



Syllabus

Aerospace Manufacturing & Maintenance Technology

INSTRUCTOR INFORMATION

- Instructor Name: Kareen Morales Vincent
- Office Hours: 7:45 AM – 2:30 PM
- Office Location: Building 3 Room 311
- Phone: 425-348-2245
- Email: VincentKM@mukilteo.wednet.edu
- Best Way to Contact instructor: Email and office phone.

COURSE INFORMATION

- No Prerequisites
- High school credits: 3
- Equivalency Credit: English 1.0, Science 1.0, 3rd Year Math 1.0
- Dual Credits: AVA 101, 20 Credits upon completion and 20 additional credits upon successfully passing the course challenge exam at EvCC (Aviation) with a minimum of 85% grade. Total 40 credits.
- Session Times:
 - AM Class: 7:55AM – 10:25 AM Monday - Friday
 - PM Class 11:10AM – 1:40 PM Monday - Friday

COURSE MATERIALS

- Core Plus Curriculum
- Support Materials: FAA-8083-30A General Handbook, Jeppesen General Handbook, Prepware General test bank of questions.
- Required Materials:
 - Mechanic's Gloves (can be obtained from Home Depot or Lowes) – 1 pair each semester
 - Earplugs (Earmuffs are preferred, they are more durable)
 - Scientific Calculator (Basic one)
 - 3" Binder
 - Composition book (black cover)
 - At least 5 Sharpies (Black)
 - Cover-all for mechanics (optional)
- Other Resources: Download Prepware (General) on smart phone/laptop
- Lab Fee (if applicable): None

COURSE EXPECTATIONS

This course involves a 50/50 participation of class and shop/tech prep. Students will learn theory and practical sections of the course that will cover the understanding of the aircraft manufacturing, maintenance, operations as well as systems. The class is to prepare students for both the workforce as well as college in the aviation/aerospace sector. Students who successfully complete the program will be eligible for employment at Boeing, ATS and various other aerospace related manufacturing jobs as well as potentially earning 20-40 college credits at Everett Community College in the Aviation Maintenance Technology program. Additionally, students can earn high school equivalency credit for Math, Science, and English pending counselor approval. This is a one to two-year program. Only those students who qualify in the first year will be invited to participate in the second year. To qualify for the second year, students must score at least 85% on all class exams and score in the "satisfactory" level in shop projects. Students must also demonstrate good attitude and behavior as well as leadership in order to be invited for the second year. The invitation may be revoked any time a student's behavior warrants such action.

LEARNING OBJECTIVES

- Learning Objectives: Aircraft Maintenance and Manufacturing
- Certificate Opportunities Core Plus Certificate (Boeing), EvCC Aviation 40 credits

ASSIGNMENTS AND GRADING

Assessment Criteria and Grading Policies

To earn 20-40 credits for the Aviation Maintenance Technician at EvCC, students are required to:

- Complete 540 hours minimum at Sno Isle TECH.
- Complete all General related subjects (practical and theory) at a minimum of 85% score in all the tests, exams, and quizzes.
- To retake a test, students must obtain and complete a review assignment from the instructor within 10 days after the first test. The minimum passing grade for re-taken test is 85%.
- There will be a comprehensive final at the end of each quarter for subjects that have been covered thus far.
- Grades will be calculated as follows:
 - A 95% - 100%
 - A- 90%-94%
 - B 85% - 90%
 - B- 80%-84%
 - C 75% - 80% (77% is passing grade for EvCC)
 - C- 71% - 74%
 - D+ 65% - 70% (Not Eligible for EvCC College Credit)
 - D 60% - 66%

Make-up or Late Work

- All missed work and hours due to absence must be completed to earn full credit and college credits.
Note: Students must complete 540 hours to fulfill 40 EvCC credits.

Grading communication

- Students/parents will have access to the gradebook on Qmlative. This portion will be covered during orientation in fall 2020. Students will also be given a checklist of steps to share with parents showing how to sign into Qmlative to view the grades. Grades will be updated every 15th and 30th day of the month.

