THE NATIONAL WAR COLLEGE WASHINGTON, DC



ELECTIVE SYLLABUS NWC 6035

The Politics of Pandemics

FALL 2020 Academic Year 2020-2021

Dr. Eric Silla Course Director Department of Security Studies Dr. Colton Campbell Chair Department of Security Studies

NWC 6035: The Politics of Pandemics

	Topic	Monday	Title
		Class Dates	
BLOCK 1	1	14 September 2020 0830-1030	Introduction: The Biology of Disease
	2	21 September 2020 0830-1030	Epidemiology
	3	28 September 2020 0830-1030	Public Health
BLOCK 2	4	5 October 2020 0830-1030	Plague, Small Pox, Influenza of 1918
	5	19 October 2020 0830-1030	Cholera and Malaria
	6	26 October 2020 0830-1030	HIV/AIDS
	7	2 November 2020 0830-1030	Ebola and Zika
	8	9 November 2020 0830-1030	Influenza (Student Memo Due)
BLOCK 3	9	16 November 2020 0830-1030	Behavior
	10	30 November 2020 0830-1030	Economics
	11	7 December 2020 0830-1030	Security
	12	10 December 2020 1230-1430	Conclusion: Institutions and Agencies (<i>Final Student Presentations</i>)

INTRODUCTION

COURSE OVERVIEW

This course provides national security strategists and policymakers with a foundation for participating constructively in government responses to COVID-19 and future pandemics. In the first block, the course begins with an overview of the basic biology and epidemiology of disease followed by an introduction to the strategies and methods used in public health. The second block then presents case studies of diseases—plague, small pox, cholera, malaria, HIV/AIDS, Ebola, Zika, influenza (SARS, H1N1, COVID-19, etc.)—to develop knowledge and analytic skills for understanding the full range of technical, political, economic, social, and ethical issues that policy strategists must consider when responding to pandemics. The third block then presents behavioral science, economic, security, and organizational/agency perspectives as a basis for classroom discussion of the concepts and tools available for strategy design and implementation.

The course takes a broad view of health and disease, comparing the interplay of politics and medical culture in different countries and the global context. It considers a wide variety of interrelated health challenges and policies associated with, for example, sanitation, maternal health, nutrition, working conditions, ecology, poverty, climate, agricultural practices, pollution, misinformation, religious practices, and conflict. By the end of the course, students will be expected to define best practices and develop frameworks for harmonizing political and technical strategies in response to pandemics. Class grades will be based on seminar contributions and two deliverables. The first deliverable will be a 3-page memo assessing a past case of disease response to inform COVID-19 strategy for senior policymakers. The second deliverable will be an in-class briefing—presented in the final session—that applies insights from the course to assesses an agency's or organization's performance thus far in responding to COVID-19.

APPROACH

The course consists of 12 sessions that consist primarily of seminar discussions and may include break-out group exercises or other activities adapted to students' preferred learning styles.

The course is organized around three main blocks:

- Topics 1-3 provide an overview of the basic biology and epidemiology of disease followed by an introduction to the strategies and methods used in public health.
- Topics 4-8 present case studies of diseases—plague, small pox, cholera, malaria, HIV/AIDS, Ebola, Zika, influenza (SARS, H1N1, COVID-19, etc.)—to develop analytic skills for understanding the full range of technical, political, economic, social, and ethical issues that policy strategists must consider when responding to pandemics.
- Topics 9-12 presents behavioral science, economic, security, and institutional perspectives as a basis for classroom discussion of the concepts and tools available for strategy design and implementation.

COURSE LEARNING OBJECTIVES

Weekly seminar learning objectives are tailored to each lesson, but students by the end of the course should be able to:

1. *Explain* the basic science of disease, including the concepts and methods used to explain and measure disease incidence, transmission, and impact.

2. *Explain* how biological, ecological, behavioral, social, political, economic, and security factors interact in shaping the propagation, management, and impact of pandemics.

3. *Evaluate* the effectiveness of strategies, policies, tools, agencies, organizations, and tactics used to prevent or respond to pandemics and their consequences for national security.

4. *Analyze* pandemic case studies for understanding best practices in leadership, decisionmaking, and strategy development and implementation.

5. *Develop* strategies that address pandemics and their impact on national security.

ASSIGNMENTS AND GRADING POLICY

Grades will be based on seminar contributions, one memo, and a final in-class presentation. Students must meet all stated course objectives to pass the course; any student who questions his/her own ability to meet all course objectives, regardless of compensatory work completed for absences, should ask the faculty lead for further remedial assistance.

