Syllabus for COMP204/INST290: Information Security and Cyber Warfare
Spring 2013
Dickinson College
Instructor: John MacCormick

Goals

- Understand the theory and practice of cyber power and cyber warfare
- Understand fundamental concepts of computer and network security, cryptography, and software vulnerabilities
- Improve skills for writing about issues that involve both technology and policy considerations
- Gain rudimentary practical experience of performing and defending against security exploits

Teaching methods

- Class discussions of readings
- Lectures describing technical and theoretical concepts
- Practical computer lab sessions (no programming experience is required)

When and where

- Classes: Tuesday and Thursday 9:00–10:15am, Tome 122
- Office hours: see the instructor's webpage

Books

Required:
- Cyberpower and National Security. Edited by Franklin D. Kramer, Stuart H. Starr, and Larry Wentz. Potomac Books, 2009. ISBN-10: 1597974234

- Cyber War: The Next Threat to National Security and What to Do About It. Richard A. Clarke and Robert Knake. Ecco, hardback 2010, paperback 2012 – either is fine. ISBN-10: 0061962244

Recommended (optional):
- Nine Algorithms That Changed the Future. John MacCormick. Princeton University Press, 2012. ISBN-10: 0691147140

Additional background (optional):
- Elementary Information Security. Richard E. Smith. Jones and Bartlett, 2011. ISBN-10: 1449648207

Assessment and grading

- Final grade will comprise:

Homework (5 assignments, 5% each)	25%
Midterm exams (2 exams, 15% and 25% respectively)	40%
Midterm paper	10%
Final paper	25%

- **Homework:** There will be five homework assignments, with due dates specified in the online course schedule. Homework is due at the start of class on the due date. Homework solutions must be typed (unless stated otherwise) and submitted in hard copy.
- **Exams:** The two midterm exams will take place in class on Tuesday, February 26 and Thursday, March 25. Exams will be **closed book**, meaning you may not use any books, notes, or other resources during the exam, with the following exception: you are permitted to bring into each exam up to **three sheets** of letter-sized paper containing **handwritten** notes (on both sides). Typed notes are not permitted.
- **Midterm paper:** The midterm paper is due at the start of class on ~~Tuesday, March 19~~ Thursday, March 21 [change made 3/6/13].
- **Final paper:** The final paper is due at 5 p.m. on Monday, May 6 (i.e. at the end of the exam slot for this class).

Amount of work

You should expect to spend 7-9 hours per week (outside of class time) on this course.

Plagiarism, copying, and collaborating

The College's standard policy on plagiarism applies and you should be familiar with it, but here are some key points that apply particularly to this course:
- All work must be your own, unless the assignment explicitly states otherwise.
- Never copy work from someone else or allow your own work to be copied.
- You may not copy or consult assignment solutions from any source, including online repositories.
- If you use exact words taken from any source, you must use quotation marks and cite the source.
- Students are encouraged to help each other understand concepts, including concepts that apply to graded assignments. However, all work must still be your own. So if you discuss a problem with someone, you must destroy any written or electronic material that results from the discussion, and re-create it later on your own.

Accommodations

The instructor will follow college policy on accommodations for students who need them.

Late Work Policy

Each student is permitted a total of four no-penalty days of lateness for submitted work over the entire semester; every subsequent day of lateness incurs up to a 25% penalty for the late assignment. Late days can be used only in whole day (24-hour) units. Late days may be used for homework assignments, the midterm paper, and the final paper, but not for exams. Please keep track of your own usage of late days. To use one or more late days on a given assignment, state clearly at the start of your submission how many days you are using, and the total used so far in the semester.