

Tamkang University Academic Year 108, 2nd Semester Course Syllabus

Course Title	APPLICATION OF COMMERCIAL SOFTWARE	Instructor	CHEN-CHIEH CHEN
Course Class	TLFBB3A DIVISION OF GLOBAL COMMERCE, DEPARTMENT OF INTERNATIONAL BUSINESS (ENGLISH- TAUGHT PROGRAM), 3A	Details	◆ General Course ◆ Selective ◆ One Semester
Departmental Aim of Education			
I. To instill the university motto of "Simplicity, Firmness, Perseverance, and Fulfillment" into students. II. By integrating the "Five Disciplines" of education, the qualities of conduct, intelligence, physical education, teamwork, and beauty into the professional, core, and extracurricular curriculum, the department helps to produce well-rounded students skilled in identifying and solving problems. III. To oversee the trend and foresee the development of global economy, the department aims to produce the graduates with expertise in the fields of International Business and Trade.			
Subject Departmental core competences			
A. Breeding professionals with expertise in general International Trade and International Business.(ratio:50.00) C. Producing graduates with capability of foreseeing and analyzing the development of Global Economy.(ratio:50.00)			
Subject Schoolwide essential virtues			
2. Information literacy. (ratio:50.00) 5. Independent thinking. (ratio:50.00)			
Course Introduction	Overview of the process of data analysis. Data analytics have moved out of the academic world of statisticians to the practical world of technology. A variety of user friendly technologies bring powerful analytical capabilities to end users. Three major areas that comprise analytics are reporting, visualization and prediction. This course uses the latest tool called Weka, without any programming, to show the practice of data analytics in the real world. You will experience practical applications of analytics through guided exercises and case studies.		

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	Analyze data to generate information and knowledge that lead to informed decisions for businesses	Cognitive
2	Show how business intelligence can be derived from data warehouses	Cognitive
3	Derive insightful trends using data mining techniques	Cognitive
4	Apply the latest in analytics technology in real world case studies in the areas of business, entertainment, climate change etc.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	AC	25	Lecture, Discussion, Publication, Practicum, Experience	Testing, Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
2	AC	25	Lecture, Discussion, Publication, Practicum, Experience	Testing, Discussion(including classroom and online), Practicum, Report(including oral and written)
3	AC	25	Lecture, Discussion, Publication, Practicum, Experience	Testing, Discussion(including classroom and online), Practicum, Report(including oral and written)
4	AC	25	Lecture, Discussion, Publication, Practicum, Experience	Testing, Discussion(including classroom and online), Practicum, Report(including oral and written)

Course Schedule			
Week	Date	Course Contents	Note
1	109/03/02 ~ 109/03/08	Overview of the course	
2	109/03/09 ~ 109/03/15	1. What' s it all about?	
3	109/03/16 ~ 109/03/22	1. What' s it all about?	
4	109/03/23 ~ 109/03/29	2. Input: Concepts, instances, attributes	
5	109/03/30 ~ 109/04/05	National Holiday	Class OFF
6	109/04/06 ~ 109/04/12	3. Output: Knowledge representation	
7	109/04/13 ~ 109/04/19	4. Algorithms: The basic methods	
8	109/04/20 ~ 109/04/26	Working on midterm exercise (I)	
9	109/04/27 ~ 109/05/03	Midterm Exam Week	
10	109/05/04 ~ 109/05/10	Announce Final Report Topic and Template	
11	109/05/11 ~ 109/05/17	5. Credibility: Evaluating what' s been learned	
12	109/05/18 ~ 109/05/24	6. Trees and rules	
13	109/05/25 ~ 109/05/31	7. Extending instance-based and linear models	
14	109/06/01 ~ 109/06/07	8. Data transformations	
15	109/06/08 ~ 109/06/14	Final project presentation (I)	
16	109/06/15 ~ 109/06/21	Final project presentation (II)	
17	109/06/22 ~ 109/06/28	Final Exam Week (Date:109/6/18-109/6/24)	
18	109/06/29 ~ 109/07/05	Supplementary teaching	
Requirement		* Instructor teaching website: https://sites.google.com/site/stevecsschen/lecture We will learn how to use Weka, a great tool for data analysis and machine learning, to solve industrial problems without writing any codes. Grading Policy: (Students who skip class 3 times will be flunked!) * Teaching philosophy: high flexibility, joyful atmosphere for learning, inspiring students, experienced teacher, students harvesting + networking. * Midterm and Final will be replaced by exercise and group report presentation.	
Teaching Facility		Computer, Projector	
Textbooks and Teaching Materials		* Textbook: Data Mining : Practical Machine Learning Tools and Techniques, 4/e (Paperback) * Authors: Ian H. Witten, Eibe Frank, Mark A. Hall, Christopher J. Pal	

References	* Publisher: Morgan Kaufmann * Publish date: 2016-12-01 * ISBN: 0128042915 * ISBN-13: 9780128042915
Number of Assignment(s)	(Filled in by assignment instructor only)
Grading Policy	◆ Attendance : % ◆ Mark of Usual : 30.0 % ◆ Midterm Exam : 30.0 % ◆ Final Exam : 40.0 % ◆ 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.