

SYLLABUS PART II
EDISON COMMUNITY COLLEGE
ELT 151S Programmable
Logic Controllers
3 CREDIT HOURS

Section/Term: ELT-151S-001FS

Class Meeting Time: M/W 10:00am – 11:50am

Location: Room 445

Required items: No Required text.

*(**Optional**) Professor Bill's LadderLab found on the website: <https://thelearningpit.com/>

We will be using the simulation program (Bill's LadderLab) on classroom computers. If you would like a copy for working at home, you may purchase it or work in the lab in your extra time.

Faculty: Professor David Barth
Masters: Electrical Engineering Michigan Technological University
Feb. 1995

E-mail: dbarth@edisonohio.edu

Faculty Phone: 937-778-7938

Faculty Office Hours: Piqua Campus Room 430 M 9-10 online & 1-3
T 4:30 – 5:30 online
W 9-10 online
Th 5-5:30
Darke County Greenville H S Manufacturing Lab W 5 – 5:30 p.m.

Faculty Contact: If you have questions or concerns, please contact me via email with the course name and number in the subject line (ELT 151S 001FS) through your Edison State email. You are welcome to set up an appointment to meet virtually via Teams or Zoom or stop by my office.

Class Policies

Netiquette:

We will be communicating a lot with each other. You will need to be respectful of the instructor and each other. Your classmates' ideas and beliefs may differ from your own, be polite! When in doubt, you can agree to disagree. You will be expected to communicate with your classmates and your instructor using appropriate language and style, which includes written/typed communication. Remember: the way you communicate can reflect the level of respect you have the people with whom you communicate. You will want to practice good e-mail etiquette when typing questions/responses to the instructor and classmates, such as avoiding using all caps when typing or using an accusatory tone.

Communication Policy:

E-mails sent to me by 4:00 p.m. Monday-Friday with course name and section number (ELT 151S 001FS in the subject line from your Edison e-mail will be answered within 48 hours unless the school is closed (breaks/holidays). **All assignments must be submitted in class.**

Late Work:

All work should be submitted on time. Late work may be accepted due to extenuating circumstances. Contact the instructor.

Academic Integrity:

Edison Community College expects students to submit original work for each assignment. The Student Handbook

<https://www.edisonohio.edu/digipub/StudentHandbook/index.html> , pages 28-29 clearly defines academic dishonesty and how Edison handles cases of academic dishonesty.

Using peer support and tutoring services is not considered academic dishonesty, as long as the work is original and in your own voice, meaning you didn't submit work you did previously or "borrow" words/ideas without crediting the source

Testing Your Faith Act Policy

Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations Form, <https://www.edisonohio.edu/services-support/registration-records>, located in "Forms" and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at <https://www.edisonohio.edu/services-support/student-resources>.

Technical Support

For Blackboard Assignment issues, the Instructor should be the first point of contact

For Log-in or other technology issues:

There are several steps you can follow if you have issues logging in to Blackboard or Office.

During business hours:

- Password reset: Log onto office.com with your Edison email and follow the "forgot password" prompts.
- Reach out for help during regular business hours (9-5 Monday-Thursday, 9-4 Friday)
 - email to support@edisonohio.edu
 - call 937-778-8600 and ask for IT Help Desk

After hours:

- Password reset: Log onto office.com with your Edison email and follow the "forgot password" prompts
- Go to www.edisonohio.edu into the Resources tab and click "IT Help Desk" then click "Chat".
- Call 937-778-7957 and talk to the off-campus Blackboard company to get help.

Grading Scale*

A = 90 – 100%

B = 80 – 89%

C = 70 – 79%

D = 60 – 69%

F = 59% and Below

<u>Week #</u> <u>Value</u>	<u>Topic</u>	<u>Assignments</u>	<u>Point</u>
1	LogixPro	Assignment 1: Relay Logic Program1: Door Simulator	50 points
2	Combinational Logic	Door Simulation (Continued)	100 points
3	Latch and Unlatch	Program 2: Silo Simulation	100 points
4	Timers (Cascading Timers)	Program 3: Traffic Light 1	100 points
5	Counters	Program 4: Batch Mixing	100 points
6	Compare Commands	Program 5: Traffic Light 2	100 points
7	Math Instructions	Program 6: *Adv. Batch Mixing	100 points
8	Review	Midterm Exam	400 points
9	Sequencer Instructions	Assignment 2: *Traffic Light 3	50 points
	Step Programming	Assignment 3: *Silo 2	50 points
10	Subroutines	Program 7: *Dual Compressor	100 points
11	Bit Shift	Program 8: *Bottle Simulation	100 points
12	RSLOGIX 500 Software / RSLinx	Assignment 4	50 points
	Analog I/O	Assignment 5	50 points
13	RS5000 systems	Assignment 6	50 points
14	HMI Screen Programming	Assignment 7	50 points
15	Troubleshooting	Assignment 8	50 points
	Mitsubishi PLCs	Assignment 9	50 points
16	Review	Final Exam	400 points

* Programs indicated with an asterisk on the syllabus will be changed in content from what is on the student exercises of Logix Pro.

Assignments in red are using real equipment rather than simulation software.

Programs are to be fully commented with your name on the first rung.

When you finish your program, submit it on Blackboard under the appropriate link. You may submit your program multiple times, but please read the comment bubble when the program was graded as to the problems that need to be corrected.

Grading:

There will be two exams worth **20% of your final grade each.**

Exams will be open notes.

There will be 8 programs (100 points each) and 9 assignments (50 points each).

These will comprise **60% of the final grade.**

Grade Scale: 90 - 100 = A 60 – 69 = D

80 – 89 = B under 60 = F (need to retake the class)

70 – 79 = C *You may withdraw from the class before week 10

Cheating Policy

Cheating will not be tolerated and will receive disciplinary action according to current Edison Policy. It is one thing to help a fellow student find errors in their program or to explain commands and another thing entirely to help write their program, copy, or allow them to be copied. I will know whether you have taken large parts of your program from another source or not. If I am in doubt, I will have you explain it all to me. If you cannot, you will receive a ZERO on that assignment or program (remember that programs are 60% of your grade).

Absentee / Makeup Policy:

It is vital to come to class to understand the material and participate in assignments, exams, etc.

If you miss class or intend to miss class, please email me or let me know ASAP. It is your responsibility to get notes from someone else in the class. We can schedule when to make up the missed work. If you miss several weeks without notice, it is up to my discretion to help you.

