AEROSPACE SCIENCE-100

CA-935 SCRIPPS RANCH HS
First Year Cadets Course Syllabus
Fall Semester (Semester 1)
Instructor: Maj Francis / SMSgt Guardado
Room #421 / #422
LAN-Line: 858-302-3400 x2421

"Citizenship, Character, & Air Force Tradition"

"Best in the West, Best in the Nation!"

11 Aug 2025

SECTION A

COURSE PLAN

Instructor: Maj Francis / SMSgt Guardado
Length of Term: Aug - Dec

TEXT: Aerospace Science 100: Milestones in Aviation History (Electronic Version)
Journal/Workbook: Google Classroom/In Class

Dear Student: The Constitution of the State of California requires that we provide a public education to you free of charge. Your right to a free education is for all school/educational activities, whether curricular or extracurricular, and whether you get a grade for the activity or class. Subject to certain exceptions, your right to a free public education means that we cannot require you or your family to purchase materials, supplies, equipment or uniforms for any school activity, nor can we require you or your family to pay security deposits for access, participation, materials, or equipment. You may be required to attend a fundraising event; however if you are unable to raise funds for the event, you will not be prevented from participating in an educational activity. For more information visit www.sandi.net/staff/studentfees.

Class changes will not be allowed after the first grading period. A student who drops a course after the first grading period of a semester for reasons within their control, or who is dropped because his/her behavior in class is detrimental to the welfare of the class may receive an "F/U" grade on his/her semester grade reports and cumulative grade history records. Grades reported on the semester report card are part of the student's cumulative grade history records. When students withdraw from a class for reasons not within their control, the school shall evaluate individual circumstances and determine whether a grade should appear on the student's cumulative grade history record.

The link below has the SRHS Student Handbook 2025-2026 which has detailed information about the academic honesty policy and tardy policy. In addition, students and families can read about AFJROTC policies in the Cadet Handbook 2025-2026 which can be found at the unit website link below.

Student Handbook Link
https://docs.google.com/document/d/1BrgRkYzgj-LIBc0alXy2hzDILZbaW-lpvwhr38Q9Ikg/edit?tab=t.0

Unit Website: https://ca-935th.com/files/

SECTION B

COURSE DESCRIPTION AND COURSE OBJECTIVES

Course Description: Aerospace Science 100: Milestones in Aviation History is a course that covers the development of flight throughout the centuries. It all starts with an examination of ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies.

Course Objectives:

The cadets should:

1. Describe historical facts and impacts of the early attempts of heavier-than-air flight.
2. Analyze the impact World War I aviation had on commercial aviation.

3. Examine the role bombing had on the outcome of World War II.
4. Investigate the impact commercial jet aviation has had on US travel.
5. Analyze the lessons learned from global use of US airpower.
6. Evaluate developing technology that will affect the US Air Force of the future.

SECTION C
COURSE POLICY AND PROCEDURES

Attendance: To support student success in the classroom, connections to campus, and eligibility for school events including homecoming events, dances, prom, senior commencement, and ASB activities, students must: 1) Be present in all of their classes for the duration of the period, 2) Have a valid pass when out of class, 3) Maintain a 2.0 citizenship score, and 4) Exemplify the pillars of Falcon PRIDE. Students with any truancy codes in PowerSchool will be ineligible for the activities noted above. Truancy codes include: Unverified-absence (A), truancy (Z), tardy (T), missed more than 30 minutes - unexcused (W). Seniors with any truancy code (AZTW) that has not been recovered will lose their senior privileges (prom and commencement ceremony). All students will be allowed up to three tardies per semester for unforeseen circumstances while maintaining eligibility for school events and activities. Students must have a valid pass when outside of class. Students found without a pass will be assigned to lunch study hall.

Cell Phones, and other Electronic Signaling Devices: The Board of Education approved Policy H-6980 allows students possession and use of cell phones and other electronic signaling devices (such as smart watches) on campus before school, during lunch, and after school. Scripps Ranch allows students to use their electronic devices during passing periods.

These devices must be kept out of sight, silenced or turned off during classroom time unless specified by the teacher for authorized academic purposes. Unauthorized use of electronic devices is grounds for confiscation of the device by school officials and/or classroom teachers.

Consequences for confiscated devices;

- 1st Offense - Teacher keeps the phone until the end of the period, counsel's student, and contacts the parent. Citizenship grade may be affected.
- 2nd Offense -Teacher turns cell phone over to associate principal, parents are contacted, and student will pick up device after 3:30 p.m. Citizenship grade will be lowered by a letter.
- 3rd Offense - Teacher turns device into office. Device remains in the office until parent/guardian picks it up. Citizenship will be lowered by a letter.
- 4th Offense - Any further instances involving electronic devices will result in a parent, student, and administrator conference.

