

## INR4990: Cyber, Drones & National Security Policy

Fall 2018 (Section 82600)

TR 4:00-5:15, 11/121

Office Phone: 850-474-3008

Office and Office Hours: Bldg 50/Rm 126, MW 1:00-2:00 and TR 1:30-2:30 or by appointment

Instructor: Dr. Jacob Shively

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### Course Objectives

“Modern science ... has thrust into man’s fallible hands unprecedented power: power in building, power in destroying.” –Hugh Ferriss

This course evaluates how emerging technologies affect national security strategy. Political leaders constantly make tough decisions about deploying new military capabilities, and in recent years, that has meant lethal drones and cybersecurity. For some, a modern “revolution in military affairs” is driving a new era. For others, politics and strategy—and the human beings making them—never really change. Does technological change drive politics and policy? How do new technologies shape national security plans? We first evaluate the history and theories of how technology and national security interact with one another. The latter sections of the course focus on lethal drones and the cyber environment. During two simulations, students will evaluate real policy challenges and work out possible solutions. The course pushes students to combine analytical and conceptual rigor with pragmatic and specific applications. Students will be evaluated based upon performance on two exams, several memos, analysis/reflection papers and two simulations.

### Student Learning Outcomes

- Students will discuss readings in a seminar-style format.
- Students will synthesize course materials in written exam essays and analysis papers.
- Students will evaluate real policy challenges, apply course concepts and create possible solutions.
- Students will interact with groups to organize solutions to assigned problems.

### Topics

- The historical interaction of technology and grand strategy or national security strategy.
- The legal and empirical theories surrounding modern policy on these issues.
- Current debates and case studies related to lethal drones and cybersecurity strategy.

### Course Materials

- A number of articles and documents made available online through eLearning.
- Scott Jasper (2017) *Strategic Cyber Deterrence: The Active Cyber Defense Option* New York: Rowman and Littlefield. ISBN 978-1538104897
- Brian Glyn Williams (2013) *Predators: The CIA’s Drone War on al Qaeda* Potomac Books. 978-1612346175
- Recommended Sharon Weinberger (2017) *The Imagineers of War: The Untold Story of DARPA, the Pentagon Agency That Changed the World* Knopf. ISBN 0385351798

## **Course Requirements**

The course requires participation worth a total of 15%, two exams worth 30%, two memos worth 15%, and analysis projects worth a total of 40%.

**Participation** We will engage in discussion, group work and individual assignments during class time, and you will be graded on materials you submit, your overall contributions to class and your attendance record.

You may miss two class meetings with no penalty but will lose 3% from your final participation grade for each missed period after that. Absences due to illness, emergency or university-sponsored activities will be excused with proper documentation.

### **Exams**

There will be two exams: a midterm and final. Each will be a take home assignment due at the time and date stated in the course schedule. You will have one week to complete a set of short answer questions. Submit your answers as a Word document to the designated assignment on eLearning.

### **Memos**

You will complete two memos before the first exam. Due dates are listed below. In one page or less, you are to summarize and evaluate a government document, study, law or treaty relevant to one of our topic areas: nuclear weapons; space; drones; cyber; or, possibly, technology change in general. I will distribute a separate document with instructions on these.

### **Simulations**

We will conduct two simulations, one on drones and the other on cybersecurity. You will received details on another document. These will be the graded elements:

- Individual research: Position Memo (30%; 15% each)
  - 2 pages: see the online materials for details
- Group Position Memo (30%; 15% each)
  - 1 or 1.5 pages
- Simulation Participation (40%; 20% each)

## **Letter Grades**

94% or better	A	87% to 89%	B+	77% to 79%	C+	67% to 69%	D+
90% to 93%	A-	83% to 86%	B	73% to 76%	C	60% to 66%	D
		80% to 82%	B-	70% to 72%	C-	59% or less	F

**GRADING** In general, I consider how well you followed directions and focused tightly on your given topic; your mastery (i.e. correct understanding and general use) of the readings and other course material; your argument's clarity, consistency and accuracy; overall structure and logic; overall clarity and grammar. See the document "Shively Paper Grading Rubric" for detailed break-down.

### Academic Conduct

PLAGIARISM and ACADEMIC DISHONESTY involve adding others' words to your text as if they were your own and will not be tolerated. For University policies on plagiarism and other misconduct, see the Student Code of Conduct: <http://uwf.edu/osrr/documents/BOTApprovedStudentCodeofConduct-2010edition.pdf>.

