

TO JOIN OUR PROGRAM JUST SIGN UP WITH YOUR SCHOOL COUNSELOR!!! BELOW IS A DESCRIPTION OF OUR PROGRAM.

TX-794 AFJROTC COOPER HIGH SCHOOL COURSE SYLLABUS

Instructors:

Colonel (Ret) Michael A. Kenny, Senior Aerospace Science Instructor
Master Sergeant (Ret) Ronald F. Deos, Aerospace Science Instructor

Grading:

1. Academic Tests	30%
2. Major Exams/Events	30%
3. PT/Drill	10%
4. Uniform Wear	30%

AEROSPACE SCIENCE I: FRONTIERS OF AVIATION HISTORY

Course Description: The course is designed to acquaint the student with the historical development of flight and the role of the military in history. About three-quarters of the available classroom hours are spent reviewing the development of flight from ancient legends through the Persian Gulf War and beyond. Additionally, the role of the military throughout the history of the United States is identified.

Course Objectives:

1. Know the legends of people's attempts to fly in ancient civilizations throughout the world and the first record of scientific study, first flights, and the impact aviation had on the conduct of war during the period 1775-1898.
2. Know the United States' position at wartime and how wars brought about the development of new weapons, new methods of warfare, new aircraft, more pilots, and the need for pilot training.
3. Comprehend the U.S. policy of containing the spread of communism and the role of air power during the Korean War, the Cuban Missile Crises, and the Vietnam War.
4. Know the peaceful roles and missions in support of national objectives that the military is involved in, and the value of air power during the Persian Gulf War.

Course Materials:

1. Textbook: Aerospace Science I: Frontiers of Aviation History (2002 edition)
2. Student Workbook: Aerospace Science I: Frontiers of Aviation History (2002 edition)
3. Selected video tapes

Assignments:

1. Cadets will read assigned chapters, accomplish selected chapters in Student Workbook which corresponds to textbook chapters, and participate in demonstration/participation quiz games.
2. Cadets will prepare speeches and written reports corresponding to textbook chapters and related subjects.
3. Cadets will prepare for unannounced quizzes and announced chapter tests.
4. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

AEROSPACE SCIENCE II: THE SCIENCE OF FLIGHT

Course Description: This aerospace science course is designed to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. The course begins with a discussion of the atmosphere and weather. After developing an understanding of the environment, how that environment affects flight is introduced. Discussions include the forces of lift, drag, thrust, and weight. Students also learn basic navigation including map reading, course plotting, and the effects of wind. The portion of the Human Requirements of Flight is a survey course on human physiology. Discussed here are the human circulatory system, the effects of acceleration and deceleration, and protective equipment.

Course Objectives:

1. Know the atmosphere environment.
2. Know the basic human requirements of flight.
3. Know why Bernoulli's principle and Newton's Laws of Motion are applied to the theory of flight and the operating principles of reciprocation engines, jet engines, and rocket engines.
4. Know the basic elements of navigation, the four basic navigation instruments, and the methods of navigation.

Course Materials:

1. Textbook: Aerospace Science II: The Science of Flight (2001 edition)
2. Student Workbook: Aerospace Science II: The Science of Flight (2002 edition)
3. Selected video tapes
4. Aviation maps and navigation instruments
5. Computers with flight simulator

Assignments:

1. Cadets will read assigned chapters, accomplish selected chapters in Student Workbook which corresponds to textbook chapters, and participate in demonstration/participation quiz games.
2. Cadets will prepare for unannounced quizzes and announced chapter tests.
3. Cadets will demonstrate basic skill in controlling aircraft movement using computer flight simulator and scripted flight plan.
4. Cadets will demonstrate basic map reading knowledge and solving basic flight navigation problems.
5. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

AEROSPACE SCIENCE III: GEOGRAPHY/SPACE/SURVIVAL

Course Description: The course, will begin with the study of the earth through geography which will end as we examine our Earth, the Moon and the planets, the latest advances in space technology, and continuing challenges of space and manned space flight. Issues critical to travel in the upper atmosphere such as orbits and trajectories, unmanned satellites, space probes, guidance and control systems are discussed. The last third of the year will be survival. The cadets will study the physiological and physical requirements and then go twice into the field for labs. The final lab will be the overnight ROPES course

Course Objectives:

1. Comprehend the “big picture” of space exploration to include history of space flight, organizations doing work in space, and the overall space environment.
2. Know and use key concepts for getting from the surface of the Earth into Earth orbit, to other planets and back again.
3. Know how spacecraft and launch vehicles, and their associated parts, are designed and built to support the needs of the United States.
4. Know techniques used to manage the development and operations of space systems within government and industry.