- <u>Participation and Contribution</u>: (60% of grade) Students are expected to drive discussion with insights, reflections, and questions derived from: the assigned readings; contributions from other students and the faculty leader; and relevant professional and personal experience. Students are also encouraged to share insights or information gained from outside reading or other sources.
- <u>Policy Memo (Due 9 November)</u>: 3-page memo assessing a past case of disease response to inform COVID-19 strategy for senior policymakers. In consultation with the faculty lead, students should select a disease or disease outbreak not covered in the course, such as polio, measles, Chikungunya, and MERS. Each student will assess a different disease or disease outbreak. More detailed guidance on structure, format, and content will be provided in advance. (20% of grade)
- <u>Briefing (Due on 10 December)</u>: 5-minute briefing with slides that assesses an agency's or organization's response to COVID-19 thus far. In consultation with the faculty lead, students should select a relevant institution such as the Centers for Disease Control and Prevention, USAID, World Health Organization, and the Office of the Surgeon General. Each student will assess a different institution. Selection will be made early in the semester so students can track their institution's actions over time. More detailed guidance on structure, format, and content will be provided in advance. (20% of grade)

STUDENT ASSESSMENT

Students receive a grade and written feedback on course assignments. Faculty will evaluate students using the below A to F grading scale. Final grades will indicate the degree to which students have demonstrated mastery of course objectives in course assessments and in contributions to seminar learning. Faculty members provide candid, constructive narrative comments to each of their students, addressing the student's strengths and weaknesses, and providing recommendations for improvement.

To pass a core or elective course, students must earn an overall course grade of at least a B minus. The final grades for all courses appear on the official student transcript. Below is the letter grade to quality point scale used for all NDU courses, along with the descriptor of each grade.

NDU GRADING SCALE				
Letter Grade	Score	Descriptor	Quality Points	
А	93 - 100	Exceptional Quality	4.00	
A-	90 - 92	Superior Quality	3.70	
B+	87 - 89	High Quality	3.30	
В	83 - 86	Expected/Acceptable Quality	3.00	
B-	80 - 82	Below Expected Quality	2.70	
С	70-79	Unsatisfactory Quality	2.00	
F	Below 70	Fail/Unacceptable Quality	0.00	
Ι		Incomplete	0.00	
Р		Pass	0.00	
Percentages will round up or down from the half-point mark				

Late submissions without advance instructor approval will be penalized by one letter-grade within the first 24-hour window and another step for each subsequent 24-hour window.

Students who fail to complete all course requirements in the allotted time will receive an overall grade of Incomplete (I); students who cannot meet all course objectives will receive an overall grade of Fail (F). In either case, the student will enter a remediation program to help raise his or her performance to passing standards.

GRADE APPEALS

Every NWC student has a right to appeal any graded event or final course grade. As a first step, the student should request an informal review of the grade by the FSL(s). This review should take place no later than 7 days after the release of the grade. Should the informal review not lead to a satisfactory resolution, the student may then initiate a formal review by submitting a written petition to the Associate Dean of Academics no later than 14 days after the release of the grade. The Associate Dean of Academics will adjudicate a graded event appeal. The Dean of Faculty and Academic Programs will convene a faculty panel to conduct the formal review and make a recommendation for resolution on a course grade appeal. The recommendation of the panel will be final.

GRADING GUIDELINES

Electives use a generic rubric, with the applicable categories noted below; for this course, each category will apply the following guidelines:

Seminar Performance / Contribution:	This will address how effectively the student engages during seminar. While everyone should participate regularly, more is not necessarily better; think quality over quantity; do not attempt to dominate the conversation; respect divergent perspectives; ask questions, and provide clarification when asked.
Paper:	The grade will reflect how well the paper addresses the substantive issues discussed in this course; overall writing quality (coherence and concision), whether they meet formatting requirements, and sourcing effectiveness—both in selection and application.
Oral Presentation:	This will address how well students present their paper's key findings in class. The presentations should be clear and concise (within 5 minutes), and the presenter should be able to effectively address follow-on questions.

ORIGINAL WORK & PLAGIARISM

As described in the Student Catalog, the College has carefully defined "original work "to avoid any ambiguity. The term "original" within the NWC research and writing program means both "produced by the author" and "produced for the first time." Thus, papers written to satisfy NWC writing requirements must be produced during the student's tenure at NWC, be submitted to satisfy only one writing requirement (excluding approved expanded and long papers), and contain the student's own ideas and analysis, except as documented by appropriate citations. Complying with the original work definition will avoid potential issues of plagiarism. When in doubt about options or requirements, consult a faculty advisor or the Associate Dean of Research and Outreach.

ABSENCE POLICY

Students are expected to attend all required events unless they have been given explicit permission to be absent. Regular leave normally will not be approved during the school year except during the December recess.

Any student who feels the need to miss a scheduled academic event must follow the below steps to request approval for an excused absence.

