

Course discipline/number/title: AVIA 2200: Commercial Pilot Ground**A. CATALOG DESCRIPTION**

1. **Credits:** 3
2. **Hours/Week:** 3
3. **Prerequisites (Course discipline/number):** AVIA 1310
4. **Other requirements:** Requires completion of prerequisite program courses with a C or better.
5. **MnTC Goals (if any):** NA

B. COURSE DESCRIPTION: Advanced commercial rating ground school course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical test and the Commercial Pilot written examinations. Includes commercial pilot Federal Aviation Regulations, advanced meteorology, advanced airplane systems, advanced radio navigation, physiology of flight, advanced weather, flight planning and commercial maneuvers. Requires completion of prerequisite program courses with a C or better.**C. DATE LAST REVISED (Month, year):** November, 2022**D. OUTLINE OF MAJOR CONTENT AREAS:**

1. Cross country and night procedures, building cross country experience,
2. Sectional charts
3. Radio navigation and flight instruments,
4. Airspace, weather minimums
5. Sources of weather information,
 - a) Surface observation reports
 - b) Forecasts
 - c) Inflight weather advisories
 - d) Inflight weather broadcasts
6. Weight and balance principles, aircraft loading
7. Aerodynamics,
 - a) Stability
 - b) Turns
 - c) Load factor
 - d) Aerodynamic hazards
 - e) Steep turns
 - f) Steep spirals
 - g) Chandelles
 - h) Lazy eights
 - i) Eights on pylons
8. Aircraft performance
9. Flight operations, Federal Aviation Regulations

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

1. Demonstrate cross-country planning, sectional charts, radio navigation, flight instrument and airspace related to commercial flight operations.
2. Calculate weather minimums, weather, weight and balance, aerodynamics associated with commercial flight regulations.
3. Demonstrate commercial flight maneuvers, aircraft performance and flight operations in accordance with Federal Aviation Regulations.

F. LEARNING OUTCOMES (MNTC): NA**G. METHODS FOR EVALUATION OF STUDENT LEARNING:** Methods may include but are not limited to:

1. Quizzes
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