

# **Evolution of U.S. Air Force Air and Space Power**

AS20C Syllabus



**Spring Quarter 2012**

**UCLA**

**AFROTC DET 055**

**AS20C – Evolution of U.S. Air Force Air and Space Power  
Spring 2012 Quarter**

**1. Instructor**

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**2. Class Time, Location, and Credit**

- |                                 |            |                  |
|---------------------------------|------------|------------------|
| a. Section 1: Friday, 0900-0950 | SAC Rm 215 | 1.0 hour/2 units |
| Section 2: Thursday, 1530-1620  | SAC Rm 215 | 1.0 hour/2 units |

b. Official university enrollment is required to attend class. Those not enrolled by week three will not be allowed to attend class without an official memorandum providing a valid explanation for lack of enrollment. Failure to pay any university fees associated with the class will result in a failing grade.

**3. Course Description:** AS20 is a course designed to examine general aspects of air and space power through a historical perspective. The course covers a time period from the first balloons and dirigibles to the space-age systems of the Global War on Terror. Historical examples are provided to extrapolate the development of Air Force distinctive capabilities and missions to demonstrate the evolution of what has become today's USAF. Furthermore, the course examines fundamental principles of war and tenets of air and space power. As a whole, this course provides the students with a knowledge level understanding of the general elements and employment of air and space power from an institutional doctrinal and historical perspective. In addition, the students will be inculcated into the Air Force Core Values and with the use of operational examples. Additionally, they will conduct several writing and briefing assignments to meet Air Force communication skills requirements.

**4. Course Goals**

- a. Know the key terms and definitions used to describe air and space power
- b. Know the events, leaders, and technical developments which surrounded the evolution and employment of USAF air and space power
- c. Demonstrate basic verbal and written communication skills
- d. Know the Air Force core values and examples of their use throughout the evolution of US Air and Space power

**5. Course Text Books**

- a. The Evolution of USAF Air and Space Power
- b. AS 200 Student Note Taker
- c. Tongue and Quill

**6. Course Web Site:** <https://classes.sscnet.ucla.edu/course/view.php?name=12S-AEROST20C-1>. Information about the class and assignments will be posted on the course web page. USAF publications and forms are located at: <http://www.e-publishing.af.mil>

**7. Grading Criteria**

- a. **Letter Grades:** Your grade in this class is based on your performance. You **must** achieve a grade of “C-“ or better in your Air Force courses to maintain academic retention standards and remain in AFROTC. Your grade in this course is based on the following scale:

93 - 100 %	A	90 – 92.9 %	A-
87 - 89.9 %	B+	83 – 86.9 %	B
80 – 82.9 %	B-	77 – 79.9 %	C+
73 – 76.9 %	C	70 – 72.9 %	C-
67 – 69.9 %	D+	63 – 66.9 %	D
60 – 62.9 %	D-	59.9% - below	F

- b. **Assignment weighting:** Student assignments and exams will be individually graded and combined using the following weights to determine the final course grade.

<u>Activity</u>	<u>(% of overall grade)</u>
Class Participation	10%
Homework (2)	15%
Quizzes (2)	15%
Written Assignment	30%
<u>Final</u>	<u>30%</u>
Total	<b>100%</b>

c. **Missed/Late assignments:**

- i. If you miss a quiz, exam, or paper turn-in due to an unexcused absence, expect to receive a grade of zero for that graded event.
- ii. Turn-in of assignments missed due to an excused absence will be coordinated with the instructor before the due date if possible. Student failure to make arrangements for turn-in of missed assignments within one week of the excused absence will result in a zero grade for the assignment.
- iii. Late assignments will be deducted 1 grade step per day late (from an A to an A-, A- to B+, etc.). Assignments will be considered a day late if they are not turned in at the beginning of the class period during which they are due.

**8. Class Participation:**

- a. Students are expected to come prepared for class and actively participate in class discussions. To receive maximum credit, cadets must attend all classes (or make up legitimate excused absences) as well as participate by volunteering answers and opinions during discussion. Active participation makes the class more enjoyable and enhances learning!
- b. Each class session will begin with a discussion of current events relating to political and military issues. All students are expected to come to class prepared to discuss at least two separate topics from recent news items.

**9. Quizzes/Final Exam:**

- a. There will be two in-class quizzes on current events. The material covered in these quizzes will be available for student study from a variety of media, but the questions will be written based exclusively on content from Slate.com’s news summary page, “The Slatest” which can be found at <http://slatest.slate.com/>
- b. The questions on the quizzes/final exam may consist of multiple choice, fill-in-the-blank, matching, true/false, or essay questions. Quiz and test questions are based on the lesson objectives covered in the textbook reading and/or in the material presented in class.

c. The final examination is comprehensive and given during finals week. If you can correctly respond to the lesson objectives by studying the material presented in the class slides (posted on the class website) and in your reading assignments, you should do well on the quiz and final exam.

10. **Reading Assignments:** There will be varied outside reading assignments throughout the course. Reading the assigned material is important for comprehension and understanding of the SOBs and other course material, as well as crucial for doing well on quizzes and the final exam.

