

Introduction to Network Security

Basic Course Information			
Course Number	0205081	Subject Category	Compulsory (C)
Class Format	Lecture	Credit Type and Number of Credits	1
Department	Computer	Student Category	Year 3
Period of Study	Semester 2	Classes per Week	2
Required Materials	Cisco Networking Academy		
Instructor	Prasat Tanjungsudin	Mio Kobayashi	Tanapon Keatsanarn

Course Objective			
The course provides students with introduction and basic knowledge of Cloud system, Web application, Introduction of information security, protocol, Authentication techniques, Security measure.			

Evaluation/Rubric	Ideal Level of Achievement: (Very Good)	Standard Level of Achievement: (Good)	Unacceptable Level of Achievement: (Fail)
Understanding the CIA	Explain the meaning and specific examples of each of the CIA in cybersecurity.	Explain the meaning of each of the CIA in cybersecurity.	Cannot explain CIA in cybersecurity.
Explain Firewalls	Explain the function and purpose of each layer of the firewall.	Explain the function and purpose of several firewalls.	Cannot explain about any firewalls.
Understanding Security Vulnerabilities	Explain each Security Vulnerabilities	Explain some Security Vulnerabilities	Cannot Explain any Security Vulnerabilities

Relationship with Learning Outcomes	
C(A) Ability to understand the computer network system and security methods and to implement the safe system within networks, servers, computers, and connected devices.	
Please change	
Please change	

Teaching Method	
Outline:	Using CISCO Networking Academy
Class Format:	Lecture and some experiment
Please Note :	Contents can be adjusted depending on the situation

Course Plan		Goals	Related MCC
Semester 2	Contents and Method of Course		
1st week	Guidance (Online)	Understanding how to use CISCO Networking Academy	V-D 7 89
2nd week	The Need for Cybersecurity Quiz (Online)	Understanding needs for cybersecurity Understanding CIA, Hackers, Threat, Personal data, Organizational data and Cyberwarfare.	V-D 8 100 V-D 8 104
3rd week	The Need for Cybersecurity Labwork	Check your computer status for example, hash and MD5 Understanding Security breach.	V-D 8 102
4th week	Attacks, Concepts and Techniques lecture	Understanding Security Vulnerabilities, Malware, Phishing, DDoS, Social Engineering and SEO Poisoning.	V-D 8 100 V-D 8 104
5th week	Holiday	Holiday	
6th week	Attacks, Concepts and Techniques lecture and Quiz	Experiment the process for Attack, Concepts and Techniques, Understanding Blended Attack and tool kits.	V-D 8 101
7th week	Protecting Your Data and Privacy Lecture	Experiment the process for Attack, Concepts and Techniques	V-D 8 101
8th week	Protecting Your Data and Privacy Lecture and Quiz	Understanding Public Key Infrastructure	V-D 8 102
9th week	Holiday	Holiday	
10th week	MidtermExam	MidtermExam	
11th week	Protecting Your Data and Privacy Lecture and Labwork	Experiment protect methods on cloud and Understanding Public Key Infrastructure	V-D 8 102
12th week	Protecting Your Data and Privacy Labwork	Experiment protect methods	
13th week	Will Your Future Be in Cybersecurity Quiz	Understanding Firewall, Port scanning.	V-D 8 75
14th week	Will Your Future Be in Cybersecurity Labwork	Understanding OSI and TCP/IP layer model	
15th week	Will Your Future Be in Cybersecurity Labwork	Experiment OSI reference model and each layer firewalls	
16th week	Will Your Future Be in Cybersecurity Labwork	Experiment cybersecurity techniques IDS and IPS	
17th week	Will Your Future Be in Cybersecurity Labwork	Wrap up and do cybersecurity	
18th week	Prepare for FinalExam	Prepare for FinalExam	
19th week	FinalExam	FinalExam	
20th week	Return Exam sheet and feedback	Return Exam sheet and feedback	

	Examination	Quiz	Final Evaluation between systems	Report / Portfolio	Other
Basic Ability	10	10	10		
Technical Ability	10	10	10		
Interdisciplinary Ability	20	10	10		