

**Federal Way High School
AIR FORCE JUNIOR ROTC
SCIENCE OF FLIGHT
2021-2022 COURSE SYLLABUS**

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Classroom: 1035

Planning Period: 5th & 6th Periods

Office Hours: 0645-0715; 1415-1500 (except Monday & Friday) or by appointment

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Course Description

Aerospace Science 200: The Science of Flight is an introductory course and customized textbook that focuses on how airplanes fly, how weather conditions affect flight, and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses and is aligned with the National Science Education Standards, the Math Standards and Expectations, and ISTE National Educational Technology Standards for Students.

Leadership Education 100: Traditions, Wellness, And Foundations Of Citizenship will introduce cadets to history, organization, mission, traditions, goals, and objectives of JROTC for all services.

Leadership Education 200: Communication, Awareness, and Leadership, Second Edition, is a customized course designed to improve communication, enhance awareness of self and others, and provide fundamentals of leadership and followership. The course focuses on the Air Force Junior Reserve Officer Training Corps (AFJROTC) mission to “develop citizens of character dedicated to serving their nation and community.” Woven throughout is the underlying theme of developing personal integrity. The course also emphasizes leadership and values such as service and excellence. This update incorporates 21st century teaching, learning, and skills of critical thinking, communication, collaboration, and creativity.

Wellness is an official and integral part of the Air Force Junior ROTC program. It consists of two exercise programs focused upon individual base line improvements with the goal of achieving a national standard as calculated by age and gender. The Wellness curriculum is instrumental in developing citizens of character dedicated to serving our nation and communities. Wellness and physical education will normally occur during the Friday class periods.

Although, a small number of our cadets enter the military, our program is not designed to recruit you for military service. However, we will take advantage of the military resources available to us to support the AFJROTC program - e.g. guest speakers, military facility tours, job shadows, etc.

AFJROTC is not comprised of just classes, but it is a program complete with a cadet leadership structure that is managed and led by the cadets. Those cadets who get involved in the other activities get the most out of the AFJROTC program.

Course Materials

Aerospace Science 200: The Science of Flight – A Gateway to New Horizons

Leadership Education 100: Traditions, Wellness, And Foundations of Citizenship

Leadership Education 200: Communication, Awareness, and Leadership, Second Edition,

AFMAN 36-2203 – Drill and Ceremonies

52nd Eagle Squadron Cadet Guide

Course Objectives

Aerospace Science

Analyze the basic elements of flight lift, gravity, thrust and drag.

Evaluate how atmospheric conditions affect flight.

Evaluate how flight affects the human body.

Analyze flight navigation and the purpose of aerial navigation aids.

Leadership

Analyze the importance of attitude in daily life.

Evaluate the ways in which personality and behavior affect relationships with others

Wellness

Demonstrate improvement on three exercises of the Presidential Fitness Program: push-ups, sit-ups, and 1-mile run.

Course Topics

Aerospace Science

Chapter 1, "How Airplanes Fly" discusses the elements of flight, to include principles of flight, theory of flight, airfoils and the four forces acting on an aircraft in flight: lift, gravity, thrust and drag.

Chapter 2, "Working Through Flight Conditions" explores how weather conditions affect flight, to include atmospheric motion, cloud types and how atmospheric layers impact flight.

Chapter 3, "Flight and the Human Body" covers how flight affects the human body, to include the four zones of the flight environment, the physical laws of gases, the respiration and circulation processes, G-forces, spatial disorientation and motion sickness.

Chapter 4, "Flying from Here to There" discusses flight navigation and the purpose of navigation aids, to include the elements and history of navigation and navigation instruments, navigational aids, air navigation charts and flight planning,

Leadership

Chapter 3, "Understanding Your Attitude" describes how you and others interpret the events and experiences around you, as well as how to develop a positive attitude and what it takes to be a leader.

Chapter 4, "Understanding Your Actions" focuses on integrity and character, your responsibility and how it affects your actions, and consequences and responsibilities.

Classroom Expectations

You can find the student expectations in REP FED and the 52nd Eagle Squadron Cadet Guide. Follow the policies outlined in the Cadet Guide. When you come to class:

1. Be prepared to participate in class, take notes, and complete assignments.
2. Be on time.
3. Be respectful to others.
4. Use school appropriate language.
5. Try your best.

