This course will examine how cyberspace, particularly the Internet, can serve as a tool, target, and source of conflict for both state and non-state actors. Topics include: power in cyberspace, state control over cyberspace, methods of cyber conflict, laws and ethics of cyber conflict, cyber warfare, infrastructure threats and vulnerabilities, civil liberties, cyber deterrence and defense, and cyber conflict strategy and challenges.

The grading will be:

- First Group Project: 20%
- Second Group Project: 20%
- Oral Presentations: 15%
- Take Home Final Exam due April 21: 25%
- Class Participation: 20%

The required books are:


The projects will be done in teams of three or four. If possible, each team will have students from both policy and technical fields. Each team will write a report of 1500 to 2000 words on a selected topic related to the course, and present its report to the class.

Students are expected to be familiar with college and university policies on matters such as plagiarism, sexual harassment and help for students with mental problems or physical disabilities. See for example http://www.umich.edu/~spolicy/ and http://fordschool.umich.edu/academics/expectations.


1. Singer and Friedman, pp. 1-72.

3. The Internet As Battlespace. Jan 25. [No class Jan. 18 for MLK Day, or Jan. 20]


4. Disruption and Attribution (and Russia, North Korea). Jan. 27.

5. Sobelman, Batsheva, “Israel braces as hackers launch Internet attack,” LA Times, April 7, 2013.
8. Singer and Friedman, pp. 72-76.


3. Singer and Friedman, pp. 91-96 and 138-144.


5. Rid, Thomas, 2013. Cyberwar Will Not Take Place (London: Hurst and Co.), ch 5 on Espionage, pp.81-112. (also relevant to Iran and attribution)


2. Singer and Friedman, pp. 114-120. (Stuxnet including ethics)


4. Fuerth, Leon, “Cyberpower from the Presidential Perspective,” in Franklin D. Kramer, Stuart H. Starr, and Larry K. Wentz (eds.), Cyberpower and

5. Singer and Friedman, pp. 133-138


1. Singer and Friedman, pp. 120-133.
4. Clark and Knake, 144-78.


1. Clark and Knake, pp. 103-44.
2. Singer and Friedman, pp. 166-180 and 205-246


2. Singer and Friedman, pp. 144-61.

1. Singer and Friedman, pp. 96-106. (Cyberterrorists)
3. Singer and Friedman, pp. 77-84. (Hactivists)
4. Singer and Friedman, pp. 106-114. (Dissidents and Patriots)
5. Singer and Friedman, pp. 85-91. (Criminals)

1. Singer and Friedman, pp. 180-204.
2. Clarke and Knake, 219-255.


2. Singer and Friedman, pp. 247-56.


Final Exam Due April 21.