

Course discipline/number/title: AVIA 2610: Flight Instructor Lab

A. CATALOG DESCRIPTION

1. Credits: 2
2. Hours/Week: 4
3. Prerequisites (Course discipline/number): AVIA 2200, AVIA 2250, AVIA 2251
4. Other requirements: Requires current medical certificate, airport security clearance, not PSEO eligible. Completion of prerequisite program courses with a C or better and program approval to register.
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course will provide the knowledge and skill necessary to earn a Federal Aviation Administration Flight (FAA) Instructor License. This lab includes instruction in teaching techniques, 16 hours of one-on one ground instruction and 25 hours of flight instruction on an airplane or flight training device with an FAA Certified Flight Instructor or solo to gain the level of proficiency required to pass the FAA Flight Instructor practical test. Instruction includes requirements as listed in the Federal Aviation Regulations.

C. DATE LAST REVISED (Month, year): November, 2022

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Single pilot resource management
 - a) Risk management
 - b) Situational awareness
 - c) Task management
2. Pre-takeoff ground operations
 - a) Preflight inspection
 - b) Cockpit management
 - c) Engine start
 - d) Taxiing
 - e) Airport ground control
 - f) Runway and taxi way markings
 - g) Before takeoff check
3. Airport operations
 - a) Radio communications
 - b) Air Traffic Control (ATC) light signals
 - c) Traffic patterns
4. Takeoffs, landings and go-arounds – short and soft field operations
5. Fundamentals of flight
 - a) Straight and level turns
 - b) Climbing and descending turns
6. Performance maneuvers
 - a) Steep turns
 - b) Steep spirals
 - c) Chandelles
 - d) Lazy eights
7. Ground reference maneuvers
 - a) Turns around a point
 - b) S turns across a road
 - c) Rectangular course
 - d) Eights on a pylon
8. Slow flight stalls and spins
 - a) Power-on stalls and power-off stalls
 - b) Cross controlled stalls
 - c) Elevator trim stalls
 - d) Spin awareness



- D. OUTLINE OF MAJOR CONTENT AREAS: Continued. . .
- 9. Emergency operations
 - a) Emergency descents
 - b) Emergency approach and landing
 - c) Emergency equipment
 - 10. After landing ground operations
 - a) Post landing taxi and parking
 - b) Post flight procedures
- E. LEARNING OUTCOMES (GENERAL): The student will be able to:
- 1. Demonstrate proficiency in all areas defined in the Flight Instructor Practical Test Standards.
 - 2. Meet or exceed the Federal Aviation Administration standards for aeronautical knowledge, aeronautical experience, and flight proficiency for passing the FAA Flight Instructor practical test.
- F. LEARNING OUTCOMES (MNTC): NA
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
- 1. Demonstrations
 - 2. Exams
- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- I. SPECIAL INFORMATION (if any): None