

# **DLE 2083: INTRODUCTION TO SECURITY MANAGEMENT**

## **CHAPTER 13 INFORMATION, COMMUNICATION & CYBER SECURITY**

# Chapter 13: Learning Outcomes

- At the end of the topic, students should be able to:
  - Defines computer security.
  - Describes all types of computer security threats.
  - Defined information, ICTs, and cyber space.
  - Described the typical access vectors.
  - Defined the typical malicious activities.

# Information Security

- Information security includes the security of information in all its forms.
- Information technology normally refers to any electronic or digital means of holding or communicating information.
- Such as radios, telephones, and e-mail

# Cyber Space

- Cyber space best refers to digitally networked information and information technologies.
- The sources of cyber attacks are the human sources of the attacks.
- These sources include:
  - Official actors (such as spies)
  - Profit-oriented organized criminals
  - Terrorists
  - Commercial competitors
  - Ideologically motivated hackers

# Computer Security

- Computer security is the protection of computer systems from the theft or damage to hardware, software, and information.



# Why is Computer Security Important?

- Computer Security allows the organization to carry out its business operation by:
  - Enabling people to carry out their daily tasks and jobs.
  - Supporting critical business process.
  - Protecting personal and sensitive information.

# Types of computer security threats

## 1. Trojan

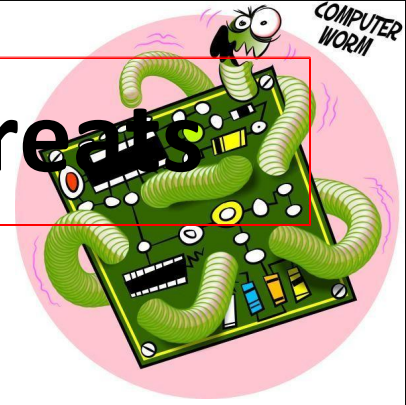
- Most of the popular banking threats come from the Trojan family such as Zeus and SpyEye.



## 2. Virus

It is a malicious program where it replicates itself and aim to only destroy a computer. The ultimate goal of a virus is to ensure that the victim's computer will never be able to operate properly.

# Types of computer security threats



## 3. Worms

- One of the most harmless threats where it is program designed only to spread.

## 4. Spyware

- Is a Malware which is designed to spy on the victim's computer. If you are infected with it, probably your daily activity or certain activity will be spied by the spyware and it will find itself a way to contact the host of this malware.



# Types of computer security threats

- Others types of computer security threats include:
  - Keylogger
  - Adware
  - Backdoor
  - Wabbits
  - Exploit
  - Phishing



# Steps to protect computer



**Back up** your files regularly.

**Read** Web site privacy statements.

**Close** pop-ups using red “X”.

**Think** before you click.

# Back up Your Files



- Save to CD/DVD, a USB drive, or other external source.
- Use a Web-based backup service, e.g. Google drive or your own email.

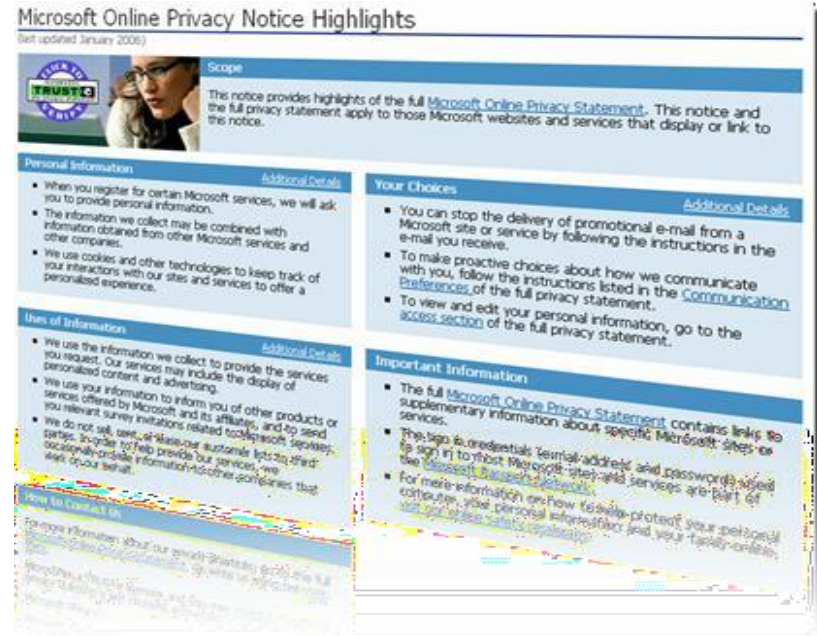
# Think Before You Click

- Be cautious with e-mail attachments and links.
- Only download files from Web sites you trust.



# Read Privacy Statements

Understand what you are getting before you agree to download or share your personal information.



# Use the Red “X” to Close Pop-ups



- Always use the red “X” in the corner of a pop-up screen.
- Never click “yes,” “accept,” or even “cancel,” because it could be a trick that installs software on your computer.

# If your identity is stolen...What to do??

- Report it to the relevant parties such as bank, police, etc.
- Deactivate and stop all bank account and transaction.
- Follow up via e-mail.
- Change all passwords

