THE MILITARY AND NEW TECHNOLOGY

Course Instructor: Prof. Kathleen Vogel,
Department of Science and Technology Studies
Office: 154 Uris Hall
Tel: 255-2248
email: kmv8@cornell.edu

Class meeting time: 8:40 am-9:55 a.m. TR
Classroom location: Statler (SR 453)
Office Hours: Uris Hall, Room 154; T/Th 10-11 a.m

Course Description

This course will examine the role that technology plays in warfighting and examine whether advances in technology will significantly alter traditional notions of the way battles are fought and won. Given the pace of technological development, the course will examine to what extent the United States and other countries are currently witnessing a “revolution in military affairs.” The course will examine how receptive the military is to technological development. Does technology drive military innovation? Or does the military drive technological innovation? To answer these questions, we will study military organizational culture, education, promotion pathways, and inter-service rivalries, as well as look at some examples of technological advances in weaponry. How do each of these factors shape the way technology is developed and incorporated into the military? Finally, the course will look at the unique role that technology has played in how the United States has planned and fought in wars and in current debates on U.S. military transformation. The final weeks of the course will focus on case studies of the Vietnam War and the Global War on Terrorism. What role has technology and the American concept of “techwar” shaped the outcome of these conflicts? What does the future hold for U.S. military transformation?
I. **INTRODUCTION: CURRENT POLICY DEBATES**

(1/23) **First Day of Class:**

(1/25) **Current U.S. Military Transformation Debates**

(1/30) **The QDR**

(2/1) **The QDR and Budget**

II. **HISTORICAL PERSPECTIVES ON MILITARY TRANSFORMATION**

**A. Clausewitz and Sun Tzu: The Importance of Strategy, Experience, and Technology**

(2/6)

(2/8)

(2/13) **Library Instruction Session for Group Project**
- No assigned readings, meet at Uris Library circulation desk
B. Thinking about Revolutions in Warfare

(2/15) **Military Revolution vs. Revolution in Military Affairs (RMA)**

(2/20) **Examples of Military Revolutions**

(2/22) **Examples of RMA**

III. Challenges/Influences on the Implementation of RMAs

(2/27) **The Weight of Tradition and the Problem of Testing**

(3/1)

ESSAY #2 DUE ON 3/1

(3/6) **Organizational Interests and Military Culture**
(3/8) The Military-Academic-Industrial Complex
- Dwight D. Eisenhower, “Farewell Address.”

(3/13) The Enemy
- Film: The Battle of Algiers  
  o Special Screening, date/location TBA

(3/15) Military Training and Know-How

LITERATURE REVIEW FOR GROUP PROJECTS DUE 3/15

3/17 THRU 3/25 SPRING BREAK: NO CLASS

IV. STRATEGIES FOR UNDERSTANDING MILITARY INNOVATION

(3/27)  

(3/29)

(4/3)
- Stephen P. Rosen, Winning the Next War, Chapter 1, p 1-53.

(4/5)
- Stephen P. Rosen, Winning the Next War, Chapter 2-3, p. 57-105.
GROUP PROJECT OUTLINES DUE IN CLASS ON 4/10

(4/10)

(4/12)
• Stephen P. Rosen, *Winning the Next War*, Chapter 8, p. 221-250.

(4/17)

V. TECHNOLOGY AND WARFIGHTING: THE AMERICAN EXPERIENCE

(4/19) Case Study #1: Vietnam

(4/24) Case Study #2: Afghanistan, Iraq, and the Global War on Terror

VI. THE FUTURE OF MILITARY TRANSFORMATION

(4/26) The Return of Mercenaries?
• PBS/Frontline video,"*Private Warriors*" (June 2005)
  o Special film screening, date/location TBA
**FINAL GROUP PROJECTS DUE IN CLASS ON 4/26**

(5/1) **Class Presentations**

(5/3) **The Road Ahead…**


**ESSAY #3 DUE IN CLASS ON 5/3**
GENERAL COURSE INFORMATION

Course materials
The majority of readings for the course will be found in the course packet and on-line (as indicated in the syllabus). However, the following books are required for this course:


Copies of these books will also be available on 2-hour loan in Uris library.

