

Hertog War Studies Program

Course Syllabus

Summer Course

Instructor Information

INSTRUCTORS

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FREDERICK KAGAN
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GUEST CO-INSTRUCTORS

LTG (RET.) H.R. MCMASTER
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General Information

Description: Lessons are daylong; some are divided into two blocks when they address different topics.

Course Materials

Required Materials

Readings on Microsoft Teams

Books and purchases:

1. Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York, NY: Basic Books, 2014)
2. Carl von Clausewitz, *On War*, eds. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984)
3. Toby Dodge, *Iraq: From War to a New Authoritarianism* (International Institute of Strategic Studies & Routledge: 2012)
4. Stanley A. McChrystal, *My Share of the Task: A Memoir* (New York, NY: Portfolio/Penguin, 2014)
5. Peter Paret, *Makers of Modern Strategy: from Machiavelli to the Nuclear Age* (Oxford: Clarendon Press, 2010)
6. Jim Scuitto, *The Shadow War: Inside Russia's and China's Secret War to Defeat America* (New York: Harper/Harper Collins, 2019)
7. Stephen Sears, *Gettysburg* (New York: Mariner Books Reprint, 2004)
8. John A. Warden III, *The Air Campaign, Revised Edition* (iUniverse: 1998)
9. *Gettysburg* film (<https://www.amazon.com/Gettysburg-Tom-Berenger/dp/B006QPX6IG>)

Lesson 1	July 25th
TOPIC	LANGUAGE & LOGIC OF WAR
PURPOSE	<i>Gain foundational knowledge vital for the remainder of the course, including the levels of war framework</i>
OBJECTIVES	<p>How are militaries organized? What frameworks help us study war? How do you read a military map?</p> <ol style="list-style-type: none"> 1. <i>Learn the levels of war</i> 2. <i>Learn how military forces are organized and echeloned</i> 3. <i>Learn the basic vocabulary needed to discuss war and military operations</i> 4. <i>Understand how to read military maps and symbols</i>
KEY TERMS	<i>Levels of war; Grand strategic level, Strategic level, Operational level, Tactical level Campaign; Battle; Doctrine; Services; Branches (and the branches themselves); Joint Combined; Combined arms; Firepower; Maneuver; Movement; Unit; Formation Fireteams; Squad; Light infantry squad; Crew served weapons; Individual weapons Direct fire, Indirect fire; Rate of fire; Commissioned officer; Non-commissioned officer; Table of organization and equipment (TO&E); Task organization; Combat power; Staff; Span of control; Command and control; Chain of command; Defeat; Destroy</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Maps: Austerlitz (1805) Campaign Section <ul style="list-style-type: none"> ○ https://westpoint.edu/academics/academic-departments/history/napoleonic-wars • Videos: Reading a Topographical Map <ul style="list-style-type: none"> ○ SMCT: Identify Topographic Symbols on a Military Map https://www.youtube.com/watch?v=Ij0_6gfBF5w ○ SMCT: Identify Terrain Features on a Military Map https://www.youtube.com/watch?v=YZJaV1MARhc • Videos: Military Symbols <ul style="list-style-type: none"> ○ Squad Movement Formation & Techniques https://www.youtube.com/watch?v=OKRues4Fwrk ○ The Rifle Platoon Dismounted Movement Techniques Vintage US Army Film https://www.youtube.com/watch?v=-qdFd9Uh0N0 ○ TANK TACTICS: Fast Armored Tactics https://www.youtube.com/watch?v=chMDasloyUU (Begin at 5:25)
READINGS	<ul style="list-style-type: none"> • Reading Packet (Kagan Readings) • U.S. Department of Defense, Chapter 1, “Theory and Foundations,” <i>Doctrine for the Armed Forces of the United States</i>, Joint Publication 1 https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp1_ch1.pdf • U.S. Department of the Army, <i>Operational Terms and Graphics</i>, Army Field Manual 1-02 https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN19780_FM%201-02x1%20-%20FINAL%20WEB.pdf <ul style="list-style-type: none"> ○ Definitions of tactical terms, pp. 15ff ○ Tactical mission graphics, Appendix A-1, p. 435ff

**LESSON
PLAN**

- Levels of war: define each, differentiate each, and use World War II for practice.
Echelons: how and why are soldiers grouped into units of what size

Lesson 2	July 26th
TOPIC	ONE NAPOLEONIC BATTLE -- AUSTERLITZ
PURPOSE	<i>Apply the terms and concepts you learned in Lesson 1 to the study of a particular campaign.</i>
OBJECTIVES	<ol style="list-style-type: none"> 1. Understand the Austerlitz Campaign of 1805 <ol style="list-style-type: none"> a. <i>Learn how to read military operational history with maps</i> b. <i>Learn how to evaluate a campaign</i> c. <i>How did each actor understand the situation at the start of the period covered by the reading? How accurate were their respective pictures?</i> d. <i>What assumptions did each actor make about what the others would do and his own capabilities?</i> e. <i>What plans did each actor make to achieve his objectives based on that understanding?</i> f. <i>Were the plans good? What would that mean?</i> g. <i>How well did each actor execute his plans?</i> h. <i>How well did each actor adjust his understanding of the situation both to new information and to changes in the situation itself?</i> i. <i>Why did Napoleon win? Why did the coalition lose?</i> j. <i>How did political, diplomatic, and inter-personal considerations affect the conduct of military operations?</i> k. <i>What lessons should each actor (including Napoleon) have drawn from this campaign?</i> 2. Which actor was best (and which was worst) at each level of war from strategic to tactical? Bring evidence to bear! 3. How did each side try to shape the other's perceptions of the situation and its own intentions? Which was more successful? Why?
KEY TERMS	<i>Offense; Defense; Maneuver; Flank; Envelop; Campaign; Battle; Order of battle; Decisive battle; Defeat in detail</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Video: <i>Napoleon's Masterpiece – Austerlitz 1805</i> <ul style="list-style-type: none"> ○ https://www.youtube.com/watch?v=bhQe2cjr5XQ
READINGS	<ul style="list-style-type: none"> • David G. Chandler, <i>Austerlitz 1805: Battle of Three Emperors</i> (London: Osprey Publishing, Ltd., 1990), pp. 6–20 • Frederick W. Kagan, <i>The End of the Old Order: Napoleon and Europe, 1801–1805</i> (Cambridge, MA: Da Capo Press, 2008), Chapters 17–18, 21–23
LESSON PLAN RUSSIA, FRANCE, AUSTRIA	<ol style="list-style-type: none"> 1. What were your grand strategic, strategic, and operational objectives as of August 25, 1805? (If you do not know the answer to the question at one or more levels, say so.) 2. What was the grand strategic, strategic, and operational situation, from your perspective, as of August 25, 1805? (If you do not know the answer to the question at one or more levels, say so.)

