Acknowledgments

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Cathy Nichols-Cocke, PhD, Social Studies Teacher, Fairfax High School, Fairfax County Public Schools

The framework was edited and produced by the CTE Resource Center:
Course Description

**Suggested Grade Level:** 9 or 10 or 11 or 12

Students explore the Air Force JROTC program with instruction focusing on aerospace science including flight conditions affecting flight, flight’s effects on the human body, analyses of flight navigation, and purposes of aerial navigation aids. The course focuses on Air Force traditions, customs and courtesies, effective communication skills, and the influences of varying global cultures, religions, and ethnicities in the development of nations. Leadership education develops leadership skills and acquaints students with the practical applications of life skills and includes a drill and ceremonies component. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

*Instructors are asked to continue relying heavily on their branch-specific curriculum guides to complement this core set of competencies.*

*Per the 2017 Air Force Junior Reserve Officer Training Corps Curriculum Document (p.12), “Course Offerings: All units have the option to determine which [courses] to offer to first-, second-, third-, and fourth-year cadets.”*

## Task Essentials Table

For the indicated course(s):

-Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential
-Tasks/competencies designated by empty-circle icons (◯) are optional
-Tasks/competencies designated by minus icons (⊖) are omitted
-Tasks marked with an asterisk (*) are sensitive.

<table>
<thead>
<tr>
<th>Task Number</th>
<th>AF7916</th>
<th>Tasks/Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploring Aerospace Science: The Science of Flight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>☑</td>
<td>Describe the atmosphere, environment, and basic human requirements of flight and aviation innovation.</td>
</tr>
<tr>
<td>40</td>
<td>☑</td>
<td>Identify the principles of flight.</td>
</tr>
</tbody>
</table>

**Exploring Leadership: Communication, Awareness, and Leadership**

| 41 | ☑ | Identify the key factors of effective communication. |
| 42 | ☑ | Demonstrate effective speaking and writing skills. |
| 43 | ☑ | Explain the importance of having a positive attitude. |
| 44 | ☑ | Exhibit the traits of a good leader. |
| 45 | ☑ | Explain how integrity, character, and personality influence behavior. |
| 46 | ☑ | List team dynamics. |
| 47 | ☑ | Serve in common leadership and followership opportunities. |
| 48 | ☑ | Explain what factors have shaped the six major regions of the world. |
| 49 | ☑ | Explain how social, political, and economic factors influence culture. |
| 50 | ☑ | Identify leadership styles and mission demands. |
| 51 | ☑ | Identify techniques for motivating others. |
| 52 | ☑ | Identify advantages of effective teamwork. |
| 53 | ☑ | Demonstrate courtesy in given situations. |
| 54 | ☑ | Perform military drill. |
| 55 | ☑ | Research a community-service opportunity. |
| 56 | ☑ | Complete the Armed Services Vocational Aptitude Battery (ASVAB). |
| 57 | ☑ | Comply with procedures in the cadet guide or handbook. |

**Achieving Personal Wellness, Health, and Fitness**

| 58 | ☑ | Incorporate a physical fitness program. |
| 59 | ☑ | Improve physical fitness performance over time. |

Legend: ☑ Essential ☐ Non-essential ☐ Omitted

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**Curriculum Framework**
Task Number 39

Describe the atmosphere, environment, and basic human requirements of flight and aviation innovation.

Definition

Description should include

- atmosphere
- flight physiology
- aviation technology
- how flight affects the human body
- flight navigation
- purpose of aerial navigation aids.

Process/Skill Questions

- In which level of the atmosphere does weather occur?
- What is hypoxia?
- What is an example of a modern navigational tool?
- What are the four elements of navigation?
- How do atmospheric components affect the weather?
- What is the role of meteorology in aviation?

Task Number 40

Identify the principles of flight.

Definition

Description should include

- Bernoulli’s principle
- Newton’s laws of motion
- four forces of flight
- aircraft motion and control
- aerospace power plants.

Process/Skill Questions
• What are the four forces of flight?
• What is the function of the elevator?
• Which control surfaces must move opposite to each other? Why?

Exploring Leadership: Communication, Awareness, and Leadership

Task Number 41

Identify the key factors of effective communication.

Definition

Identification should include

• speaking
• listening
• communication barriers
• non-verbal communication.

Process/Skill Questions

• What is the difference between hearing and listening?
• What are barriers to effective communication?
• What are some examples of non-verbal communication?

Task Number 42

Demonstrate effective speaking and writing skills.

Definition

Demonstration should include

• elements of effective speaking
• checklist for writing
• elements of effective writing.

Task Number 43

Explain the importance of having a positive attitude.
Definition

Explanation should include the positive effects of integrity, credibility, humility, patience, respect, and appreciation.

