Instructor: Donald Bartlett
Room: 101 Test Cell
Phone: 453-9212
E MAIL: flyer22@siu.edu
Office hours: Tuesday 1-3  Friday 10-1

Grading Scale:
100 - 90  A
89 - 80  B
79 - 70  C
69 - 60  D
59 and below is a failure

Cell Phones: Students shall ensure that all cell phones are turned off prior to entering the classroom. Alternately, a courtesy mode may be selected so that NO CELL PHONES WILL RING DURING CLASS!

NOTE: AVT-316 or equivalent is a prerequisite for this course. It is expected that each student will have a level of knowledge consistent with the information presented in AVT-316.

Readings/textbooks:
Require: Aircraft Powerplants, 7th ed or 8th ed., Kroes & Wild for reference. Plus additional material To Be Determined TBD
Optional:

Also required:
Each student must have an accurate working timepiece (wristwatch or pocket watch) by which to determine Class times and. Additionally, the ability to use it with complete facility. If you do not have both, DROP THIS CLASS immediately

Absences/tardiness: The following policy will be required for AVT-416
**Attendance is mandatory.** As an FAA certified Airframe and Powerplant Mechanic Training Program, we must abide by the FAA's attendance policy. Instructors are required to take roll each class period. It is the student's responsibility to contact the instructor in advance of absences whenever possible or immediately thereafter to arrange make-up time where appropriate and to obtain hand-outs or other material from classes missed.

Students are expected to be in class and lab on time. Three late arrivals will be counted against the student as one unexcused absence. Unexcused absences or habitual
tardiness will result in a cumulative reduction of the student's final grade point average: First unexcused absence results in a one-point reduction of the final grade (0-100 scale). Second absence results in a two-point reduction. Third absence results in a four-point reduction. Fourth absence results in an eight-point reduction. Fifth absence results in a sixteen-point reduction. After the fifth unexcused absence the cumulative grade reduction would be 31 points, making it impossible to receive a passing grade for the course. Make up time may be granted at the discretion of the instructor. Final determination as to whether or not an absence is "excused" rests with the instructor. Performance of make-up time does not reinstate points lost due to unexcused absences. Any quizzes missed may not be made up. Any tests missed due to an unexcused absence may not be made up.

GRADING/TESTS/QUIZZES:
CALCULATION OF THE FINAL GRADE: The student's final grade will be computed based on the following: Fifty percent of the student's final grade will be the average of three lecture exams given during the course of the semester, each weighted equally. (More detail on the subject of each exam is provided below.) The remaining 50% of the student's grade will be assigned based on mastery of the computer based training (CBT) assigned as lab projects.

NOTE: BRING A NUMBER TWO PENCIL TO ALL EXAMS AND QUIZZES.

NOTE: Only lecture tests missed during an excused absence may be made up for full credit. Tests missed during an unexcused absence may be taken for a maximum score of 70 if mitigating circumstances prevail. All others will receive a zero. All make-up tests must be taken within five school days of the date the test was given, and will be scheduled at the convenience of the instructor. MAKE-UP LECTURE TESTS WILL LIKELY DIFFERENT WITH MORE CONTENT.

LECTURE TOPICS:
Topics of the first portion of the course will be concerned with most advanced technologies incorporated into currently certified aircraft gas turbines: what these are, how they evolved and the driving forces (e.g., political, social, regulatory, etc.) and advances in the enabling technologies (e.g., material sciences, aerodynamics, computers, electronic controls, etc.) We will discuss new, evolving technologies, the superalloys and beyond, composites, noise and pollution emissions, etc. The remainder of the course will be devoted to the results of these advances: applications of new and emergent technologies (e.g., V/STOL powerplants, unsteady flow devices, advanced component design, the UDF, new materials, etc.)