3. When did your understanding of the grand strategic, strategic, and operational situation change, why, and in what ways? (If you do not know the answer to the question at one or more levels, say so.)
4. Did you adjust your objectives at any level of war? If so, how?
5. When and why did you choose to fight or avoid a battle? If you choose to fight, what was the objective for which you fought? Did you achieve it? If you chose not to fight, why did you make that choice? Did the decision not to fight further hinder your operational objectives?
6. What objectives, if any, had you accomplished by the end of November 1805? Which objectives did you fail to accomplish? Why?
7. How accurately did you understand the situation, intentions, actions of your own forces throughout this period? Of your allies' forces? Of the enemy's forces?

Afternoon II

1. What decisions did you make before the battle began? When did you make them and for what reasons? How did they affect the battle?
2. What decisions did you make during the battle? Who made them when and under what information conditions, and how did they affect the battle?

EVENING

- *Gettysburg* Movie Clips
 - <https://www.amazon.com/Gettysburg-Tom-Berenger/dp/B006QPX6IG>

Lesson 3	July 27th
TOPIC	BATTLE OF GETTYSBURG
GUEST FACULTY	GEN (Ret.) John Allen 1000 am – 1200 pm
PURPOSE	<i>War in reality vs. war on paper: visualize a battlefield, a campaign, and a war</i>
OBJECTIVES	<p>Apply Lesson 1 and 2 framework to the Gettysburg campaign; focus on visualizing battles on terrain</p> <ol style="list-style-type: none"> 1. <i>Understand how to “see” terrain using military cartography</i> 2. <i>Understand how terrain affects combat in particular technological and doctrinal circumstances</i> 3. <i>Understand how the operational level of war interacts with tactical decision-making before and during combat</i> 4. <i>Understand how strategic considerations shape tactical decision-making</i> 5. <i>Understand the moral and ethical consequences of military decision-making</i> 6. <i>Understand how some military theorists and practitioners interpreted and implemented Napoleonic warfare</i>
KEY TERMS	<i>Meeting engagement; Military crest; Enfilading fire</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Maps: Available under Gettysburg Campaign <ul style="list-style-type: none"> ○ https://westpoint.edu/academics/academic-departments/history/american-civil-war • Videos: Watch Ahead of Class – Understanding Gettysburg <ul style="list-style-type: none"> ○ Civil War Infantry Tactics https://www.youtube.com/watch?v=tYg3v9IUuNA ○ Civil War Artillery https://www.youtube.com/watch?v=85s-yMUAfQm ○ Civil War Analysis of Terrain https://www.youtube.com/watch?v=RktUeoA3F7w ○ Civil War Logistics https://www.youtube.com/watch?v=ISDQGsdvX4 ○ Civil War Medicine https://www.youtube.com/watch?v=IDYWP2fz4-E • Videos: Examples of discussions we’ll have in class <ul style="list-style-type: none"> ○ Tactical, operational, and strategic levels of war https://www.youtube.com/watch?v=-bmLEZdWJuY ○ Change the plan or persist; interplay of the levels of war; decision-making in uncertainty https://www.youtube.com/watch?v=Myoj2hntbdg ○ <i>Gettysburg</i> Movie (4 hours 14 minutes):

	<p style="text-align: center;">https://www.amazon.com/Gettysburg-Tom-Berenger/dp/B006QPX6IG</p>
<p>READINGS</p>	<ul style="list-style-type: none"> • Stephen Sears, Chapters 1–7, <i>Gettysburg</i> (New York: Mariner Books Reprint, 2004) • Gettysburg Staff Ride Packet, Day 1–3, Overviews, Order of Battle, pp. 15–28 https://history.army.mil/staffRides/_docs/staffRide_Gettysburg.pdf <p>In addition to the Order of Battle, look at the corresponding chart on Microsoft Teams.</p>
<p>STUDY GUIDE & LESSON PLAN</p>	<ol style="list-style-type: none"> 1. Understand who did what to whom. Know the key players on each side. Make a “cheat sheet” for yourself: Who were the corps commanders under Lee and under Meade? Who were the division commanders under each corps commander? Who were the regimental commanders under each division commander? Who were the cavalry commanders working for Lee and Meade? 2. Understand the context. <ol style="list-style-type: none"> a. Read Chapters 1–7, Stephen Sears, <i>Gettysburg</i> b. As you read use at least two maps from the West Point link provided on the syllabus to follow along: “Situation 1, June 1863” and “Gettysburg and Vicinity, July 1, 1863” c. Watch the five short videos labeled “Understanding Gettysburg” from the syllabus. 3. Understand the terrain. Take a virtual tour of the battlefield: https://www.nps.gov/gett/learn/photosmultimedia/virtualtour.htm. Read the summaries of each day before you take the virtual tour. Make sure you view the stops below, and as you’re watching, use the West Point map to help you understand where, in the context of the whole Gettysburg battle, these actions took place. <ol style="list-style-type: none"> a. Read Day 1 summary, then watch Tour Stops #1a and 1b. This is where the battle began. Then watch Tour Stops #3 and 4. This is where Day 1’s activities ended. b. Read Day 2 summary, then watch Tour Stops #7–13. These describe some of the more important people and actions of Day 2. c. Read Day 3 summary, then watch Tour Stop #5 and Stop #15. 4. Know how the battle unfolded. Watch the <i>Gettysburg</i> movie. Keep your key player “cheat sheet” with you, and keep your West Point maps available to keep you oriented. 5. Be prepared to discuss the questions below. To get in the right mindset, watch the two “Examples of Discussion” videos on the

syllabus.

