Course Title	LINEAR ALGEBRA	Instructor	CHU, LIOU
Course Class	TEIDB2A DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 2A	Details	◆ General Course ◆ Required ◆ One Semester ◆ 3 Credits
Relevance to SDGs	SDG4 Quality education SDG9 Industry, Innovation, and Infrastructure		

Departmental Aim of Education

Ⅰ. Comprehend professional knowledge.

Ⅱ. Acquire mastery of Practical Skills.

Ⅲ. Establish creative achievement.

Subject Departmental core competences

A. Programming and application ability.(ratio:15.00)

B. Mathematical reasoning ability.(ratio:40.00)

C. Implementing computer systems ability.(ratio:15.00)

D. Computer networking application skills.(ratio:15.00)

E. Professional skills for information technology (IT) industry.(ratio:15.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:5.00)

2. Information literacy. (ratio:20.00)

3. A vision for the future. (ratio:10.00)

4. Moral integrity. (ratio:20.00)

5. Independent thinking. (ratio:30.00)

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

7. A spirit of teamwork and dedication. (ratio:5.00)

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

Course Introduction	The course gives an introductory concept of Linear Algebra with examples and application contents in order to establish foundations for advanced courses.

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	1. Linear System 2.Matrices 3.Determinant 4.Vector Space 5.Inner Product Space 6.Linear Tranformation	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	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	114/09/15 ~ 114/09/21	Ch 1. System of Linear Equations and Matrices	
2	114/09/22 ~ 114/09/28	Ch 2. Determinants	
3	114/09/29 ~ 114/10/05	Ch 3. Vectors in 2-Space and 3-Space	
4	114/10/06 ~ 114/10/12	Ch 3. Vectors in 2-Space and 3-Space	

5	114/10/13~ 114/10/19	Ch 3. Vectors in 2-Space and 3-Space	
6	114/10/20~ 114/10/26	Ch 4. Euclidean Vector Spaces	
7	114/10/27~ 114/11/02	Ch 4. Euclidean Vector Spaces	
8	114/11/03~ 114/11/09	Ch 4. Euclidean Vector Spaces	
9	114/11/10~ 114/11/16	Midterm Exam Week	
10	114/11/17~ 114/11/23	Ch 5. General Vector Spaces	
11	114/11/24~ 114/11/30	Ch 5. General Vector Spaces	
12	114/12/01~ 114/12/07	Ch 5. General Vector Spaces	
13	114/12/08~ 114/12/14	Ch 5. General Vector Spaces	
14	114/12/15~ 114/12/21	Ch 6. Inner Product Spaces	
15	114/12/22~ 114/12/28	Ch 6. Inner Product Spaces	
16	114/12/29~ 115/01/04	Final Week of Diverse Assessments	
17	115/01/05~ 115/01/11	Final Week of Diverse Assessments/Flexible Teaching Week for Teachers	
18	115/01/12~ 115/01/18	Flexible Teaching Week for Teachers	

Key capabilities	
Interdisciplinary	
Distinctive teaching	
Course Content	Logical Thinking

Requirement	1. Attendance of all classes is required. 　　請務必出席所有課程。 2. Any absence will result in 1 to 3 final points of "Participation and performance" deducted. Please call me or text me before class. 　　病假事假扣「課堂表現」佔總分1至3分，請上課前通知老師。 3. Absence without leave will result in 4 final points of "Participation and performance" deducted. 　　曠課每次扣「課堂表現」佔總分4分。 4.Cheating or plagiarism will result in failure in the course. 　　作弊、抄襲會導致本課程不及格。 5.Wearing slippers during class is not allowed. 　　上課請勿穿著拖鞋。 6. Late arrival, early departure (over 20 minutes), and the stated inappropriate behavior will result in 4 final points of "Participation and performance" deducted. 　　遲到、早退 (超過20分鐘)，及前述不當行為每次 　　扣「課堂表現」佔總分4分。 7. There will be at least 2 assignments and 4 quizzes. 　　本課程至少有4次小考與2次課堂作業。 8. Quizzes are given without notice. 　　小考不會事先通知。 9. Attendances of Mid-term Exam and Final Exam are compulsory. Absence will result in 20 final points of "Participation and performance" deducted. 　　請務必參加期中考與期末考，缺席將導致「課堂表現」0分(佔總分20分)。
Textbooks and Teaching Materials	Self-made teaching materials:Presentations, Handouts, Worksheets Using teaching materials from other writers:Textbooks, Presentations
References	
Grading Policy	◆ Attendance：　　　　　%　◆ Mark of Usual：40.0 %　◆ Midterm Exam： 20.0 % ◆ Final Exam： 20.0 % ◆ Other〈Participation & Perf〉：20.0 %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.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. ※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.