

## Tamkang University Academic Year 107, 1st Semester Course Syllabus

Course Title	STATISTICS (I)	Instructor	KLEYKAMP DAVID LEE
Course Class	TRDXB2A DEPARTMENT OF DIPLOMACY AND INTERNATIONAL RELATIONS (ENGLISH-TAUGHT PROGRAM), 2A	Details	<ul style="list-style-type: none"> <li>◆ Required</li> <li>◆ One Semester</li> <li>◆ 2 Credits</li> </ul>
D e p a r t m e n t a l   A i m   o f   E d u c a t i o n			
<p>To provide students with an understanding of the major theories in diplomacy &amp; international relations and to equip students with practical skills and help them become outstanding members of the diplomatic and international relations community.</p>			
D e p a r t m e n t a l   c o r e   c o m p e t e n c e s			
<ul style="list-style-type: none"> <li>A. Every student will process essential understanding of theories of international relations.</li> <li>B. Every student will have primary perception of current international issues.</li> <li>C. Every student will become capable of Independent thinking and information processing to further improve international relations.</li> <li>D. Every student will process essential knowledge of participation in governmental &amp; non-governmental affairs.</li> <li>E. Every student will display high-level competence in English.</li> </ul>			
Course Introduction	<p>This course is a basic introduction to statistical analysis and includes the study of random variables, probability distributions, means, variances, and the central limit theorem. In addition, students are introduced to both simple and multivariate regression and important applications. Finally, students are taught the statistical testing of hypotheses such as the usual test for the equality of means.</p>		

### The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I. Objective Levels (select applicable ones) :

- |                         |                                     |                           |
|-------------------------|-------------------------------------|---------------------------|
| (i) Cognitive Domain    | : C1-Remembering, C2-Understanding, | C3-Applying,              |
|                         | C4-Analyzing, C5-Evaluating,        | C6-Creating               |
| (ii) Psychomotor Domain | : P1-Imitation, P2-Mechanism,       | P3-Independent Operation, |
|                         | P4-Linked Operation, P5-Automation, | P6-Origination            |
| (iii) Affective Domain  | : A1-Receiving, A2-Responding,      | A3-Valuing,               |
|                         | A4-Organizing, A5-Charaterizing,    | A6-Implementing           |

II. The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

- (i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.
- (ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3, C5, and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)
- (iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A, AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	Learning Statistical Concepts	C4	CE
2	Applying Statistical Theory	C3	CE

#### Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Learning Statistical Concepts	Lecture, Problem solving	Written test, Participation
2	Applying Statistical Theory	Lecture, Problem solving	Written test, Participation

This course has been designed to cultivate the following essential qualities in TKU students

Essential Qualities of TKU Students	Description
◇ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◆ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◇ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◆ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◇ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◇ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

#### Course Schedule

Week	Date	Subject/Topics	Note
1	107/09/10 ~ 107/09/16	Introduction to the Course, Exams, and Grading	
2	107/09/17 ~ 107/09/23	Random Variables and Probability - The Classical View	
3	107/09/24 ~ 107/09/30	Random Variables and Probability - The Modern View	
4	107/10/01 ~ 107/10/07	Probability Distributions - Discrete	
5	107/10/08 ~ 107/10/14	Probability Distributions - Continuous	
6	107/10/15 ~ 107/10/21	Means and Variances	
7	107/10/22 ~ 107/10/28	The Normal Distribution	
8	107/10/29 ~ 107/11/04	The Central Limit Theorem and Its Uses	
9	107/11/05 ~ 107/11/11	Review for Midterm	
10	107/11/12 ~ 107/11/18	Midterm Exam Week	
11	107/11/19 ~ 107/11/25	Simple Regression Modeling I	
12	107/11/26 ~ 107/12/02	Simple Regression Modeling II	

13	107/12/03 ~ 107/12/09	Multivariate Regression Modeling	
14	107/12/10 ~ 107/12/16	Regression with Autocorrelation	
15	107/12/17 ~ 107/12/23	Testing the Equality of Two Means	
16	107/12/24 ~ 107/12/30	Limitations to Statistical Analysis	
17	107/12/31 ~ 108/01/06	Review for Final	
18	108/01/07 ~ 108/01/13	Final Exam Week	
Requirement			
Teaching Facility	Computer		
Textbook(s)	Weekly Lecture Notes and Videos as posted to <a href="http://www.kleykampintaiwan.com">http://www.kleykampintaiwan.com</a>		
Reference(s)	Free Openstax text on Introductory Statistics <a href="https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/Introductory-Statistics-OP_Fxq39sN.pdf">https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/Introductory-Statistics-OP_Fxq39sN.pdf</a>		
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 20.0 %    ◆ Mark of Usual :        %    ◆ Midterm Exam : 40.0 % ◆ Final Exam : 40.0 % ◆ Other (    ) :        %		
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>		