TEXAS A&M UNIVERSITY

Course Syllabus

Course Information

Course Number: INTA 706
Course Title: Cyberspace Implications for National Security
Section: Section
Time: Mondays, 6:30pm – 9:10pm
Location: Classroom
Credit Hours: 3 Credit Hours

Instructor Details

Instructor: Chip Usher
Office:
Phone:
E-Mail:
Office Hours: 6:00pm – 6:30pm, Monday or by appointment

Course Description

This course immerses students in the critical role that intelligence plays in US national security and how emerging technologies — particularly AI and cyber – are transforming how the US Intelligence Community performs its missions amidst renewed global strategic competition with China. Through guest speakers, case studies, analytic briefing practice , and a hands-on team analytic project, students will engage with real-world national security challenges, examining the impact of technology on intelligence collection, analysis, and decision-making. A key feature is a group - authored intelligence assessment , which will include both individual and group components. The group assessment will be modeled off the National Intelligence Estimate (NIE), and on a topic at the intersection of scientific and technical intelligence or strategic technology competition . Students are encouraged to leverage open - source data , commercial satellite imagery, and large language models. The goal is to provide students with an opportunity to work collaboratively in analytic groups, write a rigorous open-source intelligence product on a key topic in emerging technology and national security, and enable students to contribute to the ongoing discourse on how intelligence analysis should evolve to incorporate advances in AI.

This course is suitable for students with prior academic work on international affairs, national security, history, data science, or computer science and some familiarity with the purpose, organization, and missions of the US Intelligence Community. By the end of the course, students will gain a robust understanding of how intelligence informs US national security strategy and how technological advances are reshaping its future. The course offers a synthesis of concepts and practice, and a significant amount of the class readings are drawn from individuals who are both scholars and practitioners. The course prepares students for careers in national security, foreign policy, risk analysis, and other fields requiring a deep understanding of technology, analytical thinking and writing, group collaboration, and organizational adaptation.

Course Prerequisites

None

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Special Course Designation
None

Course Learning Outcomes

Upon completion of the course, students will:

● *Enhance their understanding of national intelligence and its historical, policy, legal, and organizational foundations as well as its structures, functions, and capabilities.*

● *Gain an understanding of how cyber-related technologies and artificial intelligence are transforming what the US Intelligence Community focuses on and how they perform their missions.*

● *Strengthen their critical thinking, writing, and oral presentation skills.*

Through reading, writing, discussion, debate, and group collaboration, this course develops students' ability to:

● Perform critical analyses: Evaluate and compare competing perspectives on intelligence issues, applying logic and evidence. Differentiate between evidence-based claims and politically motivated rhetoric in intelligence and national security discourse.

● Formulate intelligence research questions: Learn how to translate policymaker interests and requirements into meaningful Key Intelligence Questions answerable through structured analysis.

● Draft Intelligence Assessments and Persuasive Oral Presentations: Produce clear, sound, and persuasive arguments, emphasizing revision and critical self - assessment. Clearly establish and support an analytical judgment, supported by evidence.

● Engage in collaborative intelligence work: Employ traditional and emerging analytic methods to solve complex security challenges.

Textbook and/or Resource Materials

TO BE ADDED

Students must read each of the "Required" assignments before class and be prepared to draw from them during class discussion. The "Suggested Readings" are not required but many are seminal texts used frequently by practitioners.

Students are also expected to seek other sources of information for their assignments, beyond recommended or required readings, and should also keep abreast of current affairs by regularly reading a wide variety of daily newspapers and other relevant publications and media, including but not limited to *The Washington Post*, *The New York Times*, *Wall Street Journal*, *Financial Times, BBC News, Foreign Affairs*, *Foreign Policy, Politico*, *Times of Israel, Al-Jazeera, South China Morning Post*, and *The Economist*. We also recommend the *Intelligence Matters* and *Pod Save The World* podcasts.

The instructors will raise current issues relevant to statecraft and policymaking in class and may make changes to the current affairs component of readings as warranted by events or according to the preferences of guest speakers.