- 1. The student must first discuss with his/her Faculty Advisor and FSL.
- 2. Then, if still requesting time off, the student must download the Student Absence

Request template from the O365 Sharepoint folder to his/her OneDrive folder, then fill-in and share the document with (or send via email to) his/her Faculty Advisor, Service/Agency Chair, and the Dean of Students; copy the FSL.

- 3. The Dean of Students, after evaluating the request and recommendations from the Faculty Advisor, FSL, and Service/Agency Chair, will either approve or refer it to the Commandant.
- 4. The Dean of students may approve one day off; the Commandant must approve anything longer.
- 5. The Dean of Students will notify the student and other members of the approval or disapproval via OneDrive response and/or email.

Students who find themselves forced to take an unplanned absence for any reason (illness, family emergency, etc.) should contact their FSL, Faculty Advisor, Service/Agency Chair, and/or Dean of Students as soon as is feasible.

Regardless of absences, students must still meet all stated course objectives to pass courses in which they are enrolled. Thus, students who have missed one or more class sessions may be required to meet with faculty to review material or complete compensatory assignments at the course FSL's discretion. Additionally, any student who has missed one or more classes and questions his/her ability to meet the course objectives regardless of compensatory work completed should ask the FSL for further remedial assistance.

REQUIRED TEXT

- Dorothy H. Crawford, *Viruses: A Very Short Introduction*, 2nd Edition (Oxford University Press, 2018). [ISBN-10: 0198811713; ISBN-13: 978-0198811718] [Student Issue]
- Benjamin Bolker and Marta Wayne, *Infectious Disease: A Very Short Introduction* (Oxford University Press, 2015). [ISBN-10: 0199688931; ISBN-13: 978-0199688937] [Student Issue]
- Rodolfo Saracci, *Epidemiology: A Very Short Introduction* (Oxford University Press, 2010). [ISBN-10: 019954333X; ISBN-13: 978-0199543335] [*Student Issue*]
- Virginia Berridge, *Public Health: A Very Short Introduction* (Oxford University Press, 2010). [ISBN-10: 019968846X; ISBN-13: 978-0199688463] [*Student Issue*]
- Christian W. McMillen, *Pandemics: A Very Short Introduction* (Oxford University Press, 2016). ISBN-10: 0199340072; ISBN-13: 978-0199340071] [Student Issue]

Topic 1 Introduction: The Biology of Disease

Monday, 14 September 2020, 0830-1030

OVERVIEW

This is the first of three topics that provide us with foundational knowledge and skills required for strategists living in an age of major pandemics. Just as a pilot should have a basic understanding of physics, so should a strategist know the fundamental physical properties and behaviors of the pathogens that cause disease. In this first topic, we will review the biology of disease with a focus on the viruses that cause them. We will examine how pathogens enter and affect the human body. We will also examine the physical factors that affect the reproduction, transmission, and elimination of pathogens in humans, animal hosts, and the environment. The session will provide a scientific and technical foundation for discussions that we will have throughout the course.

SEMINAR LEARNING OBJECTIVES

- 1. Articulate the biological structures and properties of pathogens.
- 2. *Identify* the pathogens associated with different diseases.
- 3. *Evaluate* how pathogens affect the human body and interact with natural and manmade environments.
- 4. *Explain* the relationship between the biological properties of pathogens, their transmission, and their impact on people and society.

ISSUES FOR CONSIDERATION

- What is a virus and how does it differ from other pathogens?
- How do different pathogens affect the body?
- What is disease?
- What factors affect the transmission and impact of pathogens?

REQUIRED READINGS (75 pages)

A) Dorothy H. Crawford, Viruses: A Very Short Introduction [Student Issue]

- Chapter 1 What are viruses?
- Chapter 2 Viruses are everywhere
- Chapter 3 Kill or be killed
- Chapter 4 Emerging virus infections: vertebrate-transmitted viruses
- Chapter 5 Emerging virus infections: arthropod-transmitted viruses
- Chapter 6 Epidemics and pandemics

Topic 2 Epidemiology Monday, 21 September 2020, 0830-1030

OVERVIEW

This topic builds on the previous one to develop the strategist's technical understanding of diseases and disease monitoring and control. The topic introduces the basic concepts and methods of epidemiology that are essential for informed discussions of disease and policy responses. We will continue to explore the factors affecting disease transmission, impact, treatment, and eradication. Whereas the previous topic focused on diseases at the smallest level of the pathogen and human body, today's topic provides insight into the physical behavior of diseases in communities and societies.

SEMINAR LEARNING OBJECTIVES

- 1. *Identify* the biological, environmental, and behavioral factors associated with disease transmission and impact.
- 2. Articulate basic epidemiological concepts such as mortality, morbidity, and risk factors.
- 3. Appraise causal and correlative explanations of health and disease.
- 4. *Evaluate* the strengths and limitations of methods used to measure, monitor, and interpret disease incidence, transmission, treatment, and response.
- 5. *Assess* the implications of epidemiological concepts and methods for pandemic response strategies.

ISSUES FOR CONSIDERATION

- What is epidemiology and what role do epidemiologists play in pandemic response?
- What are the different types of epidemiological studies and what insights does each type provide?
- What concepts and techniques do epidemiologists use to measure and describe the causes, transmission, and impact of disease?
- What are "risk factors" and what role do they place in disease incidence, transmission, and impact?
- How do epidemiological concepts and techniques influence responses to pandemics and other health challenges?

REQUIRED READINGS (89 pages)

- A) Benjamin Bolker and Marta Wayne, *Infectious Disease* [Student Issue] [26 pages]
 - Chapter 1 Introduction
 - Chapter 2 Transmission at different scales
- B) Rodolfo Saracci, *Epidemiology* [Student Issue] [63 pages]
 - Chapter 1 What is epidemiology?
 - Chapter 2 Measuring health and disease
 - Chapter 3 Searching for the causes of disease
 - Chapter 4 Establishing the causes of disease
 - Chapter 5 Testing how to control a disease

Topic 3 Public Health

Monday, 28 September 2020, 0830-1030

OVERVIEW

This topic rounds out our foundational knowledge with an overview of the institutions, techniques, strategies, and policies used for managing public health in different countries and the global context. It examines the challenge of applying today's extensive scientific understanding of diseases to actually mitigating their incidence and impact in the face of political, economic, and other constraints. In this topic, we will also see how the interplay of science and politics shapes varied perceptions of disease and the setting of health goals and policies. Awareness of this interplay will enable us to draw strategic insights from the case studies that follow.

SEMINAR LEARNING OBJECTIVES

- 1. *Demonstrate* a basic understanding of concepts, methods, and terminology used in the field of public health and disease response.
- 2. *Analyze* how scientific concepts and methods discussed in the previous topics translate into public health strategies and practices.
- 3. *Evaluate* the implications of different theories of and approaches to public health for pandemic preparedness and response.
- 4. *Assess* the interplay of local, national, and global public health strategies and their implications for coordinating pandemic response.

ISSUES FOR CONSIDERATION

- What factors shape the ever-changing approaches to health in different countries?
- Why is it challenging for governments to harness scientific knowledge for managing public health? How might this be relevant for national security?
- How do public health policies and initiatives vary around the world and how do these different approaches affect health outcomes?
- How do the varied approaches to public health interact at the local, national, and international levels and what are the implications for managing pandemics?

REQUIRED READINGS (84 pages)

- A) Virginia Berridge, *Public Health: A Very Short Introduction* [Student Issue] (68 pages).
 - Chapter 1 What is public health?
 - Chapter 2 Current challenges
 - Chapter 5 The rise of lifestyle: 1900-1980s
 - Chapter 6 Tropical and international public health
 - Chapter 7 Present and future in the light of history
- B) Rodolfo Saracci, *Epidemiology* [Student Issue] [16 pages]
 - Chapter 9 From epidemiology to medicine, prevention, and public health

Topic 4 Plague, Small Pox, and Influenza of 1918 Monday, 5 October 2020, 0830-1030

OVERVIEW

This is the first of five topics focused on individual disease and pandemic case studies. For each case study, we will apply our understanding of the basic science of disease and public health strategies towards analyzing pandemics in a larger political, economic, social, and security context. Comparing and contrasting the case studies will provide us with insights into strategies, decision-making, and leadership attributes that can be applied in responding to the current and future pandemics. Although the seminar learning objectives will be the same for these five topics, each case study will present a unique set of issues and challenges to consider.

Studying military history strengthens the national security strategist's awareness of how interrelated changes in knowledge, technology, ideology, and society transform the nature of war and its effects. In a similar way, studying the history of disease develops the strategist's ability to recognize and respond to the constantly changing nature of pandemics. Plague, small pox, and the Influenza Pandemic of 1918 present us with three distinct historical case studies covering a wide expanse of time. The case studies enable us to consider a wide range of issues such as: the role of transportation and population movement; politics of prejudice and quarantine; warfare and disease transmission; and challenges of implementing technological innovation to improve health outcomes. Many of these issues will recur in different ways in the other case studies covered in this course.

SEMINAR LEARNING OBJECTIVES

- 1. *Articulate and compare* the political, economic, social, and security dimensions of pandemics.
- 2. *Assess* the role of beliefs, cultural values, and scientific knowledge in shaping the responses to pandemics.
- 3. *Evaluate* the effectiveness and consequences of pandemic response strategies, policies, and methods from different perspectives.
- 4. *Develop* best practices, lessons learned, and effective leadership attributes for use by strategists in pandemic situations.

ISSUES FOR CONSIDERATION

- How have understandings of disease and its causes changed over time?
- What factors shaped the transmission, impact, and response to disease in these case studies?
- How did disease and other political, economic, and security trends affect each other?
- What aspects of past pandemics seem relevant today?

REQUIRED READINGS (60 pages)

- A) Christian W. McMillen, *Pandemics: A Very Short Introduction* [Student Issue] [44 pages].
 - Introduction
 - Chapter 1 Plague
 - Chapter 2 Smallpox
- B) Margaret Humphreys, "The influenza of 1918: Evolutionary perspectives in a historical context" (*Evolution, Medicine, and Public Health*, 2018), pp. 219–229. [10 pages]
- C) Jeffery K. Taubenberger and David M. Morens, "1918 Influenza: the Mother of All Pandemics" (*Emerging Infectious Diseases*, CDC, Vol. 12, No. 1, January 2006) [6 pages]

Topic 5 Cholera and Malaria Monday, 19 October 2020, 0830-1030

OVERVIEW

Cholera and malaria today are associated with the "tropics" and "underdevelopment" but were common in many other parts of the world including the United States and Europe up through the early twentieth century. These two case studies of "old diseases" provide insight into the role of infrastructure, environment, and migration in disease transmission and management. Though preventable and treatable today, they remain drivers of high morbidity and mortality in many places. The case study of cholera in Haiti underscores the importance of pandemic preparedness when dealing with natural and man-made disasters. Transmitted by mosquitos, malaria highlights important challenges related to climate change and environmental management.

SEMINAR LEARNING OBJECTIVES

- 1. *Articulate and compare* the political, economic, social, and security dimensions of pandemics.
- 2. *Assess* the role of scientific knowledge, beliefs, and cultural values in shaping the responses to pandemics.
- 3. *Evaluate* the effectiveness and consequences of pandemic response strategies, policies, and methods from different perspectives.
- 4. *Develop* best practices, lessons learned, and effective leadership attributes for use by strategists in pandemic situations.

ISSUES FOR CONSIDERATION

- How have changing environmental factors affected the incidence and impact of malaria and cholera around the world?
- Why do these diseases persist?
- What are the political, economic, or other impacts of these diseases?
- In what ways might malaria and cholera be relevant for US national security or other policy interests?

REQUIRED READINGS (64 Pages)

- A) Benjamin Bolker and Marta Wayne, *Infectious Disease* [Student Issue] [27 pages]
 - Chapter 5 Cholera
 - Chapter 6 Malaria
- B) Christian W. McMillen, *Pandemics* [Student Issue] [26 pages]
 - Chapter 3 Malaria
 - Chapter 4 Cholera
- C) JW Tappero and RV Tauxe, "Lessons learned during public health response to cholera epidemic in Haiti and the Dominican Republic," (*Emerging Infectious Diseases* [serial on the Internet], November 2011) [http://dx.doi.org/10.3201/eid1711.110827] [11 pages]

Topic 6 HIV/AIDS Monday, 26 October 2020, 0830-1030

OVERVIEW

HIV/AIDS provides us with a case study of a "new disease" pandemic that emerged in the 1970s and 1980s and affected developed and developing countries alike. Its initial high prevalence among socially-marginalized groups raises important questions about the role of stigma and attitudes in shaping transmission, impact, and response. HIV/AIDS also serves as an example of how some diseases become perceived as both humanitarian and security challenges, which in turn shapes the disease's strategic significance and resulting policy response. The persistent challenges of preventing and treating HIV/AIDS despite scientific and medical advances underscores the political, economic, and behavioral dimensions of pandemics.

SEMINAR LEARNING OBJECTIVES

- 1. *Articulate and compare* the political, economic, social, and security dimensions of pandemics.
- 2. *Assess* the role of scientific knowledge, beliefs, and cultural values in shaping the responses to pandemics.
- 3. *Evaluate* the effectiveness and consequences of pandemic response strategies, policies, and methods from different perspectives.
- 4. *Develop* best practices, lessons learned, and effective leadership attributes for use by strategists in pandemic situations.

ISSUES FOR CONSIDERATION

- In what ways was HIV/AIDS a "new disease"?
- What are the similarities and differences between HIV/AIDS and other pandemics?
- What factors shaped the changing responses to HIV/AIDS over time?
- How did responses to HIV/AIDS affect its transmission and impact?
- How and why did HIV/AIDS become a national security concern?
- What are the merits and shortcomings of framing disease as a national security concern?

REQUIRED READINGS (62 pages)

- A) Benjamin Bolker and Marta Wayne, Infectious Disease [Student Issue] [12 pages]
 - Chapter 4 HIV
- B) Christian W. McMillen, *Pandemics: A Very Short Introduction* [Student Issue] [14 pages]
 - Chapter 7 HIV/AIDS
- C) Dorothy H. Crawford, *Viruses: A Very Short Introduction* [Student Issue] [16 pages]
 Chapter 7 Persistent viruses
- D) Colin McInnes and Simon Rushton, "HIV, AIDS and security: where are we now? (International Affairs 86: 1, 2010), pages 225–245. [20 pages].

Topic 7 Ebola and Zika Monday, 2 November 2020, 0830-1030

OVERVIEW

Ebola pandemics had been limited in scale and localized in central Africa from the first outbreak in 1976 until 2014-16, when a pandemic killed over 11,000 people in West Africa. The disease's transmission to the United States marked a turning point and provoked debates over the politics of containment. The US military deployment to Liberia also sparked debate over the role of militaries in pandemic response and the implications of disease for national security. The Zika pandemic of 2015-2016 emerged initially in South America and then spread to the United States, raising concerns about travel, migration, and the disease-control capabilities of other countries. Though different from influenza, Ebola and Zika provoked international dialogue that can inform strategies for dealing with the COVID-19 crisis and future pandemics.

SEMINAR LEARNING OBJECTIVES

- 1. Articulate the political, economic, social, and security dimensions of pandemics.
- 2. *Assess* the role of scientific knowledge, beliefs, and cultural values in shaping the responses to pandemics.
- 3. *Evaluate* the effectiveness and consequences of pandemic response strategies, policies, and methods from different perspectives.
- 4. *Develop* best practices, lessons learned, and effective leadership attributes for use by strategists in pandemic situations.

ISSUES FOR CONSIDERATION

- What factors led to the Ebola crisis in West Africa? Could it have been prevented?
- Was the use of the military instrument appropriate and effective? Why or why not?
- Did Ebola threaten US interests? If so, which ones and how?
- What lessons were learned from Ebola and Zika? How are they relevant today?

REQUIRED READINGS (63 pages)

- A) Steven J. Hoffman, "How many people must die from pandemics before the world learns?" (*Global Challenges*, John Wiley and Sons, Ltd., 2016) [3 pages]
- B) "Ebola Response Highlight the Need for a Public Health Emergency Policy Framework" (USAID Audit Report, January 24, 2018) [28 pages]
- C) João Nunes, "Doctors Against Borders: Médecins Sans Frontières and Global Health Security" The Politics of Fear: Médecins sans Frontières and the West African Ebola Epidemic (Oxford Scholarship Online: February 2017) [page total: 14]
- D) Drew Alexander Calcagno, "Killing Ebola: The militarization of US aid in Liberia" (*Journal of African Studies and Development*, October 2016) [9 pages]
- E) Baud, Gubler, Schaub, Lanteri, and Musso, "An Update on Zika Virus Infection" (*The Lancet*, published online June 21, 2017). [9 pages]

Topic 8 Influenza Monday, 9 November 2020, 0830-1030

OVERVIEW

As we saw in the case of the Influenza Pandemic of 1918 and now witness with COVID-19, flu pandemics can spread and kill rapidly. Although major global flu pandemics occurred in 1957-58 and 1968, their absence for the rest of the twentieth century led to relative complacency about their dangers. The spread of the H5N1 virus from poultry to humans in 1997 and the SARS pandemic of 2002-2004, however, revived concerns. Since then, health specialists and some policy analysts have repeatedly warned of the likelihood of an eventual pandemic on the scale we are currently experiencing. In this topic, we will examine the science and politics of flu pandemics to assess why the world was unable to contain COVID-19's deadly advance. We will compare case studies of different flu pandemics with each other and those of other diseases. We will then apply concepts and methods learned in the course thus far to begin considering possible responses to COVID-19.

SEMINAR LEARNING OBJECTIVES

- 1. *Articulate and compare* the political, economic, social, and security dimensions of pandemics.
- 2. *Assess* the role of scientific knowledge, beliefs, and cultural values in shaping the responses to pandemics.
- 3. *Evaluate* the effectiveness and consequences of pandemic response strategies, policies, and methods from different perspectives.
- 4. *Develop* best practices, lessons learned, and effective leadership attributes for use by strategists in pandemic situations.

ISSUES FOR CONSIDERATION

- What are the main drivers of global influenza pandemics?
- Why was the initial response to COVID-19 ineffective despite repeated warnings from health specialists and policy analysts since the SARS outbreak in 2002?
- What aspects of other diseases are relevant for analyzing influenza pandemics?
- Drawing on what you have learned in the course thus far, how would you design a strategy in response to COVID-19 and prepare for future pandemics?