Process/Skill Questions

• Why is it important to have a positive attitude?
• How are integrity, credibility, patience, and respect related to having a positive attitude?

Task Number 44

Exhibit the traits of a good leader.

Definition

Exhibition may include demonstration of the following traits/characteristics:

• Courage
• Patience
• Dependability
• Integrity
• Decisiveness
• Tactfulness
• Initiative
• Endurance
• Selflessness
• Intelligence
• Loyalty
• Enthusiasm

Process/Skill Questions

• What is the definition of each leadership trait?
• How does one use leadership in everyday life?
• What trait(s) might one use to speak with someone with whom one disagrees?

Task Number 45

Explain how integrity, character, and personality influence behavior.

Definition

Explanation should include the influence of integrity, character, and personality traits.

Task Number 46
List team dynamics.

Definition

Listing should include

- shared vision
- four stages of team development
  - storming
  - forming
  - norming
  - performing
- characteristics of effective teams
  - goals
  - rules
  - roles
  - communication
  - participation.

Process/Skill Questions

- What is a shared vision?
- What is an example of storming?
- How does one foster effective communication within a team?

Task Number 47

Serve in common leadership and followership opportunities.

Definition

Service could include

- participating in community events or service opportunities
- volunteering at human services organizations (e.g., Red Cross, Habitat for Humanity)
- campaigning during elections, registering others to vote
- contributing to public forums
- managing others at work
- competing on sports teams
- participating in student organizations
- participating in Air Force JROTC drill.

Process/Skill Questions

- Why should one contribute to a service event or opportunity?
- Where can one look for service opportunities?
- What events does Air Force JROTC consider community service?
Task Number 48

Explain what factors have shaped the six major regions of the world.

Definition

Explanation should include historical, geographic, religious, and ethnic factors of

- the Middle East
- Asia
- Africa
- Russia and the Former Soviet Republics
- Latin America
- Europe.

Process/Skill Questions

- Why is the Middle East considered the cradle of western civilization?
- What are the characteristics of Judaism, Christianity, and Islam?
- What are the major religions of Asia?
- What are the main ethnic groups of Asia?
- What are the five major regions of Africa?
- What are the five major regions of Latin America?
- What are the major nations of Europe?

Task Number 49

Explain how social, political, and economic factors influence culture.

Definition

Explanation could include the influence on the following areas:

- social
  - discrimination
    - tribal
    - caste system
    - racial category
    - minority language group
    - gender
      - population growth
      - religion
  
- political
  - poor governmental management
  - corruption
  - trade laws
  - political instability
• economic
  o trade
  o markets.

**Task Number 50**

**Identify leadership styles and mission demands.**

**Definition**

Identification could include

- examples of leaders in history
- leadership characteristics
- leadership styles
  - *telling*—provides specific instructions and closely supervises all phases of the project
  - *selling*—closely supervises task completion and follow up
  - *participating*—helps and supports team members; shares ideas and decision-making tasks
  - *delegating*—turns over decision-making, problem-solving, and implementation to team members, providing help when asked and monitoring progress
- the effects of the leader on the mission.

**Note:** Students may benefit if they are provided with the names of leaders from a variety of arenas (e.g., military leaders, elected officials, community leaders).

**Process/Skill Questions**

- Which style of leadership is best suited when one is task-oriented?
- Which style of leadership is best suited when one is people-oriented?
- What are characteristics of effective leaders?

**Task Number 51**

**Identify techniques for motivating others.**

**Definition**

Identification should include

- making team members aware of their roles and the project goals
- assessing team members and applying the motivation technique that might work best
- modeling behaviors and practices that exemplify expectations
- communicating effectively, listening, and supporting team members' concerns
- rewarding positive contributions to team success
- solving morale problems and encouraging focused contributions.

**Process/Skill Questions**
• What is motivation?
• What causes lack of motivation?
• How can one improve low morale?

**Task Number 52**

**Identify advantages of effective teamwork.**

**Definition**

Identification should include

- *creativity*—ideas are contributed from diverse pathways of experience
- *satisfaction*—pride in belonging to a team that meets goals that an individual could not meet alone
- *expertise*—the skills each member contributes to the success of the group enable the ability of the team
- *efficiency*—tasks are accomplished simultaneously with other team members, reducing the expenditure of time as a resource
- *assessment*—teams provide a forum for individuals to exchange concerns, ideas, solve problems
- *support*—each member is available to help and be helped by another, when needed, and recognized for his/her efforts.

**Process/Skill Questions**

- Why is teamwork important?
- What are the consequences of poor teamwork?
- Why is creativity important for effective teams?