An incident results when a student's behavior interferes with the learning process. If this happens, I will work with you and your parent/guardian to problem-solve. Our goal is to support all students in growing and learning from their mistakes. We will work together to repair the situation with others if that is what is needed. For serious infractions, FWHS Administration will be notified.

Tardies/unexcused absences will be managed in accordance with FWHS school policy.

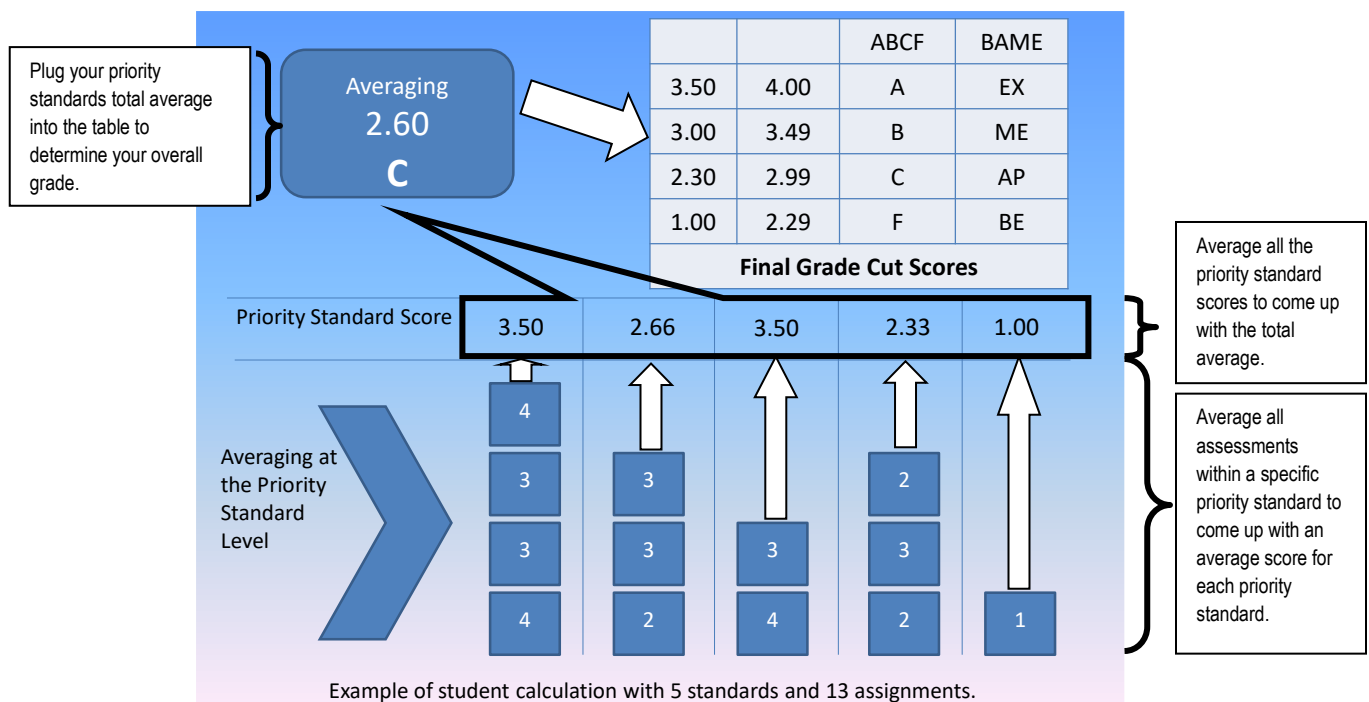
Grading

Students and parents can access grades online through the ParentVue account and StudentVue account. Grades should be checked weekly for most current class status. For information or to log in, go to https://grades.fwps.org/Login_Parent_PXP.aspx

Your course grade will be directly related to the priority standards for this course. You will have multiple opportunities to meet these standards where you will receive feedback from myself, MSgt Smith, and your peers to help you learn. We will use formative, non-graded assessments that will provide you with opportunities to give and receive feedback on how your work compares to the priority standards. Your overall grade will be based upon various summative assessments that include the following:

1. Assignments and multiple-choice assessments for Science of Flight and Leadership modules.
2. Uniform inspections (blue/PT uniforms) once per week (usually Wednesday).
3. A physical fitness assessment based upon improvement from the baseline performance assessment in three exercises: push-ups, sit-ups, 1-mile run – all are part of the Presidential Fitness Program.
4. Community service projects.

