

## Master Syllabus

### AVT 2158 - Aircraft Performance II

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 2.0

**Lecture Hrs:** 2.0

**Prerequisite(s):** AVT 1119

**Date Revised:** October 2012

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### Course Description:

Prepares students with the aeronautical knowledge, skill and experience necessary to meet the requirements for a Federal Aviation Administration (FAA) Aircraft Dispatcher Certificate. Topics include DC-9, B-727, B-737 and BE-1900 weight and balance and advanced transport category aircraft performance calculations.

### General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency

### Course Outcomes:

#### Engine Pressure Ratio (EPR) and Velocity Speeds

Comprehend the use of and apply engine pressure ratio settings and velocity speeds for the DC-9, B-727, B-737 and BE-1900 aircraft as it pertains to takeoff performance calculations.

**Assessment Method:** Locally developed exams

**Performance Criteria:** Score 80% or higher on exams

#### Weight and Balance Shifts

Comprehend the use of and apply weight and balance techniques for weight shift scenarios for the DC-9, B-727, B-737 and BE-1900 aircraft as it pertains to takeoff performance calculations.

**Assessment Method:** Locally developed exams

**Performance Criteria:** Score 80% or higher on exams

#### Advanced Transport Category Performance

Comprehend the use of and apply stabilizer trim settings and weight and balance loading conditions for the DC-9, B-727, B-737 and BE-1900 aircraft as it pertains to takeoff performance calculations.

**Assessment Method:** Locally developed exams

**Performance Criteria:** Score 80% or higher on exams

### Outline:

Engine pressure ratio  
Velocity (V-speed) speeds  
Weight shifts  
Advanced transport category aircraft performance  
Stabilizer trim settings  
Weight and balance loading conditions