**Task Number 53**

**Demonstrate courtesy in given situations.**

**Definition**

Demonstration should include

- performing a courteous, respectful, or considerate act or expression
- executing military customs to show consideration and respect for others (e.g., salutes, colors, rendering honors).

**Process/Skill Questions**

- How does one define *courtesy*?
- Who initiates a military salute?
- What does it mean to *render honors*?

**Task Number 54**
Perform military drill.

Definition
Identification should include assessing personal performance of the 30-step drill sequence according to the current inspection guide.

Process/Skill Questions
- Which foot is *eyes right* called on?
- Which foot is *column left* called on?
- What is the last command of the 30-step drill sequence?

Task Number 55

Research a community-service opportunity.

Definition
Research should include

- resources for community-service opportunities
- potential roles within a community-service opportunity
- tasks and time required to perform community service
- benefits of the community service
- personal skills that may be acquired or improved through the service.

Process/Skill Questions
- What local organizations provide service opportunities?
- How might one contribute to national opportunities for service?
- What are some national service organizations?

Task Number 56

Complete the Armed Services Vocational Aptitude Battery (ASVAB).

Definition
Completion could identify potentially satisfying careers.

Process/Skill Questions
- How can the ASVAB help one identify career opportunities?
- What are the components of the ASVAB?
- What is the minimum score required for Air Force enlistment?
Task Number 57

Comply with procedures in the cadet guide or handbook.

Definition

Compliance should include identification of and adherence to branch-specific curriculum expectations that coincide with performance evaluation.

Process/Skill Questions

- Who is responsible for producing the cadet guide?
- What are some consequences for non-compliance?
- What is the proper way to wear one’s uniform?

Achieving Personal Wellness, Health, and Fitness

Task Number 58

Incorporate a physical fitness program.

Definition

Incorporation should include

- Education
- Participation
- Evaluation

Process/Skill Questions

- What are benefits of regular exercise?
- What is the difference between cardiovascular and strength training?

Task Number 59

Improve physical fitness performance over time.

Definition

Improvement could be based on striving for better performance and documenting those achievements over time in the following categories:
- Shuttle run
- One-mile run
- V sit-and-reach
- Push-ups
- Curl-ups

**Process/Skill Questions**

- How can a person decrease his or her run time?
- What is the importance of flexibility in a regular exercise program?
- What are the dangers of a sedentary lifestyle?

**SOL Correlation by Task**

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>English</th>
<th>History and Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Describe the atmosphere, environment, and basic human requirements of flight and aviation innovation.</td>
<td>9.5, 10.5, 11.5, 12.5</td>
<td></td>
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</table>
Science: ES.11 |
| 40   | Identify the principles of flight. | 9.5, 10.5, 11.5, 12.5 |  
History and Social Science: WHII.4 |
| 41   | Identify the key factors of effective communication. | 9.5, 10.5, 11.5, 12.5 |  
History and Social Science: GOVT.1, GOVT.6, VUS.1, VUS.13, VUS.14, WG.1, WG.17, WHII.1, WHII.14 |
| 42   | Demonstrate effective speaking and writing skills. | 9.1, 10.1, 11.1, 12.1 |  
History and Social Science: GOVT.1, VUS.1, WG.1, WHII.1 |
| 43   | Explain the importance of having a positive attitude. | 9.5, 10.5, 11.5, 12.5 |  
History and Social Science: GOVT.16 |
| 44   | Exhibit the traits of a good leader. |  |  
History and Social Science: GOVT.1, GOVT.16, VUS.1, WG.1, WHII.1 |
| 45   | Explain how integrity, character, and personality influence behavior. | 9.5, 10.5, 11.5, 12.5 |  
History and Social Science: GOVT.16 |
| 46   | List team dynamics. | 9.6, 9.7, 10.6, 10.7, 12.6, 12.7 |  
History and Social Science: GOVT.1, VUS.1, WG.1, WHII.1 |
| 47   | Serve in common leadership and followership opportunities. | 9.1, 10.1, 11.1, 12.1 |  
History and Social Science: GOVT.1, VUS.1, WG.1, WHII.1 |
| 48   | Explain what factors have shaped the six major regions of the world. | 9.5, 10.5, 11.5, 12.5 |  
History and Social Science: VUS.8, WG.5, WG.6, WG.9, WG.15, WG.18, WHII.5, WHII.13, WHII.14 |
| 49   | Explain how social, political, and economic factors influence culture. | 9.5, 10.5, 11.5, 12.5 |  

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<th>History and Social Science: GOVT.9, VUS.8, VUS.13, WHII.13</th>
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<td>50</td>
<td>Identify leadership styles and mission demands.</td>
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<td>History and Social Science: GOVT.2, GOVT.9, VUS.4, VUS.6, VUS.7, VUS.8, VUS.11, VUS.12, WHII.5, WHII.10, WHII.11, WHII.12</td>
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<td>51</td>
<td>Identify techniques for motivating others.</td>
<td>English: 9.5, 10.5, 11.5, 12.5</td>
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<td>56</td>
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<td>English: 9.5, 9.6, 9.7, 10.5, 10.6, 10.7, 11.5, 11.6, 11.7, 12.5, 12.6, 12.7</td>
</tr>
</tbody>
</table>
Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- Armed Services Vocational Aptitude Battery Examination
- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.

