

Pre-emptive Deterrence CSSS-5240

S2 2021 Section BO 3 Credits 03/15/2021 to 05/14/2021 Modified 03/05/2021

Meeting Times

Thursdays, 03/18/2021 to 05/13/2021

6:00 PM to 10:00 PM ET - *please note the start time if you are in a different time zone:*

5:00 PM - CT, 4:00 PM - MT, 3:00 PM - PT

Class will meet via Zoom - the link will be posted in WorldClassroom (*please see Campus information for site specific directives*)

Contact Information

Instructor: Dr. Godson Chukwuma

Email: godsonchukwuma10@webster.edu

Phone: 703 969 7126 (Please Text)

Description

This course addresses specific methods, ethics, laws, policies and procedures for planning and executing pre-emptive Cybersecurity deterrence operations and force application.

Requisites

CSSS 5000 Introduction to Cybersecurity (3)

Outcomes

The student will:

- Summarize and demonstrate an understanding of the vocabulary of Cybersecurity systems pre-emptive deterrence terms and phraseology.
- Acquire and differentiate a broad understanding of Cybersecurity pre-emptive deterrence, ethics, laws, methods, policies and procedures.
- Demonstrate and differentiate a basic working knowledge of Cybersecurity pre-emptive deterrence operations, as well as an awareness of the number and types of vulnerabilities, current and growing threats.
- Describe the roles, responsibilities, and tools of a Cybersecurity system technician, project and/or program manager.
- Summarize and differentiate the basic knowledge of critical Cybersecurity infrastructures, communications, detection and protection schemes, and potential threats and impacts.
- Summarize and discuss an understanding of the basics of the Comprehensive National Cybersecurity Initiative (CNCI).
- Differentiate the scope of the evolving environment of Cybersecurity communications international law, national law enforcement, and organizational security policies and procedures.
- Classify future trends in Cybersecurity strategic operation issues facing public and private enterprises.
- Categorize the challenges of the Cybersecurity (MS) program and the importance of thinking about the capstone course in terms of their research focus or projects.
- Synthesize and integrate the learning experiences acquired throughout the MS in Cybersecurity Systems program, apply critical thinking and evaluation methods of current and future topics relative to this major.

Required Textbook

Cyberspace and National Security: Threats, Opportunities, and Power in a Virtual World

Author: Reveron

Publisher: Georgetown University Press

Edition: 2012

ISBN: 978-1589019188

Materials

Textbook title and ISBN posted here:

<http://www.bkstr.com/websteronlinestore/home>

Start here - follow drop down menus

Deliverables

Weeks 2-8: Individual/Group Presentations

Individual/Group assigned in week 1.

Submit the individual/group presentations in PowerPoint format, submitted via World Classroom

Naming Convention: Individual/Group name-Presentation

Example: Bill/Bill's Group-Presentation

Week 5: Mid - Term Paper

Submit the Mid-Term paper in Word format, submitted via World Classroom, along with the Turnitin report.

Naming Convention: Last Name-First Name- [Mid-Term|Turnitin]

Example: Max-Boedder-Mid-Term

Week 9: Final Exam

Final exam - Open Text and Notes

Evaluation

Breakdown

Case Studies 30

Midterm- Paper: 15 points

Class weekly Presentations: 10 Points

Final Exam: 20 Points

Research Paper 25 Points

Criteria

Grade % Points

A 93-100

A- 90-92

B+ 87-89

B 83-86

B- 80 -82

C 70-79

F Below 70

Synthesis and Evaluation:

A =Excellent performance. Work is exemplary and worthy of emulation by others. Student is in full attendance and constructively contributes to the learning environment.

B= Above average performance. All assignments are complete and exhibit a complete understanding and an ability to apply concepts.

C= Average performance. Accomplishes only the minimum requirements. Oral and written communication is at an acceptable level.

F = Work is not passing and unsatisfactory, characterized incompleteness, lateness, unsatisfactory demonstration of understanding and application

Criteria

TYPE	WEIGHT%	TOPIC	NOTES
Weekly Presentations	10	Current Event	
Case Study 1	15	Challenges for Cyber Deterrence	2-4 Pages = 10% 5-10 Minutes Presentation with 3-5 slides = 5% Due April 1, 2021
Exam	15	Mid Term Exam	April 8, 2021
Case Study 2	15	Cyber deterrence offers much more flexibility and increased options from traditional deterrence methodologies developed in the Cold War's nuclear age. Discuss.	2-4 Pages = 10% 5-10 Minutes Presentation with 3-5 slides = 5% Due April 22, 2021
Research Paper	25	Cyber deterrence Research	10-12 page paper=20% 10 minutes presentation with 5-10 slides =5% Due May 10, 2021
Exam	20	Final Exam	May 13, 2021

