



**ELCR 2150 – Fluid Power
COURSE SYLLABUS
FALL SEMESTER 2016 (201712)**

Course Title: Fluid Power
Course Number: ELCR 2150
Credit Hr / Min: 2 hr / 2250 min
Class Location: RMTC 827, Vidalia
Class Meets: 3-4:15 pm / TR
CRN: 20160

Instructor: William Greene
Office Hours: Mon –Thurs 8:00 am – 9:00 am
1:00 pm – 3:00 pm
Office: RMTC Room 822, Vidalia Campus
E-mail: wgreene@southeasterntech.edu
Phone: 912-538-3102 **FAX:** 912-538-3106

REQUIRED TEXTS: *Fluid Power Learning Activity Packets*
by AMATROL, # 11101-BA
(10 volume set)

REQUIRED VIDEOS: STC Supplied (see your instructor)

REQUIRED TEST VOUCHERS: None

REQUIRED SUPPLIES: Engineering / Scientific Calculator

COURSE DESCRIPTION: Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

PREREQUISITES: Program Admission

MAJOR COURSE COMPETENCIES / COURSE OUTLINE:

- | | |
|----------------------------------|----------------------------|
| I. Safety | II. Fluid Dynamics |
| III. Hydraulic Pressure and Flow | IV. Pneumatics |
| V. Air Logic | VI. Electrical Interfacing |

GENERAL EDUCATION CORE COMPETENCIES: STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS: Students are expected to complete all tests and comprehensive problems by the due dates. A ten point penalty will be assessed for each day a comprehensive problem is late. There are no makeup tests. **Tests are made available for several days; therefore, there are no makeup tests. Students who miss a test will be assigned a grade of zero.** Students are responsible for policies and procedures included in the *STC E-Catalog*. All **online students must** pledge that they have read and understand the *STC Online Orientation* within the first five days of class. **Online students are responsible for checking e-mails and Blackboard announcements DAILY.**

ATTENDANCE GUIDELINES: Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course.

SPECIFIC ABSENCES: Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

SPECIAL NEEDS: Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Helen Thomas, 912-538-3126, hthomas@southeasterntech.edu, to coordinate reasonable accommodations.

PREGNANCY: Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with Helen Thomas, (912) 538-3126, hthomas@southeasterntech.edu.

WITHDRAWAL PROCEDURE: Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc...): Students are required to take all tests and complete all assignments scheduled during the semester. Failure to take Tests/Exam(s) and complete assignments **will result in a grade of zero. There will be no makeup of assignments or EXAMS.** If Internet or browser failure occurs, contact instructor immediately. A decision will be made at that time if the exam will be reset. Instructor reserves the right to deduct points from the exam scores for exceeding the scheduled time limit on the exam and/or requiring student to come to campus to take the final exam. **Note: If student notifies instructor about exam problems because of technical issues after the due date or on the last day of the semester, the student will NOT be allowed to make-up the exam. No exceptions!** **Assignments must be turned in on the assigned date and will not be accepted late, a grade of zero will be given. ALL Assignments are due according to the lesson plan.**

ACADEMIC DISHONESTY POLICY: The STC Academic Dishonesty Policy states *All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline.* The policy can also be found in the *STC Catalog and Student Handbook.*

Procedure for Academic Misconduct

The procedure for dealing with academic misconduct and dishonesty is as follows:

--First Offense—

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

--Second Offense—

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

--Third Offense—

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION

Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

GRIEVANCE PROCEDURES: Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY: Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

TCSG GUARANTEE/WARRANTY STATEMENT:

The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employed within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

****Disclaimer Statements****

- (1) Instructor reserves the right to change the syllabus and/or lesson plan as necessary.
- (2) The official copy of the syllabus is located inside the student's online course shell or will be given to them during face to face class time the first day of the semester. The syllabus displayed in advance of the semester in a location other than the course you are enrolled in is for planning purposes only.