Course Materials:

1. Textbook: Aerospace Science III: Geography/Space/Survival
2. Selected excerpts from the Student Workbook (2005 edition)
3. Selected video tapes

Assignments:

1. Cadets will read assigned chapters, accomplish selected chapters in Student Workbook which corresponds to textbook chapters, and participate in demonstration/participation quiz games.
2. Cadets will prepare for unannounced quizzes and announced chapter tests.
3. Cadets will write one research paper (graded) of not less than 500 words (with upgraded 3-5 min speech).
4. Cadets will give one graded 5-7 minute speech.
5. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

Survival. This option presents “good to know” information that would be useful in any situation. Survival instruction will provide training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. The *Survival* is a synthesis of the basic information found in Air Force Regulation 64-4, *Survival Training*. The information is just as useful to an individual lost hunting or stranded in a snowstorm.

Course Objectives for this option:

1. Know the elements of surviving.
2. Know how medical procedures, clothing, and shelter can provide personal protection for a survivor in a survival situation.
3. Know the necessities for maintaining life in a survival situation.
4. Know how to travel and prepare for recovery in a survival situation.

Assignments:

1. Cadets will read assigned chapters and participate in demonstration/participation quiz games.
2. Cadets will prepare speeches and written reports corresponding to textbook chapters and related subjects.
3. Cadets will prepare for unannounced quizzes and announced chapter tests.
4. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

AEROSPACE SCIENCE IV

Course Description: The fourth year of the curriculum is unique from the others. The Senior Aerospace Science Instructor may choose which option to incorporate for that year. There are three options: Management of the Cadet Corps, Survival and Policy & Organization.

Option 1- Management of the Cadet Corps. This option allows the cadets to manage all aspects of Corps Operations during the year. This hands-on experience affords the cadets the opportunity to put the theories of previous leadership courses into practice under the supervision of the instructor force. All the planning, organizing, coordinating, directing, and decision-making will be done by the cadets. They practice their communication, decision-making, personal-interaction, managerial, and organizational skills on a daily basis.

Course Objectives for this option:

1. Apply the theories and techniques learned in previous leadership courses.
2. Know how to develop leadership and management competency through participation.
3. Apply strengthened organizational skill through active incorporation.
4. Know how to develop confidence in ability by exercising decision-making skills.
5. Apply Air Force standards, discipline, and conduct.

Assignments:

1. Cadets, through the cadet staff positions, will put leadership skills to practical use in running the Cadet Corps.
2. Cadets will participate in school and community service projects.
3. Cadets will exercise goal setting, teamwork, planning skills, and use of metrics in preparing for any Staff Assistance Visits or Inspections.
4. Cadets will submit weekly staff reports and attend weekly staff meetings.
5. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

LEADERSHIP EDUCATION I: INTRODUCTION TO AIR FORCE JROTC

Course Description: Leadership education is an integral part of each year's instruction. The first year is dedicated to leadership studies related directly to the academic subject matter, with study habits and time management. Additionally, wear of the uniform, Air Force customs and courtesies, and basic drill skills are introduced.

The Course Objectives are:

1. Know the importance of AFJROTC history, mission, purpose, goals, and objectives.
2. Know military traditions and the importance of maintaining a high standard of dress and personal appearance.
3. Know the importance of attitude, discipline, and respect and why values and ethics are so important.
4. Know the importance of individual self-control and that an effective stress management program improves the quality of life.
5. Know why courtesies are rendered to the United States Flag and the National Anthem.
6. Know why it is important to be a good democratic citizen and to be familiar with the different forms of governments.
7. Know the importance of keeping yourself well and helping others stay well

Course Materials:

1. Textbook: Leadership Education I: Introduction to Air Force Junior ROTC (2005)
2. Student Workbook: Leadership Education I: Introduction to Air Force Junior ROTC (2005)
3. Excerpts from AFMAN 36-2203 – Personnel Drill and Ceremonies
4. Selected Videos
5. Guest Speakers

Assignments:

1. Cadets will read assigned chapters, accomplish selected chapter in the Student Workbook which correspond to textbook chapters, and participate in oral quiz games.
2. Cadets will prepare speeches and written reports corresponding to textbook chapters and related subjects.
3. Cadets will prepare for Drill Evaluation.
4. Cadets will prepare for unannounced quizzes and announced chapter tests.
5. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

LEADERSHIP EDUCATION II: INTERCOMMUNICATION SKILLS

Course Description: Leadership II covers communication skills and Cadet Corps activities. Written reports and speeches compliment academic materials. Cadet Corps activities include holding positions of greater responsibility in the planning and execution of corps projects.