- a. **Context.** Why did Lee go on the offensive? What did you hope to achieve? What was the CSA's political objective at this point of the war? From which direction did Lee come? Upon what roads did he march his corps? How did he use his cavalry? What was the Union's political objective? Given that, what military objective should Meade have deduced from that objective? From which direction did Meade's army come? Upon what roads did he march his corps? How did he use his cavalry?
 - b. **Day 1.** How did the battle begin, by whom of the CSA, by whom of the Union? What were the key decisions made on each side, and by whom? What were the consequences of those decisions? How did the Day 1 battle unfold across the terrain? Why did the CSA and the Union do what they did—why were the Day 1 battles fought where they were fought? Why didn't the CSA attack Culp's Hill in the late afternoon of Day 1? Should they have? Was this a missed opportunity? Who had the initiative on Day 1? Might there have been a difference between tactical and operational initiative? Who "won" Day 1? Why did you make that conclusion?
 - c. **Day 2.** How were the two armies disposed on the battlefield? What was Lee's plan for Day 2? Who was to execute that plan? How was the plan supposed to be coordinated? What actually happened? Was Longstreet derelict in his command duties? What did the Union army expect to happen, and how where they prepared for what they expected? How did they have to adapt to what the CSA actually did? Who gave what orders to whom to make these adaptations? Who had the initiative at the end of Day 2? Again, can you distinguish between tactical and operational initiative? Who "won" Day 2? Why did you make that conclusion?
 - d. **Day 3.** How were the two armies disposed on the battlefield? What was Lee's plan for Day 3? Who was to execute that plan? How was the plan supposed to be coordinated? What actually happened? What alternatives did Lee have? Why didn't he take them? What did the Union army expect to happen, and how where they prepared for what they expected? How did they have to adapt to what the CSA actually did? Who gave what orders to whom to make these adaptations? Who had the initiative at the end of Day 3? Again, can you distinguish between tactical and
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operational initiative? Who “won” Day 3? Why did you make that conclusion?

- e. **Context.** Did either the CSA’s or the Union’s strategic objectives meet or partially meet at the end of Day 3? Did either attain the military objectives they had at the start of the battle? Should Meade have pursued Lee? How do you judge the success or failure of a battle or campaign?

Lesson 4	July 28th
TOPIC	CLAUSEWITZ (FRICTION, CONTRASTING SUPERFICIAL WITH SUBSTANTIVE UNDERSTANDINGS OF WAR); CHAOS & WAR
PURPOSE	<i>Learn an additional language to describe military operations and theory, and evaluate the utility of that language in understanding traditional military theory.</i>
OBJECTIVES	<p>What is war? What should a theory of war achieve? Can it forecast an outcome?</p> <ol style="list-style-type: none"> 1. <i>Read Clausewitz, Books I and VIII and discuss the questions above</i> 2. <i>Learn the basic concepts of nonlinearity, complexity, and chaos theory in the scientific/mathematical context from which they arose</i> 3. <i>Evaluate the validity of applying those concepts to the understanding of On War</i>
KEY TERMS	<i>War, Politics, Extremes, Critical analysis // Nonlinearity, Chaos, Sensitive dependence on initial conditions, Random, Additive</i>
MULTIMEDIA	N/A
READINGS	<p><u>BLOCK I: Chaos Theory, Clausewitz, & Moltke</u></p> <ul style="list-style-type: none"> • Azar Gat, Chapter 6, “The Reaction against the Enlightenment,” <i>A History of Military Thought from the Enlightenment to the Cold War</i>, pp. 141–57 <ul style="list-style-type: none"> ○ <i>This section situates Clausewitz in the context of the Counter-Enlightenment or German Movement and introduces some of the philosophical trends and ideas we talk about in class.</i> • Clausewitz, <i>On War</i> (Book I, Chapters 1–8, Book II, Chapters 5–6), pp. 75–123 and 156–74 <ul style="list-style-type: none"> ○ <i>This is the core Clausewitz theory and the portion of the book that best represents his finished thought. Read it extremely closely. Look at the various analogies and metaphors he uses. Pay attention to the “extremes” and reflect on what he means by the concept of an extreme. You may find it useful to look at http://csmt.uchicago.edu/glossary2004/dialectic.htm if you are not familiar with the philosophical concept of the dialectic.</i> • Hajo Holborn, “The Prusso-German School: Moltke and the Rise of the General Staff,” in <i>Makers of Modern Strategy</i>, pp. 281–95 <ul style="list-style-type: none"> ○ <i>This is a brief and brilliant essay on a phenomenally complex personality. The interplay between Moltke and Clausewitz requires careful examination. Reflect on the ways in which Moltke is a true Clausewitzian—and the ways in which he clearly is not. The</i>

following short excerpt from Moltke's writings may help clarify.

- **Optional:** Vanya Eftimova Bellinger, Chapters 5, 9, and 11, *Marie von Clausewitz: The Woman Behind the Making of On War*

BLOCK II: Chaos, Nonlinearity, & Complexity

- Alan Beyerchen, "Clausewitz, Nonlinearity and the Unpredictability of War," in Thomas J. Czerwinski, *Coping with the Bounds: A Neo-Clausewitzian Primer*
 - *This is another, more detailed and broader, exposition of chaos theory, now with explicit reference to war, military theory, and, especially, Clausewitz. It specifically addresses On War, Book I, Chapter 1, which is assigned for the next block of this lesson. You may want to read that first, or at least have it handy when reading the Beyerchen.*
- Edward Lorenz, Chapters 1 and 4, *The Essence of Chaos* (Seattle, WA: Univ. of Washington Press, 2008) (Focus on the section that starts with "Searching" subhead and read until the end of the chapter).
 - *Lorenz was a meteorologist who made some of the most important intellectual breakthroughs in the formation of chaos theory as a mathematical discipline. This reading has nothing to do with war in principle, but, rather, describes what was at the time a new way of looking at aspects of the world that had been supposed previously to be rule-bound and predictable.*

LESSON PLAN

1. How does Clausewitz define, describe, and use the following concepts:
 - a. *War as a duel and pair of wrestlers.* What is Clausewitz trying to tell us using these analogies?
 - b. *Genius.* What is Clausewitz's concept of genius, and what does this concept tell us about Clausewitz's understanding of war?
 - c. *Friction and fog of war.* What are the sources of friction and fog? To what extent can friction and fog be eliminated or reduced, if at all?
 - d. *War by algebra.* What does Clausewitz mean by "war by algebra," and what is the central point he is trying to make about war?
2. The role of "theory," "critical analysis," and "historical examples."
 - a. *Theory:* What is it, and why is it useful?
 - b. *Critical analysis:* Its definition and role?
 - c. *Historical examples:* What is the proper use of historical examples?
 - d. The definition and role of "extremes" in understanding war.
 - e. What does the discussion of theory, critical analysis, historical examples, and polarity/extremes tell us about how Clausewitz understands war?
3. Clausewitz's understanding of war.

