



GEORGETOWN UNIVERSITY
School of Continuing Studies

BLHS 414 Cyber Operations and Global Politics

Dates: Aug 29-Dec 5 2019

Location: This course takes place on-site at the Georgetown University School of Continuing Studies' building located at 640 Massachusetts Ave NW, Washington, DC 20001. Additionally, Georgetown University School of Continuing Studies (SCS) uses Canvas as its Learning Management System. To learn more about Canvas, please go through the [Canvas Guide for Students](#).

Faculty: Prof Richard Klein

Contact Information: rk971@georgetown.edu

Virtual Office Hours: email to set up

COURSE DESCRIPTION

Networks around the world are under constant assault and threatened by hackers who want to steal information or cause harm. By looking at cyber intelligence and the domestic and international goals of governments, policymakers can develop better policies, make improved resource investment decisions, and make more complete risk management decisions. This course will focus on building an understanding of how cyber operations are used by governments to achieve domestic or international goals. We will investigate the use of cyber operations as a tool of statecraft and the options it provides leaders in achieving foreign and domestic goals.

Unclear norms of behavior about the use of cyber operations and uncertainty over acceptable responses mean governments should be prepared for uncertainty and a complication of traditional international relations. We will examine the cyber operations of various countries to see the context, drivers, and goals for their actions. Students will learn how using cyber intelligence can drive global politics, international policies, and cyber security decisions.

- The course is not intended to look at cyber security at a technical level. Students do not need a technical background. Students will be expected to have some working understanding of international relations and current events.

Coursework will focus on looking at cyber operations through the lens of international relations. Throughout the course we will compare the use of cyber operations with traditional foreign policy tools and examine the emerging use of cyber technologies to achieve national goals. The course will emphasize how strategic cyber intelligence can improve risk management decisions and assist policymakers in setting effective policies.

COURSE LEARNING OBJECTIVES

By the end of the course, students will be able to:

- Explain how cyber operations support the national or domestic goals of country suspected of conducting the operation.
- Look at world events and anticipate or conceptualize possible cyber actions from countries involved the event.
- Explain the benefits and shortcomings of the use of cyber operations as an instrument of foreign policy.
- Compare the use of cyber operations with traditional tools of statecraft (diplomacy, economic policies, military policies etc).
- Explain how cyber threat intelligence can be framed in the context of an actor's domestic or international goals.
- Identify the factors complicating the use of cyber operations to achieve national goals and the establishment of effective policies in response to cyber operations.

REQUIRED READINGS

Weekly readings will consist of portions of the below required books and a series of articles and publications. Depending on current events the instructor may assign or substitute additional articles related to world events that may unfold during the semester.

The following are the required reading material for this course:

- Freeman Jr., Charles W. Arts of Power: Statecraft and Diplomacy. Washington, DC United States Institute of Peace Press, 1997. ISBN-13: 978-1878379658
- Singer, P.W. and Allan Friedman Cybersecurity and Cyberwar: What Everyone Needs to Know. New York, NY Oxford University Press, 2014. ISBN 978-0-19-991811-9
- Carlin, John P., Dawn of the Code War: America's Battle Against Russia, China, and the Rising Global Cyber Threat, PublicAffairs, 2018, ISBN-13: 978-1541773837

COURSE REQUIREMENTS

Technical Requirements

As part of your learning experience, you can expect to:

1. Communicate via email including sending attachments.
2. Navigate the internet using a Web browser.
3. Use office applications such as Microsoft Office or Google Docs to create documents.
4. Learn how to submit assignments in Canvas.
5. Communicate with peers using discussion boards and other platforms.
6. Upload and download saved files.
7. Have easy access to the Internet.
8. Navigate Canvas, including using the email component within Canvas.
9. Use a microphone to record audio through your computer.
10. Use an internal or external camera to record video through your computer.

In this course we will use VoiceThread, TurnItIn and Zoom.

- VoiceThread is a tool that enables teachers and students to upload and asynchronously present images, video, and/or other media and respond to others presentations with audio, video, and/or text comments. [Instructions for VoiceThread are available here.](#)
- TurnItIn is a writing assessment tool that is used to detect plagiarism and allows teachers to provide assignment feedback to students. [Instructions for TurnItIn are available here.](#)
- Zoom enables users to conduct synchronous (“real-time”) conferences, presentations, lectures, meetings, office hours and group chats via audio, video, text chat and content sharing. [Instructions for Zoom are available here.](#)

Computer Requirements

Computer requirements to complete the course are listed by [Canvas in the Instructure Guides](#).