### Assistance for Students with Special Needs

If there are aspects of the instruction or design of this course that hinder your full participation, such as time-limited exams, inaccessible web content, or the use of non-captioned videos and podcasts, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with the Student Disability Resource Center (SDRC) at <http://uwf.edu/sdrc/internal/>, which requires documented needs of the individual. For information, e-mail [sdrc@uwf.edu](mailto:sdrc@uwf.edu) or call 850.474.2387.

### Your Major

If you are interested in but not yet a major in **Political Science, Pre-Law, or International Studies** contact **The Department of Government at 474-2929**. If you are undecided about your major contact your academic advisor or the Career Center at 850-474-2254.

### Cybersecurity Resources

UWF is a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE). The following resources are available to UWF students and faculty to support academic and research projects:

1. Cybersecurity Resources: <http://uwf.edu/centers/center-for-cybersecurity/resources/>
2. Library Resources - Cybersecurity: <http://libguides.uwf.edu/cybersecurity>
3. Library Resources - Computer Science: <http://libguides.uwf.edu/computer>

### Course Schedule

\*Readings not in assigned texts will appear in eLearning > Course Materials>Content

\*Some dates and assignments may be changed. I will announce these by email and in class.

<b>Week 1</b>	<b><u>Technology, Strategy and Change</u></b>
Aug 28	<u>Introduction</u>
Aug 30	- Arthur Herman, "The Pentagon's 'Smart' Revolution"
<b>Week 2</b>	<u>Theories</u>
Sep 4	- Van Evera, "Offense, Defense and the Security Dilemma"
Sep 2	- <i>Recommended: Jasper ch 5, 6</i>
<b>Week 3</b>	<u>US National Security</u>
Sep 11	- Brimley, et al. "Game Changers: Disruptive Technology and U.S. Defense Strategy"
Sep 13	MEMO 1 DUE – <i>Bring hard copy to class</i>
<b>Week 4</b>	<u>Nuclear Weapons</u>
Sep 18	- Geller, "Nuclear Weapons and War"
Sep 20	- <i>Recommended: Jasper ch 4</i>
<b>Week 5</b>	<u>Space</u>
Sep 25	- Seedhouse, "US and Chinese Space Policy"
Sep 27	MEMO 2 DUE – <i>Bring hard copy to class</i>
<b>Week 6</b>	
Oct 2	- Review
Oct 4	MIDTERM EXAM due by Midnight – submit to dropbox
<b>Week 7</b>	<b><u>Drones</u></b>
Oct 9	<u>Background &amp; Policies</u>
Oct 11	- Williams, ch 3-6
<b>Week 8</b>	<u>Law &amp; Ethics</u>
Oct 16	- Williams, ch 7-8
Oct 18	- Guest: Cpt. Fred Levin (USN, ret.) on Drones and Intelligence
<b>Week 9</b>	<u>Analysis Tools</u>
Oct 23	- Williams, ch 9-10
Oct 25	INDIVIDUAL MEMO DUE - MEET in DAL, bldg. 79
<b>Week 10</b>	- Williams ch 11
	<u>SIMULATION 1</u>
Oct 30	- Day 1 meet in Library Conference Room (both days) (32/116)
Nov 1	- Day 2
<b>Week 11</b>	<b><u>Cybersecurity</u></b>
Nov 6	<u>Background &amp; Policies</u>
Nov 8	- Jasper ch 1
<b>Week 12</b>	<u>Law &amp; Ethics</u>
Nov 13	- Jasper ch 2
Nov 15	
<b>Week 13</b>	<u>Analysis Tools</u>
Nov 20	- Jasper ch 3
Nov 22	NO CLASS - THANKSGIVING

<b>Week 14</b>	
Nov 27	INDIVIDUAL MEMO DUE MEET in DAL, bldg. 79
Nov 29	<u>Analysis Tools</u> - Jasper ch 7
<b>Week 15</b>	- Jasper ch 8 <u>SIMULATION 2</u>
Dec 4	- Day 1 meet in Library Conference Room (both days) (32/116)
Dec 6	- Day 2
<b>Week 16</b>	
Dec 13	FINAL EXAM due by Midnight – submit to dropbox