

## Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	BIG DATA MINING	Instructor	NAIDA PARSAZADEH
Course Class	TGLXM0A ELECTIVES COURSES BY COLLEGE OF BUSINESS AND MANAGEMENT-MASTER, 0A	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Selective</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG4 Quality education		
<b>Departmental Aim of Education</b>			
<ul style="list-style-type: none"> <li>I. Acquisition of professional knowledge.</li> <li>II. Learning effective self-planning.</li> <li>III. Theoretical application of practical matters.</li> <li>IV. Interpersonal communication and teamwork.</li> <li>V. Analysis of problems and recommendations.</li> <li>VI. Awareness of Ethics as a global citizen.</li> </ul>			
<b>Subject Departmental core competences</b>			
<ul style="list-style-type: none"> <li>A. Students can demonstrate that they have program advanced knowledge of business and management.(ratio:20.00)</li> <li>B. Students can demonstrate that they have analytical and problem-solving capability. (ratio:40.00)</li> <li>C. Students can demonstrate their oral and written communication skills.(ratio:20.00)</li> <li>D. Students can demonstrate team and interpersonal skill.(ratio:10.00)</li> <li>E. Students are able to demonstrate effective considerations of ethical issues in business situation.(ratio:10.00)</li> </ul>			
<b>Subject Schoolwide essential virtues</b>			
<ul style="list-style-type: none"> <li>1. A global perspective. (ratio:5.00)</li> <li>2. Information literacy. (ratio:30.00)</li> <li>3. A vision for the future. (ratio:20.00)</li> <li>4. Moral integrity. (ratio:5.00)</li> <li>5. Independent thinking. (ratio:20.00)</li> </ul>			

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:10.00)

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

Course  
Introduction

This course mainly teaches students the data visualization skills in Big Data Analysis; through a series of practical hands-on exercises, real-world case studies, and interactive data storytelling, it cultivates students' ability to solve real problems through big data analysis and data mining.

**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	Learn big data analysis and tools and how to visualize data to derive meaningful insights and communicate data-driven recommendations effectively.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	12345678	Lecture, Discussion, Publication, Practicum, Experience, Imitation	Study Assignments, Report(including oral and written), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	112/09/11~ 112/09/17	Course Introduction	

2	112/09/18 ~ 112/09/24	Introduction to Data Visualization & Setup the Development Environment of Tableau	
3	112/09/25 ~ 112/10/01	Data Sources and Data Transformation	
4	112/10/02 ~ 112/10/08	Corporate Visit	
5	112/10/09 ~ 112/10/15	Basic Visualizations in Tableau	
6	112/10/16 ~ 112/10/22	Interactive Dashboards	
7	112/10/23 ~ 112/10/29	Advanced Visualizations	
8	112/10/30 ~ 112/11/05	Geographic Visualizations	
9	112/11/06 ~ 112/11/12	Midterm Exam Week: Review and Discussions	
10	112/11/13 ~ 112/11/19	Dashboard Design (1)	
11	112/11/20 ~ 112/11/26	Dashboard Design (2)	
12	112/11/27 ~ 112/12/03	Interactive Storytelling with Data	
13	112/12/04 ~ 112/12/10	Data analysis	
14	112/12/11 ~ 112/12/17	Exploring Community Connectors and Extensions	
15	112/12/18 ~ 112/12/24	Sharing and Publishing Visualizations	
16	112/12/25 ~ 112/12/31	Group Project	
17	113/01/01 ~ 113/01/07	Group Project	
18	113/01/08 ~ 113/01/14	Final Product Presentation	
Key capabilities			
Interdisciplinary			
Distinctive teaching			

Course Content	Logical Thinking
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Textbooks
References	
Grading Policy	<p>◆ Attendance : 15.0 %    ◆ Mark of Usual : 45.0 %    ◆ Midterm Exam : %</p> <p>◆ Final Exam : %</p> <p>◆ Other (Presentation) : 40.0 %</p>
Note	<p>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>.</p> <p><b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b></p>