If a student refuses to give a cell phone, smart watch, or any electronic device to the teacher, the matter will be referred to the associate principal for additional followup and intervention if needed.
Students and parents are notified of this policy each year through the *Facts for Parents* booklet that is available for download on the district website: https://www.sandiegounified.org/ .
School personnel, including school police, do not have resources to investigate instances of lost or stolen property unless suspect information is provided. School Police will not conduct a police investigation or take a police report.

Classroom Procedures:

a. Address all instructors and JROTC staff by appropriate military rank or title.
b. Arrive on time for class.
c. Cell phones, and other electronic devices will be put away or turned off while class is in session.
d. No eating, drinking, or chewing gum.

Dress and Personal Appearance: Cadets must comply with Air Force grooming standards and appearance. Refer to Air Force Instruction (AFI) 36-2903, *Dress and Appearance of Air Force Personnel*; and Air Force Junior ROTC Instruction (AFJRROTCI) 36-2001, *Air Force Junior ROTC Operations*; and the *Air Force Junior ROTC Uniforms and Awards Guide* for the standards of dress and personal appearance. Additionally, the military uniform will be worn to class on Mondays and to any other specified military activity as directed.

Physical Fitness: Air Force Junior ROTC requires students to regularly participate in a physical fitness program. ***Cadets must attend and participate in one physical training (PT) per week.***

California High School Content Standards

Overarching Standard 1: *Students demonstrate knowledge of and competency in motor skills, movement patterns and strategies needed to perform a variety of physical activities.*

Overarching Standard 2: *Students achieve a level of physical fitness for health and performance while demonstrating knowledge of fitness concepts, principles and strategies.*

Overarching Standard 3: *Students demonstrate knowledge of psychological and sociological concepts, principles and strategies that apply to the learning and performance of physical activity.*

Physical Fitness Testing (FITNESSGRAM)

The primary goal of the FITNESSGRAM battery of tests is to assist students in establishing lifelong habits of regular physical activity. The FITNESSGRAM is conducted in November (upper class only) and March. Students will be pre-tested in September to establish baseline fitness levels and set personal goals. The FITNESSGRAM tests 6 main fitness areas that represent 5 components of fitness: Aerobic Capacity, Muscular Strength, Muscular Endurance, Flexibility, and Body Composition. In Course 2 students will have a second opportunity to achieve 5 out of 6 Healthy Fitness Zones. Students who do not achieve 5 out of 6 Healthy Fitness Zones must continue taking physical education courses in grades 11 and 12 until an overall passing score is obtained. As FITNESSGRAM is a state-mandated test, student scores will **not** be computed as part of their academic grade.

The 6 FITNESSGRAM required tests areas are:

1. Aerobic Capacity (PACER, One-Mile Run, or Walk Test)

2. Abdominal Strength and Endurance (Curl-Ups)
3. Trunk Extensor Strength and Flexibility (Trunk Lift)
4. Upper Body Strength (Push-Ups, Modified Pull-Ups, Flexed Arm Hang)
5. Flexibility (Back-Saver Sit and Reach, Shoulder Stretch)
6. Body Composition, Body Mass Index (BMI), [height and weight]

PE Grading This portion of the grade will include the cadet's preparation (i.e., coming to class ready to learn), cooperation, participation in class, attendance, leadership, etc. Since a cadet earns PE and elective credit for this class, there will also be an emphasis on dressing for physical education in appropriate Physical Education attire and actively participating in the physical fitness exercises.

The academic grade (learning-focused) is based on the degree to which each student meets or exceeds the 3 overarching *California Model Content Standards* and corresponding performance standards.

The citizenship grade (non-academic, behavior/effort-focused) is determined by following class rules, arriving on time, wearing acceptable athletic clothing, exhibiting a willingness to learn, and participating in class activities.

Medical Excuses

Students will be required to bring a written note from a parent in order to be excused from physical education. A doctor's note must be presented for illness or injury lasting more than three days. Students will be required to suit up and participate to the maximum degree that their illness/medical condition allows. Students will be required to make up all missed work.

Sessions per week: Failure to participate in PT sessions without a valid excuse will reflect poorly upon your cadet evaluation and cause you to receive an unsatisfactory grade in physical fitness

Chain-Of-Command: Use the cadet corps chain-of-command to address cadet corps issues. Feel free to contact the instructor to discuss academic or other issues that may be of concern. If a matter is cadet corps related, the instructor will refer students to the cadet chain-of-command. Also, remember to take any cadet corps matters through the cadet corps chain-of-command **before** taking the matter to either of the Aerospace Studies Instructors.

Cadet Code of Conduct: Cadets will not lie, cheat, steal, nor tolerate it among his/her fellow cadets. Additionally, the integrity of a cadet's word must be unquestionable. His/her word must be more than good; it must be unequivocally sincere. A student's signature must also be a seal of good faith. He/she stands behind it with their honor. It is the mark of the assumption of responsibility and their firm promise to fulfill that responsibility.