A complete list of recommended books, websites, and podcasts is provided in the Bibliography at the end of the syllabus.

Grading Policy

Grades will be determined based on four written assignments during the semester; class participation (in class as well as contributions to discussion links on ELMS on assigned readings); one prepared Oral Briefing; and a final written Position Paper for the 9 December in-class NSC simulation. Students will be assigned an Oral Briefing topic and given a date/time outside of class to deliver it, probably via Zoom. The relative weights of assignments will be as follows:

● Assignment #1: Intelligence Brief (Due September 19) – 25%

● Assignment #2: Intelligence Brief (Due October 17) – 25%

● Assignment #3: National Intelligence Community Memorandum (Due November 7) – 30%

● Oral Presentation: 10%

● Class Participation: 10%

The following scale will be used for calculating final grades for this course:
90-100 A; 80-89 B; 70-79 C; 60-69 D; and 0-59 F

GRADING POLICY
http://student-rules.tamu.edu/rule10

Late Work Policy

Late work (submitting the research paper, homework assignments, or other assigned makeup work after the specified due date) will be accepted with prior approval of the instructor. Grading will be reduced by a minimum of 5 percentage points per day.

For additional details, please see Student Rule 7.

Course Schedule
(Weekly topics are subject to change at the discretion of the instructor)

PART I - FOUNDATIONS
WEEK 1 (August 25): Course Introduction
Class Objectives:
● Introductions & Icebreaker Exercise - Stand Up If You…
● Course overview and guidance on written assignments, oral assessments, grading, and use of AI tools. o Introduction to Professional Writing style.
● Discussion: Welcome to the Arena: Mid-Decade Challenges to US Leadership

Required Resources:
● Mid-Decades Challenges to National Competitiveness, Special Competitive Studies Project
● Karolis Kupcikas, "The Importance of Intelligence to International Security" https://www.e-ir.info/2013/11/08/importance-of-intelligence-to-international-security/
● Amy Zegart and Michael Morell, "Spies, Lies, and Algorithms," *Foreign Affairs* (May/June 2019) https://www.foreignaffairs.com/united-states/spies-lies-and-algorithms

Recommended Resources:
● Retain for future reference - M. Neil Browne and Stuart M. Keeley, Asking the Right Questions: A Guide to Critical Thinking (chapters 1-5 required; chapters 6-13 are recommended).
● Retain for future reference - Rosemary D. Cox and Tracienne Ravita, The Thesis and the Sentence Outline; Georgia Perimeter College (2012)

WEEK 2 (September 8): Foundations of US Intelligence
Class Objectives:
● How is the US Intelligence Community organized?
● How has its structure and missions evolved since 1947?
● What does an IC analyst do?

Required Resources:
● Brian Katz, "Intelligence and You: A Guide for Policymakers", War on the Rocks
● CIA Intelligence Analyst: Views from the Inside (chapters x, y) by Roger George
● Skim - National Intelligence Strategy of the United States, August 2023 https://www.dni.gov/index.php/newsroom/reports-publications/reports-publications-2023/item/2402-2023-national-intelligence-strategy
● Skim - Public Law 108-458 – Intelligence Reform and Terrorism Prevention Act of 2004, https://www.govinfo.gov/content/pkg/PLAW-/html/PLAW-108publ458.htm

Recommended Resources:
● "The Evolution of the U.S. Intelligence Community-An Historical Overview"
https://www.govinfo.gov/content/pkg/GPO-INTELLIGENCE/html/int022.html

WEEK 3 (September 15): The Cyber Mission: The View from the NSA

Guest Speaker: **Teresa Shea**
former senior executive at NSA
Class Objectives:
● What is NSA's role in cybersecurity? How does it differ from what FBI, CISA, or CIA do?
● How does the USIC collect technical data while safeguarding US citizens' privacy? What are the issues surrounding Section 702 re-authorization?

