Generals I

AMTT - 1120 001

Lecture/Lab

Course Description

Theory and practical application of maintenance forms & records, publications, fluid lines & fittings, mechanic privileges & limitations, cleaning & corrosion control, weight & balance and aircraft drawing.
Designed to provide students with training in basic mathematical applications to provide math skills necessary to solve job related problems. Review of basic math, algebra and geometry.

Recommended Prerequisite: Completion of Math 0980 C- or higher, or placement higher than Math 0990.

Corequisite: AMTT 1140

Semester: Fall & Spring

Course Student Learning Outcomes

- Students will demonstrate proficiency in theories, principles, and concepts of maintenance forms & records and mechanic privileges & limitations to ensure students understand the minimum requirements outlined by the regulatory guidance.
- Students will demonstrate proficiency in theories, principles, and concepts of maintenance publications to ensure students are able to use and navigate within the manufacturer's documentation, such as Aircraft Maintenance Manuals, Illustrated parts catalogs, and other service documents.

- Students will demonstrate proficiency in theories, principles, and concepts of fluid lines & fittings to ensure students are able to calculate, fabricate, inspect, and properly install aircraft plumbing.
- Students will demonstrate proficiency in theories, principles, and concepts of cleaning & corrosion control and understand how to identify, prep, clean, and prevent corrosion.
- Students will demonstrate proficiency in theories, principles, and concepts of weight & balance to ensure the safety of the aircraft and proper center of gravity limits.
- Students will demonstrate proficiency in theories, principles, and concepts of aircraft drawing and drawing fundamentals.
- Students will demonstrate proficiency in theories, principles, and concepts of aviation math and formulae computations.

ACTIVE

Course Prerequisites

None.

Transfer/Certification/Licensure/Employment Information

Students may enter the course with Airframe Certification/Licensure and will be pursuing their Powerplant Certification/Licensure.

Engagement Plan

- I will respond to email within 2-3 days or less. I will offer feedback on major assignments within 5-7 business days or less. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Keys for Success (how to succeed in the course)

1. **Master the Fundamentals:**
   Understanding basic powerplant principles is crucial for tackling advanced aviation

systems.

2. **Commit to Hands-On Practice while Developing Attention to Detail:**
   Fully engage in labs and hands-on training to build experience with tools, systems, and equipment. Precision and accuracy are critical, practice attention to detail in inspections, repairs, and documentation ensure safety and compliance.
3. **Stay Organized, Study Consistently, Prepare for Exams and Certifications:**
   Keep track of assignments, projects, and deadlines. Consistent study habits reinforce technical concepts and reduce cramming. Focus on subject final exam preparation, this equates with higher scores on Powerplant written exams.
4. **Ask Questions and Seek Help:**
   Don't hesitate to ask for clarification, seeking understanding early on prevents confusion later.
5. **Understand Regulations and Compliance:**
   Familiarize yourself with FAA regulations, industry standards, rules governing aviation safety and maintenance.

Required Text or Materials

Title: Introduction to Aircraft Maintenance
ISBN: 9781933189260
Publication Date: 2012-04-01

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Title: A and P technician general test guide with oral and practical study guide
ISBN: 9780884873730
Publication Date: 2004-01-01

Title: Aviation Mechanic Handbook
ISBN: 9781644252277
Authors: Dale Crane
Publication Date: 2022-01-01

Title: Aircraft Inspection, Repair and Alterations (2025)
ISBN: 9781644255247
Authors: Federal Aviation Administration (FAA), U.S. Department of Transportation
Publication Date: 2025-05-06

Title: Far-Amt 2022
ISBN: 9781644251034
Authors: Federal Aviation Administration (FAA)/Aviation Supplies & Academics (Asa)
Publication Date: 2021-07-30

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Additional Materials

Will be required to purchase Drawing supplies.

Brief Description of Assignments/Exams

1. Assignments:

- Written Assignments: Written workbooks based off Avotek Systems and Hydraulics textbooks and are assigned on Canvas; including occasional paper assignments.
- Lab requirement: Fulfill the lab tasks to an acceptable skill level (industry-standard entry-level). Lab grades will consist of skill, group participation, work ethic, clean-up habits, and completion percentage score of lab tasks.

