

AMTT 2440 Powerplant III - Turbine Engines

Instructor:

Office Phone:

Email Address:



Online Course Materials: Canvas

Textbooks:

- AVOTEC: Volume 4: Aircraft Powerplant Maintenance. ISBN: 1-933189-12-6
- AVOTEC: Volume 4: Aircraft Powerplant Maintenance. (WB) ISBN: 1-933189-13-4
- Jeppesen A&P Test Guide
- Standard Aviation Maintenance Handbook
- FAR Handbook for Aviation Maintenance Technicians
- AC-43.13-1B/2A W/Change 1

Required Equipment: Basic hand tools, safety glasses, and hearing protection.

Course Description: This course is designed to teach students the theories, principles, and concepts of turbine engines, unducted fans, auxiliary powerplants, engine fire protection systems, turbine ignition & starting systems, turbine engine fuel & fuel metering systems, turbine engine air systems, turbine exhaust & reverser systems, and turbine engine inspection.

AMTT Prerequisite: AMTT 1120, AMTT 1140, AMTT 2340, AMTT 2420 and Math 1010.

GenEd Prerequisite: ENG 1010 or COMM 1010 or LE 1220 or Distribution Area (with concurrency).

Course Goals & Learning Objectives:

- Students will demonstrate proficiency in theories, principles, and concepts of turbine engines/ducted fans and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of auxiliary powerplants and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of engine fire protection systems and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of turbine ignition & starting systems and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of turbine engine fuel & fuel metering systems and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of turbine engine air systems and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of turbine exhaust & reverser systems and proper maintenance techniques.
- Students will demonstrate proficiency in theories, principles, and concepts of turbine engine inspection and proper maintenance techniques and documentation.

Course Requirements

- **EXAMS:** 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.
- **Maintain personal maintenance logbook** to track on the job training (OJT).
- **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.
- **Attendance and participation:** Students missing 15 hours of class (lab or lecture) time per course will receive a drop in letter grade. Students missing 18 hours of class (lab or lecture) instruction per course will be required to retake that course.

Morning Class Schedule

Afternoon Class Schedule

7:00 – 7:50 am	Lecture/Lab	2:30-3:20 pm	Lecture/Lab
8:00 – 8:50 am	Lecture/Lab	3:30-4:20 pm	Lecture/Lab
9:00 – 9:50 am	Lecture/Lab	4:30-5:20 pm	Lecture/Lab
10:00 –10 :50 am	Lecture/Lab	5:20-6:00 pm	Lunch
10:50 – 11:30 am	Lunch	6:00-6:50 pm	Lecture/Lab
11:30 – 12:20 pm	Lecture/Lab	7:00-7:50 pm	Lecture/Lab
12:30 – 1:20 p.m.	Lecture/Lab/End	8:00 -8:50 pm	Lecture/Lab/End

Registration: Any student who **does not register** for class within the first week of class will not be allowed to continue the course. (Note: you will not have access to canvas if you are not registered.)

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.**

Time Clock: Each Student must clock in at the beginning of class and at the end of class using classroom time clock. During anytime your timesheet is audited and you are missing a clock in or out times you may be marked as a full day missed.

Testing: If a student misses a scheduled test day, the student must consult with the instructor in person or by email. This test must be made up the following school day to receive full credit; if these requirements are not fulfilled, it will result in an incomplete. Final testing will occur in Canvas, and the log will be reviewed for cheating. If the log shows that the student has left the final/test/quiz more than five times, the final/test/quiz will result in a zero grade.

Assignments: All lab assignments will be submitted in canvas. Printed assignments and emailed assignments **WILL NOT** be accepted unless you are given permission by your instructor.

Late Work: All work not turned in on time or completed on time will result in a 10% deduction per day for that assignment.

Incomplete Policy: All assignments and tests for class time and lab will be turned into the instructor. Any assignments not turned in will result in an incomplete.

Extra Credit: Make up credit is at the discretion of the instructor.