Required Resources:
● Alex Joel, "The Truth About Executive Order 12333," Politico, August 18, 2014, reposted at
https://www.intelligence.gov/ic-on-the-record-database/results/692-the-truth-about-executive-order-12333
● Matthew Olsen and Joshua Geltzer, Reauthorizing Section 702 of the Foreign Intelligence Surveillance Act is a national security imperative, https://thehill.com/opinion/congress-blog/4154631-reauthorizing-section-702-of-the-foreign-intelligence-surveillance-act-is-a-national-security-imperative/
● Dana Priest, "NSA Growth Fueled by Need to Target Terrorists," Washington Post, July 21, 2013
https://www.washingtonpost.com/world/national-security/nsa-growth-fueled-by-need-to-target-terrorists/2013/07/21/24c93cf4-f0b1-11e2-bed3-b9b6fe264871_story.html

Recommended Resources:
● National Security Agency, Overview, YouTube,
https://www.youtube.com/watch?v=AnjLjIbeu8s&t=1s

WEEK 4 (September 22): The Cyber Mission: The View from CIA

Guest Speaker: **Andy Boyd**
former Senior Operations Officer, CIA
Class Objectives: **Oral Briefing Presentation Topics Due Writing Assignment #1 Due**
● What is CIA's role in cyber intelligence?
● Who are the key cyber threat actors active today? Any differences in their goals, methods, or capabilities?
● What is covert action? How does the US Government conduct and oversee covert action?

Required Resources:
●

Suggested Resources:

● Skim - 50 US Code 3093 – Presidential approval and reporting of covert actions, 50 U.S. Code § 3093 - Presidential approval and reporting of covert actions | U.S. Code | US Law | LII / Legal Information Institute (cornell.edu)

WEEK 5 (September 29): Strategic Intelligence & Support to Senior Policymakers

Guest Speaker: **Linda Weissgold** Former Deputy Director of CIA for Analysis
Class Objectives:
● What makes intelligence "strategic" and how is it different from other forms of intelligence?
● How does intelligence support the country's senior-most decisionmakers? How well does it do?

Required Resources:
● George, Chapter 6 ("Strategic Intelligence") and 8 ("Intelligence Support as Policy Enabler")
● Brett Holmgren, "The Future of Intelligence Support to Diplomacy," September 12, 2022
https://www.state.gov/the-future-of-intelligence-support-to-diplomacy/

PART II - WELCOME TO THE ARENA
WEEK 6 (October 6): The Dawn of the AI Age

Guest Speaker: **David Lin**
Special Competitive Studies Project
Class Objectives:
● A review of key AI terms and their meaning.
● How close are we to seeing Artificial General Intelligence? Artificial Super Intelligence?
● What are the implications for national security, the economy, and society?

Oral Briefing Presentations Begin

● What is the geometry of global AI competition look like today?

Required Resources:
● Henry Kissinger, Craig Mundie, and Eric Schmidt, Genesis (Chapters x, y, z)
● Ian Bremmer & Mustafa Suleyman, "The AI Power Paradox," Foreign Affairs, Sept/Oct 2023

Recommended Resources:
●

WEEK 7 (October 13): China's Approach to Techno-Economic Competition

Guest Speaker: **Liza Tobin**
Garnaut Global Consulting
Class Objectives:
● How does Beijing view economic development and technology competition?
● What is Military-Civilian Fusion?
● How is China reshaping the global economic order?

Required Resources:
● Dan Wang "China's Sputnik Moment?" *Foreign Affairs,* 29 July 2021
(https://www.foreignaffairs.com/articles/united-states/2021-07-29/chinas-sputnik-moment)
● Ronen Bergman, "China's Military Tied to China's Debilitating New Cyberattack Tool," *NY Times,* 7
May 2020 (https://www.nytimes.com/2020/05/07/world/asia/china-hacking-military-
aria.html?action=click&module=News&pgtype=Homepage)

WEEK 8 (October 20): Thinking About National Security AIs
Guest Speaker: **Mikel Rodriguez, Dr. PJ Maykish**
DeepMind Special Competitive Studies Project
Class Objectives:
● How good are China's AIs?
● What strategies exist to protect domestic national security AIs?