CALCULATION OF THE LAB COMPONENT OF THE FINAL GRADE:
A student's lab grade (50% of the final score) will be the higher of the two scores calculated as follows:

(1) To receive credit for a given lab assignment, the student must achieve a minimum grade of 70% on the corresponding CBT quiz. This constitutes minimum satisfactory mastery of the
assigned material. The student's grade will be determined based upon satisfactory completion of CBT assignments as follows:

- Three quizzes completed with a grade of 70% or better equates to a grade of 60%, a "D".
- Four quizzes completed with a grade of 70% or greater will result in assignment of a score grade of 70% or greater will result in assignment of a score 65%, a "D".
- Five assignments completed with a minimum score of 70% will merit 75%, a "C".
- Six and seven completed assignments correspond to grades of 85% (B) and 95% (A), respectively.

(2) The student's lab grade will be calculated as an average of the percentage scores of all lab quizzes taken during the semester.

**COMPUTER-BASED TRAINING (CBT): Bring a set of headphones or ear buds to lab.**


Week 5 Quiz: PW2000 Modules 3 & 4: Engine Control and Engine Indicating

Week 7 Quiz PW2000 Modules 5, 6, & 7: Power Plant Oil Systems, and Power Plant Air Systems, and Exhaust/Thrust Reverser Systems:


Week 11 Quiz: RR RB211 Modules 3 & 4: Engine Control and Engine Indicating

Week 13 Quiz: RR RB211 Modules 5, 6, & 7: Power Plant Oil Systems, and Power Plant Air Systems, and Exhaust/Thrust Reverser Systems

Week 15 Quiz: Week 16 Quiz: RR RB211 Modules 8, 9, & 10: Normal Engine Start, Non-normal Start, and Engine BITE

Week 16 Quiz: * During week 16, one CBT quiz may be retaken, if necessary, to improve a student's lab grade.

Only one missed lab quiz (the result of an excused absence) may be "made up" or taken for credit. This will be counted as the student's retake and no other lab exam may be taken for credit.

**NOTE:** If a student misses a quiz, and the reason merits excusing this absence, the quiz not taken will be administered during week 16. Only one such quiz can be taken in this way.
NOTE: COURSE CONTENT AND ADMINISTRATION MAY BE SUBJECT TO MODIFICATION DEPENDENT UPON CLASS PROGRESS. It may be necessary to deviate from the policies and schedule set forth in this syllabus. If such occurs, students will be notified of any alteration in course structure, sequencing or administration at a time and date sufficient to allow adjustments.

The Obligatory Emergency Procedure Statement

The university administration requires (faculty to include the following statement in SIUC course syllabi:

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on the BERT website at [www.bert.siu.edu](http://www.bert.siu.edu), Department of Public Safety’s website at [www.dps.siu.edu](http://www.dps.siu.edu) (disaster drop down) and in Emergency Response Guidelines pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to you instructor in evacuating the building or sheltering within the facility.
<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday 5/08</th>
<th>Monday 5/09</th>
<th>Tuesday 5/10</th>
<th>Wednesday 5/11</th>
<th>Thursday 5/12</th>
<th>Friday 5/13</th>
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</thead>
<tbody>
<tr>
<td>8:00-10:00</td>
<td></td>
<td>EHSU Common Exam: 101, 102 and 120H</td>
<td>8:00 or 8:30 on T and/or R</td>
<td>8:00 or 8:30 on M and/or W and/or F</td>
<td>9:00 or 9:35 on T and/or R</td>
<td>9:00 or 9:30 on M and/or W and/or F</td>
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<tr>
<td>10:15-12:15</td>
<td></td>
<td></td>
<td>FIN 330 Common Exam</td>
<td>10:00 or 10:30 on T and/or R</td>
<td>10:00 or 10:30 on M and/or W and/or F</td>
<td>11:00 or 11:30 on T and/or R</td>
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<tr>
<td>12:30-2:30</td>
<td></td>
<td></td>
<td></td>
<td>12:00 or 12:30 on M and/or W and/or F</td>
<td>12:00 or 12:30 on T and/or R</td>
<td>PSYC 102 Common Exam</td>
</tr>
<tr>
<td>2:45-4:45</td>
<td></td>
<td></td>
<td></td>
<td>1:00 or 2:30 on M and/or W and/or F</td>
<td>2:00 or 2:30 on T and/or R</td>
<td>KIN 101 Common Exam</td>
</tr>
<tr>
<td>5:00-7:00</td>
<td></td>
<td></td>
<td></td>
<td>MATH Common Exam: 101, 107, 108, 109, 111, 125, 139, 140, 150, 250, and 282</td>
<td>Monday only after 5:00 but before 7:00</td>
<td>4:00 or 4:30 on T and R</td>
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<td>7:15-9:15</td>
<td></td>
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<td></td>
<td>7:00, 7:30, 8:00, or 8:30 on M and W, M and F, or W and F</td>
<td>Monday only after 7:00</td>
<td>7:00, 7:30, 8:00, or 8:30 on T and R</td>
</tr>
</tbody>
</table>
The Spring 2016 final exam schedule attempts to avoid conflicts and keep exam times during their normal semester class meeting day(s) and period, while providing preparation time to be used for study-sessions. Other information about Spring 2016 final exams is listed below (and is current as of Dec. 3, 2015):