11. **Classroom Conduct:**

a. **Attendance:** Regular class attendance is mandatory for all students. See Table 1 for the class schedule.

i. An excused absence is defined as an absence that was coordinated and approved by the instructor in advance or an absence due to an unexpected, unavoidable or unusual circumstance. Students may coordinate excused absences in advance by contacting the instructor, but the absence will not be excused until the instructor explicitly says so. Students wishing to excuse an absence after the fact must prepare a memorandum explaining the absence and why it should be excused. Absences not explained within one week become unexcused.

ii. **AFROTC Cadets only: Regardless of academic performance, you will not receive a passing grade unless you attend 80 percent of the scheduled classes.**

iii. All students: Unexcused absences will be reflected in attendance and participation grades.

b. **Timeliness:** I expect each student to be seated and ready to start the lesson at the time class is scheduled to begin. Tardiness disrupts your learning process and that of other students who were on-time. Be considerate of others and strive to arrive on time; however, it is better to be late than absent. Habitual tardiness will be reflected on attendance and participation grades.

c. **Food and drinks:** Only drinks with a lid will be permitted in the classroom. Students may bring food to class so long as it does not in any way disrupt the classroom environment.

d. **Academic Freedom:** The class will observe a non-attribution policy for all students, the instructor, and any guests. This policy does not relieve military members and cadets from responsibilities associated with proper respect to authority and the chain of command.

12. **Conduct for Cadets: (Applies to AFROTC Cadets only)**

a. **Military Protocol:** Learning military protocol is a goal of AFROTC; therefore, we will use it in the classroom. Use the following guidelines for military protocol in class:

i. Calling the class to attention: It is standard military custom to rise to attention whenever a senior officer enters a room. The first person to see that senior officer entering should announce in a loud voice "Room attention!" (Pronounced "Room a-ten-hut!") When the senior officer replies "at ease," or "carry on," you may take a seat.

ii. If an officer of higher rank enters or leaves the classroom while the instructor is present, call the class to attention. Remain standing at attention until the officer directs you otherwise.

iii. The instructor will select a class leader. The class leader will be responsible for military courtesies extended to the instructor and/or guests, completing an attendance sheet each class period, and ensuring that the classroom is left in proper order. The senior cadet present (determined alphabetically) will perform these functions if the class leader is absent.

- iv. Due to the varying locations of classrooms, it is possible that the instructor may be present in the classroom as students arrive. In this case, when the instructor advises the class leader that the class will begin, the class leader will call the class to attention (civilian students may remain seated) and report in, “Sir/Ma’am, class reports ready for instruction.” It is not necessary to call the class to attention for a break period. When instruction is complete, the instructor will advise the class leader to prepare for dismissal. The class leader will call the class to attention and the instructor will dismiss the class.
  - v. Contributing in class: You are not required to stand when contributing to class discussions; however, you should use the words "sir" or "ma'am"--or the officer's rank--anytime you speak directly to an officer.
  - vi. None of this protocol should inhibit free discussion and exchange of ideas in the classroom or on the job. Military protocol simply recognizes the position of the senior officer. It does not imply that everything that officer says is always “correct” or that you must adopt the officer’s ideas.
- b. **Military students:** You are required to wear the military uniform to class. Compliance with the dress and grooming standards in AFI 36-2903 (Military Dress and Appearance) and the AFROTC Supplement is mandatory. Cadets may be dismissed from class with an unexcused absence if they do not meet Air Force grooming standards and appearance.
- c. **Leadership Lab (LLAB):** All LLAB activities are MANDATORY for all cadets. It is the military training portion of the ROTC program. It is planned, conducted and evaluated by the cadet corps under the supervision of the cadre (active duty faculty). In LLAB, you will learn about military customs/courtesies and formal military formations. Each LLAB begins at Wilson Plaza (in front of the Student Activities Center-north side), or at a location to be announced. Physical fitness training and testing are accomplished during LLAB. Base visits, dining-in/outs, military parades, and team-building exercises are also a part of LLAB. (Note: LLAB is graded Pass/Fail. Your LLAB grade is not included in your academic average, nor does the LLAB grade affect your grade in AS20.) Please coordinate absences through your cadet chain-of-command.
- d. **Voluntary Formations:** Except for the LLAB activities and participating in physical fitness training, all other AFROTC activities are completely VOLUNTARY.
- e. **Term Counseling:** AFROTC cadets must meet at least once each term for a mandatory counseling and records review. Cadets should contact me in person or send me an e-mail requesting a date and time for your counseling and records review. Please sign-up early as the records review needs to be completed as soon as possible. Once scheduled, the appointment is a military formation, and you must wear your uniform to the term counseling session. Any need to cancel or reschedule should be coordinated at least one day in advance of the appointment. Any student in the course may make a counseling appointment to discuss this course, or personal and/or general academic concerns.
- f. **Chain-of-Command:** Use the cadet corps chain-of-command to address cadet corps issues. Please feel free to contact me to discuss academics or anything else. However, if a matter is cadet corps related I will refer you to the cadet corps chain-of-command.
13. **Academics:** Academics are your #1 priority. If you are having trouble, be proactive – come see me **before** it’s too late!
14. **Discrimination and Sexual Harassment:** Discrimination and sexual harassment will not be tolerated by the Air Force, Detachment, or University. If you feel you are being discriminated against or sexually harassed, contact any member of the cadre