Required Resources: **Writing Assignment #2 Due**
●

Recommended Resources:
●

WEEK 9 (October 27): The Rise of Techno-Economic Intelligence
Guest Speaker: **Casey Blackburn, Christian Chung,**
Central Intelligence Agency Georgetown University & former CIA
Class Objectives:
● What are the global strategic implications of key new and emerging technologies, including
artificial intelligence, advanced robotics, and hypersonics, and what do they portend for the
business of intelligence?

Required Resources:
● Skim - National Intelligence Council, "Global Trends 2040", March 2021
● Henry A. Kissinger, Eric Schmidt, and Daniel Huttenlocher, "The Metamorphosis," *The Atlantic*,
Aug 2019. (https://www.theatlantic.com/magazine/archive/2019/08/henry-kissinger-the-
metamorphosis-ai/592771/)
● The Intelligence Edge: Opportunities and Challenges from Emerging Technologies for U.S.
Intelligence Published by CSIS
● *Merit Roe Smith and Leo Marx, Does Technology Drive History? Introduction and Chapter 1*

Recommended Resources:
● Ash Carter, Inside the Five-Sided Box, Chapter 12 on "Maintaining America's High-Tech Edge: A
Necessity for Strategic Success," p 319-349.

● "Blockchain Briefing for DOD," by Dr. David Rosenthal, 30 July 2019
(https://blog.dshr.org/2019/07/blockchain-briefing-for-dod.html)
● Kevin Drum, "Tech World," *Foreign Affairs*, July-August 2018
● Sean Learner, John Thornhill, Sam Joiner, and Irene de la Torres Arenas, "Quantum Computing Could Break the Internet; Here's How," Financial Times, 3 May 2023

WEEK 10 (November 3): Private Sector Perspectives on Intelligence & Tech Competition

Guest Speaker: **Michael Salazar, LTG Kevin McLaughlin, USAF (Ret.)**
Microsoft Threat Intelligence former Deputy Commander, US Cybercom
Class Objectives:
● How do US private sector companies view the cyberthreat from the PRC, Russia, Iran, and North Korea?
● What are some factors companies need to consider when cooperating with US or allied law enforcement or intelligence services?

Required Resources:
●

Recommended Resources:
●

WEEK 11 (November 10): Cyberwarfare In The Age of AI

Guest Speaker: **Rob Joyce,**
former Special Assistant to the President for Cyber, NSC
Class Objectives:
● How should the US Government organize for AI and cyberdefense?

Part III - INTELLIGENCE INNOVATION
WEEK 12 (November 17): Open Source Intelligence Re-discovered

Guest Speaker: **Randy Nixon**
Chief, CIA's Open Source Enterprise
Class Objectives:
● What is "open source intelligence" and how important is it to the USIC's mission?
● To what extent is AI influencing the IC's approach to using OSINT?

Required Resources:
● Kenneth Neil Cukier and Viktor Mayer-Schoenberger, *"*The Rise of Big Data," *Foreign Affairs*, May/June 2013

● William Usher, "Making the Case for An Open Source Agency," Center for the Studies of Intelligence, September 2024
● "Intelligence Innovation: Repositioning for Future Tech Competition," Special Competitive Studies Project

Recommended Resources:
● "The Future of Insights: Intelligence In An Age of AI-Driven Competition," Special Competitive Studies Project
● Amy Zegart, "The Self-Appointed Spies Who Use Google Earth to Sniff Out Nukes," The Atlantic, December 6, 2019 https://www.theatlantic.com/ideas/archive/2019/12/new-nuclear-sleuths/602878/

WEEK 13 (November 24): "Narrative Intelligence" & Decision Advantage in An AI Environment

Guest Speaker: **Kristin Wood, Doowan Lee,**
August Interactive Edge Theory
Class Objectives:
● What is "narrative intelligence"? How is it being used?
● How should the US government organize to improve its defenses against mis- and dis-information?

