# STRANDS AND STANDARDS AIR TRANSPORTATION



# **Course Description**

Air Transportation gives a broader understand of the business aspects of aviation. Some areas of study will include historical and present status of air transportation, regulations, administration, general aviation, and aircraft manufacturers. This course provides students with skills for the following careers: airline managers, flight dispatchers, and air traffic controllers.

| Intended Grade Level            | 11-12                               |
|---------------------------------|-------------------------------------|
| Units of Credit                 | Minimum .5                          |
| Core Code                       | 40.11.00.00.046                     |
| Concurrent Enrollment Core Code | 40.11.00.13.046                     |
| Prerequisite                    | Private Pilot                       |
| Skill Certification Test Number | N/A                                 |
| Test Weight                     | N/A                                 |
| License Area of Concentration   | CTE and/or Secondary Education 6-12 |
| Required Endorsement(s)         |                                     |
| Endorsement 1                   | Aviation - Flight                   |

ADA Compliant: December 2023

# **STRAND 1**

Students will be able to understand the historical timeline of air transportation.

#### Standard 1

Students will be able to track the historical timeline of air transportation.

- Air transportation is a mode of moving around.
- Air transportation is a major career in aviation.

#### Standard 2

Students will be able to identify the developmental patterns of the airplane through historical markers.

- · Beginning of controlled flight.
- Commercial applications of the airplane.
- Modern era of airlines and air carriers.

# **STRAND 2**

Students will be able to understand and explain regulations of air transportation.

#### **Standard 1**

Students will understand the structure and importance of aviation regulations and their functions.

- Department of Transportation
  - Regulators of general aviation
- Aviation Safety and the National Transportation Safety board
  - Performs investigations of aviation incidents.
- The Federal Aviation Administration (FAA)
  - Improves aviation safety through regulations and oversight.
- Aviation accident investigation and safety performance.

## Standard 2

Students will understand air carriers and air carrier economic regulations.

#### Standard 3

Students will explain international air transportation law.

International Civil Aviation Organization (IKAO)

#### Standard 4

Students will understand commercial space transportation.

#### **Performance Skills**

Understand and explain regulation and air transportation.

- The air carrier industry and federal legislation.
- Department of Transportation.
- The Federal Aviation Administration (FAA).
- Aviation safety and the National Transportation Safety board.
- Aviation accident investigation and safety performance.
- Air carrier economic regulations.
- International air transportation law.
- International air transportation organizations.
- Non-US air carriers.
- Commercial space transportation.

# **STRAND 3**

Students will understand and explain administration of air transportation.

#### Standard 1

Students will investigate air carrier management and organization.

#### Standard 2

Students will critique air carrier marketing.

• Impact of the Internet on airline marketing strategies.

#### **Standard 3**

Students will differentiate the business structures of airlines.

- · Air carrier accounting.
- Financial analysis.
- Aviation industry performance.
- Aviation industry forecasts.

#### **Performance Skills**

Understand and explain administration of air transportation.

- Air carrier management and organization.
- Air carrier marketing.
- Air carrier accounting and financial analysis.
- Legal aspects of air transportation.
- Aviation industry performance and forecasts.

# **STRAND 4**

Students will be able to understand and explain aircraft manufacturing and manufacturers.

#### Standard 1

Students will compare the major aviation manufacturers.

- Boeing Company.
- Airbus Industries.
- Lockheed Martin Corporation.

# **Standard 2**

Students will understand general aviation industry.

- Pilot training processes.
- · Recreational aviation.
- Private aircraft ownership
- Non-air carrier career opportunities.

# **Standard 3**

Students will explore future aircraft and space vehicles.

• Development of alternative fuel aircrafts.

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# **Performance Skills**

Understand and explain aircraft in general.

- Aircraft performance.
- The Boeing Company.
- The Lockheed Martin Corporation.
- Airbus Industries.
- Future aircraft and space vehicles.
- The general aviation industry.

# **STRAND 5**

Students will understand the importance of career readiness skills as it relates to participation in TSA (Technology Student Association), SkillsUSA, or any other related CTSO in aviation-related fields.

## **Performance Skills**

The following aviation workplace skills should be discussed, taught, re-enforced and modeled throughout the strands and standards of the course:

- Communication
- Teamwork
- Critical and Creative Thinking
- Problem Solving
- Dependability

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