**HTS 6121/INTA 8803**

**Science, Technology and National Security**

**Professor Kristie Macrakis**

**Spring 2019**

**Meets:** Wednesday, 4:30-7:15 pm, Old Civil Engineering Building 104

**Office**: Old Civil Engineering Building, 120

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**Phone**: 404-894-2185

**Office Hours**: Wednesday, 1:30-2:30, after class and very gladly by appointment

**This year’s topic: Technology and the Rise of US Global Intelligence**

This year’s topic for the graduate seminar is Technology and the Rise of the National Security State. We will first examine the nature of secrecy and intelligence – its definition, history, philosophy and sociology. We will then turn to framing the topic using the historiography of the history and sociology of technology. Then we turn to the content of technological espionage in comparative perspective but focusing on the CIA and the NSA. Finally, we examine technology and the rise of the national security state.

This is a research seminar. Students will be given ample opportunity to work on their own research while using the general materials on secrecy, technology and intelligence as a conceptual framework.

Requirements:

Blogs & Oral Reports on Weekly Readings, 33 1/3%

Oral Presentation/ Midterm Paper Proposal (due 6 March ), 33 1/3 %

A Major Research Paper, 20-30 pages(20 pages for undergraduates) , due in class 24 April 2018 33 1/3%

The Blog is due by 5 pm the Tuesday before class and should be about 300-500 words. You can also raise some questions at the end. The blog should demonstrate that you have read and thought about the reading and have interesting things to say about it.

**Learning Outcomes:**

* Students will learn how to read critically & improve their writing
* Students will be able to understand the role of science and technology in society and national security
* Students will improve their presentation skills
* Students will know the difference between a primary & secondary source
* Be able to write a research paper displaying mastery of the scholarly apparatus such as footnoting, bibliographies

**Georgia Tech Honor Code:**

Plagiarism and cheating is not tolerated and will be penalized. All students are expected to follow the Georgia Tech honor code. See [www.honor.gatech.edu](http://www.honor.gatech.edu)

**Access and Accommodations:**

At Georgia Tech we strive to make learning experiences as accessible as possible.  If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options.  You are also encouraged to contact the Office of Disability Services to explore reasonable accommodations.

The Office of Disability Services can be contacted by:

Phone: 404.894.2563

Email: dsinfo@gatech.edu

Website: disabilityservices.gatech.edu

Required Books:

Adas, Michael*. Dominance by Design: Technological Imperatives and America's Civilizing Mission*. Cambridge, Mass: Belknap Press of Harvard University Press, 2009.

Andrew, Christopher. *For the President’s Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush*. New York: Harper Perennial, 1996.

Greenwald, Glenn. *No Place to Hide: Edward Snowden, the NSA and the U.S. Surveillance State.* New York: Metropolitan, 2014.

Moynihan, Daniel. *Secrecy: the American Experience*. New Haven: Yale University Press, 1999.

Sanger, David. *The Perfect Weapon: War, Sabotage and Fear in the Cyber Age*. New York: Crown, 2018.

Recommended:

Bamford, James. *The Shadow Factory: the NSA from 9/11 to Eavesdropping on America*. Anchor, 2009. Available as a pdf online.

Lowenthal, Mark*. Intelligence:* *From Secrets to Policy*., 4th edition, CG Press, 2009.

Priest, Dana, and William M. Arkin*. Top Secret America: The Rise of the New American Security State.* New York: Little, Brown and Co, 2011 or 2012.

**Course Topics, Schedule & Readings**

**January**

Part I: Introduction to US Intelligence

**9 Introduction to Course**

Read Wilford, “Still Missing: the Historiography of U.S. Intelligence” PDF on Canvas (Read pps. 20-25 of PDF)

(Film on Top Secret America and the Rise of the American Security State)

**16 Secrecy as Regulation, WW I, Communism, WW II, A Culture of Secrecy, Bureaucratization, A Culture of Openness**

Reading: Moynihan Book on *Secrecy* (Read whole book)(reports on different chapters)

**23 Secret Intelligence and the American Presidency**

Mark Lowenthal. *Intelligence: From Secrets to Policy*. Selections, PDF on Canvas.

