

## TX-20028 AFJROTC

### AEROSPACE SCIENCE, LEADERSHIP EDUCATION, AND WELLNESS PROGRAM

AEROSPACE SCIENCE (AS) 300: Exploring Space: The High Frontier (Fall: Units 1 & 2) (Spring: Units 3 & 4)

Instructor: Lt Col Haider Khan, USAF (Ret)

Course Description: AS300 is a course on space science and space exploration. It includes study of the space environment from the earliest days of interest in astronomy and ideas of the heavens, through the Renaissance, and on into modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. The section on manned spaceflight focuses on space stations and beyond, covering milestones in the endeavor to land on the Moon and to safely orbit humans and crafts for temporary and prolonged periods. The course covers the human aspect of spaceflight, focusing on the human experience in space. It also examines the latest advances in space technology, including robotics in space, the Mars Rover, and commercial uses of space.

Course Objectives: (Fall: Units 1 & 2)

1. Know the history of astronomy and the specific characteristics of the Earth, Moon, solar system, and the planets.
2. Comprehend the big picture of space exploration, including the history of spaceflight, organizations doing work in space, and the overall space environment.
3. Comprehend the importance of entering space, characteristics of manned and unmanned spaceflight, and how humans are affected during spaceflight.

Course Objectives: (Spring: Units 3 & 4)

4. Comprehend the key concepts for getting from the surface of the Earth into Earth orbit and to other planets and back again.
5. Comprehend how spacecraft, rockets, and launch vehicles are designed and built.
6. Comprehend the latest advances in space technology.

LEADERSHIP EDUCATION (LE) 300: (Blended) LE100 Traditions, Wellness, and Foundations of Citizenship (Fall: Chap 1) & Life Skills & Career Opportunities (Fall: Chap 1, 2, & 4,) (Spring: Chap 5, 6, & 8)

Instructor: SMSgt James Core, USAF (Ret)

Course Description: This course blends the need to cover material for first-year cadets when classes are blended with returning cadets. LE100 introduces history, organization, mission, traditions, goals, and objectives of JROTC. It introduces key military customs and courtesies, uniform and appearance standards, attitude/discipline, ethical/moral behavior, and etiquette. It also includes health/wellness and history/respect to the American flag. LE300 is a course 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 become a more confident financial planner. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates. The Holland Interest Inventory and other self-assessments will help them to reveal their attitudes, aptitudes, and personal skills. This self-understanding will allow them to explore career paths and understand requirements that they will need to be successful at work and in life. They will 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 will learn how to prepare a résumé and develop effective interviewing skills. Students will use the Internet for career research and social media. 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.

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#### Course Objectives: Fall (Chapters 1, 2, & 4)

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.

#### Course Objectives: Spring (Chapters 5, 6 & 8)

5. Analyze positive and negative impact of college life in meeting career goals.
6. Evaluate the essential process for successfully pursuing desired career or job.
7. Evaluate the benefits of working for the Federal Government.
8. Create a plan for successful career development.

#### UNIFORMS:

Air Force uniforms will usually be worn on Wednesday.  
Physical fitness uniforms will usually be worn on Friday

#### WELLNESS PROGRAM

Instructors: Lt Col Haider Khan and SMSgt James Core

Course Description: This program focuses on individual baseline improvements with the goal of achieving a national standard as calculated by age and gender. The focus is developing and maintaining a healthy lifestyle, helping the cadets develop a balance of nutrition, exercise and physical activities.

Course Objectives: Motivate AFJROTC cadets to lead active, healthy lifestyles beyond program requirements and into their adult lives.

#### COURSE MATERIALS:

1. Textbook (AS): Exploring Space: The High Frontier
2. Textbook (LE): Life Skills and Career Opportunities
3. Selected videos from approved AFJROTC library
4. TX-20028 Cadet Guide
5. AFJROTC Uniform and Awards Guide

GRADING: The Aerospace Science content is 40%, Leadership Education (includes drill) content is 40%, and Health and Wellness content is 20%. This overall content will have the following grade distribution:

1. Daily Grade (participation/assignments): 30%
2. Exams/Quizzes: 30%
3. Uniform Inspection: 20%
4. Physical Fitness and Wellness: 20%

#### RETEST/REDO GUIDELINES:

1. Students will have one opportunity each nine weeks' grading period to retake a test, make-up an assignment, and/or uniform wear for which they earned a failing grade.
2. Students must complete a tutorial session (or other intervention) prior to any retest and/or assignment make-up.
3. The highest grade possible for any retest/redo is 70.

**TUTORIALS: Tutorials are available after school Monday through Thursday or by appointment.**