COURSE EXPECTATIONS

Student Expectations

This course consists of 15 weeks. You are expected to do the readings, attend the weekly lectures, participate in class discussions, and to engage with the course material in depth. Your responsibilities include completing the assignments, and turning in your final project report.

Participation is essential to your success in this class. In order to get full credit for participation, you will have to attend and participate in all discussions.

Time Expectations

Students should plan on spending approximately 2-5 hours per week outside of class to complete the work for each week.

ACADEMIC INTEGRITY

All students are expected to maintain the highest standards of academic and personal integrity in pursuit of their education at Georgetown. We assume you have read the honor code material located at <http://scs.georgetown.edu/academic-affairs/honor-code>, and in particular have read the following documents: Honor Council Pamphlet, What is Plagiarism, Sanctioning Guidelines, and Expedited Sanctioning Process. Papers in this course will all be submitted to turnitin.com for checking.

Academic dishonesty in any form is a serious offense, and students found in violation are subject to academic penalties that include, but are not limited to, failure of the course, termination from the program, and revocation of degrees already conferred. All students are held to the Honor Code.

The Honor Code pledge follows:

In the pursuit of the high ideals and rigorous standards of academic life, I commit myself to respect and uphold the Georgetown University Honor System: To be honest in any academic endeavor, and To conduct myself honorably, as a responsible member of the Georgetown community, as we live and work together.

Plagiarism

Stealing someone else's work is a terminal offense in the workplace, and it will wreck your career in academia, too. Students are expected to work with integrity and honesty in all their assignments.

The Georgetown University Honor System defines plagiarism as "the act of passing off as one's own the ideas or writings of another." More guidance is available through the [Gervase Programs](#). If you have any doubts about plagiarism, paraphrasing, and the need to credit, check out [Plagiarism.org](#).

COURSE ACTIVITIES AND ASSIGNMENTS

Written work is due by the assigned due dates. Follow-ups and class participation are contingent on the timely submission of your initial responses.

Late Submission Policy:

As stated in the [Student Handbook](#), you must notify me and obtain my approval if you are unable to complete any assignment by the published submission deadline. I will gladly consider granting extensions for assignments as long as the request is made at least 24 hours before the due date/time. The request must include the date and time when you intend to submit the assignment. If you fail to give both a date and a time, however, the request will not be honored. However, no late submissions or extensions are available for the last week of class or for any missed lectures. Late responses with no previous arrangements for all assignments will be penalized by 10% for each day or portion of a day that the assignment is late, unless previous arrangements have been made.

Discussions and Assignments

This class consists primarily of lecture with a portion of each class devoted to classroom discussion of the theme examined that week. Class participation by all students is expected and will be a key aspect of the success of each lecture. Participation will consist of regularly contributing to class discussion and drawing from readings and integrating lessons from earlier lectures.

- Class participation will represent 15% of students' final grade.

During Week 2 an in-class exam will be administered. The exam will cover concepts addressed during the first two weeks of the course.

- This exam will represent 10% of students' final grade.

At the beginning of Week 6 a paper will be due which addresses concepts addressed in the first half of the course. The required length of the paper will be 6-8 pages. The specific assignment question(s) will be handed out during week 4.

- This paper will represent 25% of your final grade.

During Week 9 of the course an in-class presentation will be required of all students. All students will also be required to submit an accompanying 5-page summary of the presentation.

- The presentation and written summary will represent 20% of your final grade.

A paper representing the final exam of the course will be due the last week of the course. The specific final assignment will be handed out during the second-to-last week of the course. Students will be expected to integrate lessons and points from throughout the course in addressing the final exam question(s).

- This final paper will be 10-15 pages in length and represent 30% of your final grade.