2. Exams:

- Quizzes: Multiple-choice, short-answer, and essay questions designed to test theoretical knowledge of subjects like reciprocating engine operation and proper maintenance, reciprocating engine inspection and documentation, concepts of propellers and proper maintenance techniques.
- Subject Finals: Multiple-choice, short-answer, and essay questions designed to test theoretical knowledge of subjects including; concepts of reciprocating engines & operation principles and proper maintenance techniques, concepts of reciprocating engine inspection and documentation, concepts of propellers and proper maintenance techniques.
- Exam requirements: Student need a 70% passing percentage per each final exam to meet FAA requirements; students can retake any test not scored above 70% BUT WILL ONLY receive a minimum passing grade.
    - Preparation: Study criteria are from lecture notes, assignments, and tests posted on Canvas, course textbooks, workbooks, and any handouts from the instructor.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	AOPA Autographng a Lie	Assignment	0

Due Date	Assignment Name	Assignment Type	Points
	Maintenance Publications and Regulations Final Exam	Quiz	0
	SLCC Provided Electronic Textbooks	Assignment	0
8/29/25	Drawing Quiz 1	Quiz	11
9/2/25	Decimal Conversions Pop Quiz	Assignment	0
9/3/25	Drawing Final '25	Quiz	40
9/3/25	ACS Drawing Lab 2	Assignment	100
9/3/25	ACS Drawing Lab 1	Assignment	60
9/3/25	ACS Drawing Lab 3	Assignment	100
9/3/25	ACS Drawing Lab 4	Assignment	60
9/3/25	Ch 2 Blueprints & Drawings Workbook	Assignment	70
9/4/25	Survey Test	Quiz	0
9/8/25	ACS Corrosion Lab 2	Assignment	30
9/9/25	Math Final '25	Quiz	32
9/9/25	ACS Math Lab Worksheet	Assignment	60
9/9/25	Ch 1 General Mathematics Workbook A	Assignment	50
9/9/25	Ch 1 General Mathematics Workbook B	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
9/9/25	Ch 1 General Mathematics Workbook C	Assignment	50
9/12/25	Corrosion and Cleaning Quiz	Quiz	10
9/15/25	Corrosion & Cleaning Final Exam F'25	Quiz	45
9/15/25	ACS Corrosion Lab 1	Assignment	30
9/15/25	Ch 7 Corrosion & Cleaning Workbook	Assignment	70
9/18/25	Weight and Balance Pop Quiz	Quiz	8
9/22/25	ACS Wt. and Bal. Lab1	Assignment	30
9/24/25	ACS Wt. and Bal. Lab 2	Assignment	50
9/24/25	Ch 5 Aircraft Weight & Balance Worksheet	Assignment	71.5
9/25/25	Weight & Balance Final F'25	Quiz	30
9/29/25	Maintenance Forms and Records Quiz	Quiz	10
9/30/25	ACS- Forms & Records Lab 1	Assignment	40
10/1/25	Maintenance Forms and Records Final Exam	Quiz	21

Due Date	Assignment Name	Assignment Type	Points
10/1/25	Ch 14 Maintenance Documentation Workbook A	Assignment	25
10/1/25	ACS- Forms & Records Lab 2	Assignment	20
10/6/25	Maintenance Publications and Regulations Quiz	Quiz	10
10/7/25	Maintenance Publications & Regulations Final (F25)	Quiz	20
10/7/25	ACS- Pubs & Regs Lab 3	Assignment	50
10/7/25	Ch 14 Maintenance Documentation Workbook B & C	Assignment	38
10/7/25	NON ACS Lab 2	Assignment	40
10/8/25	Mech Priv Final Review	Quiz	0
10/9/25	Mechanics Privileges & Limitations Final Exam (F25)	Quiz	20
10/9/25	Ch 15 Mechanics Privileges Workbook A & B	Assignment	61
10/9/25	NON ACS Mechanics Privileges Lab1	Assignment	25

Due Date	Assignment Name	Assignment Type	Points
10/13/25	Phase Quiz Fluid Lines and Fittings	Quiz	8
10/13/25	Ch 8 Fluid Lines & Fittings Workbook	Assignment	75
10/14/25	ACS Fluid Lines and Fittings Lab 1	Assignment	80
10/15/25	Fluid Lines and Fittings Final Exam (F25)	Quiz	20

Grading Scale

Grading Scale and Policy:

Each area/subject must be passed with a 70% or higher to meet the program requirements. Students not meeting this minimum will be required to repeat the subject area. The final grade will be influenced by a student's attitude, use of time, attendance and safety practices and grades received in class and lab environments. (Note: if you fail a subject area lab or lecture it is the student's responsibility to consult with your instructor on how to make up the failed area). All subject area assignments, quizzes and labs MUST be completed by the end of the course no exceptions.

Grading Scale:

100-97 = A	89-86 = B	77-74 = C	65-63 = D
96-94 = A-	85-82 = B-	73-70 = C-	61-58 = D-
93-90 = B+	81-78 = C+	69-66 = D+	57 & ↓ =E

*Missing assignment = I

*Cut off for passing is 70% (C-)

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the Institutional Syllabus page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the Institutional Syllabus page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the Institutional Syllabus page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar