



**HH386C – Naval Innovation: Cannons to Carriers**  
**United States Naval Academy**  
**Course Syllabus**  
**Spring 2022**

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Office Location: SA309  
Office Hours: M/W/F 1100-1500

Class Time: M/W/F 0955-1045  
Classroom Location: PR211  
Section: 3001

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**COURSE DESCRIPTION**

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Naval history is filled with examples of what we think of today as "transformative" innovations. While many of these developments are quite well known, the difficulties involved in making effective use of them are far less so. Through examination of primary and secondary sources, we will seek to understand how some of the most famous paradigm shifts in 19th and 20th century naval history—steam propulsion, long-range gunnery, wireless communication, carrier airpower, and others—came into their own. In doing so, we will develop an understanding of why some innovations succeed (and become famous) while others fail.

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**COURSE OBJECTIVES**

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**Historical Competence:** Identify factors that shape change over time; to explain historical narratives; and to analyze historical evidence as well as apply it to historical questions.

*Everything is about argument and evidence. Everything you read has an argument about the material it covers, and your ability to assess that argument based on its supporting evidence is key to the development of true critical thinking.*

**Communications Competence:** Express your ideas clearly, precisely, and in an organized fashion in all assignments.

*Reading critically lends itself to writing and speaking effectively; being able to express a clear and concise argument and support that argument with evidence is a vital skill you will rely on for the rest of your life.*

**Professional Competence:** Describe, explain, and apply to historical examples the basic concepts inherent to the profession of arms, such as tactics, doctrine, strategy, technology, and civil-military relations.

*All of human society stands on the shoulders of the generations which came before. You can expect to gain a grasp of critical military concepts in this class which remain invaluable tools for understanding warfare today.*

**Cultural Competence:** Summarize and explain factors contributing to military innovation in different societies throughout history.

*“Who fights, and why? Who pays, how much, and why?” War is not, nor has it ever been, conducted in a vacuum. To understand these themes is to understand the place of the military in society and, by extension, to better understand your own job.*

**Warfighter Competence:** Analyze and explain the role that innovation plays in warfare and vice-versa.

*Warfare is the ultimate test of military innovation—but also historically spurs new innovation itself. The nature of this relationship is critical to our class and, by extension, to our ability to understand much of military history.*

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## COURSE MATERIALS

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### Required Texts:

1. Epstein, Katherine. *Torpedo: Inventing the Military-Industrial Complex in the United States and Great Britain*. Cambridge, MA: Harvard University Press, 2014.
2. McNeill, William H. *The Pursuit of Power: Technology, Armed Force, and Society Since AD 1000*. Chicago, IL: The University of Chicago Press, 1982.

**Additional Readings:** Various additional readings are assigned from relevant texts and will be located online.

**Reading Expectations:** This is not a high-school class. While you will not be expected to be able to recite passages from the reading verbatim, you *will* need to actually do the assigned readings to perform well in this course.

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## GRADING

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This class focuses heavily on written work that is intended to develop and showcase your research, writing, and critical thinking skills. As such, you *must* take accountability for your work and level of effort in order to do well. Failure to turn in any assignment without adequate communication with me will result in a failing grade for the course.

**Class Participation (25%):** This class will be run as a seminar, though the exact format of the seminar will vary depending on our circumstances from week to week. That means each of you *must* read the assigned readings so that you may participate intelligently in the discussion.

**Papers (45%):** You will author three original papers for a significant portion of your grade in this class. The first is a short (2-3 page) reflection on our reading assignments for the first six weeks. The second will be a moderate (5-7 page) primary source paper, due by the end of week 11. The final paper will be a longer (10-page) innovation study due on the last day of class. Details on these assignments can be found in this syllabus following the course schedule.

**Final Exam (30%):** This course will include one cumulative final exam in May. This will contain a number of short answer (paragraph) prompts, as well as two longer essays. Success on this exam will not be dependent on the student’s ability to merely recite names and dates (outside of major events or wars), but will require a thorough knowledge of the key concepts explored throughout the class.

### COURSE SCHEDULE

Week	Date	Topic	Readings / Assignments
1	<b>Tuesday</b> 11 January	Course Introduction	Syllabus McNeill, Preface (vii-x)
	Wednesday 12 January	Arms and Society in Antiquity	McNeill, Ch. 1 (1-23)
	Friday 14 January		McNeill, Ch. 2 (24-62)
2	Monday 17 January	MLK Day – No Class	
	Wednesday 19 January	The “Rise of the West”	McNeill, Ch. 3 (63-116)
	Friday 21 January		McNeill, Ch. 4 (117-143)
3	Monday 24 January	The French Political and British Industrial Revolutions	
	Wednesday 26 January		McNeill, Ch. 5 (144-184)
	Friday 28 January		McNeill, Ch. 6 (185-222)
4	Monday 31 January	The Industrialization of War, 1840-1914	

	Wednesday 2 February		McNeill, Ch. 7 (223-261)
	Friday 4 February		McNeill, Ch. 8 (262-306)
5	Monday 7 February	The World Wars	
	Wednesday 9 February		McNeill, Ch. 9 (307-361)
	Friday 11 February		McNeill, Ch. 10 (362-384)
6	Monday 14 February	Case Study I: Steam Propulsion	<b>Reflection Paper Due</b> “Sailing Against the Wind” Mahan, Excerpts (1-12, 25-35)
	Wednesday 16 February		Sumida, Introduction (1-8) Chisholm, Ch. 18 (419-436)
	Friday 18 February		Bowen, Excerpts (3-21) “Bowen Against the World”
7	Monday 21 February	Washington’s Birthday – No Class	
	Wednesday 23 February	Case Study I: Steam Propulsion	<b>Guest Speaker</b> Tyler, Ch. 1 (17-45)
	Friday 25 February	Interlude: Command and the Apotheosis of Naval Gunnery	<b>Innovation Paper Topic Selection</b> Mattingly, Excerpts (257-267, 278-313)
8	Monday 28 February	Case Study II: Command and Control	Gordon, Ch. 9 (155-192)
	Wednesday 2 March		Gordon, Ch. 8 (129-151)
	Friday 4 March		Winkler, Ch. 1 (5-33)
9	Monday 7 March	Case Study III:	Epstein, Introduction (1-17)

