

SYLLABUS  
PART I  
EDISON STATE COMMUNITY COLLEGE  
AVN 101S PRIVATE PILOT GROUND  
3 CREDIT HOURS

**COURSE DESCRIPTION**

Obtain the necessary aeronautical knowledge to conduct flight training in a single-engine airplane and prepare for the computer-based private pilot knowledge test. Lab fee.

**COURSE GOALS**

The student will:

| Bloom's Level |   | Program Outcomes |
|---------------|---|------------------|
| 5             | 1. Comprehend basic systems and operations.   | 1,3,4            |
| 3             | 2. Demonstrate knowledge of airplanes and aerodynamics.   | 1,3,4            |
| 3             | 3. Demonstrate knowledge of airplane instruments and systems.                                       | 1,3,4            |
| 3             | 4. Demonstrate knowledge of airports, air traffic control, and airspace.                            | 1,6,7            |
| 3             | 5. Demonstrate knowledge of the Federal Aviation Regulations (FAR's).                               | 1,6,7            |
| 3             | 6. Demonstrate knowledge of airplane performance, weight, and balance calculations.                 | 1,3,4,6          |
| 5             | 7. Comprehend cross country flight operations.  | 1,3,4,5,6,7,10   |
| 3             | 8. Demonstrate knowledge of navigational charts, publications, and flight computers.                | 1,6,7            |
| 3             | 9. Demonstrate knowledge of navigation systems and cross-country flight planning.                   | 1,5,6,7          |
| 3             | 10. Demonstrate knowledge of basic weather concepts and Aeronautical Decision Making (ADM).         | 1,5,6,8,10       |
| 5             | 11. Comprehend night flying operations.   | 1,3,4,5,6,7,8    |
| 3             | 12. Demonstrate awareness of visual illusions and night vision concepts.                            | 1,6,8            |
| 3             | 13. Demonstrate knowledge of night navigation techniques and airport markings.                      | 1,6,7            |
| 5             | 14. Practice answering FAA knowledge test questions and pass the FAA computer-based knowledge test. | 1                |
| 5             | 15. Practice calculations in navigation and aircraft performance.                                   | 1,3,6,7          |
| 1             | 16. Memorize applicable FAR's.  | 1                |

**CORE VALUES**

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State Community College. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce those Core Values wherever appropriate.

**TOPIC OUTLINE**

1. Primary and secondary flight controls
2. Aerodynamics of flight
3. Aircraft instruments and systems
4. Controlled and uncontrolled airport operations, air traffic control procedures
5. National airspace system
6. Performance and weight and balance calculations
7. FAA published navigation charts, flight computer and approved Electronic Flight Bags/Apps

8. Navigation systems, cross country flight planning
9. Night flying illusions and night vision concepts
10. FAA computer-based Private Pilot knowledge test