

Northland Community & Technical College
AVIA 1021 Aviation Math

Course Syllabus

Fall Semester 2024 (August 26th – December 19th)

INSTRUCTOR: Aaron Couturier

OFFICE: Room 19

OFFICE HOURS: Monday – Thursday, 4:45 PM to 5:45 PM

OFFICE NUMBER: (218)-683-8873

EMAIL: aaron.couturier@northlandcollege.edu

CLASS SCHEDULE: August 26th (Monday) – August 29th (Thursday), 12:30 PM to 4:30 PM

COURSE DESCRIPTION

This course will introduce and/or reinforce the principles of applied mathematical functions such as signed numbers, roots, exponents, simple equations, geometry, and algebra as applicable to aviation maintenance technicians.

ORGANIZATION

This is a 1-credit course with 16 hours of lecture. Absences in excess of 1 hour will be marked as an incomplete – see Attendance Policy. Topics will be introduced and expounded upon by the instructor during lecture. Completion of all assigned readings and worksheets before the next class meeting will aid in class participation and the learning process. Assigned worksheets will be assessed as projects for this course. There will also be a minimum of 3 quizzes and a final exam to assess student learning – see Weighted Grading Scale. Quizzes will be based on assigned readings and worksheets and the final exam will encompass everything covered in the class.

STUDENT OUTCOMES

The student will be able to extract roots, raise numbers to a given power, determine areas of various geometric shapes, determine volumes of various geometric shapes, compute ratios, compute proportions, compute percentages, and perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers.

REQUIRED MATERIALS

Airframe & Powerplant Mechanics General Handbook FAA-H-8083-30B-ATB
Aviation Maintenance Technician Reference Handbook

WEIGHTED GRADING SCALE

A = 930 – 1,000 points (93% to 100%)

B = 850 – 929 points (85% to 92.9%)

C = 770 – 849 points (77% to 84.9%)

D = 700 – 769 points (70% to 76.9%)

F = 0 – 699 points (0% to 69.9%)

I = Incomplete

An “Incomplete” will be assigned if 1.) any course work is not completed, 2.) any missing time is not made-up (see attendance policy), or 3.) total absence time for a course exceeds 10% of course total time (see attendance policy).

Final Exam = 300 points (30%)

Projects = 350 points (35%)

Tests = 200 points (20%)

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Quizzes = 150 points (15%)

ATTENDANCE POLICY

The Federal Aviation Administration (FAA) requires that class attendance be recorded and, if requested, reported to the FAA Administrator who oversees the Aviation Maintenance Technology (AMT) program at Northland Community & Technical College (NCTC) as per the Federal Aviation Regulations (FAR) under Title 14 of the Code of Federal Regulations (CFR) Part 147. Attendance will be taken at the beginning of class and at the end of class for that day. Records are kept in sixty minutes (one hour) increments; id est (i.e.), all tardies are rounded up to the nearest hour. Exempli gratia (e.g.), five minutes late for class is one hour tardy for that class and forty-five minutes absent is one hour as well. Also, the total amount of absent time for a particular course cannot exceed ten percent of that course's total time; i.e., if a course is scheduled for sixteen hours total then no more than one hour can be missed before an "incomplete" is assigned. Additionally, all absent time must be "made-up" no later than thirty school days in the following semester by following the procedure outlined below.

- 1.) Acquire a make-up form from the front office.
- 2.) Schedule a make-up session and assignment(s) with the instructor of the course from which the time is missed.
- 3.) The instructor must sign the make-up form when complete.
- 4.) Keep one copy for yourself (retain this copy for a minimum of two years after graduation or termination of enrollment), submit one copy to the instructor of the course, and deliver one copy to the front office. Instructions are printed on the make-up form.

Any student having missed time in excess of ten percent of total course time due to unforeseen circumstances may appeal the ten percent rule by following the NCTC appeal process. If there are unforeseen circumstances speak with the instructor of your course as soon as possible, as there are fewer options later in the semester to alleviate the situation.