Citation Style

This course uses APA style for all writing and research assignments. Resources for this citation style are available through

[Georgetown Library Citation Guide](#)

[APA Style Guidebook](#)

GRADING

Grading in this course will be determined by the following grading scale:

- A: 93% to 100%
- A-: 90% to 92%
- B+: 87% to 89%
- B: 83% to 86%
- B-: 80% to 82%
- C+: 77% to 79%
- C: 73% to 76%
- C-: 70% to 72%
- D+: 67% to 69%
- D: 63% to 66%
- F: 62% and below

ACCOMMODATIONS

Under the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, individuals with disabilities are provided reasonable accommodations to ensure equity and access to programs and facilities. Students are responsible for communicating their needs to the Academic Resource Center, the office that oversees [disability support services](#), (202-687-8354; arc@georgetown.edu;) before the start of classes to allow time to review the documentation and make recommendations for appropriate accommodations. The University is not responsible for making special accommodations for students who have not declared their disabilities and have not requested an accommodation in a timely manner. Also, the University need not modify course or degree requirements considered to be

an essential requirement of the program of instruction. For the most current and up-to-date policy information, please refer to the [Georgetown University Academic Resource Center website](#). Students are highly encouraged to discuss the documentation and accommodation process with an Academic Resource Center administrator.

STUDENT SUPPORT SERVICES

Support Services

SCS offers a variety of support systems for students that can be accessed online, at the School of Continuing Studies downtown location, and on the main Georgetown campus:

- [Academic Resource Center](#)
- 202-687-8354 | arc@georgetown.edu
- [Counseling and Psychiatric Services](#)
- 202-687-6985
- [Institutional Diversity, Equity & Affirmative Action \(IDEAA\)](#)
- (202) 687-4798

Georgetown Library

Students enrolled in online School of Continuing Studies SCS coursework have access to the University Library System's eResources, including 500+ research databases, 1.5+ million ebooks, and thousands of periodicals and other multimedia files (films, webinars, music, and images). Students can access these resources through the [Library's Homepage](#) by using their University username (NetID) and password (this is the same login information used to access email, BlackBoard, etc.). The Library does not mail physical items to students.

SCS students may make an appointment with a librarian to discuss a research topic, develop a search strategy, or examine resources for projects and papers. Librarians offer an overview of and in-depth assistance with important resources for senior or master's theses, dissertations, papers and other types of research. Appointments are conducted using Google Hangout (video-conferencing function) through the Georgetown Gmail System or by telephone. This service is available to currently enrolled students who need assistance with Georgetown-assigned projects and papers. Please review the [Services & Resources Guide for Online Students](#) for additional information.

Research Guide

The Bachelor of Liberal Arts program has an extensive online [Library Research Guide](#) designed for the subject and research specifications of our program. This Guide will give you direct access to the library resources central to your course research work.

Learning Resources

SCS offers a host of [learning resources](#) to its students. Two that you might find particularly helpful in this course are the [Writing Center](#) and [Refworks](#).

- The [Writing Center](#) offers professional writing support through its online peer tutoring service.
- [Refworks](#) is an online research management tool that aids in organizing, storing, and presenting citation sources for papers and projects.

Technical Support

Click on the Help link (on the bottom-left corner in Canvas) to reach Canvas Support, including the [Canvas Student Guide](#) and 24 hour Canvas Support Hotline at 855-338-2770.

In this course we will use VoiceThread, TurnItIn and Zoom.

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- TurnItIn is a writing assessment tool that is used to detect plagiarism and allows teachers to provide assignment feedback to students. [Technical support for TurnItIn is available.](#)
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COMMUNICATIONS GUIDELINES

Netiquette Guidelines

To promote the highest degree of education possible, we ask each student to respect the opinions and thoughts of other students and be courteous in the way that you choose to express yourself. The topics in this course can be controversial and promote debate. Students should be respectful and considerate of all opinions.

In order for us to have meaningful discussions, we must learn to genuinely try to understand what others are saying and be open-minded about others’ opinions. If you want to persuade someone to see things differently, it is much more effective to do so in a polite, non-threatening way rather than to do so antagonistically. Everyone has insights to offer based on his/her experiences, and we can all learn from each other. Civility is essential.

Statement of Student Conduct, Civility, and Engagement

The School of Continuing Studies offers students the opportunity to engage with faculty, staff, and peers in ways that foster intellectual growth and development in their chosen field of study. It is important to recognize that each member of our community brings his or her own values, thoughts,

perspectives, and experiences into each interaction. We expect students to behave in a manner that is civil and respectful of others, and appreciate the learning opportunities that come from engaging pluralistic perspectives in a dynamic educational environment.

Engagement within the SCS Georgetown community takes places in on-campus meeting spaces and classrooms, and extends to online learning platforms and forums. Students should be particularly mindful that participation in class discussions, group assignments, emails, blogs, and social media reflect upon them personally, academically, and professionally. All viewpoints, editorials, and opinions expressed by students represent those students exclusively – and not the students' instructors, classmates, academic program, School, or University – even in cases when students are using Georgetown-affiliated systems like email, blogs, and online portfolios. The expectations for respect and civility are consistent for on-campus classes and spaces, as well as cyber, virtual, and online environments. Thus, civility and cybercivility are expected of all students, in all campus spaces.