Assignments and Expectations:
We will emphasize close reading and group discussion of the readings. You should come to class prepared to discuss the assigned readings. Regular attendance and participation are expected, and more than two unexcused absences will result in a lower grade. Grades will be based on the following:

• Class participation (15%)
• Reading responses (20%)
• Essays (30%)  
• Group project (35%): which includes the following components  
  o literature review, outline: 5%
  o final report: 20%
  o class presentation: 10%

Class Participation
Each student is expected to come to class prepared to discuss the readings. Regular attendance and participation are expected, and more than two unexcused absences will result in a lower grade. In addition, half of your participation grade will be based on each student leading one of the class discussions, starting on 2/6. A sign up sheet will be provided at the start of the semester. Students are welcome to meet with Professor Vogel during her office hours to discuss discussion strategies.

Reading responses:
Starting on January 25th, each student will be required to turn for each class: a very brief (four to five sentences is sufficient) response of the reading(s). Some examples of responses could include a brief discussion of: (1) an issue or problem raised by the reading(s) that you find interesting or that you will criticize; (2) a connection of the readings to previously assigned readings; (3) an outside reading that relates to the assigned reading; (4) a news article that relates to the reading(s). In all cases, your response must incorporate the reading(s). In addition to the response, include two questions for discussion in class. If there is more than one reading, write at least one question per reading (you are encouraged to ask questions that combine the readings, but this won’t always be possible). The purpose of the response is to help focus discussion for each class. Be prepared to read your responses aloud in class.

On the days that a student leads class discussion, s/he will turn in his or her discussion outline as a reading response for that class period. Notes will be due at the end of class on the days they are assigned. Notes will be
given partial credit if they are late and/or poorly done. During the course of the semester, you may skip 2 of these notes without penalty. These reading notes will be graded on the following scale: 5 (good reading response that engages the readings and brings fresh insights), 3 (average reading response; engages the readings), 1 (poor reading response; does not show familiarity or engagement with the readings).

**Essays:**
You will be responsible for submitting a short essay (~3-4 page typed, double-spaced pages) on the due dates listed below. One week before each essay is due I will announce the topic. The papers must be submitted in class on the day they are due; late essays will be penalized by half a letter grade, each day after the due date.

- Essay #1: 2/13
- Essay #2: 3/1
- Essay #3: 5/3

**Group Project**
For the group project, the class will be divided into groups of students, who will work together throughout the course of the semester on the project. Additional details on the group project will be announced on 2/13. As part of the group project, each group will be expected to submit various project materials throughout the semester. These are noted below:

- Literature Review, Outline: 5% of grade for project
- Final Report: 20% of grade for the project
- Presentation: 10% of grade for the project

The report should incorporate at least one of the assigned readings from the course, which must be approved by Professor Vogel. The Final Report should be ~10 typed, double spaced pages; appendices should be included as relevant. Papers will be graded on analysis and argumentation, evidence, and mechanics (grammar and appropriate format). Additional guidance regarding the project and final report will be forthcoming. Papers are due at the beginning of class on May 3rd. Late papers will be marked down a half grade per day (e.g., B+ = B).

Each group will also give a ~15 min in-class presentation of their group project (on the dates indicated on the syllabus). The presentation will be graded on organization of talk, clarity of findings, argument clearly presented, and *creative flair*.

There is no final exam for this course.

**Statement on Academic Integrity**

The Cornell Code of Academic Integrity states: “Absolute integrity is expected of every Cornell student in all academic undertakings. Integrity entails a firm adherence to a set of values, and the values most essential to an academic community are grounded on the concept of honesty with respect to the intellectual efforts of oneself and others. . . . A Cornell student's submission of work for academic credit indicates that the work is the student's own. All outside assistance should be acknowledged, and the student's academic position truthfully reported at all times. In addition, Cornell students have a right to expect academic integrity from each of their peers.”

Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. In the context of this course, academic integrity includes writing your own reading notes & responses, essays, and term paper, faithfully referencing all sources, and using quotation marks to indicate material that is quoted. Violations will be handled in accordance with the strictest applicable university policies. See the complete statement of student responsibilities: [http://plagiarism.arts.cornell.edu/tutorial/index.cfm](http://plagiarism.arts.cornell.edu/tutorial/index.cfm)