**Attached is a calendar that includes test days, due dates for major assignments, etc.*

Grading Scale:

100-97=A 96-94=A- 93-90=B+ 89-86=B 85-82=B- 81-78=C+ 77-74=C 73-70=C-

69-66=D+ 65-63=D 61-58=D- 57 and lower =E missing assignment=I

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

DRC STATEMENT

SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you have a disability and believe you need accommodations to improve access to learning materials or the learning environment, please contact the Disability Resource Center: Phone: 801-957-4659; Email: drc@slcc.edu; DRC Website.

CODE OF STUDENT RIGHTS AND RESPONSIBILITIES STATEMENT

The student is expected to follow the SLCC Code of Student Rights and Responsibilities.

GENERAL EDUCATION STATEMENT (IF APPLICABLE)

This course fulfills the [category] requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning. General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

TITLE IX STATEMENT FOR SLCC FACULTY

Title IX of the Educational Amendments of 1972 prohibits discrimination based on sex in any educational institution that receives federal funding. Salt Lake Community College does not tolerate sex discrimination of any kind including: sexual misconduct; sexual harassment; relationship/sexual violence and stalking. These incidents may interfere with or limit an individual's ability to benefit from or participate in the College's educational programs or activities. If you have questions or concerns regarding your rights or responsibilities, or if you would like to file a Title IX complaint please contact:

David E. Jensen, J.D.
Director EEO/Title IX
Taylorsville Redwood Campus
Academic Administration Building, Room 201D
4600 So. Redwood Road, SLC UT 84123
801-957-4561
david.jensen@slcc.edu

Online Reporting Form:

- <https://www.slcc.edu/title-ix/complaint.aspx>

Students may also report incidents to an SLCC faculty or staff member, who are required by law to notify the Title IX Coordinator. If a student wishes to keep the information confidential, the student may speak with staff members of the Center for Health and Counseling, (801) 957-4268.

For more information about Title IX

- <https://www.slcc.edu/title-ix/index.aspx>

IMPORTANT INFORMATION FOR STUDENTS**Important Dates**

Dates you will want to pay particular attention to:

- Last Day to Add
- Last day to drop with 100% refund
- Last Day to Withdraw (with no refunds). Having a conversation with students and their progress may be helpful as this date approaches. A student may want to withdraw from your course rather than receive an E in your course if it appears the student will not pass.
- Holidays when classes are not in session.
- Last day of class

General Education

Regardless of your major, General Education courses build a foundation of broad knowledge and skills that help you in your further career and life.

General Learning support & Tutoring Services

General Learning Support & Tutoring Services provide support for SLCC students enrolled in any class at the College. All resources are provided free-of-charge. Ask your instructor about discipline-specific learning support and tutoring services.

- Tutoring: index of all tutoring resources.
- STEM Learning Centers: provide free assistance in Math, Science, Accounting, CSIS and Allied Health Classes at 6 campus locations.
- Student Writing Center: provides in-person and online feedback on all writing assignments.
- Library Services: provides research help, print and online resources, computers and study space.
- ePortfolio Lab: provides drop-in assistance for all ePortfolio questions.
- eLearning Support: provides support for navigating online and hybrid classes.
- Business Resource and Innovation Center: provides tutors and a study space for students in Business and CSIS courses. Located in BB 226 on Taylorsville-Redwood Campus.

Advising and Counseling Support Services

Advising and Counseling Support Services provide support for students enrolled in any class at the college.

- Center for Health and Counseling: provides health care, mental health counseling, massage therapy services and healthy lifestyle programs.
- Veterans' Services: assists hundreds of students in using their VA education benefits each semester.
- Academic and Career Advising: helps students plan, explore, make decisions, access resources and evaluate their academic and career goals.
- Academic Achievement Center: helps students achieve GPA requirements for graduation.

ACKNOWLEDGMENT OF UNDERSTANDING

I, _____ have fully read and understand the
print name
requirement of the course syllabus for _____
(course and semester)

STUDENT SIGNATURE _____ *DATE* _____

Sign and turn into Program Coordinator