## Aviation Maintenance Technology- AERO 4

| Class Information: | Aero 4: Spring 2010, Eighteen-Week Course, 17.5 units, Lecture class meets in AE5 |
| :---: | :---: |
| Instructor: | Mr. Richey |
| Office Hours: | M/T/W 1:05-2:05 in AE7 or by appointment |
| School Phone: | 638-0318 email: david.richey @reedleycollege.edu |
| Class Hours: | Daily, 7:30 am to 1:20 pm Lab: 7:30-10:10 Break: 10:10-10:35 |
|  | Lecture: 10:35-11:50 Break: 11:50-12:00 |
|  | Lecture: 12:00-1:05 Break: 1:05-1:20 |
| Holidays: | Monday, January 18, 2010 Martin Luther King Jr. |
|  | Friday, February 12, 2010 Lincoln Day |
|  | Monday, February 15, 2010 Washington Day |
|  | Monday - Friday, March 29-April 2, 2010, Spring Recess |
| Drop Deadline: | March 12, 2010 (see college catalog for details) |
| Final Exam Date: | May 17, 2010 |
| Required Texts: | Jeppesen, A\&P Technician General Textbook (ISBN 0-88487-203-3) |
|  | Jeppesen, A\&P Technician Airframe Textbook (ISBN 0-88487-205-1) |
|  | Jeppesen, A\&P Technician General Workbook (ISBN 0-88487-427-3) |
|  | Jeppesen, A\&P Technician Airframe Workbook (ISBN 0-88487-2955-5) |
|  | Aircraft Inspection and Repair AC-43.13, 13-1B, 2B (ISBN 0-89100-306-1) |
|  | 2010 FAR's for AMT (ISBN 0-88487-472-9) or similar document |
| Personal Supplies: | Safety Glasses \& Ear Protection (required as needed in the lab) |
|  | Six-Inch Ruler graduated in $1 / 32^{\text {ths }}$ (required as needed in the lab) |
|  | Scientific Calculator (recommended) |
| Lecture/Lab Policies: | 1. Do not enter the Classroom while another class is in progress. |
|  | 2. No food or drink is allowed in the Aero classrooms or lab. |
|  | 3. The use of any form of tobacco is only permitted outside at the South entrance to the Aero building. Please help keep the area clean. |
|  | 4. Always maintain an attitude of safety in the lab. |
|  | 5. Always receive proper training before operating equipment that you do not know how to use properly. |
|  | 6. Safety glasses must be worn in all areas required. |
|  | 7. No open-toed shoes are to be worn in the lab. |
|  | 8. If you have special needs as addressed by the Americans with Disabilities Act (ADA), please notify me immediately. Reasonable efforts will be made to accommodate your special needs. |
| Course Objective: | The primary purpose of this course is to meet the Federal Aviation Administration requirements for certification as an Airframe and Powerplant Maintenance Technician. |
| Course Topics/Outline: | See attached Reading Assignment and Exam Schedule. |
| Learning Outcomes: | Upon completion of this course, students will be able to: |
|  | 1. Apply safety procedures in a shop environment and follow hazardous material handling procedures. |
|  | 2. Adhere to ethical and legal maintenance standards as prescribed in the Federal Aviation Administration, Federal Aviation Regulations. |
|  | 3. Given acceptable manufactures documentation, complete assigned inspections, modifications, repairs, calculations, and/or troubleshooting procedures. |
|  | 4. Develop acceptable documentation for return to service certification of aircraft and/or related component parts. |
|  | 5. Work successfully in a team atmosphere, alternately assuming the role of leadership and of a team player. |
|  | 6. Meet the Federal Aviation Administration requirements for the majority of the "Airframe" subjects as specified in our Approved Maintenance Technician School. |
| Grading Basis: | Because the Aviation Maintenance Technician Program is both a community college curriculum and a Federal Aviation Administration approved curriculum at the same site, two grading systems are used. |
|  | The FAA subject scores are computed as follows: A percent score will be used to compute all graded work where possible. Lab projects will be graded on the basis of airworthiness, safety, ability to follow instructions, and professional approach to each project. When each subject is completed, the instructor will combine all lecture and lab scores in that subject and convert it to a percent score. Wherever possible, lecture and lab scores will be weighted equally. This score is the FAA Subject Score. Important Note: Each one of the 44 FAA subject scores must be at or above $\mathbf{7 0 \%}$ to receive credit toward the Airframe and Powerplant Certificate. <br> (cont. next page) |