ELCR 2150 COURSE GRADING POLICY:

Self Review Questions	15%
LAP Exams	25%
Laboratory Skills	35%
Final Exam	<u>25%</u>
	100%

GRADING SCALE:

A	(90-100)
B	(80-89)
C	(70-79)
D	(60-69)
F	(0-59)

IMPORTANT REMINDERS CONCERNING ASSIGNMENTS: (Students are responsible for all information contained in this lesson plan).

- **Assignments:** This lesson plan is subject to change at instructor's discretion. All assignments must be submitted and completed by the due dates listed above to receive credit.....so manage your time wisely each week. Missing assignments receive a grade of zero.
- **Videos:** These videos contain useful supplemental information for the course. Students should take notes while watching the videos to use when answering the video questions on BLACKBOARD or within the LAP assignments. VHS tapes and access to viewing equipment will be provided for enrolled students at the beginning of the semester.
- **Grades:** Can be checked via the BLACKBOARD class.

LESSON PLAN
ELCR-2150 – Fluid Power
Fall Semester 2016 (201712)

Color Codes: **Black** = Assignments / Information, **Blue** = Graded Assignments

Date	Chapter / Lesson	Content / Location	Assignments & Tests	Comp. Area*
WEEK 1				
Aug 15	1		[On BLACKBOARD] Read / Review START HERE information POST to appropriate Message Boards Download/Review all material	a,c
16	1	LAP 1 – Hydraulic Power Systems	Review OBJECTIVE 1 Activity 1 – VIDEO NOT AVAILABLE Review OBJECTIVE 2 Complete ACTIVITY 2 Review OBJECTIVE 3 Complete SKILL 1	1,2,3, a,b,c
17	1	BLACKBOARD LAP 1 – Hydraulic Power Systems	Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 4	2,3, b,c
18	1	LAP 1 – Hydraulic Power Systems	Complete ACTIVITY 3 Complete ACTIVITY 4 Complete SKILL 2 Complete SKILL 3	1,2,3, a,b,c
WEEK 2				
Aug 22	1	BLACKBOARD LAP 1 – Hydraulic Power Systems	Do SEGMENT 2 Self-Review Questions Review OBJECTIVE 5 Review OBJECTIVE 6	2,3, b,c
23	1	LAP 1 – Hydraulic Power Systems	Complete SKILL 4 Review OBJECTIVE 7 Complete SKILL 5 Review OBJECTIVE 8	1,2,3, a,b,c
24	2	BLACKBOARD LAP 1 – Hydraulic Power Systems	Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 9 Review OBJECTIVE 10	2,3, b,c
25	2	LAP 1 – Hydraulic Power Systems BLACKBOARD	Complete ACTIVITY 5 Review OBJECTIVE 11 Review OBJECTIVE 12 Complete ACTIVITY 6 Complete SKILL 6 Complete SKILL 7 Do SEGMENT 4 Self-Review Questions Do LAP 1 Exam	1,2,3, a,b,c
WEEK 3				
Aug 29	2	LAP 2 – Basic Hydraulic Circuits	Review OBJECTIVE 1 Review OBJECTIVE 2	
30	2	LAP 2 – Basic Hydraulic Circuits	Complete SKILL 1 ACTIVITY 1 – DO NOT DO THIS ONE Review OBJECTIVE 3 Complete ACTIVITY 2 Review OBJECTIVE 4	1,2,3, a,b,c