- Air Force JROTC I (AF7913/36 weeks)
- Air Force JROTC III (AF7918/36 weeks)
- Air Force JROTC IV (AF7919/36 weeks)

Career Cluster: Education and Training

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
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<tbody>
<tr>
<td>Administration and Administrative Support</td>
<td>Instructional Coordinator</td>
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<tr>
<td></td>
<td>Training and Development Manager</td>
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<tr>
<td>Professional Support Services</td>
<td>Instructional Developer</td>
</tr>
<tr>
<td>Teaching and Training</td>
<td>Coach, Secondary Level</td>
</tr>
<tr>
<td></td>
<td>Instructional Coordinator</td>
</tr>
<tr>
<td></td>
<td>Training Consultant/Training Specialist</td>
</tr>
</tbody>
</table>

Career Cluster: Government and Public Administration

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
</tr>
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<tbody>
<tr>
<td>Foreign Service</td>
<td>Diplomatic Courier</td>
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<tr>
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<td>Foreign Service Worker</td>
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<tr>
<td></td>
<td>Interpreter/Translator</td>
</tr>
<tr>
<td>Governance</td>
<td>Legislative Aide</td>
</tr>
<tr>
<td></td>
<td>Legislator</td>
</tr>
<tr>
<td>National Security</td>
<td>Combat Specialty Officer</td>
</tr>
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<td>Military Enlisted Personnel</td>
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<tr>
<td></td>
<td>Military Intelligence Specialist</td>
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<tr>
<td></td>
<td>Military Officer</td>
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<tr>
<td></td>
<td>Special Forces Personnel</td>
</tr>
<tr>
<td>Planning</td>
<td>Economic Development Coordinator</td>
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<td></td>
<td>Urban and Regional Planner</td>
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</table>
### Career Cluster: Government and Public Administration

<table>
<thead>
<tr>
<th>Pathway</th>
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<tbody>
<tr>
<td>Public Management and Administration</td>
<td>Court Clerk</td>
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<tr>
<td></td>
<td>Government Accountant/Auditor</td>
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<tr>
<td></td>
<td>Postal Service Clerk</td>
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<tr>
<td></td>
<td>Postmaster/Mail Superintendent</td>
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<tr>
<td>Regulation</td>
<td>Compliance Officer</td>
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<tr>
<td></td>
<td>Environmental Compliance Inspector</td>
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<td></td>
<td>Private Detective, Investigator</td>
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<tr>
<td>Revenue and Taxation</td>
<td>Compliance Officer</td>
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### Career Cluster: Law, Public Safety, Corrections and Security

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<tr>
<th>Pathway</th>
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<tbody>
<tr>
<td>Correction Services</td>
<td>Corrections Officer</td>
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<td>Probation, Parole Officer</td>
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<td>Emergency and Fire Management Services</td>
<td>Emergency Medical Technician, Paramedic</td>
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<td>Firefighter</td>
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<td>Law Enforcement Services</td>
<td>Police Officer</td>
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<tr>
<td>Legal Services</td>
<td>Records Processing Assistant</td>
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<td>Security and Protective Services</td>
<td>Private Detective, Investigator</td>
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<td>Security Officer</td>
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### Career Cluster: Transportation, Distribution and Logistics

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<th>Pathway</th>
<th>Occupations</th>
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<tbody>
<tr>
<td>Facility and Mobile Equipment Maintenance</td>
<td>Diesel Service Technician</td>
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<td>Service Technician</td>
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<td>Small Engine Mechanic</td>
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<tr>
<td>Health, Safety and Environmental Management</td>
<td>Health, Safety, and Environment Manager</td>
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<td>Logistics Planning and Management Services</td>
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<td>Logistics Manager</td>
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<td>Sales and Service</td>
<td>Dispatcher</td>
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<td>Transportation Operations</td>
<td>Transportation Manager</td>
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<td>Civil Engineer</td>
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<td>Civil Engineering Technician</td>
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<td>Transportation Manager</td>
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<tr>
<td>Warehousing and Distribution Center Operations</td>
<td>Traffic Engineer</td>
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