	Wednesday 9 March	Naval Weapons and Fire Control	Epstein, Ch. 1-2 (18-65)
	Friday 11 March		Sumida, Ch. 2 (37-61) Sumida, Ch. 3 ex. (71-76)
10	Monday 21 March	Case Study III: Naval Weapons and Fire Control	<b>Primary Source Topic Selection</b> Sumida, Ch. 5 ex. (163-166) Epstein, Ch. 3 (66-103)
	Wednesday 23 March		Sumida, "A Matter of Timing"
	Friday 25 March		Epstein, Ch. 4 (104-132)
11	Monday 28 March	Case Study III: Naval Weapons and Fire Control	Epstein, Conclusion (213-229) Gordon, Ch. 7 (102-128)
	Wednesday 30 March		
	Friday 1 April		<b>Primary Source Paper Due</b>
12	Monday 4 April	Case Study IV: World Power on a Budget	Sumida, Ch. 1 (3-28) Lambert, Excerpts (5-11)
	Wednesday 6 April		Lambert, Excerpts (23-42, 121-128)
	Friday 8 April		
13	Monday 11 April	Case Study V: The Treaty System	Washington Naval Treaty
	Wednesday 13 April		Miller, Ch. 4, Ch. 7 (31-38, 65-76) Nofi, Ch. 2 (9-15)
	Friday 15 April		Kuehn, Ch. 4 (40-62) Miller, Ch. 17 (186-202)
14	Monday 18 April	Case Study VI: Air Power	Layman, Excerpts (48-72)

			Roskill, Excerpts (247-252, 263-268)
	Wednesday 20 April		Friedman, Ch. 2 (30-55)
	Friday 22 April		Evans & Peattie, Ch. 9 (299-352)
15	Monday 25 April	Case Study VI: Air Power	Friedman, Ch. 4 (78-101)
	Wednesday 27 April		Parshall & Tully, Ch. 11, Ch. 12 (205-231)
	Friday 29 April		
16	Monday 2 May	Peer Reviews	
	Wednesday 4 May	Review Day	<b>Innovation Paper Due</b>

## PAPER GUIDELINES

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**General Guidelines:** The writing assignments in this class form a substantial portion of the overall grade. Do not be afraid to seek assistance if you are experiencing issues while writing; the USNA Writing Center (<http://www.usna.edu/AcCenter/WritingCenter.php>) exists for exactly this reason, and I am more than willing to offer guidance and draft reviews if you reach out to me. Just remember that, above all, you are making an argument. Get your point out, summarize your evidence, detail your evidence, then conclude. Length is always a secondary consideration to adequately making your point.

**Format:** All papers will be double-spaced and written in Times New Roman, size-12 font with 1” margins. Do not include extra spaces between paragraphs. Please number your pages.

**Citations:** All papers must conform to the Chicago Manual of Style (<https://owl.english.purdue.edu/owl/resource/717/01/>), use footnotes (not endnotes), and include a complete bibliography.

**Originality:** All work submitted this semester must be the original work of each student done for this semester of this course.

Submission: All papers submitted this semester will be turned in electronically via our class environment. Documents must be in .docx or .pdf format.

**Reflection Paper:** Your first major assignment will be a short (2-3 page) reflection on what you believe to be the most important concepts to take away from William McNeill's *The Pursuit of Power*. Specifically, your prompt for this assignment is as follows: "*William McNeill argues in The Pursuit of Power that a commercial transformation of world society caused military activity to respond increasingly to market forces as well as the commands of rulers. How does our study of military innovation fit into this theory? Be sure to support your argument with what you believe to be McNeill's most significant case studies.*"

**Primary Source Paper:** This assignment is a medium-length (5-7 page) dive into primary source research. For this project, you will be expected to prepare a case study similar to those we have been carrying out in class—one that can then be related to the chosen subject for your final paper later in the semester. You will be expected to find at least TWO primary sources to integrate into this study. Overall, this paper should respond to the following prompt: *Identify and describe a case of historical military innovation which can be related to problems the Department of Defense faces today. Remember—you are making an argument. Your thesis should tell us right away both what event you have chosen and why that event is important.*

**Innovation Paper:** The final paper requires you to take what you learned in this course and apply it to a current challenge facing the Department of the Defense in at least ten pages. While this addresses a current challenge, I expect that you will write this essay in a scholarly manner; in the process of offering a creative solution to a current challenge, you must demonstrate you have a solid understanding of the theory and history involved. Ideally, this will include elements of the Primary Source Paper. As a result, we will try to have topics for this assignment selected by week 8 so that you have plenty of time to work on this assignment. The specific prompt for this assignment is: *Identify and describe a "modern" problem facing the Department of Defense that can be related to those it has faced in the past. In doing so, explain how you believe this problem should be approached and, if possible, solved using historical evidence. In your effort, be sure to use government or scholarly sources to support your work. Remember—you are making an argument. Your thesis should tell us right away both what problem you have chosen and why that problem should be approached in a specific manner.*