

Hydraulic and Pneumatic Systems Laboratory (ETM 2315L)

Instructor: Alessandro Anzalone, Ph.D., CPT
Class Location: BSSB 218
Class Time: Tuesdays 4:00pm to 5:40pm
Office Hour: Tuesdays 5:45pm-6:45pm, other times by appointment.
Office: BSSB 213e
Phone: (813) 253-7852
Fax: (813) 253-7868
Email: aanzalone2@hccfl.edu

Course Description:

Provides hands-on experiences to reinforce the basic principles of hydraulic and pneumatic systems and the operation of pumps and flow monitoring devices for simple but fundamental systems. Completion of PHY-1025 is strongly recommended. Taking ETM-2315 concurrently is strongly recommended.

Course Outcomes:

Upon completion of the course the student should be able to:

1. Understand fluid power and hydraulic principles.
2. Understand fluid power components such as valves, actuators and pumps and their use in fluid power circuits
3. Demonstrate the ability to interpret and use fluid power circuits
4. Understand fluid power control and distribution
5. Understand power pneumatics principles and components

Textbook and Materials:

Fluid Power: Hydraulics and Pneumatics, James R. Daines, Second Edition, 2013, The Goodheart-Willcox Company, Inc., ISBN: 978-1-60525-931-4.

Safety Goggles (provided for use in the Laboratory or bring your own)

Amatrol Fluid Power Laboratory Manual (provided for use in the Laboratory)

Instructional Methods (including Examination Policies):

This Laboratory course includes hands on experiences with hydraulic and pneumatic equipment. The course will be supported with its own website in Blackboard (<https://hccfl.blackboard.com/>). Please make sure you visit frequently in order to get up to date information, course handouts, and announcements. The official form of communication for the course is your HCC email address.

Students will be evaluated through a lab report and a final exam.

1. Unexcused absences on a test day will receive a zero for that test.
2. Tests will be closed book closed notes. Reference materials will be provided if required.
3. Tests will be short answer, T/F, multiple choice, hands-on experiments, and some problems.
4. Please contact me by email or phone if at all possible before the time of the test (leave a voice message) in the event you have to miss a test.
5. No retests will be given for any exams that have been taken.
6. Every student will be required to take the final exam.
7. Make up tests from excused illnesses must be made up within 2 weeks of the absence and the test may be of a different format than the class test.
8. If you are auditing this class, it must be declared at registration.
9. Some work will be competency-based and assessed accordingly.

Grading System: The final grades will be determined on the following basis:

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

Academic Dishonesty Policy: All parties identified as cheating or plagiarizing on an exam, project or assignment will be assigned a grade zero on that item and subject to academic discipline in accordance with HCC policy.

Attendance Policy: It is important that you attend every class period and be on time. Missing class means that you miss some important material. Since this course is a cumulative experience, you will put yourself at an extreme disadvantage.

1. It is your responsibility to sign the attendance sheet provide at every class meeting.
2. If you are absent, it is your responsibility to get announcements, materials, and assignments before the next class period.
3. More than 3 absences per semester are considered excessive and will result in points taken off your final grade for the unexcused absences after the third absence. Please note that excused absences must be documented and may be death or illness of family members, personal illness, military duty, car trouble, etc.

Request for Accommodation: Any student whose disability falls within the American Disabilities Act (ADA) and requires accommodations should contact the Office of Services for Students with Disabilities. The Brandon office is located in the Student Services Building Room 109. You may also reach the office by phone at (813) 253-7914. Requests for accommodations should be submitted to the instructor within the first two weeks of the course.

Religious Observances: HCC will reasonably accommodate the religious observances, practices, and beliefs of students in its admissions, class attendance, and examination policies and work assignments. Students must notify instructors at least one week prior to a religious observance.

Safety and Security: Students who notice situations that represent potential or real safety or security problems should notify the HCC Public Safety Office: 813-253-7911.

Recording of Class Sessions: A student shall not, without my express authorization, make or receive any recording, including but not limited to audio and video recordings, of any class, co-curricular meeting, organizational meeting, or meeting with me. Further, it is not permissible to post my class lectures/course materials on the web.

Equity/Equal Access Policy: Hillsborough Community College is an equal access/equal opportunity employer that makes employment and education-related decisions without regard to race, color, gender, religion, national origin, age, disability, sexual orientation, marital status or any other bias that is or may be prohibited by laws. In addition, the college does not discriminate in employment practices or in the admission and treatment of students. HCC is committed to equitable treatment for all students and employees and to a learning and working environment free of discrimination and harassment for current as well as future students and employees. The college provides equal educational opportunities for qualified individuals with disabilities and complies with, as well as, supports the Americans with Disabilities Act. HCC's Equity Officer ensures compliance with federal and state laws prohibiting discrimination and sexual harassment. Employees and students who believe they have been a victim of discrimination or sexual harassment should contact: Dr. Joan B. Holmes, Special Assistant to the President for Equity and Special Programs, District Administrative Offices, 39 Columbia Drive, Room 718, Tampa, FL 33606, Telephone: 813-253-7043, email: jholmes16@hccfl.edu.

Class Schedule

Date	Activity	Assignment
01/13	Introduction	
01/20	In-Service day (no class)	
01/27	LAP 1, Segment 2	
02/03	LAP 1, Segment 3	
02/10	LAP 1, Segment 4	
02/17	LAP 2, Segment 1	
02/24	LAP 2, Segment 2	
03/03	LAP 2, Segment 3	
03/10	Spring Break (no class)	
03/17	LAP 2, Segment 4	
03/24	LAP 6, Segment 1	
03/31	LAP 6, Segment 2	
04/07	Work on Lab Reports	
04/14	LAP 6, Segment 3	
04/21	LAP 6, Segment 4	
04/28	Lap 7, Segments 1 and 2 Final Exam Review	Study for Final Exam and Submit Lab Report
05/05	Final Exam	

This Class Schedule is subject to change.