

ROCHESTER COMMON COURSE OUTLINE

Course discipline/number/title: AVIA 2110: Aviation Safety

- **CATALOG DESCRIPTION**
 - 1. Credits: 3 2. Hours/Week: 3
 - 3. Prerequisites (Course discipline/number): None
 - 4. Other requirements: None 5. MnTC Goals (if any): NA
- В. COURSE DESCRIPTION: This course provides students with an overview of factors related to the safe and efficient operation of aircraft. Pilot performance, aircraft design, environmental factors, and the operating environment will be examined as they relate to accident cause and prevention. The student will learn how to analyze and mitigate risk through the use of a safety management system.
- C. DATE LAST REVISED (Month, year): November, 2022
- **OUTLINE OF MAJOR CONTENT AREAS:** D.
 - 1. Safety concepts and statistics
 - 2. Study of the National Transportation Safety Board and aviation related reports
 - 3. Federal Aviation Administration Regulatory and Rulemaking Actions
 - 4. Aircraft accident reports and application of operation practices
 - 5. Principles and merits of aviation safety
 - 6. Accident investigation methodologies
- E. **LEARNING OUTCOMES (GENERAL):** The student will be able to:
 - 1. Recognize and mitigate risk and hazards associated with flight scenarios.
 - 2. Identify probable causes of selected aircraft accidents from NTSB reports.
 - Describe NTSB accident investigation procedures and objectives.
 - Understand how the FAA creates rules and how/why they are put into place.
 - Make quick, educated decisions when provided a scenario and be able to defend their decision with information based on class content and enhanced Aeronautical Decision-Making skills.
- F. **LEARNING OUTCOMES (MNTC): NA**
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
 - 1. Quizzes
 - 2. Exams
- RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Н. Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- I. SPECIAL INFORMATION (if any): None

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