

Course Overview: AF JROTC 300

Content Area:

Course(s):

Time Period: **Year**

Length: **180**

Status: **Published**

Summary

Aerospace Science 300: Exploring Space: The High Frontier 2nd Edition

Aerospace Science 300: Exploring Space: The High Frontier, Second Edition is typically the third/fourth-year science course in the high school sequence of Aerospace Science courses for AFJROTC. This course has been completely rewritten to include the latest information and teaching philosophies, incorporating 21st-century learning strategies. This new course provides students with the latest information on exploring space and an introduction to cybersecurity and technology. It begins with early astronomy and the basic interest in the universe from the Greeks through the Renaissance and Enlightenment ages. Students will be provided with an in-depth view of the solar system, including Earth, the Sun, the Moon, and planets. The text also discusses the history of space travel and more modern space probes and robotics. Students will examine the effects of space on the human body. The text also investigates the history of rockets, launch vehicles, and the coordinated systems required for a successful launch into space. Finally, the text will offer a cybersecurity chapter that outlines the importance of cybersecurity in space and in daily life.

Course Outcomes:

1. Explain the history of astronomy throughout time.
2. Analyze the various elements of the solar system.
3. Investigate the components of space exploration and the current strategic plan for space exploration.
4. Analyze past space programs and the effect of space on the human body.
5. Examine the history of space exploration and the future of space travel.
6. Discuss the role of space probes and robotics in space exploration.
7. Evaluate the science and technology required for space travel.
8. Analyze the concept of cyber security and methods for staying safe online.

Aerospace Science 300: Exploring Space: The High Frontier 2nd Ed

Chapter	Content	Recommended Hours
Chapter 1	The History of Astronomy	9
Chapter 2	The Solar System	9
Chapter 3	Space Exploration	9
Chapter 4	Space Programs	9
Chapter 5	Space Stations and Beyond	9
Chapter 6	Space Probes and Robotics	9
Chapter 7	Orbiting, Space Travel, and Rockets	9
Chapter 8	Cyber Security	9

Leadership Education 300: Life Skills and Career Opportunities

Leadership Education 300: Life Skills and Career Opportunities, Second Edition provides an essential component of leadership education for today's high school students. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st-century. Students will learn how to save, invest, and spend money wisely, as well as how to avoid credit traps. They learn about real-life issues such as contracts, leases, warranties, legal notices, personal bills, money-saving strategies for grocery shopping, apartment selection, and life with roommates.

In addition, students learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They learn how to prepare a winning résumé, and how to develop effective interviewing skills. The text also provides information on working for the federal government to include careers in the military, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration.

Course Outcomes:

1. Analyze the elements of successful financial management skills.
2. Create a plan to safeguard personal resources.
3. Analyze the different ways of pursuing a career path.
4. Analyze the requirements for applying to a college or university.
5. Analyze positive and negative impact of college life in meeting career goals.
6. Evaluate the essential process for successfully pursuing the desired career or job.
7. Evaluate the benefits of working for the Federal Government.
8. Create a plan for successful career development.

Leadership Education 300: Life Skills & Career Opportunities

Chapter	Content	Recommended Hours
Chapter 1	Charting Your Financial Course	5
Chapter 2	Managing Your Resources	5
Chapter 3	Career Opportunities	5
Chapter 4	Aiming Towards a College Degree	5
Chapter 5	Charting Your Course	5
Chapter 6	Applying for Jobs	5
Chapter 7	Working for the Federal Government	5
Chapter 8	Developing Your Career Skills	5

Drill and Ceremonies: Drill Curriculum (Cumulative)

The Drill and Ceremonies manual is used to teach the Drill Curriculum (Cumulative) course by providing an in-depth introduction to drill and ceremonies. The course concentrates on the elements of military drill, and describes individual and group precision movements, procedures for saluting, drill, ceremonies, reviews, parades, and development of the command voice. Cadets are provided with detailed instruction on ceremonial performances and protocol for civilian and military events and have the opportunity to learn drill. Though each class will follow an established lesson plan, most of the work is to be hands-on. Instructors are provided DAF Pamphlet 34-1203 to teach the Drill and Ceremonies course and may download the latest version from Air Force e-pubs website (<https://www.e-publishing.af.mil/>). In addition, instructors may order the Army Field Manual 3-21.5 and the Interservice Cross-Index Drill Manual to supplement the teaching of Drill and Ceremonies.

The course objectives:

After successfully completing *DAF Pamphlet 34-1203: Drill and Ceremonies*, the student will:

1. Know the importance of drill and ceremonies.
2. Know basic commands and characteristics of the command voice.
3. Apply and execute the concepts and principles of basic drill positions and movements.
4. Know when and how to salute.
5. Apply the principles and procedures of drill movements used with smaller units to the movement of a squadron.
6. Know the function of the group and the wing.
7. Know how groups and wings are formed.
8. Know the purpose and definition of ceremonies and parades.

WELLNESS PROGRAM

Wellness is an official and integral part of the Air and Space Force Junior ROTC program. Wellness curriculum is instrumental in developing citizens of character dedicated to serving our nation and communities. The program is provided as a tool to help develop individualized fitness programs for your cadets. Cadets will be given the opportunity to put into practice the wellness concepts that are taught in Leadership Education 100. Instructors are encouraged to include team sports to keep the Wellness Program fun and motivating. Team sports also provide cadets with the opportunity to develop leadership skills and build esprit de corps. Instructors are also encouraged to utilize sites, such as the following, to help develop lesson plans and fitness activities:

The Wellness Program provides a list of 19 exercises with examples that may be utilized in a 36-week program modifiable to help provide variety and meet individual and district/state goals. Instructors should utilize fitness programs that best fit the requirements within their district/county/state. HQ AFJROTC offers suggested fitness programs that will assist instructors with developing a comprehensive fitness program. Cadet fitness improvement is rewarded by earning the Health and Wellness Ribbon.

The course objective for the Wellness Program is to:

Motivate JROTC cadets to adopt active, healthy lifestyles beyond program requirements and into their adult lives.

The goals of the Wellness Program are to:

1. Create an individualized fitness program based on national standards by age and gender.
2. Identify areas of improvement for each cadet and provide guidance for improvement.
3. Incorporate a physical fitness and wellness education program to reach fitness goals.

Air Force JROTC Fitness Challenge

Regular physical activity in adolescents promotes health and fitness. Compared to those who are inactive, physically active youth have higher levels of cardiorespiratory fitness and stronger muscles. Their bones are stronger, and they may have reduced symptoms of anxiety and depression. Youth who are regularly active also have a better chance of a healthy adulthood. They also typically have a lower Body Mass Index (BMI). Higher BMIs increase the risk for certain diseases such as heart disease, high blood pressure, type 2 diabetes, gallstones, breathing problems, and certain cancers may develop. Adolescents don't usually develop chronic diseases; however, risk factors for these diseases can begin to develop early in life. Regular physical activity makes it less likely risk factors will develop and more likely that adolescents will remain healthy as adults.