CLASSROOM/SHOP RULES OF CONDUCT

- No radios/music are allowed in class unless operated only with headphones and only during assignments, test/exam, or quizzes.
- Food and beverages are permitted in the classroom; however, failure to clean after yourself will result in being barred for the rest of the semester. This includes plates, food, drinks, candy, snacks etc., whether opened or not.
- Shop time is expected to be spent in shop work. Shop time is not free time.
- Work at home will be required in addition to work during shop times (work at home should not substitute for work during shop periods).
- The maximum volume for shop stereo is 20.
- All books, tools and resources must be returned to the place they were taken from.
- Shop/Class cleanup must be at least 10 minutes before your dismissal time.
- Any use of tools outside the shop requirements are prohibited. Use the tools for the purpose of what they are made to be used for. Tools are not toys!
- The use of bathroom is unlimited; however, it becomes obvious when students leave classroom far too many times.
- Use of classroom computers are allowed with permission from the instructor.
- Use of any machinery is not permitted without the permission of the instructor.
- The use of driving the tug, is not permitted without the permission from the instructor.
- Use of any school or instructor property is not permitted without the permission of the instructor. Ever.
- Students are required to complete safety instruction and successfully pass the evaluation before using any machinery or tools in the shop, classroom, and the hanger.
- Students cannot leave the classroom, shop, or the vicinity of hanger without permission of the instructor. Students must obtain a hall pass before leaving the class for any business with other classes, shop, or admin office.
- Aerospace class students are not permitted to purchase any snacks from the culinary class cafeteria in Building 1. Plan ahead to bring your own food/snacks.
- All students will wear their personal protective equipment at all times in the shop, when crossing the yellow caution line in the shop or any other shop in the campus.
- Each student will wear his or her badge as required by the FAA and EvCC.
- Students will ensure they sign in on arrival and sign out when they depart.
- Students must depart at the designated time of departure as scheduled by their sending school. The times will be issued to students at the beginning of class. Students who leave early will be marked truant.
- Students are not permitted to drive to Sno Isle TECH unless special arrangements have been made through parents, sending school and the administration of Sno Isle TECH.

EMERGENCY PROCEDURES

- In case of emergency, injury, or any other concern, immediately notify the instructor. In presence of a sub-teacher, inform the sub-teacher.
- Evacuation procedures -- see instructions posted in the classroom and shop.
- First aid kit is located in the front of the classroom door under the coffee table.
- Contact the main office phone in absence of teacher or sub-teacher. In such situation, any of the classroom executive members may walk/run to the front office to notify the admin of any emergency.

Course Calendar

Theory	Practical/Shop/Technical Prep
Fall (1st quarter)	
Mathematics	Calculation of Fasteners, thickness and measurements
Physics (Includes Theory of Flight)	Aircraft Nomenclature – Identifying of Parts. Piper Apache
Aircraft Drawings	Assemble an aircraft part, fabricate and repair a damage part
Materials and Processes	Identify aircraft hardware and their materials
Sheet Metal	Fabricate aircraft parts using sheet metal
Winter (2nd Quarter)	
Basic Electricity – Theory	Basic Electricity – Soldering – Magneto Buzz box
Fluid Lines and Fittings – Theory	Fabricate tubes
Weight & Balance – Theory	Jack, De-jack and weight Piper Apache aircraft
Cleaning and Corrosion – Theory	Inspect and repair corroded parts. Piper Apache
Aircraft Sealant – Theory	Fabricate a composite part, inspect and repair
Aircraft Sealant – Theory	Aircraft Sealant, body and joints
Spring (3rd and 4th Quarter)	
	Fabricate aircraft parts using sheet metal
Aircraft Power Plant – Theory	Power Plant – Practical (Open/Overhaul Engine Cylinders)
Maintenance Forms & Records (Aviation Regulations)	Search for ADs ACc and Bulletins
Mechanic Privileges & Limitations (Aviation Regulations)	Search Federal Aviation Regulations
Ground Operations & Servicing - Theory	Ground Operations and Servicing. Piper Apache
TBD – EvCC Final Course Challenge Exam at Sno Isle Tech	
TBD – EvCC Final Course Challenge Exam (40 credits).	

Mukilteo School District does not discriminate in any programs or activities on the basis of sex, race, creed, religion, color, national origin, age, veteran or military status, sexual orientation, gender expression or identity, disability, or the use of trained dog guide or service animal and provides equal access to the Boy Scouts and other designated youth groups. The following employees have been designated to handle questions and complaints of alleged discrimination: Civil Rights Coordinator and Title IX Coordinator Bruce Hobert (425-356-1319), hobertbl@mukilteo.wednet.edu, Section 504 Coordinator Lisa Pitsch (425-356-1277), pitschla@mukilteo.wednet.edu, and the ADA/Access Coordinator Karen Mooseker (425-356-1330), moosekerkw@mukilteo.wednet.edu. Address: 9401 Sharon Drive in Everett, WA. Inquiries regarding ADA/Access issues at Sno-Isle TECH Skills Center should be directed to Wes Allen, Director (425-348-2220) allenwr@mukilteo.wednet.edu. Address: 9001 Airport Road in Everett, WA 98204