Course Syllabus

Large-scale violence among humans has taken place at least since the dawn of recorded history. This course is about how societies arm themselves for and pursue war, how they have attempted to limit the destructiveness and likelihood of war, and how these pursuits have affected their political, organizational and technological development.

The course aims to acquaint students with the evolution of war’s technologies and the logics that underlie them, to help them become able critically to assess claims made by strategists, political and military leaders and weapons experts, about the role and control of force and military technologies in the international environment. Written assignments are intended to help students develop skills in writing clear, concise, factual, action-oriented memorandums.

Requirements and grading

Class meets Mondays, Wednesdays, and Fridays at 10:00 a.m. Students are expected to arrive on time and attend class, read, listen, and discuss.

A series of five memoranda and an in-class final exam will constitute the written work for the class. These are explained in a separate handout.

Grades will be based upon the memoranda (approximately 60%), the final (approximately 30%) and attendance and class participation (approximately 10%).

Books

The following are available in the bookstore and are required:


Some Useful websites (there are lots more)

Arms Control Center http://www.armscontrolcenter.org/

Arms Control Association and Arms Control Today http://www.armscontrol.org access to (Carnegie Endowment supported) periodical on arms control.


Center for Defense Information [http://www.cdi.org/]

Center for Nonproliferation Studies (Monterey Institute of International Studies) [http://cns.miis.edu/index.htm]

Center for Strategic and Budgetary Assessments [http://www.csbaonline.org/2006-1/index.shtml]


FAS link page – very useful further links on nuclear issues: [http://www.fas.org/nuke/links.htm]

General Dynamics [http://www.generaldynamics.com/]

GlobalSecurity.Org [http://www.globalsecurity.org/index.html], an excellent site dealing with current military technology and arms control matters. It is run by John Pike who used to run the FAS site.

Lockheed Martin [http://www.lockheedmartin.com/index.html]

Northrup Grumman [http://www.northropgrumman.com/]


Project on Government Oversight [http://www.pogo.org/] lots on defense contracting.

Henry L. Stimson Center (“Pragmatic steps for global security”) [http://www.stimson.org/home.cfm]

Stockholm International Peace Research Institute (SIPRI) [http://www.sipri.org/] very useful current news and database materials, for instance on arms transfers, Korean Peninsula relations, general arms control issues.


Wisconsin Project (seeking to control weapons proliferation) http://www.wisconsinproject.org/
Primer on nuclear weapons: http://www.wisconsinproject.org/pubs/articles/2001/bomb%20facts.htm

**Web and Blackboard Readings**

The books are on reserve. In addition there are materials that can be found through links in this syllabus directly or through Blackboard Documents. Direct links (when the syllabus is opened in Blackboard) can be clicked upon and should open. Blackboard documents are listed on the class Blackboard website under Course Documents in order of their appearance in the syllabus.

Non-Blackboard documents, with direct links, are also with URLs so that in the event that clicking on the syllabus doesn’t work or is impossible, you can paste the URL into your browser.
Topics and Readings

1. Introduction: war and force. Sept. 8, 10.


Class topics: 9/8: Introduction to technology and war 9/10: Discussion: your interests

2. Causes and nature of war. Sept. 13, 15, 17

For 9/13, read: Carl von Clausewitz, “On the Nature of War,” On War, edited and translated by Michael Howard and Peter Paret (Princeton, 1976), Book 1, at least 75-89, 100-104 (through the second complete paragraph on danger, exertion, uncertainty, and chance), and especially 119-121. [Blackboard: Clausewitz - On War].

For 9/15: John Keegan, ch. 1 “What is War?” from A History of War (Vintage, 1994), 3-12, 24-46 [Blackboard: Keegan - What is War?].


For 9/17: Greg Cashman, What Causes War?, ch. 10 (279-289) [Blackboard: Cashman - Causes?].


Class topics: 9/13: War as an instrument of politics; fog, friction, extremes. 9/15: War as an instrument and producer of culture. 9/17: Causes of war: system, state, individual.


Class topics: 9/20: Hardware development
9/22: Role of doctrine, strategy.
9/24: Does technology drive doctrine, or vice versa? What is the role of misunderstanding?


For 9/27, read: Thomas Schelling, “The Diplomacy of Violence,” chapter 1 from *Arms and Influence* 1-34 [Blackboard].


Class topics: 9/27: Attrition, air power, and total war
9/29: The nuclear triad
10/1: Discussion: what are military requirements for averting war?
5. **Hardware and doctrine.** Oct. 4, 6, 8.


