％ ◆ Other〈In-class exercises〉：20.0 ％
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.**