Unit Plan

Unit Code: CSI1101

Unit title: Computer Security

Semester: 1

Year: 2015

Study Mode: On-campus & Off-campus

Lecturer/tutor information

Name	Mr Patryk Szewczyk
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Consultation arrangements	Please use email as a first point of contact outside of class. Always send university-related emails from your ECU student email address, and be sure to include the unit code in the subject line of your email. I aim to respond to emails within 24 hours.

Table of Contents

Introduction

This unit covers the threats to computer systems and the countermeasures that can be put in place to minimise them. The areas covered are: aims of computer security and general computer security threats, malicious code including viruses, Trojan horses, worms and other forms of hostile executable code. Students also consider the history and fundamental concepts of encryption, current encryption techniques and the social issues that surround the use of such techniques.

Learning Outcomes

On successful completion of this unit students should be able to:

1. discuss the aims of computer security and analyse security breaching attacks in the context of these aims;
2. explain the history of encryption and the application of current forms of encryption, their role in society and the issues that surround their use;
3. identify a range of network and Internet related security issues including current types of attacks and appropriate countermeasures;
4. explain the range of surveillance techniques and countermeasures;
5. investigate a range of security issues relating to operating systems and PC systems;
6. outline and develop the skills required to stay informed of current security issues as new attacks and countermeasures continue to be reported.

Unit Textbook and Readings

Textbook:

Goodrich, M. T., & Tamassia, R. (2011). *Introduction to Computer Security.* Boston, MA: Pearson Education.

Readings:

Each module contains a recommended set of readings and videos that should be read and watched.

Assessment Information

Assessment Item	Due Date	Percentage
Assignment 1	April 13th (9:00am)	20%
Assignment 2	May 18th (9:00am)	25%
Test 1	May 11th - May 17th	2.5%
Test 2	May 25th - May 31st	2.5%
Exam	TBA	50%

Unit Schedule

Week	Week Beginning	Topic
1	23rd February	Introduction and Aims of Security
2	2nd March	Risks, Threats, Threat Agents
3	9th March	Malware
4	16th March	Cryptography 1
5	23rd March	Cryptography 2
	30th March	*Make-up week (no classes)*
	6th April	*Mid Semester Break (no classes)*
6	13th April	Identification and Authentication
7	20th April	Hardware and Data Security
8	27th April	Operating System Security
9	4th May	Application Security
10	11th May	Network Security
11	18th May	Web Security
12	25th May	Exam Revision/Information

Assessment Information

Referencing

Referencing is a requirement in all your academic work. It is a formal way to let your lecturer and tutor know exactly where you found the information that supports your argument. It also acknowledged the original authors' work and ideas that you have used in your own work. Failure to reference your work appropriately is taken seriously and is known as plagiarism. Not citing your work correctly can result in a fail or being expelled from the university.

ECU mainly uses the American Psychological Associated (APA) style of referencing. The APA style has strict rules which you must follow. The ECU Referencing Guide has instructions on how to use the APA style appropriately and can be obtained from http://www.ecu.edu.au/centres/library-services/workshops-and-training/referencing/related-content/downloads/ECU-Referencing-Guide-2014-July-update.pdf

Academic Misconduct (including plagiarism)

ECU regards academic misconduct in any form as unacceptable. Academic misconduct may include but is not limited to plagiarism, unauthorised collaboration, cheat in assessments, and/or theft of another students' work. Any of the aforementioned offenses will be dealt with in accordance with the ECU Rule 40 Academic Misconduct (including Plagiarism) Police. Additional information on academic misconduct can be obtained via http://www.ecu.edu.au/__data/assets/pdf_file/0010/378316/academic_misconduct_rules_students.pdf

Late Assignment Submission

Each assignment and test has a specific date by which it must be completed to avoid being penalised. Should you require an extension to an assignment you must apply in writing to your lecturer or tutor before the assignment due date with the appropriate supporting documentation. Normal occupational commitments

and extracurricular activities are not accepted as grounds for granting extra time because you are expected to plan ahead. If you submit the assignment after the due date without an agree extension, or beyond the date of an agreed extension, you will usually incur a penalty. In accordance with the University's regulations, the penalty is 5% (of the maximum mark available) for each working day that your assignment is late. If your assignment is submitted more than one week late, you may be awarded a mark of zero.

Email Protocol

All emails should be sent from your ECU student email account only. Utilising alternative email accounts may result in your lecturer or tutor missing your email due to anti-spam filters that are in place. When sending an email to your lecturer or tutor you should also ensure that your email contains the following:

- A subject field that contains the unit code, and a brief note describing the nature of your query (i.e. CSI1101 – Assignment 1 Question). Without a unit code it is difficult for your lecturer or tutor to identify which unit the query relates to. This may unnecessarily delay a reply or result in your query remaining unanswered.
- Include any previous messages that you have had with your lecturer or tutor.
- Address your lecturer appropriately by name.
- Provide sufficient detail about yourself in the email, including; your name in full, your student number, and whether you are an on-campus or off-campus student.

Lecturers and tutors will typically reply to your email within two business days of receiving the email. Your lecturer or tutor may in some instance request additional information from you before the query is resolved.