Course Title	COMPUTER AND NETWORK SECURITY	Instructor	FU-YI HUNG
Course Class	TEIDB3P DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM), 3P	Details	◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG4 Quality education		

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:10.00)

B. Mathematical reasoning ability.(ratio:30.00)

C. Implementing computer systems ability.(ratio:30.00)

D. Computer networking application skills.(ratio:10.00)

E. Professional skills for information technology (IT) industry.(ratio:20.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:10.00)

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:10.00)

6. A cheerful attitude and healthy lifestyle. (ratio:10.00)

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

8. A sense of aesthetic appreciation. (ratio:10.00)

	This course provides the basic principles and standards of computer and network security. It includes the following topics: computer security technology and principles, management issues, cryptographic algorithms and internet security.
Course Introduction	

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	Students should be able to understand and apply the fundamental security technology and principle	Cognitive
2	Students should be able to understand and apply the cryptographic algorithms	Cognitive
3	Students should be able to understand and apply the security management architecture	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	Testing
2	ABCDE	12345678	Lecture	Testing
3	ABCDE	12345678	Lecture	Testing

Course Schedule

Week	Date	Course Contents	Note
1	111/09/05 ~ 111/09/11	Introduction	

2	111/09/12~111/09/18	Introduction	
3	111/09/19~111/09/25	Malware	
4	111/09/26~111/10/02	Malware	
5	111/10/03~111/10/09	Malware	
6	111/10/10~111/10/16	Symmetric-Key Encipherment	
7	111/10/17~111/10/23	Symmetric-Key Encipherment	
8	111/10/24~111/10/30	Asymmetric-Key Encipherment	
9	111/10/31~111/11/06	Asymmetric-Key Encipherment	
10	111/11/07~111/11/13	Midterm Exam Week	
11	111/11/14~111/11/20	Asymmetric-Key Encipherment	
12	111/11/21~111/11/27	Message Integrity and Message Authentication	
13	111/11/28~111/12/04	Message Integrity and Message Authentication	
14	111/12/05~111/12/11	User Authentication and Access Control	
15	111/12/12~111/12/18	User Authentication and Access Control	
16	111/12/19~111/12/25	Firewalls, Intrusion Detection and Prevention Systems	
17	111/12/26~112/01/01	Firewalls, Intrusion Detection and Prevention Systems	
18	112/01/02~112/01/08	Final Exam Week	

Requirement	Cheating or plagiarism will receive a semester grade of zero for this course. 作弊或抄襲者學期總成績為零分。 If a student's class absence reaches one-third of the total class hours (in a semester) for a particular course, the course instructor will notify the Office of Academic Affairs, and the student will not be allowed to take part in the remaining course examinations and will receive a semester grade (for that course) of zero. 學生對某一科目之缺課總時數達該科全學期授課時數三分之一，經該科教師通知教務處時即不准參加該科目之考試，該科目學期成績以零分計算。
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	

References	Cryptography and Network Security, 1st ed, Behrouz Forouzan, McGraw-Hill Education, 2007
	Computer Security: Principles and Practice, 4th ed, William Stallings and Lawrie Brown, Pearson, 2017
	Introduction to Computer Security, 1st ed, Michael Goodrich and Roberto Tamassia, Pearson 2010
	CompTIA Security+ Study Guide: Exam SY0-501, 1st ed, Emmett Dulaney and Chuck Easttom, Sybex, 2017
Number of Assignment(s)	**6** (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 10.0 % ◆ Mark of Usual：30.0 % ◆ Midterm Exam： 25.0 % ◆ Final Exam： 25.0 % ◆ Other〈Assignments〉：10.0 %
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.**