Sample Calculations for FAA Subject Grade:

| Lecture | Total Points <br> Possible | Student <br> Points | Student \% <br> Score |
| :--- | :---: | :---: | :--- |
| Quiz 1 | 5 | 3 |  |
| Quiz 2 | 10 | 6 |  |
| Exam 1 | 30 | 25 |  |
| Exam 2 | 40 | 30 | $75.3 \%$ |
| Subtotal | 85 | 64 |  |
|  |  |  |  |
| Lab | 50 | 30 | $60.67 \%$ |
| Project | 70 | 50 |  |
| Project | 120 | 80 |  |

To arrive at the FAA subject score, add the lecture and the lab percents together, then divide by two. This will result in a $71.1 \%$ "sample" subject score.

The College final grade is computed differently. Each completed subject score is "weighted" in proportion to the number of hours of instruction it contains relative to the other subjects in the course. The weighted subject scores are then combined with the College final exam, (which is $20 \%$ of the final grade.) This score is the College Grade.
For example, to arrive at the College grade, multiply each subject grade times the factor determined by each subject's length of instruction, and add the scores together. Then add in the final exam score weighted at $20 \%$ of the total score to find the grade obtained by one instructor. Add the grade found for each instructor together and divide by two to get the total college grade.

Sample Calculation for the College Grade for one instructor:

| Subjects | Grade | Hours/Subject | Factor | Factored |
| :---: | :---: | :---: | :---: | :---: |
| Completed |  |  |  | Grade |
| Subject "A" | 70\% | 20 hours | . 5 | 35 |
| Subject "B" | 50\% | 10 hours | . 25 | 12.5 |
| Subject "C" | 80\% | 10 hours | . 25 | 20 |
| Totals |  | 40 hours | 1.0 | $67.5 \rightarrow$ times $80 \%=54$ |
| Final Exam | 90\% | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ times $20 \%=18$ |
| College grade for one instructor |  |  | $\rightarrow$ | $\rightarrow \quad=\mathbf{7 2 \%}$ |
| The College letter grade scale is as follows: |  |  | 100-90\% = A; | $89-80 \%=\mathrm{B}$; |
|  |  |  | $79-70 \%=\mathrm{C} ;$ $59-0 \%=\mathrm{F}$ | 69-60\% = D; |

Attendance Policy: Since good work habits are needed to become a successful aircraft maintenance technician, students are expected to meet in the assigned area for roll call in the Aero building no later than 7:30 AM each day, and only take breaks when authorized. A student missing more than $\mathbf{3 0}$ hours in any semester course or arriving late for class more than 6 times during the semester may be dropped from that Aero Course. Students shall report the time missed for taking any unauthorized breaks or for missing any portion of lecture or lab to the instructor responsible for recording his or her progress for that day.
Missed Time Reports: A missed time report form shall be completed by any student missing time, and maintained for each student by the instructor responsible for lab roll call in the following manner:

1. At the time a student is tardy or absent the instructor will mark the student absent, enter the date, indicate whether the time missed was lecture or lab, and identify the subject(s) missed on the department attendance form.
(Note: It is the responsibility of each student to verify that absences due to late arrival have been reduced to actual time missed. If not corrected, each absence becomes six hours time lost per day. Verification shall be done on the same day of the late arrival.)
2. Students must report any time missed on the Time Make-up Form and submit it to the appropriate instructor as soon as the student returns from the absence. It is the student's responsibility to complete the time make-up form. At the time of make-up, the instructor will enter the date the work was made up and initial. At the end of each nine-week block of instruction the time missed and the time made up will be posted in the master records.
3. All work must be made up in order to qualify for the A \& P Mechanic certificate.
4. The missed time report forms will be accessible for student verification.

Make up Policy: All time missed due to being late or absent in any portion of a subject must be made up within that subject. It is the student's responsibility to contact the instructor where the time was missed, to arrange to make up the time missed, and to verify that time made up is properly logged by that instructor.

