

University of Computer Studies, Yangon
Faculty of Information Science
2019-2020 Academic Year
Diploma in Computer Science

Subject Code	IS-405	Subject Name	Information Security-IV
Credit point	3	Course Coordinator	Faculty of Information Science
Online Lecture Hour	60 hours	Semester	First
Practical hour	24 hours		
Tutorial Test hour	4.5 hours		

Course Description

This module aims to motivate the topic of host security, data security, information security and application security. And the basic information security framework is introduced. In this framework, the main components consisting of assets, vulnerabilities, threats and controls are explained. The rest of the course is devoted to explaining different kinds of attacks and how to defend these attacks. At the end of the course, student should have an awareness of how information security concerns have evolved in our society and how they can use the basic framework to respond to attacks.

Course Objectives

- To understand the importance of information security
- To understand the basic security model
- To know most common vulnerabilities, threats and controls
- To understand host application and data security

Learning Outcomes

At the end of this module, the successful student will:

- Understand how information security and assurance is important and which impact on organizations
- Understand the elements of basic security framework, relationships between the elements of the basic information security framework and common classification of information security controls
- Get clear understanding of the different of attacks, attackers and the defenses against attacks
- Understand how to secure host application and data security

Course Outlines

- Introduction to Security
- Understanding Information Security and its importance
- Understanding the Information Security Framework
- Common Threats to Information Security
- Different Kinds of Attackers
- Difficulties in Defending against Attacks
- Defenses against Attacks
- How to Secure Host, Application and Data

Prerequisites

None

Main course website

<http://www.ucsy.edu.mm>

The assignments will be posted here, as will the lecture materials.

Learning Assessment

Exam	:	50%
Assignment	:	15%
Project	:	15%
Tutorial Test	:	5%
Online Quiz	:	5%
Practical Participation	:	10%

Textbooks

1. "SECURITY+GUIDE TO NETWORK SECURITY FUNDAMENTALS", Fifth Edition, CompTIA, Mark Ciampa, Ph.D
2. "INFORMATION SECURITY and IT RISK MANAGEMENT", 1st Edition, Wiley, Manish Agrawal, Alex Campoe and Eric Pierce, 2014

References Books

1. "Cyber Security", Michael Carter
2. "A History of Cyber Security Attacks", Bruce Middleton
3. "Information Security Fundamentals", Thomas R.Peltier

Course Policy

Assigned Readings: The student is expected to read Lectures and assignments to prepare for scheduled discussions of the material.

Attendance: The student is expected to attend orientation classes, online Lecture and Practical Class, the exam meetings, and scheduled project presentations. Regular class and/or online participation should ensure that expectations are understood, and provide feedback to monitor and assess progress. The student is responsible for accessing the course website to obtain assignments and related materials.

Participation: The student is expected to take part in regular class and online discussions too, implement and test lab assignments and assist class members with technical issues.

Lab projects: It is expected that the student will begin each project when assigned or as topics are approved, then present system components by the scheduled progress reporting dates. The Lab project schedule and book format are going to be confirmed during the lecture course.

Exams and Tutorial test: The student is expected to complete each exam and tutorial test at the scheduled time. All exams and tutorial are based upon all learning objectives to be reached before the scheduled date. Final Exam date is declared at the time table of course schedule and the tutorial test schedule are going to be confirmed during the lecture course.

Intellectual Honesty: By departmental policy, the discovery of plagiarism (i.e. copying from another's assignment paper or lab project) will result in a reduction of grade result.