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| | <ul style="list-style-type: none">a. <i>The trinity</i>: “More than” a chameleon. What is Clausewitz’s central idea in his discussion of the trinity and his use of the chameleon analogy? What does this central idea say about war?b. What is war and what is war not, in Clausewitz’s mind? <p>4. Purpose and means.</p> <ul style="list-style-type: none">a. What is (are) the purpose(s) of war and how is (are) purpose(s) related to means? Can there be multiple forms of combat? How? Why? |
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Lesson 5	July 29th
TOPIC	POLITICS & WAR: CLAUSEWITZ VS. MOLTKE
PURPOSE	<i>Reflect upon the correct relationship between military operations and high politics (or policy) in order to decide whether you believe that Clausewitz or Moltke had it right.</i>
OBJECTIVES	<p>How much can and should a political leader intervene in military operations?</p> <ol style="list-style-type: none"> 1. <i>Understand Clausewitz’s views on the relationship between politics (policy) and military operations at every level. Are his views coherent or contradictory?</i> 2. <i>Evaluate Moltke’s portrayal of Clausewitz’s views (consider both the Moltke reading and the footnote in On War noted below). Did Moltke get it right?</i> 3. <i>Why was this dispute of such moment to Moltke? (Look to the Craig reading for this.)</i> 4. <i>Was Moltke wrong, or had Clausewitz simply failed to foresee the kind of challenge Moltke faced?</i> 5. <i>What does it mean to have a “system of war” or “war as a system?”</i> 6. <i>Explore the utility of reading the work of Helmuth von Moltke the Elder through the prism of nonlinearity, complexity, and chaos theory.</i>
KEY TERMS	<i>War as a system</i>
MULTIMEDIA	N/A
READINGS	<p><u>BLOCK I: Clausewitz on Politics and War</u></p> <ul style="list-style-type: none"> • Clausewitz, <i>On War</i>, pp. 61–71 <ul style="list-style-type: none"> ○ <i>Notes by Clausewitz and his wife regarding the nature of the composition and the manner of its publication. This is extremely important front-matter. You need to understand how On War took the final form that it did and what aspects of it best reflected Clausewitz’s most advanced thinking.</i> • Re-read Clausewitz, <i>On War</i>, pp. 75–99 (Book I, Chs. 1 and 2) <ul style="list-style-type: none"> ○ <i>Seriously, re-read them. There is no amount of re-reading of On War that will cease to be of interest.</i> • Clausewitz, <i>On War</i>, pp. 605–10 (Book VIII, Ch. 6, Part B) and especially see the note on p. 608 <ul style="list-style-type: none"> ○ <i>This is short and vital—especially the footnote. We say again: READ THE FOOTNOTE!</i> <p><u>BLOCK II: Moltke and Clausewitz</u></p> <ul style="list-style-type: none"> • Clausewitz, <i>Carl von Clausewitz: Two Letters on Strategy</i>, pp. 1–21 (a portion of Clausewitz’s letter to Roeder, December 22, 1827)

- *This is an obscure, rarely discussed exposition of Clausewitz's thoughts, particularly relating to the topic of this lesson. Your understanding of the Clausewitzian understanding of the relationship between war and politics (and therefore of that question itself) is apt to be partial if you do not read this letter.*
- Gordon A. Craig, *The Politics of the Prussian Army, 1640–1945*, pp. 180–92
 - *An important brief overview of the history in question*
- Helmuth von Moltke, “War and Politics,” in *Moltke on the Art of War: Selected Writings*, ed. Daniel J. Hughes, pp. 35–36
- von Moltke, “On Strategy, 1871,” in *Moltke on the Art of War*, pp. 44–47

LESSON PLAN

Incorporate Books I, II, and VIII as well as the notes and letters into your answers.

1. War and its purpose.
 - a. Once set, is a war's aim fixed? If so, why? If not, why not?
 - b. What is the relationship between a war's aim and the means used to achieve that aim?
 - c. What is the relationship between policy and military action at each level of war?
2. Between the political and the military.
 - a. How are the roles of the political and military leaders differentiated, if at all?
3. Theory and practice.
 - a. Does Clausewitz suggest that from the start one must conceive of war as a whole or just conceive of the first steps then adapt? Why does he take the position that he does?
 - b. What does “defeat” mean? The doctrinal definition and how Clausewitz discusses it.
 - c. What is the relationship between absolute and real war? Why does this relationship matter?
 - d. In the end, is Clausewitz's theory of war coherent and consistent—either, both?

	July 30th
GUEST FACULTY	GEN (Ret.) Stanley McChrystal 9:30 am –12:30 pm
	<ul style="list-style-type: none"> • Early start time: 930 am ET • Stanley McChrystal, <i>My Share of the Task</i>, pp. 89–263 <ul style="list-style-type: none"> ○ <i>Students should begin this reading, focusing on the narrative of the creation of the Joint Special Operations Task Force and reflecting on how the principles embodied in that organization reflect the theories and history articulated in other lessons.</i> <p>Rest of the day is a reading period. Read through World War II and Operational Art.</p>

Lesson 6	July 31st
TOPIC	RAILROADS & RIFLES
PURPOSE	<i>Understand how changes in technology generated (required) transformations in military organization, doctrine, and theory.</i>
OBJECTIVES	<i>How does a revolutionary new technology change the conduct of war? And how does any large organization adopt a revolutionary new technology?</i>
KEY TERMS	
MULTIMEDIA	<ul style="list-style-type: none"> • Video: Understanding Railroads <ul style="list-style-type: none"> ○ The Railroad Journey and the Industrial Revolution: Crash Course World History 214 https://youtu.be/GYAk5jCTQ3s
READINGS	<ul style="list-style-type: none"> • Dennis Showalter, <i>Railroads and Rifles</i>, Part One (Railroads), pp. 19–72 <ul style="list-style-type: none"> ○ <i>This is a long, intricate history of a period you are not likely familiar with at all. But you have already read about Moltke—who he was, where he came from, and what he did—and you have read some of his own writing. You have also read a lot about the Napoleonic Wars and, particularly, the different lessons contemporaries drew from them. This reading should help you reflect on the challenges and opportunities offered to military theorists and practitioners by changing technology. How can one tell if a new technology might revolutionize warfare? How can one guess about how to use that technology to do so? How do military requirements interact with economic needs to shape the evolution of both military and civilian technology? What role do individuals play in generating disjunctive change?</i> • Gen. Gordon R. Sullivan and Col. James M. Dubik, <i>Envisioning Future Warfare</i>, 1995 https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/sullivan.pdf • James M. Dubik, <i>The Army’s “Twofer”</i>: <i>The Dual Role of the Interim Force</i>, October 2001 https://www.ausa.org/sites/default/files/LWP-39-The-Armys-Twofer-The-Dual-Role-of-the-Interim-Force.pdf • Gen. (Ret.) Gordon Sullivan and Col. (Ret.) Michael Harper, <i>Hope is Not a Method</i>, pp. 9–21, 39–42, 49–54, 77–82, 147–49, 155–71, 182–87, and 236–41 <p>In preparation for the next suite of lessons:</p> <ul style="list-style-type: none"> • Shimon Naveh, Chapter 1, “Operational Art and the General Theory of Systems,” <i>In Pursuit of Military Excellence: The Evolution of</i>

