

JAMESTOWN COMMUNITY COLLEGE
State University of New York

Master Course Syllabus

Course Title: Commercial Pilot Ground School I

Course Abbreviation and Number: AVN 1340

Credit Hours: 1.5 **Division:** STEM **Course Type:** Lecture

Course Description: This course, along with AVN 2140: Commercial Pilot Ground School II, prepares students for the FAA Commercial Pilot Written Exam. Topics covered include complex aircraft systems; aircraft performance and control; aerodynamics, air traffic control and the National Airspace System; Federal Aviation Regulations, radio navigation, meteorology, and the physiology of flight (including discussions of hypoxia, hyperventilation, middle ear and sinus problems, spatial disorientation, carbon monoxide poisoning, motion sickness, physiology of night flying, and the effects of alcohol and drugs including over the counter medications).

Prerequisite: AVN 1140 and 1150, or Private Pilot Certificate; **Corequisite:** AVN 1350; **Eligibility:** ENG 1530; other: current FAA Third Class Medical Certificate.

Course Attributes: C,E

(C=Career, E=Elective, H=Humanities, L=Liberal Arts & Sciences, N=Mathematics/Sciences, S=Social Sciences, VEDP=Values, Ethics & Diverse Perspectives) 4-letter codes represent SUNY General Education Courses, please see below to determine which SUNY General Education requirement(s) is met.

Student Learning Outcomes:

These SLO's come from the FAA Code of Federal Regulations (CFR) § 61.125 Aeronautical knowledge.

(a) General. A person who applies for a commercial pilot certificate must receive and log ground training from an authorized instructor, or complete a home-study course, on the aeronautical knowledge areas of paragraph (b) of this section that apply to the aircraft category and class rating sought.

(b) Aeronautical knowledge areas.

1. Applicable Federal Aviation Regulations of this chapter that relate to commercial pilot privileges, limitations, and flight operations;
2. Accident reporting requirements of the National Transportation Safety Board;
3. Basic aerodynamics and the principles of flight;
4. Meteorology to include recognition of critical weather situations, windshear recognition and avoidance, and the use of aeronautical weather reports and forecasts;
5. Safe and efficient operation of aircraft;
6. Weight and balance computations;
7. Use of performance charts;
8. Significance and effects of exceeding aircraft performance limitations;
9. Use of aeronautical charts and a magnetic compass for pilotage and dead reckoning;
10. Use of air navigation facilities;
11. Aeronautical decision making and judgment;
12. Principles and functions of aircraft systems;
13. Maneuvers, procedures, and emergency operations appropriate to the aircraft;
14. Night and high-altitude operations;
15. Procedures for operating within the National Airspace System; and
16. Procedures for flight and ground training for lighter-than-air ratings.

Additional Student Learning Outcomes that meet SUNY General Education Requirements:

Does this course meet a SUNY General Education requirement(s)? Yes No

Topical Outline: See Student Learning Outcomes above.

Signatures and Dates:

Discipline Director: Richard J. Rupprecht

Date: 08/25/09

Assistant Dean: *Jean Schuader*

Date: 11/30/2009

Academic Affairs: CR

Date: 11/30/2009

Effective Date: Fall 2009