Schedule

When	Topic	Notes
Week 1 03/18/2021	Introduction	Read Chapter 1
Week 2 03/25/2021	Speculative Security	Read Chapter 2
Week 3 04/01/2021	Operational Considerations	Read Chapters 3 & 4
Week 4 04/08/2021	Structures of Cyber Conflict	Read Chapters 5 & 6

Week 5 04/15/2021	Cyber Deterrence & Security Reliance	Read Chapters 7 & 8 Submit Mid Term Paper . (APA Format, & Check with Turnitin.)
Week 6 04/22/2021	Information warfare	Read Chapters 9 & 10
Week 7 04/29/2021	Russia and China	Read Chapters 11 & 12
Week 8 05/06/2021	Theory of Cyber Power	Read Chapters 13 & 14
Week 9 05/13/2021	Final Exam	Final Exam <u>ONLINE EVALUATION:</u> https://evaluation.webster.edu - <i>available weeks 8 & 9</i> , posted in WorldClassroom as well

* Course Policies

The instructor reserves the right to alter assignments. If this should occur, the students will be notified beforehand.

This class will involve discussions about the readings assigned in the text and in other articles. Students will see relevant applications to help them understand the conceptual frameworks and see how these ideas relate to the real world of cybersecurity threat detection and countermeasures.

The professor will not do a lecture each week on all the material we will discuss in class. It is expected that each student independently learn through completion of assigned readings and required assignments outside of class in order to improve reflection and application of theories and methodologies to situations and organizations showcased through class discussions.

Therefore, the use of case studies, presentations, and other vehicles as points of application for critical conceptual and theoretical material appears to be a sound teaching strategy. Class meetings will include group discussions, assessments, case studies and other informational pieces presented through various media methods.

It is expected that class members will:

- Be prepared with facts and specific quotes from articles and readings
- Be prepared to make comments, ask questions, or make observations about articles and readings
- Take a position on a question or a point
- Ask clarifying questions
- Help keep the discussion moving and on track
- Help draw others into the discussion
- Integrate theories and content from other article
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- Common courtesy dictates that class members shall not:
 -
 - Be unprepared and show your lack of knowledge
 - Monopolize the discussion
 - Make irrelevant comments
 - Be insensitive to other's desire to speak or to their opinions

Institutional Policies

Academic Policies

Academic policies provide students with important rights and responsibilities. Students are expected to familiarize themselves with all academic policies that apply to them. Academic policies for undergraduate students can be found in the Undergraduate Studies Catalog; graduate students should review the Graduate Studies Catalog.

Undergraduate Studies Catalog

The Undergraduate Studies Catalog contains academic policies that apply to all undergraduate students. The *academic policies and information* section of the catalog contains important information related to **attendance, conduct, academic honesty, grades, and more**. If you are an undergraduate student, please review the catalog each academic year. The current Undergraduate Studies Catalog is at:

<http://www.webster.edu/catalog/current/undergraduate-catalog/> (<http://www.webster.edu/catalog/current/undergraduate-catalog/>).

Graduate Studies Catalog

The Graduate Studies Catalog contains academic policies that apply to all graduate students. The *academic policies* section of the catalog contains important information related to **conduct, academic honesty, grades, and more**. If you are a graduate student, please review the catalog each academic year. The current Graduate Studies Catalog is at:

<http://www.webster.edu/catalog/current/graduate-catalog/> (<http://www.webster.edu/catalog/current/graduate-catalog/>).

Grading

The Grades section of the academic catalog outlines the various grading systems courses may use, including the information about the final grade reported for this class.

Undergraduate

<http://www.webster.edu/catalog/current/undergraduate-catalog/academic-policies.html#grading>
(<http://www.webster.edu/catalog/current/undergraduate-catalog/academic-policies.html#grading>).

Graduate

<http://www.webster.edu/catalog/current/graduate-catalog/academic-policies.html#grades>
(<http://www.webster.edu/catalog/current/graduate-catalog/academic-policies.html#grades>).

Incomplete

There are important policies that govern grades of Incomplete (I), including the circumstances under which Incomplete grades are granted, deadlines for completion, and consequences should the remaining course work not be completed. It is the responsibility of a student who requests an Incomplete to ensure that he/she understands and follows the policies.

Grade Appeals

Instructors are responsible for assigning grades, and student should discuss grade issues with the instructor. Policies and procedures for appealing grades are available in the appropriate catalog.

