

Programmable Logic Controller Syllabus

CLARENDON COLLEGE

Division of Business and Technology

Course Name: *ELMT 1201.343 Programmable Logic Controllers.*

Credit Hours: 2

Semester: *Fall 2010*

Classroom Location: *Childress Center room 2*

Instructor: *Murdock*

Office Location: *Childress*

Phone: 806-881-7393

Email: *corey.murdock@clarendoncolleg.edu*

Fax: *N/A*

Other: *940-937-2001*

Office Hours: *Mon- Fri 2:00 to 4:00*

I. Course Description:

An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Programming a PLC, Input/Output devices and troubleshooting digital I/O.

II. End of Course Learning Outcomes

An introduction to programmable logic controllers used in industrial environments including basic concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment. This course is necessary for completing the wind energy course of study.

III. Tentative Course Content and Activities

Textbook: Dunning, Gary Programmable Logic Controllers 3rd Edition, Thompson, 2006

Tentative Fall Course Schedule
ELMT 1201.343 Programmable Logic Controllers

Week	Week of	Lecture Topics
1	Aug 26, 2010	Chapter 1-2
2	Sep 2, 2010	Chapter 3-5
3	Sep 9, 2010	Chapter 1-5 test Chapter 6
4	Sep 16, 2010	Chapter 7-8
5	Sep 23, 2010	Chapter 9-10
6	Sep 30, 2010	Chapter 6-10 test Chapter 12
7	Oct 7, 2010	Chapter 13
8	Oct 14, 2010	Chapter 14
9	Oct 21, 2010	Chapter 15
10	Oct 28, 2010	Chapter 16
11	Nov 4, 2010	Chapter 17
12	Nov 11, 2010	Chapter 18-19
13	Nov 18, 2010	Chapter 12-19 test/ Review for final
14	Nov 24,2010	Thanksgiving
15	Dec 1, 2010	Review for final/ turn in folders
16	Dec 8, 2010	Final exam

Final exam on date/time as posted on Final Exam Schedule on Clarendon College website.

IV. Course Requirements

Course requirements include problems and exercises, unit tests and final examinations derived from lectures. Assignments will be due one week from the day they were assigned unless special instruction is given by the instructor. Students must actively participate in class and attend class unless arrangements are made in advance for absence.

Pop Quizzes may be given.

Methods and components of evaluation and grading are listed in the following:

Problems and exercises:	20%
Quizzes:	25%
Folder:	5%
Participation:	10%
Attendance:	10%
Final:	30%

Total 100%

The final semester grades will be figured as set in the current catalog:

90 and above = A

80-89 = B

70-79 = C

60-69 = D

Below 60 = F

A student's final grade will be made available through Campus Connect at Clarendon College's website.

Methods of Instruction:

Lecture, PowerPoint presentation student interaction.

Other Requirements:

- Class Attendance is Required
- No late homework will be accepted
- Personal Tools and Supplies include: three ring binder, scientific calculator, and pencils, note paper (recommend graphing or engineering paper), etc...

Classroom Policies:

Classroom Conduct

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit.

Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved.

Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

American with Disabilities Act Statement:

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687-9737). We will work with you to make whatever accommodations we need to make.

Dropping a Course:

A student who is enrolled in a developmental course for TSI purposes may not drop his/her only developmental course unless the student completely withdraws from the college. A student may drop any other course with a grade of "W" any time after the census date for the semester and on or before the end of the 12th week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar. The request for permission to drop a course is initiated by the student by procuring a drop form from the Office of Student Services. (Refer to other policies concerning this issue in the current college catalog online.)

Withdrawal from College:

When a student finds it necessary to withdraw from school before the end of the semester, he or she should obtain a withdrawal form from the Office of Student Services. Students may also withdraw from the college by sending a written request for such action to the Registrar's Office. The request must include the student's signature, the student's current address, social security number and course information details. Students who withdraw after the census date for the semester and on or before the end of the 12th week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar will be assigned a grade of "W."

Classroom requirements:

The operation of cell phones, MP3 type devices, personal computers, or any other such devices is strictly prohibited during class sessions. The result of such use will result in a zero grade for the event (quiz/test) for that day including final exam day. Cheating, plagiarism or other dishonest acts shall be dealt with to the extent of dismissal from the class permanently on a case by case basis. Under no circumstance will an individual be exonerated after a second incidence, but will be immediately dropped.

Any missed quizzes or exams must be taken within 1 week of the date missed. It is the student's full responsibility to make arrangements to make up a quiz or exam at a time agreeable to the instructor. The Final exam will be taken on the prescribed day or arranged day prior to the final exam. No exceptions.