Required Resources:
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●

Recommended Resources:
● Matt Chassen, "The MADCOM Future," Atlantic Council, September 26, 2017. (https://www.atlanticcouncil.org/in-depth-research-reports/report/the-madcom-future/) (how AI will change disinformation)
● Christopher Wylie, Mindf*ck: Cambridge Analytica and the Plot To Break America

WEEK 14 (December 1): Spy vs. AI

Guest Speaker: **Adam Leslie, Aaron Brown,**
former Australian SIS Lumbra Technologies & former CIA
Class Objectives:
● How is AI going to remake the world of espionage?

Required Resources:
● William Usher and Tara McLaughlin, "A Day In the Life of An AI-Augmented Analyst", Special Competitive Studies Project
●

WEEK 15 (December 8): The Future of Intelligence
Writing Assignment #3 Due

Guest Speaker: **Shay Herskowitz,**
Georgetown University
Objectives:
● How might intelligence services adapt to thrive in the future? Or can we envision a future where 'intelligence' is obsolete?
● What skills and experiences will the IC need in the future?

Required Resources:
● Jane Harman, "Disrupting the Intelligence Community", Foreign Affairs, March-April 2015. https://www.foreignaffairs.com/articles/united-states/2015-03-01/disrupting-intelligence-community
● Joseph Gartin, "Future of Analysis," *Studies in Intelligence* Vol. 63, No. 2 (June 2019) https://www.cia.gov/resources/csi/studies-in-intelligence/volume-63-no-2/future-of-analysis/
● Cortney Weinbaum, et al., *Options for Strengthening All-Source Intelligence,* https://www.rand.org/pubs/research_reports/RRA1245-1.html
● CSIS, *Maintaining the Intelligence Edge: Reimagining and Reinventing Intelligence through Innovation*, January 13, 2021 https://www.csis.org/analysis/maintaining-intelligence-edge-reimagining-and-reinventing-intelligence-through-innovation

Suggested Resources:
● Siobhan Martin, "Spying in a Transparent World: Ethics and Intelligence in the 21st Century," Geneva Centre for Security Policy https://www.gcsp.ch/publications/spying-transparent-world-ethics-and-intelligence-21st-century
● "Shape or Deter? Managing Cyber-Espionage Threats to National Security Interests," Lester Godefrey, Studies in Intelligence Vol. 66, No. 1 (Extracts, March 2022)

University Policies

Attendance Policy
The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to Student Rule 7 in its entirety for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy
Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to Student Rule 7 in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (Student Rule 7, Section 7.4.1).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (Student Rule 7, Section 7.4.2).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See Student Rule 24.)

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

Texas A&M at College Station
You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu.

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact the Disability Resources office on your campus (resources listed below) Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Texas A&M at College Station
Disability Resources is located in the Student Services Building or at (979) 845-1637 or visit disability.tamu.edu.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see University Rule 08.01.01.M1):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Texas A&M at College Station
Students wishing to discuss concerns related to mental and/or physical health in a confidential setting are encouraged to make an appointment with University Health Services or download the TELUS Health Student Support app for 24/7 access to professional counseling in multiple languages. Walk-in services for urgent, non-emergency needs are available during normal business hours at University Health Services locations; call 979.458.4584 for details.

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's Title IX webpage.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors influencing a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care practices by utilizing the resources and services available through University Health Services. Students needing a listening ear can call the Texas A&M Helpline (979.845.2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends for mental health peer support while classes are in session. The TELUS Health Student Support app provides access to professional counseling in multiple languages anytime, anywhere by phone or chat, and the 988 Suicide & Crisis Lifeline offers 24-hour emergency support at 988 or 988lifeline.org.

Texas A&M College Station
Students needing a listening ear can contact University Health Services (979.458.4584) or call the Texas A&M Helpline (979.845.2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends while classes are in session. 24-hour emergency help is also available through the 988 Suicide & Crisis Lifeline (988) or at 988lifeline.org.