Grading System: Your grades will be computed using the grading regimen reflected in the table below.



Make-up/Retake Policy:

GRADED ITEM	OUR ACTION	YOUR ACTION	MAKE-UP/RETAKE	YOUR ACTION	OUR ACTION
UNIFORM INSPECTIONS					
ABSENT (MISSED INSPECTION) – NO MAKE-UP FOR UNEXCUSED ABSENCES. NO RETAKES.	MARK YOU WITH AN UNEXCUSED ABSENCE IN GRADEBOOK AND GIVE YOU A "1" IN GRADEBOOK AND ON YOUR INSPECTION FORM.	RETURN TO SCHOOL WITH AN EXCUSE NOTE FROM PARENTS CLEARLY EXPLAINING WHY YOU MISSED CLASS AND IF IT IS EXCUSED	COMPLETE UNIFORM INSPECTION WITHIN ONE WEEK OF THE EXCUSED ABSENCE OR WHEN YOU RETURN AFTER AN EXTENDED EXCUSED ABSENCE. MAKE-UP INSPECTION CANNOT BE ON A REGULAR INSPECTION DAY.	UPDATE YOUR INSPECTION SHEET WITH NEW GRADE.	UPDATE GRADEBOOK WITH MAKE-UP GRADE.
DID NOT WEAR UNIFORM ON INSPECTION DAY.	GIVE YOU A "1" FOR THE INSPECTION ON YOUR INSPECTION FORM AND IN GRADEBOOK.	PROVIDE A NOTE TO AFJROTC FROM PARENTS EXPLAINING WHY YOU DID NOT WEAR THE UNIFORM.	PROVIDE NOTE AND MAKE-UP UNIFORM INSPECTION (IF EXCUSE IS APPROVED) WITHIN ONE WEEK OF NOT WEARING UNIFORM. CANNOT BE MADE-UP ON A REGULAR INSPECTION DAY.	UPDATE YOUR INSPECTION SHEET WITH NEW GRADE.	UPDATE GRADEBOOK WITH MAKE-UP GRADE.
OTHER ASSIGNMENTS AND ASSESSMENTS					
MISSED ASSIGNMENT/ASSESSMENT. NO RETAKES TO IMPROVE AN ALREADY PASSING SCORE.	GIVE YOU A "1" IN GRADEBOOK.	MAKE ARRANGEMENTS TO MAKE-UP/RETAKE THE ASSIGNMENT OR ASSESSMENT WITHIN ONE WEEK OF ASSIGNMENT OR ASSESSMENT OR RETURN FROM AN ABSENCE.	COMPLETE THE ASSIGNMENT/ASSESSMENT WITHIN ONE WEEK AS DIRECTED BY INSTRUCTOR. YOU CAN HAVE TWO MAKE-UP/RETAKE ATTEMPTS.	MAKE SURE YOU UNDERSTAND THE CONCEPTS FAILED OR MISSED.	UPDATE GRADEBOOK WITH MAKE-UP/RETAKE GRADE.
NOTE: FULL POINTS ARE POSSIBLE FOR MAKE-UPS AND RETAKES. TALK TO SASI OR ASI ABOUT ANY PROBLEMS OR ISSUES AFFECTING YOUR GRADE OR MAKE-UPS. DO IT EARLY.					

Academic Honesty

At Federal Way High School we value honesty and integrity of work. Cheating on tests and homework by copying other people's work is not acceptable. Making copies of someone's electronic file is also considered cheating. Cheating will result in a failing grade for that learning activity. Cheating also includes the aiding and abetting of cheating by others.

Plagiarism, the act of borrowing another author's work without crediting that author and thereby implying that it is one's own, is academically dishonest and a form of cheating.

AFJROTC SCIENCE OF FLIGHT
Lt Colonel Long / Master Sergeant Smith
2021-2022

Signature Page

Parent/Guardian, we look forward to partnering with you in the education of your child. The above information is being provided to you in an effort to increase our communication with you about what is happening in school. It is important to us that you be well informed and therefore an active participant in the educational experience of your son or daughter. Our mission is to graduate all of our students ready for college and career, but we need your help to do this. Thank you for reading this course syllabus. After reading the syllabus, please sign below and return this page to the teacher.

Student Name (please print): _____

Student Signature: _____ Date: _____

Parent Signature: _____ Date: _____

Parent Email: _____

Phone Number: _____