REQUIRED READINGS (87 pages)

- A) Christian W. McMillen, Pandemics: A Very Short Introduction [Student Issue] [13 pages]
 - Chapter 6 Influenza
- B) Benjamin Bolker and Marta Wayne, *Infectious Disease* [Student Issue] [13 pages]
 - Chapter 3 Influenza
- C) Matthew A. Baum, Red State, Blue State, Flu State: Media Self-Selection and

Partisan Gaps in Swine Flu Vaccinations (*Journal of Health Politics, Policy and Law*, Vol. 36, No. 6, December 2011) [36 pages]

- D) Elizabeth Prescott, "SARS A Warning" (*Survival*, International Institute for Strategic Studies, vol. 45, no. 3, Autumn 2003), pages 207-222 [15 pages]
- E) Harvey V. Fineberg, "Pandemic Preparedness and Response Lessons from the H1N1 Influenza of 2009" (*New England Journal of Medicine*, April 3, 2014) [8 pages].

<u>SKIM</u>

F) Pandemic influenza preparedness in WHO Member States (WHO, 2019) [50 pages skim]

Topic 9 Behavior Monday, 15 November 2020, 0830-1030

OVERVIEW

Having established a baseline of knowledge as well as experience analyzing pandemics, we now begin our last block with the goal of identifying concepts and tools for strategy design and implementation. We begin with an assessment of human behavior as a major constraint for the strategist. In many ways, this constraint is no different than it is for other national security challenges. We have seen repeatedly throughout history that scientific knowledge and technical capacity alone are insufficient without a viable strategy for behavior change, a strategy that takes into account the full array of political, economic, social, and security dimensions. Using the previous case studies as points of reference, we will now probe these dimensions more deeply.

SEMINAR LEARNING OBJECTIVES

- 1. *Review* the role of human behavior in our case studies and unit on public health.
- 2. Articulate concepts and methods for assessing the behavioral dimensions of pandemics.
- 3. *Evaluate* the implications of human psychology for disease impact and response.
- 4. *Formulate* pandemic response strategies that address the challenges of behavior change.

ISSUES FOR CONSIDERATION

- How does human behavior affect the transmission, impact, and politics of disease?
- What are viable strategies for the behavioral aspects of COVID-19 and other pandemics?
- How should our understanding of behavior inform our pandemic messaging strategy?

REQUIRED READINGS (71 pages)

- A) Steven Taylor, *The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease* (Cambridge Scholars Publishing, 2019), pages 39-98. [49 pages]
 - Chapter 3 Psychological Reactions to Pandemics
 - Chapter 4 Personality Traits
 - Chapter 5 Cognitive-Behavioral Models of Health Anxiety
 - Chapter 6 The Behavioral Immune System
 - Chapter 7 Conspiracy Theories
 - Chapter 8 Social Psychological Factors
 - Chapter 9 Improving Risk Communication
 - Chapter 10 Improving Vaccination Adherence.
- B) Xiaojun Zhang, Fanfan Wang, Changwen Zhu, and Zhiqiang Wang, "Willingness to Self-Isolate When Facing a Pandemic Risk: Model, Empirical Test, and Policy Recommendations" (*International Journal of Environmental Research and Public Health*, 27 December 2019) [12 pages]
- C) Paul Flowers, Mark Davis, Davina Lohm, Emily Waller, and Niamh Stephenson,
 "Understanding Pandemic Influenza Behavior" (*Journal of Health Psychology*, Vol. 21, 2016, pages 759–769. [10 pages].

Topic 10 Economics Monday, 30 November, 0830-1030

OVERVIEW

Like human behavior, economic factors play an important role in constraining the strategist's options and shaping the ultimate response. Several of our cases studies, particularly Ebola and now COVID-19, have demonstrated the economic consequences of pandemics. They have also demonstrated that health and economics are in fact intertwined and not "tradeoffs." For example, as highlighted in our topics on epidemiology and public health, poverty in many parts of the world including the United States is closely correlated with poor health outcomes. Likewise, poor health conditions—as reflected by indicators such as life expectancy, maternal health, child mortality, and morbidity—are considered a major drag on economic growth. Health economics is an academic discipline unto itself. In this topic, we will touch on just a few aspects to develop a conceptual awareness of how to incorporate economics into one's strategy.

SEMINAR LEARNING OBJECTIVES

- 1. Assess the role of economic factors in shaping health outcomes and the impact of disease.
- 2. *Analyze* the economic impact of disease.
- 3. *Evaluate* the relative economic costs of pandemic prevention and preparedness against those for other national security priorities.
- 4. *Recognize* economic tradeoffs in designing pandemic response strategies.

ISSUES FOR CONSIDERATION

- How does one measure the economic impact of pandemics?
- Judging from readings A, B, and D, should the economic costs of COVID-19 have been anticipated?
- How should economic considerations be integrated into a pandemic response strategy?