For 10/6: William Arkin, “Sleight of Hand with Trident II,” *Bulletin of the Atomic Scientists* 40:10 (December 1984) 5-6. (You are invited to read more of the Bulletin to see what life was like in 1984).

http://books.google.com/books?id=0gUAAAAAMBAJ&pg=PA5&q=trident+warhead+accuracy&dq=Patr+and+Dor+equ+address&cd=1#v=onepage&q=trident%20warhead%20accuracy&f=false


http://journals.ohiolink.edu/ejc/pdf.cgi/Peters_John_E.pdf?issn=00304387&issue=v48i0003&article=479_apvopw


Class topics: 10/4: Generations of warfare  
10/6: Offense, defense, deterrence, doctrine and hardware  
10/8: Pre-emption, prevention, doctrine and hardware

6. **Spending, procuring and testing.** Oct. 11, 13, 15.


For 10/13 Franklin “Chuck” Spinney, “Defense Power Games” (this is a classic); http://www.dniipogo.org/fcs/def_power_games_98.htm


Cummings, “Lockheed Stock and Two Smoking Barrels” *Playboy.com* (January 16, 2007) [and on Blackboard].


http://www.govexec.com/dailyfed/0610/062110cdam2.htm

Class topics: 10/11: Defense budget process
10/13: Rational versus real procurement logic
10/15: Discussion: can military spending be controlled?


Class topics: 10/18: Predicting RMAs?
10/20: Robots and artificial intelligence
10/22: Private Military Contractors

Fall Break. Oct. 23-31
8. Counterinsurgency, LIW, 4GW, terrorism (1). November 1, 3, 5.

For 11/1, read: Hammes, ch. 4-8, “Changes in Society”; “Mao”; “Vietnam”; “Sandinistas”; “Intifada” (p. 32-110);


For 11/5: Hammes, ch. 11-12, “Iraq”; “Afghanistan” (p. 153-189);

Class topics: 11/1: Theories of low intensity, guerilla, and insurgency conflict
11/3: OODA loops, war and morale
11/5: Discussion: were/are Afghanistan and Iraq 4GWs?

9. COIN, LIW, 4GW, terrorism (2). Nov. 8, 10, 12.


Class topics: 11/8: 4GW, terrorism and the international system
11/10: Is there a link from RMA to counter-terror and 4th generation warfare?
11/12: Discussion: COIN, terrorism, and the military’s mission

http://www.d-n-i.net/fcs/4th_gen_war_gazette.htm

10. **Arms Control Theory and history.** Nov. 15, 17, 19.


For 11/17: Wisconsin Project on Nuclear Arms Control, “[Nuclear Weapons](http://www.wisconsinproject.org/bomb-facts/nuclearessay.htm)” web page;


For 11/19: Wisconsin Project on Nuclear Arms Control, “[Chemical Weapons](http://www.wisconsinproject.org/bomb-facts/chemicalessay.htm)” web page.

[Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction](http://www.opcw.org/chemical-weapons-convention/about-the-convention/) (Chemical Weapons Convention). Read the Overview, Articles I-XII, and the Annex on Chemicals. Note that Article VIII sets up a new international organization (the NPT analogue would be the IAEA, but the IAEA already existed)

http://www.opcw.org/chemical-weapons-convention/about-the-convention/


[Review Conference updates](http://www.opbw.org/)

http://www.opbw.org/

Class topics: 11/15: Arms races and arms control
11/17: How to make a nuclear weapon
11/19: Biological and Chemical weapons, environmental costs of WMD
11. **Arms Control Monitoring, Counter-proliferation.** Nov. 22, 24.


12. **Small and Light Weapons (SALW).** Nov. 29, Dec. 1, [3].


Class topics: 11/22: Inspection, monitoring, unilateralism and multilateralism 11/24: New anti-proliferation challenges and initiatives 11/29: Small arms capabilities and ubiquity 12/1: Small arms control efforts 12/3: Discussion: how important and possible is SALW control?


For 12/6, read: Clarke, *Cyber War*

For 12/8, Clarke, *Cyber War*

For 12/10, Hammes, ch. 15, “Where to?”; 16, “Evaluating the Threat; 17, “The Future is Flexibility”;


Class topics 12/6: Precision strike, responsibility, and control
12/8: Is cyber war the fifth generation?
12/10: Conflicts of the future

14. Last class: Dec. 13

Class topics: Final comments, final exam review, course evaluations distributed.