Academic Honesty Policy

Webster University is committed to academic excellence. As part of our Statement of Ethics, we strive to preserve academic honor and integrity by repudiating all forms of academic and intellectual dishonesty, including cheating, plagiarism and all other forms of academic dishonesty. Academic dishonesty is unacceptable and is subject to a disciplinary response. Students are encouraged to talk to instructors about any questions they may have regarding how to properly credit others' work, including paraphrasing, quoting, and citation formatting. The university reserves the right to utilize electronic databases, such as Turnitin.com, to assist faculty and students with their academic work.

The University's Academic Honesty Policy is published in academic catalogs:

Undergraduate

<http://www.webster.edu/catalog/current/undergraduate-catalog/academic-policies.html>
(<http://www.webster.edu/catalog/current/undergraduate-catalog/academic-policies.html>).

Graduate

<http://www.webster.edu/catalog/current/graduate-catalog/academic-policies.html>
(<http://www.webster.edu/catalog/current/graduate-catalog/academic-policies.html>).

As a part of the University commitment to academic excellence, the Academic Resource Center provides student resources to become better acquainted with academic honesty and the tools to prevent plagiarism in its many forms:

http://www.webster.edu/arc/plagiarism_prevention/ (http://www.webster.edu/arc/plagiarism_prevention/).

Statement of Ethics

Webster University strives to be a center of academic excellence. The University makes every effort to ensure the following:

- The opportunity for students to learn and inquire freely

- The protection of intellectual freedom and the rights of professors to teach
- The advancement of knowledge through scholarly pursuits and relevant dialogue

To review Webster University's statement of ethics, see the Undergraduate Studies Catalog and the Graduate and Studies Catalog:

Undergraduate

<http://www.webster.edu/catalog/current/undergraduate-catalog/overview.html#ethics>
(<http://www.webster.edu/catalog/current/undergraduate-catalog/overview.html#ethics>).

Graduate

<http://www.webster.edu/catalog/current/graduate-catalog/ethics.html> (<http://www.webster.edu/catalog/current/graduate-catalog/ethics.html>).

Contact Hours for this Course

It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, the content must be covered at another time.

Important Academic Resources

Academic Accommodations

Webster University makes every effort to accommodate individuals with academic/learning, health, physical and psychological disabilities. To obtain accommodations, students must identify themselves and provide documentation from a qualified professional or agency to the appropriate campus designee or the Academic ADA Coordinator at the main campus. The Academic ADA Coordinator may be reached at 314-246-7700 or disability@webster.edu (<mailto:disability@webster.edu>).

If you have already identified as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor of the accommodations you will require for this class at the beginning of the course.

Academic Resource Center

Additional support and resources may be accessed through the Academic Resource Center (ARC). Support and resources include academic counseling, accommodations, assistive technology, peer tutoring, plagiarism prevention, testing center services, and writing coaching. Visit www.webster.edu/arc (<http://www.webster.edu/arc>) or Loretto Hall 40 on the main campus for more information.

Student Success Portal

Webster University's Student Success Portal, powered by Starfish, is a communications tool to connect students with faculty members and campus support services. It allows faculty and staff members to communicate with you regarding academic achievements as well as areas where support may be helpful. You may use the portal to contact faculty and staff members for assistance and to arrange meetings. Activity in the portal will be communicated to your Webster University email account. The Student Success Portal is available via your course home page in WorldClassRoom or via Connections. Learn more about the Student Success Portal at <http://www.webster.edu/success/students.html> (<http://www.webster.edu/success/students.html>).

University Library

Webster University Library is dedicated to supporting the research needs and intellectual pursuits of students throughout the University's worldwide network. Resources include print and electronic books, journal articles, online databases, DVDs and streaming video, CDs and streaming music, datasets, and other specialized information. Services include providing materials at no cost and research help for basic questions to in-depth exploration of resources. The gateway to all of these resources and services is <http://library.webster.edu> (<http://library.webster.edu>). For support navigating the library's resources, see <http://libanswers.webster.edu/> (<http://libanswers.webster.edu/>) for the many ways to contact library staff.

Drops and Withdrawals

Drop and withdrawal policies dictate processes for students who wish to unenroll from a course. Students must take proactive steps to unenroll; informing the instructor is not sufficient, nor is failing to attend. In the early days of the term or semester, students may DROP a course with no notation on their student record. After the DROP deadline, students may WITHDRAW from a course; in the case of a WITHDRAW, a grade of W appears on the student record. After the WITHDRAW deadline, students may not unenroll from a course. Policies and a calendar of deadlines for DROP and WITHDRAW are at:

Undergraduate

<http://www.webster.edu/catalog/current/undergraduate-catalog/enrollment.html>
(<http://www.webster.edu/catalog/current/undergraduate-catalog/enrollment.html>).