**Table 1: UCLA Spring 2012 AS20C Class Schedule**

Week	Date	Lesson / Activity	Reading	Assignment Due
1	5-6 Apr	The Gulf War - Operation Desert Shield / Desert Storm	Evolution Of Air and Space Power pp 317-331	
2	12-13 Apr	No Fly Zones - Iraq and Yugoslavia	Evolution Of Air and Space Power pp 334-349	Quiz #1 - Current Events
3	19-20 Apr	Kosovo / Operation Allied Force	Evolution Of Air and Space Power pp 349-351	HW #1 - Precision Munitions in the Gulf War
4	26-27 Apr	21st Century Terrorism		Background Paper Part 1 - Individual Research
5	3-4 May	Self-Study - GWOT Individual Research - Space-Based Technology	Evolution Of Air and Space Power pp 356-363	
6	10-11 May	Operation Enduring Freedom	Evolution Of Air and Space Power pp 356-363	Quiz #2 - Current Events
7	17-18 May	Operation Anaconda		HW #2 - Remotely Piloted Aircraft in OEF
8	24-25 May	Self-Study - OEF		Background Paper Part 2 - First Draft
9	31 May - 1 June	Self-Study - OIF		
10	7-8 Jun	Operation Iraqi Freedom	Evolution Of Air and Space Power pp 366-373	Background Paper Part 3 - Final Draft

**AS20C Spring 2012**  
**Written Assignment - Background Paper on the Air Force in Space**

**Due Dates:**

**Part 1 - Individual Research - 26/27 Apr**

**Part 2 - First Draft - 24/25 May**

**Part 3 - Final Draft - 7/8 June**

For this term, students will form groups of 3 or 4 and select an Air Force space-based system or some aspect of Air and Space Power that is enabled by space-based systems and write a minimum 5-page paper discussing this system or capability. The paper should discuss the system/capability's primary features, deployment, and user interface. Emphasis should be on how the technical, space-based, nature of the system or capability enables Air Force operations that were previously impossible.

The Background Paper shall follow the format in *The Tongue and Quill*, including double-spaced 10 or 12-pt font with 1" margins.

This assignment will consist of three parts. On Day 1, the class leader will divide the class into groups. Group members will work together to select a space system to be the topic of their paper, then each team member will conduct individual research into the system. On 12/13 April, the class leader will provide the instructor a list of each group's members and their selected topic.

**Part 1:** Working alone, each student will research their group's topic and collect information about the topic, including citations of sources for their research. In class on 26 or 27 April, each individual will turn in a summary of their own research. The format for this part of the assignment is on the next page.

**Part 2:** The members of each group will meet to review each other's research and begin to draft a background paper on their selected topic. All group members need to contribute to outlining, writing, and editing the group's background paper. On 25 May, each group will submit (via email to [ajaxperis@ucla.edu](mailto:ajaxperis@ucla.edu)) a draft of their background paper.

**Part 3:** Each group will receive feedback on their draft paper from the instructor. Groups should then meet to review the feedback, make any necessary changes, and prepare the final draft of the paper. The final paper will be due in class on 7 or 8 June.

Evaluation of the paper will focus on format, content, and organization. Grading criteria will include transitions, spelling, punctuation, grammar, word choice, conciseness, and paragraph structure.

You should include at least three print and four on-line sources for your research. You may not use Wikipedia. Documentation standards will be in accordance with AFH 33-337, *The Tongue and Quill*, 1 Aug 04, or the UCLA Department of English STYLE SHEET.

**Format for Part 1 of the Background Paper Assignment  
Individual Research**

Name

Group Topic

1. “The F-15 is a twin engine, high performance, all weather air superiority fighter. First flown in July 1972, the Eagle entered USAF inventory in November 1974. It was the first U.S. fighter to have engine thrust greater than the normal weight of the aircraft, allowing it to accelerate while in a vertical climb. This, combined with low aircraft weight to wing area, makes the Eagle very highly maneuverable. The Eagle was produced in both single-seat and two-seat versions.”
  - “McDonnell Douglas F-15 Streak Eagle” Factsheet, National Museum of the Air Force Factsheets, 2008, <http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=621>
  
2. “The Air Force has about 720 F-15C/D aircraft in active and Guard service combined, providing front-line control of the air both at home and abroad. The service plan is to replace a large portion of the air superiority F-15Cs with the F-22. However, to cover all its bases, the Air Force will still need to augment the F-22 with the F-15 beyond 2025. By then, the F-15 will have been in service for more than 50 years, and those still flying will be more than 35 years old.”
  - Tirpak, John A. "Making the Best of the Fighter Force." Air Force Magazine, March 2007, pp 40-45