## **EET 2170 Industrial Controls**

Instructor:

Office:

Please use the Canvas Communications tools to send me messages.

# CONSULTATION:

INTRODUCTION: SLCC is committed to fostering and assessing the following student learning outcomes in its programs and courses:

- Acquiring substantive knowledge in the field of their choice
- Developing quantitative literacies
- Developing the knowledge and skills to be civically engaged
- Thinking critically
- Communicating effectively

COURSE DESCRIPTION: Introduction to industrial control systems for manufacturing and automated test applications. The course will focus on Allen-Bradley control systems and Programmable Logic Controllers (PLCs). Students will configure, program, and troubleshoot industrial control systems. Lecture and lab combination.

COURSE OBJECTIVES: At the conclusion of the course, the student will be able to:

- Understand to operation of PLC controllers in an industrial setting.
- Be able to read, interpret and create ladder logic.
- Be able to design control systems.
- Troubleshoot, repair and upgrade control systems.
- Be proficient with Allen-Bradley software.

REQUIRED MATERIALS: There is no required material for this course.

CALCULATORS: A laptop computer and a TI-36X Pro calculator are required for this class.

Course Schedule: The schedule is flexible. We go as fast as we can. The pace is governed by the ability of the slowest engaged student.

Attendance: The flexible schedule makes attendance very important. At some point failure to attend will cause you to be perceived as "not engaged". At that point you will have difficulty completing the required work.

Homework: Please do your homework and more important, make notes about things you do not understand. These notes and the discussions they create are very beneficial to you and to other students.

Exams: There will be a midterm at a convenient point near the middle of the semester. Neat work on exams demonstrates understanding.

Final Exam: The final exam will be comprehensive. It is an Engineering Technology Department policy that students attaining a score of less than 60% on the final shall receive a grade no higher than "D" for the course.

Cheating: The minimum penalty for students found cheating on an exam will be a "0" for that exam.

Grades: Grades will be posted in Canvas. Final Canvas grades are awarded as follows:

SCALE:

А	93 – 100 %	С	73 – 76 %
A-	90 – 92 %	C-	70 – 72 %
B+	87 – 89 %	D+	67 – 69 %
В	83 – 86 %	D	63 – 66 %
B-	80 – 82 %	D-	60 – 62 %
C+	77 – 79 %	E	0 – 59%

### WEIGHTS:

Homework/labs	65% of final grade
Midterm Exam	10% of final grade
Final Exam	25% of final grade

GOAL: The EET program is designed to prepare you for a great career. Your goal must be mastery of the material. The grade for mastery is an A. No other grade should be acceptable to you. It certainly isn't acceptable to me.

### **College & Classroom Policies**

College & Classroom Policies: Salt Lake Community College has a complex set of rules that govern both your behavior and mine. These rules are included in the pages and links below.

However, there is a simple rule that actually defines our relationship:

# You have to do your best and I have to be reasonable.

The complex rules mostly govern what happens if either you or I break the simple rule. If I break the rule, you have many places to go for help. The first place to go is to me. If you feel I am being unreasonable or if you feel I could help you in any way, come talk to me. I will do the best that I can. If that doesn't work, you can talk to the department coordinator. After that you can talk to my boss, who is very wise and helpful. SLCC has other resources for you to use and you should feel comfortable and safe using any of them.

# Syllabus Statement---Important Information for Students

**General Education** Regardless of your major, General Education courses build a foundation of broad knowledge and skills that help you in your further career and life. <u>http://www.slcc.edu/gened</u>

**General Learning Support & Tutoring Services** provide support for SLCC students enrolled in any class at the College. All resources are provided free-of-charge. Ask your instructor about discipline-specific learning support and tutoring services.

The **Tutoring and Learning Centers** provide free assistance in Math, Science, Accounting, CSIS and Allied Health Classes at 6 campus locations. <u>https://www.slcc.edu/tutoring</u>

The **Student Writing Center** provides in-person and online feedback on all writing assignments. <u>http://www.slcc.edu/swc</u>

The **Academic Literacy Center** provides tutoring in reading and conversation. <u>https://www.slcc.edu/english/academic-literacy-center.aspx</u>

**Library Services** provides research help, print and online resources, computers and study space. <u>http://libweb.slcc.edu</u>

The **ePortfolio Lab** provides drop-in assistance for all ePortfolio questions. <u>http://eportresource.weebly.com</u>

**eLearning Support** provides support for navigating online and hybrid classes. <u>https://slcc.instructure.com/courses/297606</u>

The **Business Resource and Innovation Center** provides tutors and a study space for students in Business and CSIS courses. Located in BB 226 on Taylorsville-Redwood Campus.

Advising and Counseling Support Services provide support for students enrolled in any class at the college.

The **Center for Health and Counseling** provides health care, mental health counseling, massage therapy services and healthy lifestyle programs. <u>http://www.slcc.edu/chc/index.aspx</u>

**Veteran's Services** assists hundreds of students in using their VA education benefits each semester. <u>http://www.slcc.edu/veterans</u>

**Academic and Career Advising** helps students plan, explore, make decisions, access resources and evaluate their academic and career goals. And the Academic Achievement Center helps students achieve GPA requirements for graduation.

https://www.slcc.edu/academicadvising

https://www.slcc.edu/academic-achievement-center/index.aspx

Student Code of Conduct: http://www.slcc.edu/policies/docs/Student\_Code\_of\_Conduct.pdf

### **Disability Resource Center**

SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you have a disability and believe you need accommodations to improve access to learning materials or the learning environment, please contact the Disability Resource Center: (phone) 801-957-4659; (email) <u>drc@slcc.edu</u>; (website) <u>www.slcc.edu/drc</u>.

### TITLE IX STATEMENT FOR SLCC FACULTY

Title IX of the Educational Amendments of 1972 prohibits discrimination based on sex in any educational institution that receives federal funding. Salt Lake Community College does not tolerate sex discrimination of any kind including: sexual misconduct; sexual harassment; relationship/sexual violence and stalking. These incidents may interfere with or limit an individual's ability to benefit from or participate in the College's educational programs or activities. If you have questions or concerns regarding your rights or responsibility, or if you would like to file a Title IX complaint please contact:

Kenneth Stonebrook, J.D. Title IX Coordinator Salt Lake Community College Taylorsville Redwood Campus – STC 276A (801) 957-5027 Ken.stonebrook@slcc.edu

Online Reporting Form: http://www.slcc.edu/title-ix/complaint.aspx

Students may also report incidents to an SLCC faculty or staff member, who are required by law to notify the Title IX Coordinator. If a student wishes to keep the information confidential, the student may speak with staff members of the Center for Health and Counseling, (801) 957-4268.

For more information about Title IX, go to: <u>http://www.slcc/edu/title-ix/index.apsx</u>

# STUDENT CODE OF CONDUCT

The student is expected to follow the SLCC student Code of Conduct found at <a href="http://www.slcc.edu/policies/docs/stdcode.pdf">http://www.slcc.edu/policies/docs/stdcode.pdf</a>

### **DRC STATEMENT**

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