1. The class final exam period is based on the meeting pattern listed on the first line of the class entry of the Schedule of Classes. For example, a class section is listed in the Schedule of Classes on two lines in the following manner:

   T R: 8:00 – 8:50
   W: 9:00 – 10:50

   The starting time listed for the first line of the meeting pattern is 8:00. The days listed for the first line of the meeting pattern are TR, and therefore are in the category 8:00 or 8:30 on T and/or R. Using the Spring 2016 Final Exam Schedule grid, it is determined that this course’s final exam period is Tuesday, May 10, from 8:00 – 10:00 a.m.

2. Classes should plan to hold their final exams in their regularly scheduled classrooms. The Academic Scheduling Office will forward departments information relative to the location of their exams for those classes that cannot hold their final exams in their regularly scheduled rooms due to a space conflict. This will be done in advance of the final exam week to provide adequate notice for all.

   Classes that meet less than the entire semester should hold their exams during the last regularly scheduled class session prior to the formal final exam week.

   It is a policy of the University that no final exam be given prior to the scheduled final exam period, and that students be given their exams at the designated times listed on the Spring 2016 Final Exam Schedule grid. Any deviation from this policy must be approved by the Dean of the College.

3. Students who find they have more than three exams on the same day may petition, their Dean for approval to take an exam during the make-up exam period on the last day of final exam week. Provision for such a make-up exam period does not mean that students may decide to miss the scheduled exam time to make it up during this make-up period. This period is to be used only for students whose petitions have been approved by their Dean.

4. Students who must miss a final exam may not take the exam before the time scheduled for the class exam. Information for faculty and instructors relative to the proper grade to be given to those students who miss a final exam and are not involved in a situation covered in Section 3 above can be found on the Registrar’s Office web site at http://registrar.siu.edu/faculty/webgradinginfo.html.

5. Classes with a special common exam time. | Exam Date | Exam Period |
---|---|---|
ENGL 101, 102, and 120h | Mon, 5/9 | 8:00 AM - 10:00 AM |
FIN 330 | Mon, 5/9 | 10:15 AM - 12:15 PM |
KIN 101 | Wed, 5/11 | 2:45 PM - 4:45 PM |
MATH 101, 107, 108, 109, 111, 125, 139, 140, 150, 250, and 282 | Mon, 5/9 | 5:00 PM - 7:00 PM |
PSYC 102 | Wed, 5/11 | 12:30 PM - 2:30 PM |

6. One credit hour courses and classes that meet for less than the full semester should hold their exams during the last regularly scheduled class session prior to the formal final exam week.
Syllabus Attachment
Spring 2016
http://pvcaa.siu.edu/

