## Tamkang University Academic Year 106, 1st Semester Course Syllabus

Course Title	STATISTICS	Instructor	DENG WEN-SHUENN
Course Class	TLWXB1A BACHELOR'S PROGRAM IN GLOBAL FINANCIAL MANAGEMENT (ENGLISH-TAUGHT PROGRAM),	Details	<ul> <li>Required</li> <li>1st Semester</li> <li>2 Credits</li> </ul>
	Departmental Aim of Educ	ation	
I. Acquis	ition of professional knowledge.		
II. Learnir	ng effective self-planning.		
III. Theore	tical application of practical matters.		
IV. Interpe	ersonal communication and teamwork.		
V. Analys	is of problems and recommendations.		
VI. Awarer	ness of Ethics as a global citizen.		
	Departmental core compet	e n c e s	
A. Financia	l accounting professional skills.		
B. To unde	rstand basic knowledge of business administration.		
C. To comr	nunicate, negotiate, and collaborate to acomplish business proj	ects by team v	vork.
D. Knowled	D. Knowledge of basic statistical theory.		
E. Applicat	E. Application of profession knowledge.		
F. Have a f	F. Have a firm grasp of the fundamental concepts in economics.		
G. Have the ability to apply basic analytical tools to economic issues.			
H. Students are equipped with professional knowledge of core courses.			
I. Students can apply their profession to practice matters.			
Course Introduction	The course provides an introduction to statistical concepts ar application in business. Topics include graphical and tabular measure of center tendency and dispersion, introduction to p variables, discrete and continuous distributions and sampling	nd techniques presentation o probability, ran g distribution.	with of data, ndom

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

I.Objective Levels (select	applicable ones)	:	
(i) Cognitive Domain :	Cl-Remembering,	C2-Understanding,	C3-Applying,
	C4-Analyzing,	C5-Evaluating,	C6-Creating
(ii) Psychomotor Domain :	Pl-Imitation,	P2-Mechanism,	P3-Independent Operation,
	P4-Linked Operati	on, P5-Automation,	P6-Origination
(iii) Affective Domain :	Al-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.)

			Relevance	
No.	Teaching Objectives	Objective Levels	Departmental core competences	
1	To comprehend the methods of descriptive statistics	С3	DE	
2	To comprehend the concepts and applications of normal distribution	C3	DE	
3	To acquaint the concepts and applications of sampling distribution	С3	DE	
4	To familiarize students with the concepts of estimtaion and hypothesis testing	C3	DE	

## Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	To comprehend the methods of descriptive statistics	Lecture, Problem solving	Written test
2	To comprehend the concepts and applications of normal distribution	Lecture, Problem solving	Written test
3	To acquaint the concepts and applications of sampling distribution	Lecture, Problem solving	Written test
4	To familiarize students with the concepts of estimtaion and hypothesis testing	Lecture, Problem solving	Written test

