

AFJROTC 200, SCIENCE OF FLIGHT, COURSE SYLLABUS – FALL 2025

COURSE NAME: JROTC IIA - Science in Flight - S1

CREDIT HOURS: Elective Credit

REQUIRED TEXT:

AS 200, *The Science of Flight; A Gateway to New Horizons*, 2012

LE 200, *Communication Awareness and Leadership (2nd Edition)*

*(Textbooks and / or electronic links will be provided in class and will not go home with cadets, SASI/ASI will make lessons available on school fusion if needed to complete)

COURSE DESCRIPTION:

AEROSPACE SCIENCE- 200

The Science of Flight: A Gateway to New Horizons is an introductory course and customized textbook that focuses on *how airplanes fly*, how weather conditions affect flight, 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.



In this course, every lesson includes a “Quick Write” and a short story related to the lesson; a “Learn About” that tells students what they’ll learn from the lesson; a list of vocabulary words in the lesson; “Wing Tips” that highlight specific and interesting facts; and many biographies and profiles. Each lesson closes with “Checkpoints” that will allow students to review what they have learned. An “Applying Your Learning” section at the end of each lesson presents discussion questions that will give them a chance to use what they have learned and provides another way to reinforce their understanding of the lesson’s content. The text has four chapters, each of which contains a number of lessons.

The course outcomes are:

1. Analyze the elements of flight.
2. Evaluate how atmospheric conditions affect flight.
3. Evaluate how flight affects the human body.
4. Analyze flight navigation and the purpose of aerial navigation aids.

LEADERSHIP EDUCATION -200

LE 200 stresses communications skills and cadet corps activities. Much information is provided on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problem

s, and personal development. Written reports and speeches compliment the academic materials. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects.



The course objectives are:

After successfully completing the Leadership Education II: Communication, Awareness, and Leadership course the student will:

1. Apply the key factors of effective communications.
2. Know the ways in which personal awareness affects individual actions.
3. Know the key elements of building and encouraging effective teams.
4. Apply the key behaviors for becoming a credible and competent leader.

UNIFORM DAYS:

Tuesday's during JROTC unless otherwise directed by Cadet Group Leadership or SASI/ASI.

OCP's may be worn by Cadet Staff on Thursdays **IN ADDITION** to the required Blues on Tuesdays.

WELLNESS PROGRAM: Every Friday in JROTC Class The students will:

1. Understand the need to lead active, healthy lifestyles beyond program requirements and into their adult lives.
2. Understand the need to identify areas of improvement and work to achieve them.
3. Dress out and participate in organized physical activities to include: Wellness (E2C) exercises, running and jogging, and other sports activities.

GRADING PROCEDURES:

- 40% Aerospace Science
- 40% Leadership Education / Drill / Dress & Appearance
- 20% Wellness