CMPT 352 - 02

An Introduction to Information Security

Department of Computer

Science University of

Saskatchewan 2016, Term 2

Course Description

Information Security - Students will be introduced to concepts of information security and assurance. Emphasis will be placed on real world issues and cases.

Prerequisites

Cmpt 270 or Cmpt 275

Lecture Information

Tuesday/Thursday 14:30 - 15:50 Physics 165

Lab Information

Students will be required to participate in simulated cyber security breach. This table top simulation will be scheduled on a Saturday in late March, tentatively planned for March 25, 2017. Two 3.5 hour sessions will be offered on a first come first served basis.

Instructor Information

Instructor: Dr. Lawrence Dobranski, P.Eng.

Contact: lawrence(dot)dobranski(at)usask(dot)ca

Office Hours: by appointment following class

Textbook Information

Suggested Text

Bosworth, Seymour & Kabay, Michel E. & (eds), Eric Whyne. (© 2014). *Computer security handbook, sixth edition*. [Books24x7 version] Available from *http://common.books24x7.com.cyber.usask.ca/toc.aspx?bookid=63501*.

Additional Readings

Additional recommended reading material from research journals and other grey-literature sources will be recommended with appropriate references or links provided. This will include media coverage of current cyber security breaches.

Policies

<u>Missed Examinations</u>

1. "Students who have missed an exam or assignment must contact their instructor as soon as possible. Arrangements to make up the exam may be arranged with the instructor. Missed exams throughout the year are left up to the discretion of the instructor if a student may make up the exam or write at a different time. If a student knows prior to the exam that she/he will not be able to attend, they should let the instructor know before the exam."
2. "Final exams - a student who is absent from a final examination through no fault of his or her own, for medical or other valid reasons, may apply to the College of Arts and Science Dean's office. The application must be made within three days of the missed examination along with supporting documentary evidence. Deferred exams are written during the February mid-term break for Term 1 courses and in early June for Term 2 and full year courses."

(2007/08. http://www.arts.usask.ca/students/transition/tips.php)

<u>Incomplete Course Work and Final Grades</u>

"When a student has not completed the required course work, which includes any assignment or examination including the final examination, by the time of submission of the final grades, they may be granted an extension to permit completion of an assignment, or granted a deferred examination in the case of absence from a final examination. Extensions for the completion of assignments must be approved by the Department Head, or Dean in non-departmentalized Colleges, and may exceed thirty days only in unusual circumstances. The student must apply to the instructor for such an extension and furnish satisfactory reasons for the deficiency. Deferred final examinations are granted as per College policy.

In the interim, the instructor will submit a computed percentile grade for the course which factors in the incomplete course work as a zero, along with a grade comment of INF (Incomplete Failure) if a failing grade. In the case where the instructor has indicated in the course outline that failure to complete the required course work will result in failure in the course, and the student has a computed passing percentile grade, a final grade of 49% will be submitted along with a grade comment of INF (Incomplete Failure).

If an extension is granted and the required assignment is submitted within the allotted time, or if a deferred examination is granted and written in the case of absence from the final examination, the instructor will submit a revised computed final percentage grade. The grade change will replace the previous grade and any grade comment of INF (Incomplete Failure) will be removed.

For provisions governing examinations and grading, students are referred to the University Council Regulations on Examinations section of the Calendar.

(2007/08 University of Saskatchewan Calendar/Exams & Grades/Grading System)

Department Policy on Academic Honesty

Students are expected to be academically honest in all of their scholarly work, including course assignments and examinations. Academic honesty is defined and described in the Department of Computer Science Statement on Academic Honesty (http://www.cs.usask.ca/content/academichonesty/academichonesty.jsp) and the University of Saskatchewan Academic Honesty Website (http://www.usask.ca/honesty).

The Student Academic Affairs Committee treats all cases according to the University Policy and has the right to apply strict academic penalties (see http://www.usask.ca/university_secretary/honesty/academic_misconduct.php).

Examinations with Disability Services for Students (DSS)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Disability Services for Students (DSS) if they have not already done so. Students who suspect they may have disabilities should contact DSS for advice and referrals. In order to access DSS programs and supports, students must follow DSS policy and procedures. For more information, check http://students.usask.ca/health/centres/disability-services-for-students.php, or contact DSS at 966-7273 or dss@usask.ca.

Students registered with DSS may request alternative arrangements for mid-term and final examinations. Students must arrange such accommodations through DSS by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by DSS.

Student Supports

Student Learning Services (SLS) offers assistance to U of S undergrad and graduate students. For information on specific services, please see the SLS web site https://www.usask.ca/ulc/.

The Student and Enrolment Services Division (SESD) focuses on providing developmental and support services and programs to students and the university community. For more information, see the SESD web site http://www.usask.ca/sesd/.

Student Evaluation

1) Grading Scheme: see the marking section

2) Required coursework

A student must write both exams (midterm and final) to pass the course. Failure to average 50% on both exams will result in an automatic failure in the course. In certain rare circumstances, a student who, due to a reasonable error or unusual circumstance, misses the midterm examination may, with written permission of the instructor, undertake a makeup examination or have the midterm marks moved to the final examination. In such a case, the student must achieve a 50% average in the final examination to pass the course.

3) Attendance expectations

You are expected to attend all lectures and the cyber breach simulation. Notes on the lectures, or simulation will not necessarily be made available by the instructor, so if you do miss a class it is up to you to catch up with the help of one, or more, of your peers.

4) Posted Lecture Outlines

While some lecture outlines will be posted in advance of some lectures, these notes are expected to be viewed as an aide to the student in following the lecture. Often material introduced at lecture will not be specifically mentioned in posted notes; students are responsible at examination for all materials covered in the course, introduced at lecture or in assigned labs and/or readings.

IMPORTANT! Please read:
1. All students must be properly registered in order to attend lectures and receive credit for this course.
2. Failure to write the final exam will result in failure of the course.
3. Failure to complete required course work without written exemption will result in failure of the course.
4. Students should expect reading assignments in each week of the class. It has been the experience of the instructor that failing to keep up with course reading often results in poor performance at examination (even, and perhaps especially, when the examination was set as 'open book').

Marking

Mid term 15%

Final 50%

Tutorial Assignments 15%

Lab – Cyber Breach Simulation 20%

The following marking structure defines CMPT352 marking:

NOTE: Good quality work is expected from students. Average quality good work is worth a 7/10. To get a mark beyond a 7 on a question requires going above and beyond average quality good work, demonstrating synthesis of the course material.

10 - Excellent
9 - Outstanding
8 - Very Good
7 - Good
6 - Weak
5 - Poor

<5 - Very Major Problems

It is expected that most will range between 6 and 9 (on each question) but that a few may receive marks outside these bounds.

Information Security is an evolving science. Students are expected to demonstrate critical thinking skills based on synthesis of the course material. The necessary background and understanding will be gained throughout the term.