

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

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