CptS 425/580 — Network Security
Washington State University, Tri-Cities
Fall 2005

Instructor: A. David McKinnon, Ph.D.
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Schedule: Tues/Thurs 17:45–19:00, TWST 248
Office Hours: By appointment, typically either before or after class
Website: http://www.tricity.wsu.edu/~mckinnon/cpts425/

Prerequisites: CptS 360.

Catalog Desc.: Practical topics in network security; policy and mechanism; intrusion detection, prevention, response; cryptography.


Policies: Academic Integrity: Neither plagiarism nor cheating will be tolerated in this class. Established university policies will be followed for all cases of plagiarism/cheating. (The EECS policy is located at: http://www.eecs.wsu.edu/~syllabus/eeungrad/academic-integrity.html). Academic dishonesty will result in a failing grade for the assignment, project, or exam in question.

Code of Conduct: The ACM Code of Ethics and Professional Conduct and the IEEE Code of Ethics will serve as conduct guides for this class. In particular, all members of the class will be treated with respect and courtesy.

Disability Accommodations: Reasonable classroom adjustments/accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodations needed for the course. All classroom academic adjustments/accommodations must be approved through the Disability Services Coordinator, located in room 269D West Building, 509-372-7351. Late notification may mean that the requested accommodations might not be available.

Course Overview
CptS 425/580 will cover the following topics.
• Introduction to Computer/Network Security
• Security Policies
• Basic Cryptography
• Assurance
• Malicious Logic
• Intrusion Detection
• System & Network Security

For more details on the course schedule, please see the detailed course schedule located on the class website.
Grading Policy
The overall class grade will be broken down as follows:

**CptS 425**
- 20% Assignments and Homework\(^1\)
- 25% Programming Exercises
  (Cryptography; Covert Channel or Man-in-the-Middle; Intrusion Detection)
- 6% Network Security Classroom Discussions
  (Lead two ~5 minute classroom discussions on a recent network security news item)
- 20% Mid-term Exam\(^2\)
- 25% Final Exam\(^2\)
- 4% Discretionary points\(^3\)

**CptS 580**
- 85% CptS 425 Requirements
- 15% Research Paper

*Unless otherwise specified, all assignments, projects, exams, and other work in this class should be your own, individual effort.*

**Notes:**
\(^1\) Late work will be penalized 15% per day, unless otherwise noted.
\(^2\) Makeup exams will not be given without prior authorization or written documentation verifying that the student was unable to take the exam as scheduled. Unexcused missed exams will earn a ‘zero’. Work-related obligations and personal emergencies are included in the valid reasons for missing an exam.
\(^3\) Discretionary points will be awarded on the basis of class participation and professional conduct. Software engineering requires both good written and oral communication skills. Discretionary points are intended to help encourage this via productive classroom discussions.

\(^4\) The grading scale is tentative. It will not be revised upwards, but may revised downwards at the instructor’s sole discretion. (If everyone has a raw score over 93%, everyone will receive an ‘A’. However, if the highest raw score is 88%, the scale will likely be revised downward so that an ‘A’ or ‘A-’ will be given instead of a ‘B+’.)

**Important Dates**
- Aug 23  First day of class
- Sep 5  Labor Day — All University Holiday
- Nov 11  Veterans’ Day — All University Holiday
- Nov 21-25  Thanksgiving Vacation
- Dec 12-16  Finals Week

**Assignments, Homework, and Programming Exercises**
From time to time, assignments, homework, and programming exercises will be given out in class. Details about these assignments will be given in class and also posted on the class web site.

*E-mail will be used for official communication in this class. Please check your e-mail.*