REQUIRED READINGS (54 pages)

- A) White House Council of Economic Advisors, "Mitigating the Impact of Pandemic Influenza through Vaccine Innovation" (September 2019) [35 pages]
- B) Ilan Noy and Sharlan Shields, "The 2003 Severe Acute Respiratory Syndrome Epidemic: A Retroactive Examination of Economic Costs (Asian Development Bank, ADB Economics Working Paper Series, No. 591, October 2019). [12 pages]
- C) "Economic Impact of Epidemics and Pandemics" (European Parliament, 2020) [9 pages]

<u>SKIM</u>

 D) George Verikios, Maura Sullivan, Pane Stojanovski, James Giesecke, and Gordon Woo, "The Global Economic Effects of Pandemic Influenza" (Paper prepared for the 14th Annual Conference on Global Economic Analysis, Venice, June 16-18, 2011). [41 pages]

Topic 11 Security Monday, 7 December 2020, 1535-1730

OVERVIEW

Our readings and case studies thus far, such as HIV/AIDS and Ebola, have already provided some examples of how analysts and policymakers have integrated pandemics into the panoply of national security challenges. The readings for today's topic take us further in this direction and provide us with more vocabulary and concepts for the strategist. At this point in the course, we should be able to draw on these readings and our overall knowledge to begin adapting existing strategies and framing new ones for the COVID-19 context and beyond. We should also be able to relate pandemic strategy to other national strategies for a "big picture" view and for discussing how to balance pandemic response against other national security challenges. As of the drafting of this syllabus in mid-May 2020, official COVID-19 deaths in the United States exceeded 90,000 and in the world 310,000; health experts and analysts assessed these numbers were far below than the actual number. This official US death toll already far exceeds the number of Americans killed in the Vietnam War. More Americans died in just two days of the pandemic in April and May than died in the 9/11 attacks. Such data raise difficult questions for strategists that we address today.

SEMINAR LEARNING OBJECTIVES

- 1. Analyze the concepts and methods used to frame pandemics as security challenges.
- 2. Review the security dimensions of pandemics studied earlier in the course.
- 3. *Evaluate* the merits and shortcomings of treating pandemics as security challenges.
- 4. Assess the security implications of COVID-19.

ISSUES FOR CONSIDERATION

- How have analysts and policy commentators situated pandemics in a security context?
- Should the military play a larger role in pandemic preparedness and response?
- What are best practices for integrating pandemics into a national security strategy?

REQUIRED READINGS (72 pages)

- A) Gregory Koblentz, "From biodefence to biosecurity: the Obama administration's strategy for countering biological threats" (*International Affairs* 88: 1, 2012), pages 131–148. [15 pages]
- B) Colin McInnes and Anne Roemer-Mahler, "From security to risk: reframing global health threats" (*International Affairs* 93: 6, 2017), page 1313–1337. [24 pages]
- C) Sara E. Davies, "Securitizing infectious disease" (*International Affairs* 84: 2, 2008), pages 295–313. [18 pages]
- D) British Red Cross and Chatham House, "Civil-Military Relations: A Focus on Health Emergencies and Epidemics" (NGO-Military Contact Group, 17 July 2018). [14 pages]

Topic 12 Conclusion: Assessing Institutional Responses to COVID-19 [Student Briefings]

Thursday, 10 December 2020, 1230-1430

OVERVIEW

We conclude our course with a review of the many national and international agencies and organizations involved in pandemic response and thereby develop awareness of the "instruments" available to the strategist. Each student will brief on a different institution that he/she has tracked since the beginning of the semester. We will evaluate how these institutions have responded to COVID-19 thus far and identify their strengths and limitations. The knowledge and skills that you have acquired in this course, and from monitoring the actions of your assigned institution, now empower you as a strategist to lead the discussion with your own briefs. We will devote the first hour to the briefs and the second hour to a discussion of how these different "instruments" might be orchestrated in an actual strategy.

SEMINAR LEARNING OBJECTIVES

- 1. Analyze the history, structure, and role of health institutions.
- 2. Assess the impact of institutions in responding to COVID-19.
- 3. *Formulate* strategies that designate and orchestrate roles for these institutions.

ISSUES FOR CONSIDERATION

- What is the brief history of your agency/organization?
- What role does it play in pandemic preparedness and response?
- What technical capacities does it have?
- What are its strengths and weaknesses
- Assess its preparedness for a pandemic on the scale of COVID-19.
- Assess its performance thus far in responding to COVID-19.

REQUIRED READINGS (70 pages, skim)

- A) "Public Health Service Agencies" (Congressional Research Service, 2015). [42 pages]
- **B**) Harley Feldbaum, "Building U.S. Diplomatic Capacity for Global Health" (CSIS, May 2010). [10 pages]
- C) Department of Defense Implementation Plan for Pandemic Influenza (DoD, 2006). [18 pages]