Open Door Policy: The instructor will support students to the fullest extent to assist them in passing this class and/or dealing with any other important matters. Students are highly encouraged to discuss with the instructor issues concerning academic or personal problems. The instructor is also available to answer questions about or shed light on active duty Air Force and military life.

Class Format: Classes will consist of lectures, discussions and hands-on activities. Visual aids will be used to supplement the instruction. You may ask questions at any time. Your active participation in class discussions is an important ingredient in your learning process. Please come prepared!

SECTION D

GRADES

ACADEMIC HONESTY Policy: Details in the SRHS Student Handbook 2025-2026

Retake Policy: Instructors will accept make-up work for all graded measurements in the case of excused absences only. Contact instructors to determine make-up test/work time.

Test/Assessment Return Policy: Quizzes/exams will utilize Google Classroom. Grades will be posted in Power School. For performance evaluations cadets will receive verbal feedback from instructors/senior cadet leaders.

All academic grades shall be based solely on students' current levels of mastery of the board-adopted standards and shall not be influenced by behavior or other nonacademic measures. Citizenship grades shall be based on students' behavior and nonacademic measures, such as work habits, effort, and ability to meet indicated timelines for assignment completion. Board-adopted standards for citizenship shall be used to communicate current levels and areas for needed improvement.

Your final grade will be based upon your ability to achieve the course objectives as evidenced by your performance on one mid-term and a final examination. Also, to receive full credit for "Class Participation," students must be present for class and actively participate in all discussions and exercises.

Measurement	**Point Value**	**Percentage**
Mid-Term Examination	100	33.3%
Final Examination	100	33.3%
Class Participation/Quizzes	100	33.3%
TOTAL	300	100%

Your final letter grade will be determined using the following scale:

%	Total Points	Final Grade
90-100	270 - 300	A
80-89	240 - 269	B
70-79	210 - 239	C
60-69	180 - 209	D
00-59	0 - 179	F

SECTION E

COURSE OUTLINE

SYLLABUS SUBJECT TO CHANGES AT INSTRUCTORS DISCRETION

FRI, 15 Aug
Class Assemblies

FRI, 22 Aug
Administrative Procedures/Expectations/Semester Overview/Permission Slips/Seating Charts/Q&A, Syllabus & Textbook Review/Classroom Procedures

FRI, 29 Aug
Ch 1, Lesson 1: Ancient Flight
Student Preparation: read pp. 4-12
Checkpoints

FRI, 5 Sep
Ch 1, Lesson 2: The Early Days of Flight
Student Preparation: read pp. 14-25
Checkpoints

FRI, 12 Sep
Ch 1, Lesson 3: The Wright Brothers Take Off
Student Preparation: read pp. 26-39
Checkpoints

FRI, 19 Sep
Ch 1, Lesson 4: Pioneers of Flight
Student Preparation: read pp. 40-57
Checkpoints

FRI, 26 Sep
****TEAM BULDING ACTIVITY****

FRI, 3 Oct
Ch 2, Lesson 1: Airpower in World War I
Student Preparation: read pp. 60-77
Checkpoints

FRI, 10 Oct
Ch 2, Lesson 2: Expanding the Horizon from Barnstormers to Mainstream
Student Preparation: read pp. 78-87
Checkpoints

FRI, 17 Oct
Ch 2, Lesson 3: Early Developments in Commercial Flight
Student Preparation: read pp. 88-107
Checkpoints

FRI, 24 Oct
Ch 3, Lesson 1: The Army Air Corps
Student Preparation: read pp. 110-125
Checkpoints

FRI, 31 Oct
****TEAM BULDING ACTIVITY****

FRI, 7 Nov
Ch 3, Lesson 2: Airpower in World War II
Student Preparation: read pp. 126-159
Checkpoints

FRI, 14 Nov
Ch 3, Lesson 3: Significant Aircraft of World War II
Student Preparation: read pp. 160-191
Checkpoints

FRI, 21 Nov
Ch 4, Lesson 1: The Development of Federal Regulations and Aviation
Student Preparation: read pp. 194-209
Checkpoints

FRI, 28 Nov
****Thanksgiving Break (No School)****

FRI, 5 Dec
Ch 4, Lesson 2: The Propeller Era in Commercial Flight
Student Preparation: read pp. 210-222
Checkpoints

FRI, 12 Dec
View/critical analysis of Miracle on the Hudson or DC UH-60/Commuter Crash

FRI, 19 Dec
****AFJROTC, CA-935 Unit Field Day****

20 Dec – 4 Jan
****Winter Break (No School)****

Monday, 5 January 2nd Semester Begins