31	2	BLACKBOARD LAP 2 – Basic Hydraulic Circuits	Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 5 Review OBJECTIVE 6	2,3, b,c
Sept 1	2	LAP 2 – Basic Hydraulic Circuits BLACKBOARD LAP 2 – Basic Hydraulic Circuits BLACKBOARD	Complete ACTIVITY 3 Complete SKILL 2 Complete SKILL 3 Do SEGMENT 2 Self-Review Questions Review OBJECTIVE 7 Review OBJECTIVE 8 Complete SKILL 4 Review OBJECTIVE 9 Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 10	1,2,3, a,b,c
WEEK 4				
Sept 5		HOLIDAY – LABOR DAY	HOLIDAY – LABOR DAY	
6	2	LAP 2 – Basic Hydraulic Circuits BLACKBOARD	Complete SKILL 5 Complete SKILL 6 Complete SKILL 7 Do SEGMENT 4 Self-Review Questions	1,2,3, a,b,c
7	2, 3	BLACKBOARD LAP 3 – Hydraulic Pressure & Flow	Do LAP 2 Exam Review OBJECTIVE 1 Complete SKILL 1	2,3, b,c
8	3	LAP 3 – Hydraulic Pressure & Flow	Complete SKILL 2 Review OBJECTIVE 2 Complete SKILL 3 Complete SKILL 4	1,2,3, a,b,c
12	3	BLACKBOARD LAP 3 – Hydraulic Pressure & Flow	Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 3	2,3, b,c
WEEK 5				
Sept 13	3	LAP 3 – Hydraulic Pressure & Flow BLACKBOARD	Complete ACTIVITY 1 Review OBJECTIVE 4 Complete ACTIVITY 2 Do SEGMENT 2 Self-Review Questions	1,2,3, a,b,c
14	3	LAP 3 – Hydraulic Pressure & Flow	Review OBJECTIVE 5 Review OBJECTIVE 6	2,3, c
15	3	LAP 3 – Hydraulic Pressure & Flow BLACKBOARD LAP 3 – Hydraulic Pressure & Flow BLACKBOARD	Complete SKILL 5 Complete ACTIVITY 3 Review OBJECTIVE 7 Complete ACTIVITY 4 Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 8 Review OBJECTIVE 9 Do SEGMENT 4 Self-Review Questions Do LAP 3 Exam	1,2,3, a,b,c
19	4	LAP 4 – Hydraulic Speed Control	Review OBJECTIVE 1 Review OBJECTIVE 2 Review OBJECTIVE 3	2,3, c

WEEK 6				
Sept 20	4	LAP 4 – Hydraulic Speed Control BLACKBOARD LAP 4 – Hydraulic Speed Control	Complete SKILL 1 Review OBJECTIVE 4 Complete ACTIVITY 1 Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 5 Review OBJECTIVE 6 Complete ACTIVITY 2 Complete SKILL 2	1,2,3, a,b,c
21	4	BLACKBOARD LAP 4 – Hydraulic Speed Control	Do SEGMENT 2 Self-Review Questions Review OBJECTIVE 7 Review OBJECTIVE 8	2,3, b,c
22	4	LAP 4 – Hydraulic Speed Control BLACKBOARD LAP 4 – Hydraulic Speed Control	Complete SKILL 3 Review OBJECTIVE 9 Complete ACTIVITY 3 Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 10 Complete SKILL 4	1,2,3, a,b,c
26	4	LAP 4 – Hydraulic Speed Control	Review OBJECTIVE 11	2,3, c
WEEK 7				
Sept 27		LAP 4 – Hydraulic Speed Control BLACKBOARD LAP 4 – Hydraulic Speed Control	Complete SKILL 5 Do SEGMENT 4 Self-Review Questions Review OBJECTIVE 12 Complete SKILL 6 Review OBJECTIVE 13 Complete SKILL 7	1,2,3, a,b,c
28		BLACKBOARD LAP 4 – Hydraulic Speed Control	Do SEGMENT 5 Self-Review Questions Review OBJECTIVE 14 Complete SKILL 8	2,3, b,c
29		LAP 4 – Hydraulic Speed Control BLACKBOARD	Review OBJECTIVE 15 Complete SKILL 9 Review OBJECTIVE 16 Complete SKILL 10 Do SEGMENT 6 Self-Review Questions Do LAP 4 Exam	1,2,3, a,b,c
Oct 3	5	LAP 5 – Pressure Control Circuits	Review OBJECTIVE 1 Review OBJECTIVE 2	2,3, c
WEEK 8				
Oct 4	5	LAP 5 – Pressure Control Circuits BLACKBOARD LAP 5 – Pressure Control Circuits	Complete SKILL 1 Complete SKILL 2 Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 3 Complete ACTIVITY 1	1,2,3, a,b,c
5	5	LAP 5 – Pressure Control Circuits BLACKBOARD	Review OBJECTIVE 4 Complete SKILL 3 Review OBJECTIVE 5 Complete SKILL 4	2,3, b,c

