ROCHESTER COMMUNITY AND TECHNICAL COLLEGE

COMMON COURSE OUTLINE

Course discipline/number/title: AVIA 1210: Private Pilot Lab

A. CATALOG DESCRIPTION

1. **Credits: 1**
2. **Hours/Week: 2**
3. **Prerequisites (Course discipline/number):** None
4. **Other requirements:** AVIA1200 must be taken as a pre-requisite or co-requisite. Requires current medical certificate and airport security clearance.
5. **MnTC Goals (if any):** NA

B. COURSE DESCRIPTION This course along with AVIA 1211 will provide the knowledge and skill necessary to earn a Federal Aviation Administration (FAA) Private Pilot Certificate with Airplane Single-Engine category and class ratings. This lab includes 15 hours of one-on-one ground instruction, along with 15 hours of actual flight training in 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 Private Pilot practical test. Instruction includes requirements as listed in the Federal Aviation Regulations.

C. DATE LAST REVISED (Month, year): February, 2024

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Pilot Aircraft External Stresses Model
   a) Aircraft preflight inspection procedures
   b) Basic aerodynamic principles
   c) Required aircraft documents and checklist
2. Aircraft control
   a) Pilotage
   b) Steep turns
   c) Radio communications
   d) Takeoffs and landings
   e) Slow flight
3. Emergency procedures
   a) Stalls, system, and equipment malfunctions
   b) Emergency descents
4. Ground reference maneuvers
   a) Power on and power off stalls
   b) Turns about-a-point
   c) S-turns
5. Traffic patterns
   a) Normal/crosswind landings
   b) Forward slips to landings and go arounds
6. GPS and radio navigation procedures, and solo flight preparation
7. Emergency Operations

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. List the required documents and explain their significance.
2. Describe the features and functions of basic airplane systems.
3. Demonstrate a complete preflight inspection.
4. Demonstrate proper engine start and run-up procedures.
5. Explain radio communication procedures at controlled and uncontrolled fields.
6. Diagram proper airport traffic pattern entry and exit points.
7. Select appropriate emergency landing locations and demonstrate simulated emergency landings.
8. Operate the aircraft in normal flight attitudes & recover aircraft from unusual attitudes while in simulated instrument conditions.
9. Demonstrate aircraft control, maneuvering and stalls in slow flight configuration.
10. Utilize ground reference maneuvers to demonstrate proper control of the aircraft.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:

1. Demonstration
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