Operational Theory, pp. 1–30

- *A general discussion of the idea of the operational level explaining its necessity and differentiating it from the tactical and strategic levels.*

**LESSON
PLAN &
STUDY
GUIDE**

1. Understand the chronology of railroad development.

- a. Read the Showalter piece. Create your own chronology. As you read, list the date of every event marking the progress of the railroads or an obstacle to that progress. List also the key person(s) associated with that event and what they did to advance or obstruct the development of the railroad as well as why they did so.
2. Describe the different kinds of actions that moved railroads from a concept to a reality—i.e. the difference between having an idea, selling that idea, proving the idea, adopting the idea, institutionalizing the idea, and adapting the idea.
 - a. Watch “The Railroad Journey and the Industrial Revolution.” Try to figure out what “Machines make their own laws” might mean. Try also to figure out what understanding railroads “as a system” might mean.
 - b. Go back through your chronology. Identify where “having” the idea of a rail system began and ended. Do the same with “selling, proving, adopting, institutionalizing, and adapting.” Identify also the overlap between these activities as well as which activities were sequential and which were simultaneous?
 - c. Look at the people associated with each of these activities. List their strengths and weaknesses. What characteristics allowed them to succeed or fail?
3. What exactly does “institutionalization” mean in the military context? What are the conditions that allow one to say with confidence that a military has developed a new capability?
4. Explain, using the railroad example the difference between the rate of technological advance and the rate of human and organizational adaptation. Think about this difference and be prepared to explain it in your own words...using the railroad example.
5. Understand the application of the ideas contained in #2 and 3 to the Army’s adoption of digital technologies in the 1990s.
 - a. Describe, in your own words, the path that Chief of Staff of the U.S. Army, Gen. Gordon Sullivan wanted to put the army on. Why did he think that path was necessary?
 - b. How would Gen. Sullivan answer question #4?
 - c. List the similarities and differences between the railroad example and the digitization example.

Lesson 7	August 1st
TOPIC	SCHLIEFFEN TO STALEMATE
PURPOSE	<ol style="list-style-type: none"> 1. Decide which of the following are true: <ol style="list-style-type: none"> a. <i>Trench warfare stalemate resulted from the stupidity of generals.</i> b. <i>Stalemate was the inevitable result of the military technology of the time.</i> c. <i>The German attack in 1914 failed because of Moltke’s changes to Schlieffen’s plan.</i> d. <i>The 1914 attack failed because Schlieffen designed it mechanistically and in disregard of Moltke’s dictum that no plan survives first contact with the enemy.</i> e. <i>The attack failed because Schlieffen sought Napoleonic-style decisive victories in an era in which they were no longer possible.</i> 2. Why did the war stalemate on the Western Front? 3. How did the various actors try to overcome the stalemate?
OBJECTIVES	<p>Planning vs. execution; is war an engineering problem?</p> <ul style="list-style-type: none"> ○ <i>World War I represented a failure at the tactical level—or at the operational level?—or at the strategic level?</i>
KEY TERMS	<i>Motorized, Mechanized, Mobility; Trench warfare (suite of terms); Infiltration tactics; Michael Offensive</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Videos: <ul style="list-style-type: none"> ○ Trench Warfare https://youtu.be/NtfOpb1SG34 ○ German Tactics for 1918 Spring Offensive The Great War Special https://www.youtube.com/watch?v=wMfQXPya9zs ○ Tank Development in World War 1 The Great War Special https://www.youtube.com/watch?v=zjj13U-j0_g
READINGS	<p><u>BLOCK I: Schlieffen and the First Campaign of World War I</u></p> <ul style="list-style-type: none"> • Terence Zuber, “1920: Kuhl Reveals the Schlieffen Plan,” <i>German War Planning, 1891–1914</i>, pp. 265–71 • Gunther Rothenberg, “Moltke, Schlieffen, and the Doctrine of Strategic Envelopment,” in <i>Makers of Modern Strategy</i>, pp. 296–325 <ul style="list-style-type: none"> ○ <i>Another brilliant essay from one of the best compilations of writings about war ever produced. Pay careful attention—there are TWO Helmuth von Moltkes. You have been reading about Helmuth von Moltke the Elder, who introduced railway</i>

mobilization and the general staff system to the Prussian Army and led that army through the Wars of German Unification. Now you'll meet his nephew, Helmuth von Moltke the Younger, who will occupy his uncle's position as Germany approaches and enters World War I. Use this essay to reflect on all of the theoretical and practical debates swirling between Clausewitz, Moltke the Elder, Jomini, and Schlieffen about the nature of war as art, science, or a hybrid.