6	5	LAP 5 – Pressure Control Circuits BLACKBOARD LAP 5 – Pressure Control Circuits	Review OBJECTIVE 6 Complete ACTIVITY 2 Do SEGMENT 2 Self-Review Questions Review OBJECTIVE 7 Review OBJECTIVE 8 Complete SKILL 5 Complete SKILL 6	1,2,3, a,b,c
10	5	BLACKBOARD LAP 5 – Pressure Control Circuits MIDTERM	Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 9	2,3, b,c
WEEK 9				
Oct 11	5	BLACKBOARD	Complete ACTIVITY 3 Complete SKILL 7 Review OBJECTIVE 10 Complete ACTIVITY 4	1,2,3, a,b,c
12	5, 6	BLACKBOARD LAP 6 – Pneumatic Power Systems	Do SEGMENT 4 Self-Review Questions Do LAP 5 Exam Review OBJECTIVE 1 Review OBJECTIVE 2	2,3, b,c
13	6	LAP 6 – Pneumatic Power Systems	Complete ACTIVITY 1 Review OBJECTIVE 3 Complete SKILL 1	1,4,5, a,b,c
17	6	LAP 6 – Pneumatic Power Systems BLACKBOARD	Review OBJECTIVE 4 Do SEGMENT 1 Self-Review Questions	4, b,c
WEEK 10				
Oct 18	6	LAP 6 – Pneumatic Power Systems	Review OBJECTIVE 5 Complete ACTIVITY 2 Review OBJECTIVE 6 Review OBJECTIVE 7 Complete SKILL 2 Review OBJECTIVE 8 Review OBJECTIVE 9 Complete SKILL 3	1,4, a,b,c
19	6	BLACKBOARD	Do SEGMENT 2 Self-Review Questions	4, b,c
20	6	LAP 6 – Pneumatic Power Systems	Review OBJECTIVE 10 Complete SKILL 4 Review OBJECTIVE 11 Complete SKILL 5 Complete SKILL 6	1,4, a,b,c
24	6	BLACKBOARD LAP 6 – Pneumatic Power Systems	Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 12 Review OBJECTIVE 13	4, b,c
WEEK 11				
Oct 25	6	LAP 6 – Pneumatic Power Systems	Complete ACTIVITY 3 Review OBJECTIVE 14 Review OBJECTIVE 15 Complete SKILL 7	1,4, a,b,c
26		FALL ACTIVITY DAY	FALL ACTIVITY DAY	
27	6	LAP 6 – Pneumatic Power Systems	Complete SKILL 8	4, b,c

31	6	LAP 6 – Pneumatic Power Systems BLACKBOARD	Do SEGMENT 4 Self-Review Questions Do LAP 6 Exam	4, b,c
Nov 1	7	LAP 7 – Basic Pneumatic Circuits	Review OBJECTIVE 1 Review OBJECTIVE 2 Complete ACTIVITY 1 Review OBJECTIVE 3 Review OBJECTIVE 4 Complete SKILL 1	1,4,5, a,b,c
WEEK 12				
Nov 2	7	BLACKBOARD LAP 7 – Basic Pneumatic Circuits	Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 5 Review OBJECTIVE 6	4,5, b,c
3	7	LAP 7 – Basic Pneumatic Circuits BLACKBOARD	Complete SKILL 2 Review OBJECTIVE 7 Complete ACTIVITY 2 Review OBJECTIVE 8 Do SEGMENT 2 Self-Review Questions	1,4,5,6, a,b,c
7	7	LAP 7 – Basic Pneumatic Circuits	Review OBJECTIVE 9 Complete SKILL 3 Review OBJECTIVE 10 Complete SKILL 4	4,5, b,c
8	7	LAP 7 – Basic Pneumatic Circuits BLACKBOARD	Complete SKILL 5 Complete SKILL 6 Do SEGMENT 3 Self-Review Questions Do LAP 7 Exam SKIP SEGMENT 4 of LAP 7	1,4,5,6, a,b,c
WEEK 13				
Nov 9	8	LAP 8 – Pneumatic Pressure & Flow	Review OBJECTIVE 1 Complete SKILL 1	4,5, b,c
10	8	LAP 8 – Pneumatic Pressure & Flow BLACKBOARD LAP 8 – Pneumatic Pressure & Flow BLACKBOARD	Complete SKILL 2 Review OBJECTIVE 2 Complete SKILL 3 Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 3 Complete ACTIVITY 1 Review OBJECTIVE 4 Complete ACTIVITY 2 Do SEGMENT 2 Self-Review Questions	1,4,5,6, a,b,c
14	8	LAP 8 – Pneumatic Pressure & Flow BLACKBOARD	Review OBJECTIVE 5 Complete SKILL 4 Review OBJECTIVE 6 Review OBJECTIVE 7 Complete SKILL 5	4,5, b,c
15	8	LAP 8 – Pneumatic Pressure & Flow BLACKBOARD LAP 8 – Pneumatic Pressure & Flow	Complete ACTIVITY 3 Do SEGMENT 3 Self-Review Questions Review OBJECTIVE 8 Review OBJECTIVE 9 Review OBJECTIVE 10 Complete SKILL 6 Review OBJECTIVE 11 Complete ACTIVITY 4	1,4,5,6, a,b,c