SCS students are expected to adhere to the SCS guidelines for student conduct and the University Code of Student Conduct. In the event that a student's behavior is perceived to fall outside the stated SCS guidelines or may be a violation of the Code of Student Conduct, the matter may be referred to the Office of Student Conduct for further review and possible sanctioning. Such instances can include but are not limited to: disruption of official university functions (including teaching, research, administration), failure to comply with a directive issued by a University official, harassment and bullying, and incivility. For questions regarding the SCS student conduct expectations please review the policy in-full found in the [Bachelor of Arts in Liberal Studies Undergraduate Bulletin](#). For questions about the Code of Student Conduct, please review the information provided by the [Office of Student Conduct](#).

Communication with Peers

Notifications

In this course we will use Canvas to send email for private messages. You can either check your messages in the Canvas system or set your notifications to your preferred method of contact. Please check your messages at least once per day. When submitting messages, please do the following:

- Put a subject in the subject box that describes the email content with your name and module.
- Do not send messages asking general information about the class, please post those in the General Questions Discussion Board Forum.

Turnaround and Feedback

If you have a concern and send me a message, you can expect a response within one business days. Please allow two business days for assessment submission feedback.

Extreme weather, Emergencies, and Instructional Continuity

During inclement weather or other emergencies on a day when we are scheduled to meet face-to-face, check the university's Web site or call (202) 687-7669 for information on whether the university is open. If the university is open, this class will meet. If the university is closed, this class will meet through distance means such as online videoconferencing; check your e-mail for a message from me on how we will proceed in that situation. Due dates for written assignments submitted through Canvas will not be changed due to campus closings.

The university recently has acquired the capability to send text messages and recorded messages about emergencies to cell phones and other mobile devices. Sign up on MyAccess.

Copyright

The materials used in Georgetown University courses ("Course Materials") generally represent the intellectual property of course instructors which may not be disseminated or reproduced in any form for public distribution (e.g., sale, exchange, etc.) without the written permission of the course instructor. Course Materials include all written or electronic documents and materials, including syllabi, current and past examination questions/answers, and presentations such as lectures, videos, PowerPoints, etc., provided by a course instructor. Course Materials may only be used by students enrolled in the course for academic (course-related) purposes.

Published course readings (book chapters, articles, reports, etc.) available in Canvas are copyrighted material. These works are made available to students through licensed databases or fair use. They are protected by copyright law, and may not be further disseminated or reproduced in any form for distribution (e.g., uploading to websites, sale, exchange, etc.) without permission of the copyright owner.

More information about intellectual property and copyright can be found here: <https://www.library.georgetown.edu/copyright>

More information about computer acceptable use policy and intellectual property can be found here: <https://security.georgetown.edu/it-policies-procedures/computer-systems-aup>

Policy Accommodating Students' Religious Observances

The following is university policy:

Georgetown University promotes respect for all religions. Any student who is unable to attend classes or to participate in any examination, presentation, or assignment on a given day because of the observance of a major religious holiday or related travel shall be excused and provided with the opportunity to make up, without unreasonable burden, any work that has been

missed for this reason and shall not in any other way be penalized for the absence or rescheduled work. Students will remain responsible for all assigned work. Students should notify professors in writing at the beginning of the semester of religious observances that conflict with their classes.

Title IX at Georgetown

<https://titleix.georgetown.edu/>

Sexual Misconduct

Title IX of the Education Amendments of 1972 (“Title IX”) prohibits discrimination based on sex in any educational programs, which includes sexual harassment or any acts of sexual misconduct. Title IX requires the University, upon becoming aware of any incident of sexual harassment and misconduct to respond appropriately to protect and maintain the safety of the University community, including students, faculty, and staff.

Georgetown University prohibits sexual misconduct, including sexual harassment, sexual assault, domestic/dating violence, and stalking.

Discrimination based on sex, including sexual misconduct and discrimination based on pregnancy or parenting status, subverts the University’s mission and threatens permanent damage to the educational experience, careers, and well-being of students, faculty, and staff. Please know that as a faculty member I am committed to supporting survivors of sexual misconduct, including relationship violence and sexual assault. However, University policy also requires me to report any disclosures about sexual misconduct to the Title IX Coordinator, whose role is to coordinate the University’s response to sexual misconduct.