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 Ikeracy         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 to so sto gain the skills necessary to bring about the signal development.           ◇ 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 sense of aesthetic appreciation         Encouraging students with the ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problem.           1         106/0728-1         Statistics, Data, and Statistical Thinking           2         1         Statistics, Data, and Statistical Thinking         Integrate resources, collaborate with others, practiate active and solve problems.           3         106/0728-1         Graphical Methods for Describing Qualitative Data         Integrate resources, collaborate with others, practiate active and solve and sol	This course has been designed to cultivate the following essential qualities in TKU students					
◇ 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 buttre vision.       ◇ Moral integrity     Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve entical 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 solve problems.       ◇ A spirit of teamwork and dedication     Improving one's ability to communicate and cooperate so as to integrate resource, collaborate with the ability to serve and appreciate asserve to beauty, or express themselves clearly, and to enjoy the creative process.       1     10009010	Essential Qualities of TKU Students		Qualities of TKU Students	Description		
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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.         A cheerful attitude and healthy lifestyle       Raising an awareness of the fine balance between one's body and the environment, helping students like a meaningful life.         A cheerful attitude and healthy lifestyle       Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.         A sense of aesthetic appreciation       Encourse Schedule         Week       Date       Statistics, Data, and Statistical Thinking         106/09/18-1       Statistics, Data, and Statistical Thinking       Integrate resources, collaborate with others, and solve as the solution of appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.         106/09/18-1       Statistics, Data, and Statistical Thinking       Improving one's ability to sense and appreciate aesthetic balance between one's body and the environment, helping students with the ability to environment.         2       J06/09/18-1       Statistics, Data, and Statistical Thinking       Improving one's ability to sense and appreciate aesthetic balance between one's balance	$\diamond$	A vision for the	e future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.		
<ul> <li>Independent thinking</li> <li>Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.</li> </ul> <ul> <li>A cheerful attitude and healthy lifestyle</li> <li>Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.</li> </ul> <ul> <li>A spirit of teamwork and dedication</li> <li>Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.</li> </ul> <ul> <li>A sense of aesthetic appreciation</li> <li>Equipping students with the ability to sense and appreciate asthetic beauty, to express themselves clearly, and to enjoy the creative process.</li> </ul> <ul> <li>More/0718-1</li> <li>106/09/24</li> <li>Statistics, Data, and Statistical Thinking</li> <li>106/09/25-106/1008</li> <li>Graphical Methods for Describing Qualitative Data</li> <li>106/10/08-106/1008</li> <li>Graphical Methods for Describing Qualitative Data</li> <li>106/10/02-100/106/106</li> <li>106/10/02-100/106</li> <li>106/10/</li></ul>	$\diamond$	Moral integrity	/	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.		
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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.         Week       Date       Course Schedule         1       106/09/18 106/09/24       Statistics, Data, and Statistical Thinking       Note         2       106/09/25 106/09/25 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 100/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 106/10/02- 100/02- 106/10/02- 100/02- 100/02- 100/02- 106/10/02- 100/02- 106/10/02- 100/02- 106/10/02- 100/02- 100/02- 106/10/02- 100/02- 106/10/02- 100/02- 106/10/02- 100/02- 100/02- 100/02- 100/02- 100/02- 100/02- 106/10	$\diamond$	A spirit of tean	nwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.		
Image: Note         Date         Subject/Topics         Note           1         106/09/18 106/09/24         Statistics, Data, and Statistical Thinking         Image: Note           2         106/09/25 106/10/01         Graphical Methods for Describing Qualitative Data         Image: Note           3         106/10/02 106/10/08         Graphical Methods for Describing Qualitative Data         Image: Note           4         106/10/02 106/10/16 106/10/16 106/10/23         Numerical measures of Central Tendency         Image: Note           5         106/10/16 106/10/23 106/10/23         Numerical measures of Variability         Image: Note           6         106/10/23 106/10/23 106/11/05         Probability Distribution Concepts         Image: Note           7         106/10/23 106/11/05         Random Variables         Image: Note         Image: Note           8         106/11/06 106/11/05 106/11/13-         Probability Distribution for Discrete Random Variable         Image: Note           9         106/11/13 106/11/13-         Probability Distribution for Continuous Random Variable         Image: Note	$\diamondsuit$ A sense of aesthetic appreciation		thetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.		
WeekDateSubject/TopicsNote1106/09/18~ 106/09/24Statistics, Data, and Statistical Thinking		Course Schedule				
1       106/09/18~ 106/09/24       Statistics, Data, and Statistical Thinking         2       106/09/25~ 106/10/01       Graphical Methods for Describing Qualitative Data         3       106/10/02~ 106/10/08       Graphical Methods for Describing Qualitative Data         4       106/10/02~ 106/10/08       Graphical Methods for Describing Qualitative Data         5       106/10/08       Raphical Methods for Describing Qualitative Data         6       106/10/08       Numerical measures of Central Tendency         6       106/10/22       Numerical measures of Variability         6       106/10/23~ 106/10/29       Probability Distribution Concepts         7       106/10/30~ 106/11/05       Random Variables         8       106/11/06~ 106/11/12       Probability Distribution for Discrete Random Variable         9       106/11/13~ 106/11/19       Probability Distribution for Continuous Random Variable	Week	Date	Sub	ject/Topics	Note	
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9     106/11/13~ 106/11/19     Probability Distribution for Continuous Random Variable       106/11/20~     106/11/20~	8	106/11/06~ 106/11/12	Probability Distribution for Discrete Random Variable			
106/11/20~	9	106/11/13 ~ 106/11/19	Probability Distribution for Continuous Random Variable			
10         Independence         Midterm Exam Week           106/11/26         Independence         Independence	10	106/11/20~ 106/11/26	Midterm Exam Week			
11         106/11/27 ~ 106/12/03         The Normal distribution	11	106/11/27 ~ 106/12/03	The Normal distribution			
12 106/12/04~ 106/12/10 The Sampling distribution	12	106/12/04 ~ 106/12/10	The Sampling distribution			

13 <sup>106/12/11~</sup> 106/12/17		The Central Limit Theorem	
14	106/12/18~ 106/12/24	Estimation with Confidence Intervals	
15 106/12/25~ 106/12/31 Large Sample Confidence Interval for a Popula Mean		Large Sample Confidence Interval for a Population Mean	
16	107/01/01~ 107/01/07	Small Sample Confidence Interval for a Population Mean	
17	107/01/08 ~ 107/01/14	Large Sample Confidence Interval for a Population Proportion	
18	107/01/15 ~ 107/01/21	Final Exam Week	
Requirement			
Teaching Facility		Computer, Projector	
Textbook(s)		Modern Business Statistics 201, Gerald Keller, McGraw-Hill/Irwin	
Reference(s)		Essentials of Business Statistics 2014, Jaggia & Kelly, McGraw-Hill/Irwin	
Number of Assignment(s)		4 (Filled in by assignment instructor only)	
Grading Policy		<ul> <li>Attendance: 5.0 % ◆ Mark of Usual: 15.0 % ◆ Midterm Exam: 40.0 %</li> <li>Final Exam: 40.0 %</li> <li>Other ⟨ ⟩: %</li> </ul>	
Note		This syllabus may be uploaded at the website of Course Syllabus Management System at <u>http://info.ais.tku.edu.tw/csp</u> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <u>http://www.acad.tku.edu.tw/CS/main.php</u> . <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime</b> <b>to improperly photocopy others' publications.</b>	

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