

**Northland Community and Technical College**  
**AVIA 2033 Aircraft Instruments**

**COURSE SYLLABUS**  
**FALL 2024 (AUGUST 26- AUGUST 29)**

**INSTRUCTOR:** Jeffery Krein  
**OFFICE:** Room 11  
**Office Hours:** Friday 8:00 am – 12:00 pm

**PHONE:** 1-800-952-8816  
**WORK:** (218) 683-8816  
**CELL:** (701) 866-3508

**Class Schedule:** Monday Thru Thursday- 12:30 PM to 4:20 PM

**COURSE DESCRIPTION**

This course will familiarize the student with the identification and operation of aircraft flight instruments. Also covered will be the inspection, checking, troubleshooting, servicing and repair of aircraft flight instrument systems.

**ORGANIZATION**

This is a lecture-lab course in which topics are presented by the instructor, concepts are explained, and assigned worksheets are completed by students both during class periods and outside of class. LAB projects are completed in class to reinforce learning objectives. End of block exams are given for each functional area covered along with a final exam. Students are also graded on projects throughout the course after concepts are taught and demonstrated.

**COURSE OBJECTIVES**

1. Inspect, check, service, troubleshoot and repair electronic flight instruments systems and both mechanical and electrical heading, (Federal Aviation Administration Level-1)
2. Inspect, check, service, troubleshoot and repair speed, altitude, temperature, pressure and position indicating systems to include the use of built in test equipment. (FAA Level 1)
3. Install instruments and perform a static pressure leak test. (FAA Level-2)
4. (ILO 4) Demonstrate the proper skills used when maintaining, inspecting and repairing aircraft instrument systems.

**TEXT AND REQUIRED SUPPLIES**

1. *A & P Mechanics Airframe Handbook Volume 1 & 2 FAA-H-8083-31/-ATB*
2. *AC 43.13 IB/2B Acceptable Methods, Techniques, and Practices*
3. *A & P Technician FAR AMT Federal Aviation Regulations for aviation maintenance technicians.*
4. *Standard Aviation Maintenance Handbook.*

**GRADING PLAN**

93-100% or 930-1000 points A  
85-92% or 850-929 points B  
77-84% or 770-849 points C  
70-76% or 700-769 points D  
Below 70% or 700 points F (course must be retaken)

***Coursework will be weighted as follows:***

1. Final Exams 30% or 300 points
2. Tests 20% or 200 points
3. Quizzes 15% or 150 points
4. Projects 35% or 350 points

# Northland Community and Technical College

## AVIA 2033 Aircraft Instruments

### ATTENDANCE POLICY

This is a mandated FAA Part 147 course in the General Airframe and Power Plant Program. Unlike regular college classes, students are required to meet the total hourly requirement for all part 147 classes! This means ***you must do make up time for every absence***. As per FAA regulations, students are allowed to miss a maximum of 10% of the course before they are considered incomplete. **Bottom line: Do Not Miss Class at all if you can help it!**

The make-up process for when you do miss class is:

1. **You** must go to the front office and get a make-up form.
2. **You** must get with your instructor for the make-up assignment and attend the scheduled make-up session with the assigned instructor. ***Aviation make-up sessions are scheduled every Friday from 8:00 AM to 12:00 PM***
3. **You** must get the make-up instructor to sign off your form when you complete the make-up session.
4. **You** must return the make-up form to your primary instructor for the class you missed so it will be filed in your records for FAA accountability purposes.

All make-up work must be complete before the last week of the semester you are in! Instructors are extremely busy during the last week with finals, grades, etc. and do not have time to address make-up time issues. Think of your time at Northland as your first job! Don't let little things become big things. If you are having problems, issues at home, whatever, please talk to your instructor so we can get you the help you need. We can't fix anything we don't know about.