Georgetown has a number of fully confidential professional resources who can provide support and assistance to survivors of sexual assault and other forms of sexual misconduct. These resources include:

Jen Schweer, MA, LPC
Associate Director of Health Education Services for
Sexual Assault Response and Prevention
(202) 687-0323
jls242@georgetown.edu

Erica Shirley
Trauma Specialist
Counseling and Psychiatric
Services (CAPS)
(202) 687-6985
els54@georgetown.edu

More information about campus resources and reporting sexual misconduct can be found at:

<https://sexualassault.georgetown.edu/get-help>

Pregnancy Adjustments and Accommodations

Georgetown University is committed to creating an accessible and inclusive environment for pregnant and parenting students. Students may request adjustments based on general pregnancy needs or accommodations based on a pregnancy-related complication. Specific adjustments will be handled on a case by case basis and will depend on medical need and academic requirements.

Students seeking a pregnancy adjustment or accommodation should follow the process laid out at: <https://titleix.georgetown.edu/student-pregnancy>.

COURSE SCHEDULE

Part 1. Cyber as a Tool of Statecraft

Week 1. August 29

Introductions, terminology, understanding cyberspace

Week 2. September 5

Principles of Global Politics and Tools of National Power

Readings: Freeman pages 1-68
Singer and Friedman pages 1-30

A portion of this week's instruction will include an in-class exam that covers the topics addressed in class over the first two weeks as well as the Week 2 readings.

Week 3. September 12

Cyber as a Tool of Statecraft

Readings: Freeman pages 69-104
Singer and Friedman pages 31-59

Week 4. September 19

Norms of Behavior and Responding to Cyber Operations

Readings: Freeman pages 105-140
Singer and Friedman pages 120-165

Week 5. September 26

Internet Governance and Controlling the Internet

Readings: Singer and Friedman pages 166-240
Carlin Foreword

Part 2. Cyber Intelligence

Week 6. October 3

What is Cyber Intelligence and How Should It Be Used

Readings: “Operational Levels of Cyber Intelligence,” Intelligence and National Security Alliance, Cyber Intelligence Task Force. September 2013

Carlin - Introduction-Chapter 3

Week 7. October 10

US Cyber Strategies

Readings: The Department of Defense Cyber Strategy, April 2015.
www.defense.gov

Summary: Department of Defense Cyber Strategy 2018.
www.media.defense.gov

National Cyber Strategy of the United States of America,
September 2018,

www.whitehouse.gov

The White House; International Strategy for Cyberspace,
May 2011.

www.whitehouse.gov

Carlin - Chapters 4-5

Week 8. October 17

The US as a Victim of Cyber Attacks

Readings: Carlin - Chapters 6-8

Week 9. October 24

Student Presentations – students will address one of several questions (to be provided during week 7) that reflect on previous course work

Week 10. October 31

Russia: Cyber Operations, Motivations, and Implications

Readings: Thomas, Timothy *Russia Military Strategy and Ukraine: Indirect, Asymmetric and Putin-led*, The Journal of Slavic Military Studies 28:3 2015 pages 445-461

Thomas, Timothy *The Evolving Nature of Russia’s Way of War*, Military Review July-August 2017

Carlin - Chapter 9

Week 11. November 7

China: Cyber Operations, Motivations, and Implications

Readings: Center for a New American Security | “Warring State: China’s Cybersecurity Strategy” by Amy Chang; December 3, 2014

Mandiant | “APT 1: Exposing One of China’s Cyber Espionage Units” February 2013 Report

Week 12. November 14

Iran: Cyber Operations, Motivations, and Implications

Readings: Anderson, Collin and Sadjadpour, Karim “Iran’s Cyber Threat: Espionage, Sabotage, and Revenge”, Carnegie Endowment for Peace, January 4, 2018

Singer and Friedman pages 114-119

Week 13. November 21

Examining and Evaluating the Use of Threat Models and Cyber Intelligence

Readings: Cyber Threat Metrics, Sandia Reports, Sandia 2012-2427, March 2012; Mark Mateski et al.

Carlin - Epilogue

Week 14. December 5

Realities of Cyber War and Cyber Armageddon

Readings: Rid, Thomas *Hacking Can Reduce Real-World Violence* Foreign Affairs. November/December 2013

Libicki, Martin *Don’t Buy the Cyberhype* Foreign Affairs. August 14, 2013