- James L. Stokesbury, *A Short History of World War I*, pp. 22–56 (through the First Marne). **Recommended as overview; not required**—but make sure you understand what happened in 1914 through the First Battle of the Marne
- Zuber, “The ‘Schlieffen’ Plan,” *German War Planning, 1891–1914: Sources and Interpretations*, pp. 187–204 (Read closely and with a map)
 - *This is the closest we can get to the “Schlieffen Plan,” which was destroyed along with most of the documents relating to Germany’s pre-war planning in a vain attempt to absolve Germany of responsibility for the war. This is NOT the actual plan, however. It is a concept of operations, and a preliminary one. Understand how it was supposed to work. Try to identify logical gaps and potential problems within this document. Then reflect on how much Moltke the Younger was to blame for the “failure” of the “Schlieffen Plan.” Finally, think about what this debate says about the nature of war.*
- Timothy Lupfer, *The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War*, Combat Studies Institute, Fort Leavenworth, Kansas, 1981 (58 pages)
<https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/leavenworth-papers-4-the-dynamics-of-doctrine.pdf>
 - *This is the only reading this lesson that describes the nature and challenges of trench warfare— understanding that is more important than mastering the details of infiltration tactics.*

Lesson 8	August 2nd
TOPIC	ARMORED WARFARE & OPERATIONAL ART
PURPOSE	<i>Understand the evolution of operational art as a distinct branch of military theory and practice.</i>
OBJECTIVES	<i>Learning from success and failure: How did the combatants of WWI try to envision the next war and adapt their forces to fight it?</i>
KEY TERMS	<i>Blitzkrieg, Operational Art, Front, Deep battle</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Videos: <ul style="list-style-type: none"> ○ What was the Blitzkrieg? The Blitzkrieg Explained as Short as Possible https://youtu.be/bClvk6T_CYQ ○ Weaponology – “Blitzkrieg” https://youtu.be/H4krV180eRQ ○ Blitzkrieg in the West – The Invasion of France, WWII, May 18, 1940 https://youtu.be/DLN8NHXiMy0
READINGS	<p>“Coping with Trench-Warfare Stalemate”</p> <p><i>This block is absolutely pivotal for understanding the evolution of armored warfare, so do not skip it. Make sure that you read the Luffer without fail. If we do not get to it today, then skim to refresh your memory on it during the reading day tomorrow so that you have it in your mind after reading day.</i></p> <ul style="list-style-type: none"> • David Glantz, Chapters 2, 4, and 5, “The Nature of Operational Art,” “The Formative Years of Soviet Operational Art,” and “The Great Patriotic War and the Maturation of Operational Art,” <i>Soviet Military Operational Art: In Pursuit of Deep Battle</i>, (New York: Frank Cass, 1991) <ul style="list-style-type: none"> ○ <i>Make sure you get to this reading. The Germans took armored warfare and operational art one way—the Soviets took it somewhere rather different. Make sure you can sense the differences.</i> • J. F. C. Fuller, “The Application of Recent Developments in Mechanics and Other Scientific Knowledge to Preparation and Training for Future War on Land,” Gold Medal (Military) Prize Essay in the Journal of the Royal United Services Institute, 1919 https://rusi.org/publication/rusi-journal/war-land-application-recent-developments-mechanics-and-other-scientific • J. F. C. Fuller, “Plan 1919” • Michael Geyer, Chapter 19, “German Strategy in the Age of Machine

Warfare, 1914–1945,” in *Makers of Modern Strategy*

- Robert M. Citino, *Quest for Decisive Victory: From Stalemate to Blitzkrieg in Europe, 1899–1940*
 - Second half of Chapter 6, the Interwar Years, pp. 193–213 (from “Germany: Doctrine and Developments”) as well as Chapter 8, (“Operational Art Reborn”), pp. 251–83
 - Robert Doughty, Chapters 1, 5, Conclusion, *The Seeds of Disaster: The Development of French Army Doctrine, 1919–39*
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Lesson 9	August 3rd
TOPIC	AIRPOWER—DOUHET TO WARDEN FROM THE ORIGINS OF AIR POWER THEORY TO ITS MODERN STATE
GUEST CO-INSTRUCTOR	GEN (Ret.) Curtis Scaparrotti
PURPOSE	<i>Understand the terms and concepts of air power theory as it evolved from early in the 20th century to the present.</i>
OBJECTIVES	<p>The search for the silver bullet: Can we fight by air alone?</p> <ol style="list-style-type: none"> 1. <i>Understand the rationale for seeing airpower as fundamentally revolutionary in the first half of the 20th Century.</i> 2. <i>Evaluate the nature of the debate over the right relationship between airpower and other forms of military power in that time.</i> 3. <i>Master the concept of “center of gravity” as it is used in the context of airpower theory.</i> 4. <i>Compare and contrast the airpower view of the enemy (and how to operate against him) with the view presented by operational art theory. Consider both operational art and airpower theory in the context of nonlinearity, complexity, and chaos theory.</i>
KEY TERMS	<i>Air power; Strategic bombing; Center of gravity; Air superiority; Air supremacy; Close air support; Parallel warfare</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Videos: <ul style="list-style-type: none"> ○ Victory Through Air Power: Animated History of Aviation (1942) https://youtu.be/tUeKeN9bXSE ○ Airpower in WWI https://www.youtube.com/watch?v=s1oxX4Q6ndo ○ Tactical and Strategic Power in WWII https://www.youtube.com/watch?v=kTir8MxxtFk ○ Airpower in the Korean War https://www.youtube.com/watch?v=nWbZYP7PY24 ○ Airpower in Vietnam https://www.youtube.com/watch?v=wK2BHLMH32Q
READINGS	<ul style="list-style-type: none"> • David Deptula, “Defining Rapid Decisive Operations: Parallel Warfare,” in <i>Effects-Based Operations: Changes in the Nature of War</i>, pp. 3–7 http://www.ousairpower.net/PDF-A/AEF-AFA-Effect-Based-Operations-D.A.Deptula-2001.pdf • David MacIsaac, “Voices from the Central Blue: The Air Power Theorists,” <i>Makers of Modern Strategy</i>, Chapter 21, pp. 624–47

- John Warden, “The Air Campaign in Retrospect,” *The Air Campaign* (entire)
 - *This is a long reading, but students should focus on Chs. 1, 2, 10, “The Air Campaign in Retrospect.”*
- NOT REQUIRED BUT FOR YOUR FUTURE EXPLORATION: John F. Boyd’s briefings are available at https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0151_Boyd_Discourse_Winning_Losing.PDF
 - *These readings are seminal works shaping the evolution of American airpower theory—and, thus, of the world’s airpower theory. The recommended papers are:*
 - 41.5 – Abstract
 - 42 – Pattern
 - 43 – The Strategic Game of ? and ?
 - 45 - Winning and Losing

LESSON PLAN

1. Air-Land Battle – Set in contrast to Soviet Deep Battle.
2. Airpower and airpower alone? The first theorists, the first adopters, strategic bombing, the later theorists/adopters
3. Parallel Warfare
4. What would Clausewitz say?

