CS*4110 (Winter 2018) Computer Security

School of Computer Science University of Guelph, Guelph, Ontario, Canada.

Instructor:	Dr. Charlie Obimbo		
Office:	Reynolds Room 104 519 824-4120 x 52634		
E-mail:	cobimbo@uoguelph.ca		
Prerequisite:	CIS*3110		
Credit Hours:	0.5		
Lectures:	MWF 3:30 pm 4:20 pm.		
Room:	MINS 130		
Labs:	Wed 1:30 pm 2:20 pm.		
Room:	MINS 106		
GTA:	Kasiemobi (Esther) Maduabunachukwu		
GTA Office Hours:	TBD		
Final Exam:	Friday, April 20, 2018 7 p.m 9 pm.		
Office Hours:	Mon 11:00 a.m 12:50 p.m.		

Text: 1. Computer Security Fundamentals 3rd Edition, William (Chuck) Easttom, II. (2016), Pearson Education Company), ISBN-10: 0-7897-5746-X.

Text: 2. Security in Computing, (4th Ed.)

Charles Pfleeger and Shari Pfleeger, Prentice Hall.

1 Grading

Assignments (3)	20%	[Jan 24, Feb 9, Feb 27]
Tests (2)	20%	[Feb 16 th & March 9 th]
Project	20%	[April 11 th]
Presentation	10%	
Final Exam	30%	

If a student does all the assignments and gets more than 40% in all of them then the worst one be graded at 25% and the others will account for 75%, otherwise they will all be counted equally.

Important Dates:

Tests: February 16th, in class.

March 9th, in class.

Please note these two Dates as they will not be changed for anybody.

To Pass the course, the student has to get at least 50% in the Course work (projects assignments and presentation) and at least 50% on the Tests.

CourseLink

Please note that we will be using CourseLink for this course. // Check for announcements frequently. Also, read your general e-mail.

Impt Note: Students are responsible for all material presented in class and for announcements made both in class & by Electronic Means.

2 Resources

- a. Applied Cryptography, Second Edition, By Bruce Schneier, John Wiley & Sons, 1996.
- b. Patterson, Wayne, Mathematical Cryptography for Computer Scientists and Mathematicians, Roman and Littlefield.
- c. Building Secure Software: How to Avoid Security Problems the Right Way, by John Viega and Gary McGraw, Addison-Wesley, 2001

3 Course Description

This course is a practical survey of the principles and practice of information security. Topics include but are not limited to

- 1. encryption (symmetric and public key cryptography, key exchange, authentication),
- 2. security issues and threats (eavesdropping, impersonation, denial of service, viruses, worms, access violations, PKI),
- 3. system and network security,
- 4. intrusion detection,
- 5. access control (DAC, MAC, RBAC),
- 6. database security,
- 7. the common criteria, and
- 8. threat risk management.

Note that the final project paper may be sent for publication to venues like conferences or journals.

Academic Misconduct

The University of Guelph takes a very serious view of Academic Misconduct. Included in this category are such activities as cheating on examinations, plagiarism, misrepresentation, and submitting the same material in two different courses without written permission. Students are expected to be familiar with the section on Academic Misconduct in the Undergraduate Calendar, and should be aware that expulsion from the University is a possible penalty. If an instructor suspects that academic misconduct has occurred, that instructor has the right to examine students orally on the content or any other facet of submitted work. Moreover,

it is expected that unless a student is explicitly given a collaborative project, all submitted work will have been done independently.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement due to illness or compassionate reasons, please advise the course instructor (or other designated person) in writing, with name, address and e-mail contact. Where possible, this should be done in advance of the missed work or event, but otherwise, just as soon as possible after the due date, and certainly no longer than one week later.

Note: if appropriate documentation of your inability to meet that in-course requirement is necessary, the course instructor, or delegate, will request it of you. Such documentation will rarely be required for course components representing less than 10% of the course grade.