Graduate

<http://www.webster.edu/catalog/current/graduate-catalog/enrollment.html> (<http://www.webster.edu/catalog/current/graduate-catalog/enrollment.html>).

Academic Calendar - <http://www.webster.edu/academics/academic-calendar/> (<http://www.webster.edu/academics/academic-calendar/>).

Current tuition rates, policies, and procedures, including details of pro-rated tuition refunds, are available in the "Tuition, Fees, and Refunds" section of Webster's Academic Catalogs:

Undergraduate

<http://www.webster.edu/catalog/current/undergraduate-catalog/tuition.html>
(<http://www.webster.edu/catalog/current/undergraduate-catalog/tuition.html>).

Graduate

<http://www.webster.edu/catalog/current/graduate-catalog/tuition.html> (<http://www.webster.edu/catalog/current/graduate-catalog/tuition.html>).

Student Handbook and Other Important Policies

Student handbook and other non-academic policies may apply to you and may impact your experience in this class. Such policies include the student code of conduct, privacy, technology and communications, and more. Please review the handbook each year and be aware of policies that apply to you. The handbook is available at:

<http://www.webster.edu/student-handbook/> (<http://www.webster.edu/student-handbook/>).

Sexual Assault, Harassment, and Other Sexual Offenses

Webster University makes every effort to educate the community to prevent sexual assault, harassment, and other sexual offenses from occurring, and is committed to providing support to those affected when this behavior does occur. To access information and resources or to review the Policy on Sexual Assault, Harassment, and Other Sexual Offenses, visit:

<http://www.webster.edu/sexual-misconduct/> (<http://www.webster.edu/sexual-misconduct/>).

Research on Human Subjects

The Webster University Institutional Review Committee (IRB) is responsible for the review of all research on human subjects. The IRB process applies to all Webster University faculty, staff, and students and must be completed prior to any contact with human subjects. For more information on the IRB, visit:

<http://www.webster.edu/irb/index.html> (<http://www.webster.edu/irb/index.html>).

Course Evaluations

At the end of this course, you will have the opportunity to provide feedback about your experience. Your input is extremely valuable to the university, your instructor, and the department that offers this course. Please provide your honest and thoughtful evaluation, as it helps the university to provide the best experience possible for all of its students.

Important Technology Information

Connections Accounts

Webster University provides all students, faculty, and staff with a University email account through Connections. Students are expected to activate their Connections account and regularly check incoming University email. Students may choose to have their University email forwarded to an alternate email address. Connections account holders can call the Help Desk (314-246-5995 or toll free at 1-866-435-7270) for assistance with this setup. Instructions are also provided on the Information Technology website at:

<http://www.webster.edu/technology/service-desk/> (<http://www.webster.edu/technology/service-desk/>).

WorldClassRoom

WorldClassRoom is Webster's Learning Content Management System (LMS). Your instructor may use WorldClassRoom to deliver important information, to hold class activities, to communicate grades and feedback, and more. WorldClassRoom is available using your Connections ID at:

<https://worldclassroom.webster.edu/> (<https://worldclassroom.webster.edu/>).

Webster Alerts

Webster Alerts is the University's preferred emergency mass notification service, available free to current students, faculty and staff at all US campuses. By registering a valid cell phone number and email address, you will receive urgent campus text, voice mail and email communications. Valuable information concerning a range of incidents affecting you - from weather-related campus closures, class delays and cancellations, to more serious or life-threatening events - are immediately and simultaneously delivered through multiple communication channels. To register for Webster Alerts, visit:

<http://www.webster.edu/technology/services/webster-alerts/> (<http://www.webster.edu/technology/services/webster-alerts/>).

Campus Information

Due to the Education Centers not re-opening in the DC region for this term ***please*** meet via Zoom for the Spring 2 term.

Instructors will post the meetings in WorldClassroom/Canvas for students to log in each week (added security measure). On the left side with all the hyperlinks there will be one for Zoom.

We recommend Chrome for the browser and please mute yourself when not speaking, also only you are able to unmute yourselves in Zoom. If there are many participants it also might be wise to disengage video too (or if bad weather) if low band width messages continually appear.

Webster University - Joint Base Anacostia-Bolling:

Phone (202) 561-4382

bolling@webster.edu

Additional Items

Emerson Library: library.webster.edu

There is a live chat feature - home page, contact a librarian (middle of page, middle box): Chat with a librarian on left side (might have to scroll down a bit) - accessible 24 hours a day.

The WSBT subject librarian is:

Business & Management	Mary Anne Erwin	800-985-4279	maerwin@webster.edu
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Please use these excellent resources