

## Tamkang University Academic Year 109, 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	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Required</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG3 Good health and well-being for people SDG4 Quality education SDG5 Gender equality SDG9 Industry, Innovation, and Infrastructure		
<b>Departmental Aim of Education</b>			
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			
C. Every student will become capable of Independent thinking and information processing to further improve international relations.(ratio:50.00)  E. Every student will display high-level competence in English.(ratio:50.00)			
Subject Schoolwide essential virtues			
2. Information literacy. (ratio:50.00)  5. Independent thinking. (ratio:50.00)			
Course Introduction	The course introduces the basic concepts of statistics with practical applications. Popular statistical softwares (for example, the EXCEL and GRETL) are also introduced to help students know how to apply statistics with softwares in their daily lives. Our goal is 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	Understanding the basic concepts of statistics, especially the inferential statistics.	Cognitive
2	Helping the students to acknowledge how to apply statistics in their daily lives.	Cognitive
3	Strengthening 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	CE	25	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation
2	CE	25	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written), Activity Participation
3	CE	25	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	110/02/22 ~ 110/02/28	Course Introduction and Chapter 8. Sampling, Sampling Methods (I): Sampling	

2	110/03/01 ~ 110/03/07	Chapter 8. Sampling, Sampling Methods (II): Sampling Methods	
3	110/03/08 ~ 110/03/14	Chapter 9. Estimation and Confidence Intervals (I): Confidence Intervals for a Population Mean	
4	110/03/15 ~ 110/03/21	Chapter 9. Estimation and Confidence Intervals (II): Confidence Intervals for a Population Proportion	
5	110/03/22 ~ 110/03/28	Chapter 9. Estimation and Confidence Intervals (III): Choosing an Appropriate Sample Size	
6	110/03/29 ~ 110/04/04	Holiday	
7	110/04/05 ~ 110/04/11	Chapter 10. One-Sample Tests of Hypothesis (I): Six-Step Procedure for Testing a Hypothesis	
8	110/04/12 ~ 110/04/18	Chapter 10. One-Sample Tests of Hypothesis (II): Hypothesis Testing for a Population Mean with Known and Unknown Population Standard Deviation	
9	110/04/19 ~ 110/04/25	Chapter 10. One-Sample Tests of Hypothesis (III): p-Value in Hypothesis Testing and Type II Error	
10	110/04/26 ~ 110/05/02	Midterm Exam Week	
11	110/05/03 ~ 110/05/09	Chapter 11. Two-Sample Tests of Hypothesis (I): Independent Samples	
12	110/05/10 ~ 110/05/16	Chapter 11. Two-Sample Tests of Hypothesis (II): Dependent Samples	
13	110/05/17 ~ 110/05/23	Chapter 12. Analysis of Variance (I): One-way ANOVA	
14	110/05/24 ~ 110/05/30	Chapter 12. Analysis of Variance (II): Two-Way ANOVA	Computer Practice
15	110/05/31 ~ 110/06/06	Chapter 13. Correlation and Linear Regression (I): The Correlation Coefficient	
16	110/06/07 ~ 110/06/13	Chapter 13. Correlation and Linear Regression (II): The Least Squares Principle in Regression Analysis	
17	110/06/14 ~ 110/06/20	Chapter 13. Correlation and Linear Regression (III): Testing the Significance of the Slope and Evaluating a Regression Equation's Ability to Predict	Computer Practice
18	110/06/21 ~ 110/06/27	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)	<b>6</b> (Filled in by assignment instructor only)
Grading Policy	◆ Attendance : 20.0 %   ◆ Mark of Usual : 15.0 %   ◆ Midterm Exam : 20.0 % ◆ Final Exam : 30.0 % ◆ Other < In-class exercises > : 15.0 %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> . <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>