MFGT 24 – Hydraulics Syllabus Spring 2016

Mr. Larry Paredes Sr.

Mar 18, 2016 - May 20, 2016

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Office Hrs. Wed 10:00-2:00pm welding shop office – IND 22

Units 2.0

Text:

Industrial Fluid Power Vol. 1 - 3rd Ed. By: Robert C. Womack (ISBN 13: 978 0960564453)

Materials will also be handed out in class, or provided on Blackboard. Handouts provided are to be read and treated as the course "text."

Required Materials:

Pen, pencils, paper, ringed binder, and a notebook. Calculators will be necessary.

Course Description:

Study of the basic principles of fluid power, hydraulic sources, controls, systems and hydraulic components. Specific safety regulations in the design and application of hydraulic equipment will be explored.

Course Outcomes:

Upon successful completion of this course, the student will be able to:

- 1. Integrate hydraulic knowledge into a work environment that optimizes production and accuracy.
- 2. Practice safe shop techniques in operating and servicing hydraulic systems.
- 3. Calculate common mathematical problems associated with hydraulic systems.
- 4. Choose appropriate materials for any assigned project.
- 5. Consistently execute daily assigned work in a timely and professional manner.
- 6. Assess hydraulic system problems and choose an appropriate course of action.
- 7. Creatively apply hydraulic knowledge to inspect and formulate a plan of action for solving problems.

Other Course Objectives:

Upon successful completion of this course, the student will:

- 1. Identify the basic components of a hydraulic system.
- 2. Apply hydraulic principles to operating hydraulic systems.
- 3. Compute mathematical formulas and understand basic physics principles that apply to hydraulic systems.
- 4. Learn proper maintenance of hydraulic systems.
- 5. Learn safety precautions as needed in hydraulic systems.

Core Values:

The core values are a set of principles, which guide in creating educational programs and environments at Reedley College. They include communication, ethics, critical thinking, human diversity, inquiry and respect for learning, and interpersonal skills and teamwork. The goals, objectives, and activities in this course will introduce and reinforce these Core Values whenever appropriate.

Class Room Expectation:

In order to encourage participation and growth, students are expected to be respectful of each other's time and needs by not monopolizing class time. Questions unrelated to the subject at hand will be reserved for after class.

Attendance is mandatory. Three tardies constitutes one absence. You are allowed only two absences in this class, after which you will be dropped from the course. In addition, if you are more than one hour late for class without prior notification, it will be considered an absence. You must be present on the day of quizzes. The only exception will be if I am notified in advance of an emergency, either by work phone or e-mail. If you are marked absent on the day of a quiz and I have not heard from you, you will not be able to make up the quiz and will be marked "0" as a score. I understand family crisis situations and job interviews happen and will allow for those exceptions, just recognize that the time away from class only harms your ability to learn.

<u>Disruptive Classroom Behavior</u>: "The classroom is a special environment in which students and faculty come together to promote learning and growth. It is essential to this learning environment that respect for the rights of others seeking to learn, respect for the professionalism of the instructor, and the general goals of academic freedom are maintained. ... Differences of viewpoints or concerns should be expressed in terms which are supportive of the learning process, creating an environment in which students and faculty may learn to reason with clarity and compassion, to share of themselves without losing their identities, and to develop and understanding of the community in which they live ... Student conduct which disrupts the learning process will not be tolerated and may lead to disciplinary action and/or removal from class for a period of two class sessions. Constant talking during lecture, excessive cell phone usage are two major examples.

Special Need(s) Students: "Students with special need(s) should confer with the instructor on the first day of the class in order to discuss how the instructor might assist the student with his/her particular needs. The instructor will contact the Counseling Center to see how they can assist the student with the disability. Upon identifying themselves to the instructor, the student will be informed that the College DSPS is also available to assist students with disabilities receive reasonable accommodation for learning and evaluation.

If you have special needs as addressed by the Americans with Disabilities (ADA) Act including alternate media requests, please notify your course instructor immediately. Reasonable efforts will be made to accommodate your special needs.

- Food is not allowed during class time. Please wait until break. You may have something to drink during class. Please be careful not to spill or make any messes, as this privilege can be revoked at any time.
- Please be sure cell phones are turned to vibrate. The use of cell phones in this class is extremely discouraged. Please wait until break to use your cell phones. Texting during class is absolutely not allowed and will not be tolerated.
- iPods, MP3 players or any other music or media devices are not allowed in the classroom. Leave them in your backpacks until break, and then they must be used outside of the classroom.
- An environment of mutual respect is expected and appreciated.
- Please do not wear sunglasses in the classroom or shop. It is disrespectful to students & the instructor.