WEEK 14				
Nov 16	8, 9	BLACKBOARD LAP 9 – Pneumatic Speed Control	Do SEGMENT 4 Self-Review Questions Do LAP 8 Exam Review OBJECTIVE 1 Review OBJECTIVE 2	4,5, a,b,c
17	9	LAP 9 – Pneumatic Speed Control	Complete SKILL 1 Review OBJECTIVE 3 Complete SKILL 2 Review OBJECTIVE 4 Review OBJECTIVE 5 Complete SKILL 3	1,4,5,6, a,b,c
21	9	BLACKBOARD LAP 9 – Pneumatic Speed Control	Do SEGMENT 1 Self-Review Questions Review OBJECTIVE 6 Review OBJECTIVE 7	4,5, b,c
22	9	LAP 9 – Pneumatic Speed Control	Complete SKILL 4 Review OBJECTIVE 8 Review OBJECTIVE 9 Complete SKILL 5 Review OBJECTIVE 10 Complete ACTIVITY 1	1,4,5,6, a,b,c
THANKSGIVING HOLIDAYS				
23		Thanksgiving – NO CLASSES	Thanksgiving Holiday – NO CLASSES	
24		Thanksgiving – NO CLASSES	Thanksgiving Holiday – NO CLASSES	
WEEK 15				
Nov 28	9	BLACKBOARD LAP 9 – Pneumatic Speed Control	Do SEGMENT 2 Self-Review Questions Review OBJECTIVE 11	5, b,c
29	9	LAP 9 – Pneumatic Speed Control	Complete SKILL 6 Review OBJECTIVE 12 Complete SKILL 7 Review OBJECTIVE 13 Complete SKILL 8	1,4,5,6, a,b,c
30	9	LAP 9 – Pneumatic Speed Control	Review OBJECTIVE 14	4,5, b,c
Dec 1	9	LAP 9 – Pneumatic Speed Control BLACKBOARD	Complete SKILL 9 Complete SKILL 10 Review OBJECTIVE 15 Complete SKILL 11 Do SEGMENT 3 Self-Review Questions Do LAP 9 Exam	1,4,5,6, a,b,c
FINAL EXAMS				
Dec 6	1 – 9	Day 1 of Final Exams	Fluid Power Final Exam	1-6, b,c
7	1 – 9	Day 2 of Final Exams	(Complete by Midnight of Day 2)	1-6, b,c

*** Competency Areas:**

Fluid Power Competency Areas:

- | | |
|--------------------------------|---------------------------|
| 1. Safety | 4. Pneumatics |
| 2. Fluid Dynamics | 5. Air Logic |
| 3. Hydraulic Pressure and Flow | 6. Electrical Interfacing |

General Core Competency Areas:

- | | |
|---|--|
| a. The ability to utilize standard written English. | c. The ability to read, analyze, and interpret information |
| b. The ability to solve practical mathematical | problems. |