



COURSE SYLLABUS

COURSE TITLE: INFORMATION SECURITY

TERM & YEAR:

COURSE & SECTION NUMBER: INF 343

TIME & PLACE:

NUMBER OF CREDIT HOURS: 3-0-3

INSTRUCTOR:

OFFICE LOCATION/HOURS:

OFFICE PHONE:

EMAIL:

COURSE DESCRIPTION: Principles of information security, including concepts and theory of security policies, access control methods, site security, information security, system security, user security, application security, and managing security functions through cryptographic services, protocols, authentication, authorization, and access control technologies.

PREREQUISITES: CSIT 223 Network Management

REQUIRED TEXT:

REFERENCES:

OTHER MATERIALS: VMware Workstation, Metasploitable 2 (provided in class)

LEARNING OUTCOMES: Upon completion of this course, the student should be able to:

1. Explain encryption algorithms that provide confidentiality.
2. Explain hashing algorithms that provide integrity.
3. Explain authentication, including perimeter security.
4. Compare and contrast the four factors of authentication including something you know, something you have, something you are, and something you know.
5. Explain digital signatures as a method of non-repudiation.
6. Demonstrate the security of wired and wireless networks.
7. Describe the importance of redundancy and disaster recovery as they relate to availability.
8. Create a risk assessment to create the security policies and procedures necessary to protect a computer network.

COURSE REQUIREMENTS:

ATTENDANCE/PARTICIPATION: Indicate your class attendance policy. (Remember that for Trine University to receive federal financial aid for its students, faculty are expected to take roll and be able to verify when students are and are not attending class.)

You are expected to attend all classes. Your attendance record affects your grade in class. Per department policy, every three unexcused absences will result in the lowering of your grade by one letter. Excused absences require a doctor's note (or other acceptable documentation) for sickness or may be a pre-approved university sponsored event. If you miss a class, it is your responsibility to get notes and materials that were handed out. Arrangements for ANY makeup work must be made in advance or you will receive a zero for the work.

GRADING / EVALUATION: Indicate your grading procedure and the type of evaluations you plan to use.

OTHER POLICIES: You may wish to indicate policies such as the consequences of academic misconduct, methods of communication, student expectations, instructor expectations and any other policy that needs to be clarified at the beginning of the course.

OTHER POLICIES:

ACADEMIC MISCONDUCT

The University prohibits all forms of academic misconduct. Academic misconduct refers to dishonesty in examinations (cheating), presenting the ideas or the writing of someone else as one's own (plagiarism) or knowingly furnishing false information to the University by forgery, alteration, or misuse of University documents, records, or identification. Academic dishonesty includes, but is not limited to, the following examples: permitting another student to plagiarize or cheat from one's own work, submitting an academic exercise (written work, printing, design, computer program) that has been prepared totally or in part by another, acquiring improper knowledge of the contents of an exam, using unauthorized material during an exam, submitting the same paper in two different courses without knowledge and consent of professors, or submitting a forged grade change slip or computer tampering. The faculty member has the authority to grant a failing grade in cases of academic misconduct as well as referring the case to Student Life.

PLAGIARISM

You are expected to submit your own work and to identify any portion of work that has been borrowed from others in any form. An ignorant act of plagiarism on final versions and minor projects, such as attributing or citing inadequately, will be considered a failure to master an essential skill and will result in an F for that assignment. A deliberate act of plagiarism, such as having someone else do your work, or submitting someone else's work as your own (e.g., from the Internet, fraternity file, etc., including homework and in-class exercises), will at least result in an F for that assignment and could result in an F for the course.

E-DEVICE POLICY

Use of electronic devices including smart watches and cell phones is prohibited during exams or quizzes unless directly allowed by the instructor.

DIGITAL MEDIA DEVICES

Our learning environment, including classrooms and public lecture halls, should be free from disruptions from personal communication and media devices. In such settings, cell phones and all other such devices must be turned off. Camera cell phones must be turned off in locker rooms and other such private places. The use of a computer in the classroom is a privilege, not a right. The student must understand (and resist) the temptation to "surf the 'net'" or engage in ANY activity not related to the classroom topic and discussion. Violations of the Trine University Information Technology Security Policy may result in disciplinary action by the University.

ADDITIONAL INFORMATION: You may wish to include other information here. Include information that you would repeat in lessons, practices, policies, etc.

ACADEMIC RESOURCES:

There are several academic services that may be useful to you during the semester along with the library and assistance with digital resources that can found in the University Center LINK.

The links to information here include:

- *Writing Center:*
- *Math Help Sessions:*
- *Study Sessions:*
- *Parent and Family Support and Parent Newsletter:*
- *Accessibility and Accommodations:*

They are accessible on one page at the following link:

<https://www.trine.edu/academics/success/academic-support-services.aspx>