IMPORTANT DATES

Semester Class Begins..........................................................01/19/2016
Last day to add a class (without instructor permission):..............01/24/2016
Last day to withdraw completely and receive a 100% refund.............01/31/2016
Last day to drop a course using SalukiNet................................04/03/2016
Last day to file diploma application (for name to appear in Commencement program). .................................................02/12/2016
Final examinations..............................................................05/09–05/13/2016

For outreach, in-course, and inters course drop/add dates, visit Registrar’s Academic webpage http://registrar.siu.edu/

SPRING SEMESTER HOLIDAYS

Martin Luther King, Jr.'s Birthday Holiday 01/18/2016
Spring Break 03/12–03/20/2016

WITHDRAWAL POLICY - Undergraduate only

Students who officially register for a session may not withdraw merely by the stopping of attendance. An official withdrawal form needs to be initiated by the student and processed by the University. For the proper procedures to follow when dropping courses and when withdrawing from the University, please visit http://registrar.siu.edu/catalog/undergraduatecatalog.html

INCOMPLETE POLICY - Undergraduate only

An INC is assigned when, for reasons beyond their control, students engaged in passing work are unable to complete all class assignments. An INC must be charged to a completed grade within one semester following the term in which the course was taken, or graduation, whichever occurs first. Should the student fail to complete the course within the time period designated, that is, by no later than the end of the semester following the term in which the course was taken, or graduation, whichever occurs first, the incomplete will be converted to a grade of F and the grade will be computed in the student's grade point average. For more information please visit http://registrar.siu.edu/grades/incomplete.html

REPEAT POLICY

An undergraduate student may, for the purpose of raising a grade, enroll in a course for credit more than two times (two total enrollments) unless otherwise noted in the course description. For students receiving a letter grade of A, B, C, D, or F, the course repetition must occur at Southern Illinois University-Carbondale. Only the most recent (last) grade will be calculated in the overall GPA and count toward hours earned. See full policy at http://registrar.siu.edu/catalog/undergraduatecatalog.html

GRADUATE POLICIES

Graduate policies often vary from Undergraduate policies. To view the applicable policies for graduate students, please visit http://gradebook.siu.edu/abct-grad/catalog/index.html

DISABILITY POLICY

Disability Support Services provides the required academic and programmatic support services to students with permanent and temporary disabilities. DSS provides centralized coordination and referral services. To utilize DSS services, students must come to the DSS to open cases. The process involves interviews, reviews of student-supplied documentation, and completion of Disability Accommodation Agreements. For more information visit http://disabilityservices.siu.edu/

PLAGIARISM

Student Conduct Code http://ar.siu.edu/student_conduct_code/
MORRIS LIBRARY HOURS
http://www.lib.siu.edu/about

SAFETY AWARENESS FACTS AND EDUCATION

Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: http://safe.siu.edu

SALUKI CARES

The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. For information on Salukis Cares (618) 453-5714, or srcares@siu.edu, http://salukicares.siu.edu/index.html

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INCLUSIVE EXCELLENCE

SIU contains people from all walks of life, from many different cultures and sub-cultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ is an important part of education as well as an essential preparation for any career. For more information please visit: http://www.inclusiveexcellence.siu.edu/

LEARNING AND SUPPORT SERVICES

Help is within reach. Learning support services offers free tutoring on campus and on-line. To find more information please visit the Center for Learning and Support Services website:
Tutoring: http://tutoring.siu.edu/
Math Labs: http://math.siu.edu/courses/course-help.php
WRITING CENTER

The Writing Center offers free tutoring services to all SIU students and faculty. To find a Center or Schedule an appointment please visit http://write.siu.edu/

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY

Our office's main focus is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: http://diversity.siu.edu/

Additional Resources Available:

SALUKINET: https://salukinet.siu.edu/CP/home/displaylogin
ADVISMENT: http://advisement.siu.edu/
PROVOST & VICE CHANCELLOR: http://pvCAA.siu.edu/
SIU ONLINE: http://online.siu.edu/