Course Objectives:

1. Comprehend the concepts of effective communication.
2. Know himself or herself in relation to others and the society in which we live.
3. Comprehend how teams work to succeed in improving quality and productivity.
4. Comprehend that leadership is a very complex art that is essential to the success of the mission.

Course Materials:

1. Textbook: Leadership Education II: Communication, Awareness and Leadership (2006)
2. Student Workbook: Leadership Education II: Communication, Awareness and Leadership (2006)
3. Excerpts from AFMAN 36-2203 – Personnel Drill and Ceremonies
4. Selected Videos
5. Guest Speakers

Assignments:

1. Cadets will read assigned chapters, accomplish selected chapters in Student Workbook which corresponds to textbook chapters, and participate in oral quiz games.
2. Cadets will prepare speeches and written reports corresponding to textbook chapters and related subjects.
3. Cadets will prepare for Drill Evaluation and Physical Training Evaluation.
4. Cadets will prepare for unannounced quizzes and announced chapter tests.
5. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

LEADERSHIP EDUCATION III: LIFE SKILLS

Course Description: The Leadership Education III Life Skills course will be helpful to students deciding which path to take after high school. Information on how to apply for admission to college or to a vocational or technical school is included. Information on how to begin the job search is available to students who decide not to go to college or vocational school. Available also is information about financial planning and how to save, invest, and spend money wisely, as well as how not to get caught in the credit trap. Students are informed about real life issues such as understanding contracts, leases, wills, warranties, legal notices, and personal bills. Citizen responsibilities such as registering to vote, jury duty, and selective service registration will be covered also. For those students who may be moving into an apartment of their own, information is presented on apartment shopping and grocery shopping skills. If there are students who are interested in a career in the military, with the federal government, or an aerospace career, information is also provided for them.

Course Objectives:

1. Comprehend the importance of obtaining a degree or skill after high school.
2. Know that a proper job search is needed to obtain employment.
3. Comprehend the importance of financial planning.
4. Comprehend the career opportunities available through the federal government, NASA, FAA, and the military.

Course Materials:

1. Textbook: Leadership Education III: Life Skills & Career Opportunities (2006)
2. Student Workbook: Leadership Education III: Life Skills & Career Opportunities (2006)
3. Excerpts from AFMAN 36-2203 – Personnel Drill and Ceremonies
4. Selected Videos
5. Guest Speakers

Assignments:

1. Cadets will read assigned chapters, accomplish selected chapters in Student Workbook which correspond to textbook chapters, and participate in demonstration/participation quiz games.
2. Cadets will prepare speeches and written reports corresponding to textbook chapters and related subjects.
3. Cadets will prepare for Drill Evaluation and Physical Training Evaluation.
4. Cadets will prepare for unannounced quizzes and announced chapter tests.
5. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.

LEADERSHIP EDUCATION IV: PRINCIPLES OF MANAGEMENT

Course Description: The course is a guide to understanding the fundamentals of management, managing yourself, and others. Emphasis is placed on allowing the student to see themselves as a manager. Every organization, regardless of size, faces the challenge of managing operations effectively. No matter how well a manager carries out his or her job, there are always ways of doing at least part of the task more effectively. There are four building blocks of leadership considered in this text from the military and civilian perspective. Attention to these four areas will form a strong foundation for a capability to lead others – something that can be very valuable to you for the rest of your life. The four areas are Management Techniques, Management Decisions, Management Functions, and Managing Self and Others.

Course Objectives:

1. Comprehension of the importance of management.
2. Comprehend the techniques and skills involved in making management decisions.
3. Comprehend the concepts and skills of problem solving, decision-making, and negotiating.
4. Comprehend the importance of managing yourself and others.

Course Materials:

1. Textbook: Leadership Education IV: Principals of Management (1999)
2. Student Workbook: Leadership Education IV: Principals of Management (1999)
3. Excerpts from AFMAN 36-2203 – Personnel Drill and Ceremonies
4. Selected Videos
5. Guest Speakers

Assignments:

1. Cadets will command the TX-794th Corps of Cadets (Corps) using leadership and management skills previously learned in JROTC classes.
2. Cadets will demonstrate learned skills through assigned Officer and NCO positions within the Corps.
3. Cadets will read assigned chapters, accomplish selected chapters in the Student Workbook which correspond to textbook chapters, and participate in oral quiz games.
4. Cadets will prepare speeches and written reports corresponding to textbook chapters and assigned to Officer/NCO positions.
5. Cadets will prepare for unannounced quizzes and announced tests.
6. Cadets will adhere to uniform wear requirements by wearing the Air Force issued uniform on Wednesdays.