

CSC 580 (Selected Topics): Intrusion and Anomaly Detection

Instructor	Dr. Lisa Frye
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Course web site: <http://faculty.kutztown.edu/frye/secure/CSC580IAD>

D2L: <https://kud2l.kutztown.edu/>

Office Hours

M 1:30 – 3:30pm

H 9:30 – 11:00am

T 9:30 – 11:00am

Other times by appointment



COURSE INFORMATION

Meetings M 6:00-8:50pm. OM158.

Dates Midterm: 3/6. Last day 'W': 4/3. Final: 5/4

Course Description

This course covers important issues in the detection of intrusions and anomalies. Topics covered include intrusion detection systems, intrusion prevention systems and anomaly and misuse detection on hosts and networks. A variety of tools, techniques, and methodologies for monitoring computer systems and networks will be discussed. Students will learn how to identify and respond to computer system and network intrusions. 3 sh. Prerequisites: none.

Course Objectives

- Describe Intrusion Detection Systems (IDSs) and Intrusion Prevention Systems (IPSs).
- Identify anomalies in computer systems and network traffic.
- Explain the implementation details of intrusion detection systems and methodologies.
- Analyze intrusion detection approaches and systems.
- Develop techniques and tools to create intrusions.
- Implement intrusion detection practices and systems.

Text None required. Text determined by the project.

COURSE GRADE

Grading Policy	Exam	25%
	Project	65%
	Class Participation, includes homework	10%

The University Scale will be used in determining letter grades. Plus/minus grading will be used. In order to receive a passing grade for the course, you must have a passing test average.

Exams

There will be one exam. Exams must be taken when scheduled unless I have approved an alternative time PRIOR to the scheduled time. Missed exams will be handled on an individual basis and will require written documentation for the absence. University policy will be followed. **Make-up for a missed exam will occur the last week of classes for the semester. It is the student's responsibility to schedule a time for any make-up exams!**

- Readings** It is expected that you will complete all readings and prepared to discuss them in class.
- Assignments** Assignments will be posted on the course web site. Late projects will be accepted but will be penalized 10% for each calendar day it is late.
- All assignments must be **typed** and turned in via D2L. Assignments may be photo-copied and retained for program accreditation. Include the following information at the top of **ALL** assignments: **your name, date, the course (CSC411), Dr. Frye and assignment number.**

POLICIES

- Email** The best way to contact me is by e-mail (frye@kutztown.edu). When sending me e-mail, please indicate the course number in the subject line by putting it in brackets before your subject. For example, if you are in 580, the following may be the subject:
[CSC580] Help with lab #2
- Documentation** The computer science documentation standard must be followed for software assignments. http://cs.kutztown.edu/pdfs/Documentation_Standard.pdf
- Attendance** Regular class attendance and participation are expected and highly encouraged. Students are responsible for all material covered in class.
- Class Participation** This course is intended to involve a lot of class discussion. Every student is expected to participate in the class discussions. Attendance, completed homework and doing the readings do not constitute class participation. Students must participate in the discussions, voluntarily.
- Academic Dishonesty** All students should familiarize themselves with the [Computer Science Department Academic Integrity Policy](#). Any student copying work or giving work to another student will receive a zero for that assignment and will be referred to the department chairperson.
- Classroom Etiquette** Respect for your classmates, instructor, and the class is expected. Please come to class on time and prepared to learn. Coming and going during class should only occur in unavoidable situations. **Electronic devices should be neither seen nor heard** (unless used for class instructions, notes, etc.).
- Students with Disabilities** Students with diagnosed disabilities or special needs that require accommodations for this course must first contact the Disability Services Office, located in the Office of Human Diversity at 215 Stratton Administration Building. Do this as soon as possible so that we may have a dialogue as to your needs and the recommended accommodations.

Note: This syllabus is subject to change at the discretion of the instructor.