ELPT 2319 -- PLC 1 Syllabus Fall Semester 2015

Course Information

ELPT 2319 Programmable Logic Controllers 1 Meet on the assigned **Eve.** from **6:30 Pm -- 10:00 PM** Prerequisites: *None Spring Break March* 9th – 13th; *Last day to withdraw - March* 27; *Midterm ~ March; Final grades due by May* 6th

Instructor Information

Terry Brooks – Computer and Communications Department Dow Pipeline **Mobil:** 281-381-2643 –(text accepted)

Associates of Applied Science State Master Electrician License Certified NCCER Instructor TASO official

Course Description

ELPT 2319 Programmable Logic Controllers I.

CIP 4603010008 Fundamental concepts of programmable logic controllers, principles of operation, and numbering systems as applied to electrical controls. (3 SCH, 2 lecture, 2 lab)

Course Objectives

Become familiar, comfortable, and knowledgeable with PLC hardware and software. Understand the PLC principles of operation by developing logic problems and demonstrating a knowledge of how the logic program affects the inputs and outputs attached to the PLC. Understand numbering systems with respect to PLC memory layout. Demonstrate acquired knowledge by performing hands-on programming task. Learn how to manipulate inputs and outputs to aid in troubleshooting problems. Work with a variety of logic instructions and understand how they operate within the logic.

Textbooks/ Reading /Materials

"Required course materials are available at the Brazosport College bookstore, on campus or online at <u>http://www.brazosport.edu/bookstore</u>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer."

No textbooks required Internet access Calculator, note pad, pen or pencil

STUDENTS WITH DISABILITIES

BC is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, 979-230-3236 for further information.

Student expectations

- Arrive early or on time
- Leave late or when class is officially dismissed
- Be prepared to take notes
- Complete assignments
- Ask questions either during class or after class
- Making up assignments are the responsibility of the student
- No swearing or cursing allowed

ACADEMIC HONESTY

BC assumes that students eligible to perform on the college level are familiar with

The ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the BC Guide for more information, this is available online at http://www.brazosport.edu, click on the link on the left side of the homepage.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in $__C__$ in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

Course Policies

Stay until dismissed Three absences reduces final grade by 1 letter Four unexcused absences reduces grade by 1 letter Make up any quizzes, exams, or assignments Withdrawal from class is the responsibility of the student All cell phones or other electronic devices need to be silenced in class.

Grading: 15% Attendance * 20% Mid term exam 25% Quizzes 25% Final exam <u>15%</u> Participation 100% Final letter grade

Resources

Brazosport College library On site and electronic Free PLC Simulation Program --Allen Bradley PLC's -- http://www.ab.com/products.html Siemens PLC's --Free Training Products --Siemens Training http://www.awc-corp.com/

<u>Tip: Be patient with yourself and those around you. We all have different qualities and talents. I</u> view them as equally important: e.g.: organized, quick learner, remembers well, motivated, etc. Use your specific talents or skills to the best of your ability to be successful in this course.</u>

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