Lesson 10	August 4th
TOPIC	U.S. CONVENTIONAL WARFARE, 1970S–TODAY
GUEST CO-INSTRUCTORS	GEN (Ret.) Curtis Scaparrotti LTG (Ret.) H.R. McMaster
PURPOSE	<i>The wars we want to fight: how the U.S. prepared for, won, and learned from the Gulf War</i>
OBJECTIVES	<ol style="list-style-type: none"> 1. <i>Understand the American theory and practice of conventional warfare at the end of the 20th century.</i> 2. <i>Examine different approaches to the problem of designing military doctrine based on observation of contemporary wars and the study of adversary intentions and theory.</i> 3. <i>Evaluate competing explanations for the outcome of the first Gulf War and their implications for the future of American war-fighting.</i> 4. <i>Consider the continuities and discontinuities of warfare over many changes in technology throughout the 20th century.</i> 5. <i>Evaluate the nature of the debate over the right relationship between airpower and other forms of military power.</i> 6. <i>Contrast the experience of the Gulf War with the other U.S. military deployments of the 1990s.</i>
KEY TERMS	<i>Active Defense; Air-Land Battle</i>
MULTIMEDIA	<ul style="list-style-type: none"> • Videos: <ul style="list-style-type: none"> ○ The 1st Gulf War, Battle of 73 Easting https://www.youtube.com/watch?v=tJNk7DcFIkk ○ Airpower in the 1st Gulf War https://www.youtube.com/watch?v=LNH-kCdtEaw
READINGS	<ul style="list-style-type: none"> • Douglas W. Skinner, <i>Airland Battle Doctrine</i>, September 1988 https://apps.dtic.mil/dtic/tr/fulltext/u2/a202888.pdf • John Warden, Epilogue, <i>The Air Campaign</i> • Thomas A. Keaney and Eliot A. Cohen, Summary Report, pp. 1–27, (“What happened?”), and 235–53 (“Was Desert Storm a Revolution in Warfare?”), <i>Gulf War Air Power Survey</i> • Stephen Biddle, “Victory Misunderstood: What the Gulf War Tells Us about the Future of Conflict,” 1996 • H.R. McMaster, “Eagle Troop, Second Squadron, Second Armored Cavalry Regiment,” <i>The Bridge</i>, February 26, 2016 • H.R. McMaster, “What We Learned: From the Battle of 73 Easting” <ul style="list-style-type: none"> ○ Stephen D. Biddle, <i>Commentary on “Victory Misunderstood”</i> • Max Boot, Chapters 14 and 16 (“In the Shadow of Vietnam,” “In Defense of Pax Americana”), <i>The Savage Wars of Peace</i>

LESSON PLAN**Morning and Early Afternoon**

1. Gulf War Air Campaign if not covered above.
2. The Gulf War and the discussion of ground war vs. airpower triumphalism (Warden, Deptula, and Biddle readings)

Afternoon II

1. "Small wars" of the 1990s with Gen. Scaparrotti

Lesson 11	August 5th
TOPIC	U.S. UNCONVENTIONAL WAR & THE EVOLUTION OF THE SALAFI-JIHADI MOVEMENT
GUEST CO-INSTRUCTORS	GEN (RET.) CURTIS SCAPARROTTI LTG (RET.) H.R. MCMASTER
GUEST FACULTY	1000–1130: KATHERINE ZIMMERMAN (CRITICAL THREATS PROJECT) 1630–1800: JENNIFER CAFARELLA (INSTITUTE FOR THE STUDY OF WAR)
PURPOSE	<i>Learn how non-state armed groups evolved to fight the U.S.</i>
OBJECTIVES	<ol style="list-style-type: none"> 1. Understand how the Salafi-jihadi movement, especially al Qaeda and ISIS, attempted different ways of fighting the U.S. and learned from its experiences before, during, and after the Iraq War. 2. Understand why the Iraq War became an insurgency and how the U.S. recognized and adapted to the insurgency over time. 3. Understand core elements of the U.S. counterinsurgency approach. 4. Understand the different innovations and paths of al Qaeda and ISIS.
KEY TERMS	
READINGS	<ul style="list-style-type: none"> • Katherine Zimmerman, <i>America’s Real Enemy: The Salafi-Jihadi Movement</i> (2017) http://longform.aei.org/americas-real-enemy/ • Ayman al Zawahiri, Excerpts from “Knights Under the Prophet’s Banner,” in Gilles Kepel and Jean-Pierre Milelli, <i>Al Qaeda in its Own Words</i>, pp. 193–205 • February 2004 Letter of Abu Musab al Zarqawi to Ayman al Zawahiri https://2001-2009.state.gov/p/nea/rls/31694.htm • July 2005 Letter of Zawahiri to Zarqawi https://ctc.usma.edu/harmony-program/zawahiris-letter-to-zarqawi-original-language-2/ • 2007 Letter of [al Qaeda Senior Operative] Atiyah Abdul Rahman to Zarqawi https://www.ctc.usma.edu/harmony-program/atiyahs-letter-to-zarqawi-original-language-2/ • Toby Dodge, <i>Iraq: From War to a New Authoritarianism</i> (International Institute of Strategic Studies and Routledge: 2012) • George Packer, “The Lesson of Tal Afar,” <i>The New Yorker</i>, April 10, 2006

- H.R. McMaster, “The Human Element: When Gadgetry Becomes Strategy,” *World Affairs* 171, no. 3 (2009): 31–43
<https://www.jstor.org/stable/20672872>
- H.R. McMaster, *Assessment of the Counterinsurgency Effort in Iraq*
- ISIS Readings
 - *For an excellent and fast narrative of the evolution of the counter-ISIS mission and the US/coalition role:* [Former Secretary of Defense] Ash Carter, “A Lasting Defeat: The Campaign to Destroy ISIS,” pp. 1–33
<https://www.belfercenter.org/publication/lasting-defeat-campaign-destroy-isis>
 - *CENTCOM perspective on the by-with-through approach:* [Former CENTCOM commander] Joseph L. Votel and Eero R. Keravouri, “The By-With-Through Operational Approach,” *Joint Forces Quarterly*, 2nd Quarter 2018, pp. 40–47
<https://ufdcimages.uflib.ufl.edu/AA/00/06/15/87/00089/2nd%20Quarter-2018.pdf>
 - *An evaluation of ISIS’s defense of Mosul and what the Army did and didn’t learn:* MAJ Amos Fox, “The Mosul Study Group and the Lessons of the Battle of Mosul,”
<https://www.ausa.org/publications/mosul-study-group-and-lessons-battle-mosul>
 - *For an overview of ISIS’s status at the conclusion of large-scale coalition operations, read the executive summary:* Jennifer Cafarella with Brandon Wallace and Jason Zhou, “ISIS’s Second Comeback: Assessing the Next ISIS Insurgency,” Institute for the Study of War, June 2019
<http://www.understandingwar.org/report/isiss-second-comeback-assessing-next-isis-insurgency>
- OPTIONAL additional resources on Mosul
 - Michael Knights and Alexander Mello, “Defeat by Annihilation: Mobility and Attrition in the Islamic State’s Defense of Mosul,” *CTC Sentinel* April 2017, Volume 10, Issue 4
<https://ctc.usma.edu/defeat-by-annihilation-mobility-and-attrition-in-the-islamic-states-defense-of-mosul/>
 - *For a BDE level perspective on the fight in Mosul from COL Work:* J. Patrick Work, “Fighting the Islamic State By, With, and Through,” pp. 56–62
https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-89/jfq-89_56-62_Work.pdf
 - MWI Podcast: “The Battle for Mosul with COL Pat Work,” February 2018
<https://mwi.usma.edu/mwi-podcast-battle-mosul-col-pat-work/>