Reading: Andrew. *For the President’s Eyes Only.*

(Introduction, chapters 5-13, and Conclusion)

II. History of Technology and Technological Espionage

**30 Framing the Problem with History of Technology**

Michael Adas. *Dominance by Design*.

(Introduction, chapters 4-7, Epilogue)

Macrakis. “Technophilic Hubris and Espionage Styles.” *Isis*, PDF on Canvas.

**February**

**6 Business & US Intelligence and National Security**

Tim Shorrock on Intelligence Outsourcing. PDF’s on Canvas.

**13 Eisenhower & Spy Planes & Satellites**

Taubman. *Secret Empire*. Selections in PDF on Canvas

“The Days of Mati Hari are Over.” Kristie Macrakis, manuscript on Canvas.

**20 Tunnels & Submarines**

Macrakis. “Can a Tunnel become a Double Agent?”*IJICI,* PDF on Canvas

M. Todd Bennett*.”* Détente in Deep Water*”***.** *INS,*PDF on Canvas

“Project Azorian: the Story of the Hughes Glomar Explorer.” CIA report, released 2010, PDF.

**27 Cyberwarfare**

David Sanger. *The Perfect Weapon*. Those studying cybersecurity, read the whole book. Others read the preface, prologue, at least five chapters and chapter XII and afterword.

David Gioe. “Cyber Operations and Useful Fools: the Approach of Russian Hybrid Intelligence.” *Intelligence and National Security*, 2018, 33,7, 954-973. PDF on Canvas.

*Optional/Further Reading*:

Steven Loleski. “From Cold War to Cyber Warriors: the Origins and Expansion of NSA’s Tailored Access Operations (TAO) to Shadow Brokers*.” Intelligence and National Security*, 2019, 34, 1, 112-128.

Optional on Human Cost of Intelligence: Nicholas Dujmovic. “Stars on the Wall: the Human Cost of Intelligence Technology.” *IJICI*, PDF on Canvas.

Part Three: The NSA, CIA & the Architecture of the National Security State

**March**

**6 Paper Proposals Due!/ Workshop**

**The NSA I**

Matthew Aid. “The National Security Agency and the Cold War.” *INS*. PDF on Canvas

Bamford. “The NSA is Building the Country’s Biggest Spy Center.” *Wired*. PDF on Canvas.

**13 Edward Snowden’s Revelations & NSA Building Expansion**

Greenwald, *No Place to Hide*.

Introduction, concentrate on chapter 3

Optional: Peter Swire et al. *Liberty and Security in a Changing World*, President’s Review Group on Intelligence and Communication Technology, 2013. PDF.

**20** SPRING BREAK, No Class

**27 Drones**

Mathias Maass. “From U-2’s to Drones: U.S. Aerial Espionage and Targeted Killing during the Cold War and the War on Terror.” *Comparative Strategy*, PDF on Canvas.

Brian Glyn Williams. “The CIA’s Covert Predator Drone War in Pakistan, 2004-2010: the History of an Assassination Campaign.” *Studies in Conflict & Terrorism*. PDF on Canvas.

**April**

**3**  **Aerospace & Intelligence**

Pedlow & Welzenbach. *The CIA and the U-2 Program, 1954-1974*. Read forward preface, introduction and select two more chapters. PDF on Canvas

Kevin Ruffner. *Corona: America’s First Satellite Program*. Read Part I: History of Corona Program by Kenneth Greer. Select 10 other reports to read and report on. PDF on Canvas.

**10**  **Student Reports**

**17 Student Reports**

**24 PAPERS DUE/ Class Party with “Spy” Guests**