- Mosul Study Group, “What the Battle for Mosul Teaches the Force,” September 2017, pp. 1–9 (historical context) & 10–26 (lessons learned) <https://www.armyupress.army.mil/Portals/7/Primer-on-Urban-Operation/Documents/Mosul-Public-Release1.pdf>

LESSON PLAN

Morning

- AEI’s **Katie Zimmerman** to present and lead a discussion about the Salafi-Jihadi Movement on the al-Qaeda side. (Reading: “America’s Real Enemy” on the syllabus)

Afternoon I

- Iraq: The war we wanted to fight and the war we got. (Reading: Toby Dodge)
- The discussion of how AQI and the Shi’a militias took advantage of the complex ethno-sectarian conflict and state collapse to evolve ways of fighting against the U.S. and its Iraqi allies.

Afternoon II

- Division Operations and the fight against Salafi-Jihadi groups in Iraq.
- ISW’s **Jennifer Cafarella** to lead a discussion about ISIS.
- **Discussion Questions**
 - How did the campaign against ISIS differ from the campaign against AQI/ISI? Why?
 - What are the risks the U.S. assumes in COIN vs. BWT (by-with-through)?
 - Is the BWT approach similar to “limited war?”
 - Was the counter-ISIS campaign a success? Why or why not?
 - What did the coalition learn from the counter-ISIS fight, and what did ISIS learn?
 - How does the Mosul battle inform likely scenarios in future?

Lesson 12	August 6th
TOPIC	GREAT POWER RESPONSES TO US CAPABILITIES – RUSSIA & CHINA
GUEST CO-INSTRUCTORS	GEN (Ret.) Curtis Scaparrotti LTG (Ret.) H.R. McMaster
GUEST FACULTY	GEN. (Ret.) Vincent Brooks 1030 am – 1200 pm
PURPOSE	<i>Understand how state adversaries have attempted to circumvent U.S. conventional superiority</i>
OBJECTIVES	<ul style="list-style-type: none"> • How has North Korea adapted to U.S. conventional superiority and military presence on the Korean Peninsula? How does it leverage U.S. and Chinese competition? • Do Russia and China seek to fight the U.S. on its own terms? If so, how? • If not, how are the Russians and Chinese trying to accomplish their objectives? • What are the differences in the approaches these three state actors have taken to offset U.S. military advantages? Why do they differ? • Does great power conflict require conventional warfare? Where is the boundary between competition and conflict?
KEY TERMS	
MULTIMEDIA	
READINGS	<ul style="list-style-type: none"> • Jim Sciutto, <i>Shadow War</i> • H.R. McMaster, “How China Sees the World and How We Should See China,” <i>The Atlantic</i>
LESSON PLAN	<p><u>Morning:</u></p> <ul style="list-style-type: none"> • North Korea: Gen. Vincent Brooks will join us from 1030 to 1200. • Discussion with the guest faculty and Gen. Brooks on Korea and the U.S. Forces in Korea. <p><u>Afternoon</u></p> <ul style="list-style-type: none"> • Gen. McMaster to lead a discussion on China – especially but not exclusively its gray zone exploitation. • Gen. Scaparrotti to lead a discussion on Russia with regard to its gray zone activities, but also nuclear and diplomatic ones. What are our strengths and weaknesses countering that, both as a state and as an alliance?

Lesson 13	August 7th
TOPIC	THINKING ABOUT THE FUTURE OF WAR
GUEST CO-INSTRUCTORS	LTG (Ret.) H.R. McMaster
GUEST FACULTY	GEN (Ret.) David Petraeus 1430 – 1700
PURPOSE	<i>What have we learned?</i>
OBJECTIVES	<ul style="list-style-type: none"> • How can one intelligently speak about the future of war? • What can the study of military history teach us? • Key takeaways and conclusions
KEY TERMS	
MULTIMEDIA	<ul style="list-style-type: none"> • Video: ARMY TRADOC G-2, The Future Operating Environment https://m.youtube.com/watch?v=0VsiKOe_wg&t=0s&index=11&list=PLx2Zn7hPXT7cnQwhyI5YybdgOJdlorbo1%22
READINGS	<ul style="list-style-type: none"> • <i>The Operational Environment and the Changing Character of Warfare</i>, TRADOC Pamphlet 525-92, October 2019 https://adminpubs.tradoc.army.mil/pamphlets/TP525-92.pdf • H.R. McMaster, “On War: Lessons to be Learned,” <i>Survival</i> 50:1 (2008) https://www.tandfonline.com/doi/full/10.1080/00396330801899439 • H.R. McMaster, <i>Continuity & Change: The Army Operating Concept and Clear Thinking About Future of War</i>, March-April 2015 https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20150430_art005.pdf • H.R. McMaster, “The Pipe Dream of Easy War,” <i>The New York Times</i>, July 20, 2013 • Michael Howard, “The Use and Abuse of Military History,” <i>Royal United Services Institution Journal</i> 107:625 (1962) https://www.tandfonline.com/doi/abs/10.1080/03071846209423478?journalCode=rusi19
LESSON PLAN	<p><u>Morning</u></p> <ul style="list-style-type: none"> • How to think about the future of war? • Revisiting several key discussions from earlier in the course: Clausewitz, Napoleon, Railroad and Rifles, Interwar Modernization, Digitization. <p><u>Afternoon</u></p>

- Discussion with General Petraeus.