

Campus Name: Ankeny Campus

Course Title: Programmable Controllers

Course Number: ELT 123

Section Number & CRN: 1; CRN: 12881

Instructor Information	1
Name	Bryan Burkhardt
E-mail Address	baburkhardt@dmacc.edu
Phone Number	515-965-7096
Office Location	3W-45 (if you can't find me there, check 3W-40 or 3W-49)
Office Hours	MW 8:30-9:30AM; TR 10:30-11AM; F 8:30-11AM
Blackboard	https://dmacc.blackboard.com
Course Information	

http://www.dmacc.edu

Course Information	
Semester & Year	Fall 2016
Date Syllabus Created and/or	Revised 8/24/16 ver 1.0
Days & Time & Location	MW 9:30-11:25AM; 3W-40
Course Description & Credits	https://www.dmacc.edu/Schedule/Pages/coursedescriptions.aspx
Course Competencies	https://www.dmacc.edu/competencies
Study Tips	To do well in this class, you must do work outside of class. Study the assigned readings, which will help you follow the content of the lecture. Review your lecture notes. Ask questions. This is a fast paced, hands-on course. It is realistic to expect to spend at least 3-6 hours per week studying for this class. If you miss any lecture, it is your responsibility to obtain the notes from a classmate as soon as possible. Then, review the missed notes and ask the instructor any questions on the missed material as soon as possible. The content of this course builds on itself throughout the semester. Consequently, it is important that students master early concepts, as they will become building blocks for concepts introduced later in the course. Students should seek extra help (tutoring, come in to office hours, etc.) as soon as possible if they feel that they are getting behind on the course material.
How the Course Fits into the Curriculum	This course is required for the Control Systems and Robotics Engineering Technology AAS degree, Wind Turbine Technician Program, Water Environmental Technology program and can serve as a technical option course in several other Engineering Technology disciplines. Ask if uncertain.
Textbooks & Materials	
Required Textbooks & ISBN	Programmable Logic Controllers, Petruzella, 4th Edition. ISBN: 0-07-351088-2 LogixPro Simulation Student CD-ROM
Required Materials Optional or Recommended	USB Flash drive, Writing Utensil, Paper, Appropriate dress for a electronics lab environment (long pants and/or apron; closed-toe, rubber-sole shoes; minimize jewelry) BRING THESE MATERIALS TO EVERY CLASS PERIOD UNLESS OTHERWISE INSTRUCTED Scientific Calculator

. Books/Materials

Software Applications	There is no required software for purchase.
Software Notice	"All the software used in this class is copyrighted; therefore, it is not for distribution, copying, or personal use. This software is the property of Des
	Moines Area Community College."
Course Policies	
Attendance	Unannounced quizzes are possible ANY day and can't be made up. No credit for class participation will be earned on days you aren't present. Assignments and handout material will be discussed and distributed during class period only. If you decide to miss a class, for any reason, please get the notes and handouts from a classmate rather from the instructor.
	If your schedule is such that full attendance is not possible (work schedule, etc), do not take this class. It is very easy to "fall off the edge" and not be able to get back on track. STAY AHEAD.
	NOTE: ES 4570 Classroom Participation as a Factor in Grading states that students will be informed by way of the course syllabus of instructor's grading practice. If the instructor deems regular classroom participation to be necessary to satisfactory progress, and if the lack of regular classroom participation due to absenteeism will affect the final grade for the course, this must be stated in the syllabus. If the grading practice as stated in the course syllabus includes points for classroom participation, denial of points or percentages for lack of classroom participation due to absenteeism shall be acceptable. The academic penalty for lack of classroom participation due to absenteeism should reflect the impact of the lack of classroom participation on satisfactory progress. No distinction will be made between lack of classroom participation due to approved absence and lack of classroom participation due to unapproved absence. Students shall be informed by way of the course syllabus of the instructor's make-up practice. Failure to complete a make-up assignment within a reasonably designated time shall be grounds for failure of that assignment.
Grading Criteria	Your grade for the course is based on tests, quizzes, and labs. There are three (3) tests planned, including a comprehensive final totaling 60% of your overall grade. You cannot retake an exam. Quizzes/class participation will be 10% of the grade. Quizzes CANNOT be made up. Labs/Homework will be worth 30% of the grade.
	The final letter grades will be assigned based on the ranges: 100% - 94% = A 93% - 85% = B 84% - 75% = C 74% - 65% = D Below $65\% = F$ The ranges may be lowered to your benefit, but will not be increased.
	Working in groups is an excellent way to learn. Unless otherwise specified, groups may work together on homework, but each student must complete their own write-up and state the members of the group collaborating. All homework must be typed unless otherwise specified by the instructors. Identical write-ups may result in no credit for their owners.
Classroom Conduct	https://go.dmacc.edu/handbook Show consideration for your classmates and instructor through these courtesies: (1) arrive on time, (2) be prepared for class, (3) participate actively and respectfully in class activities, (4) listen with care to the class discussion, and (5) turn off and put away cell phones and other electronic devices when you enter the classroom. (6) Do not surf the Internet during class.

the College, etc. can vary greatly among students and staff. It is always DMACC's goal to provide safe learning conditions, as well as provide the opportunity for students to attend classes when the vast majority is able to safely attend. The final decision to come to College can only be made by the individual student based on their specific extenuating circumstances that may make it unsafe for them to travel. During adverse weather, DMACC faculty is considerate of students who are unable to attend classes due to unique extenuating circumstances. Notification of Campus/College closures will be sent out through the DMACC RAVE Alert System, posted to the DMACC webpage at www.dmacc.edu, and where possible sent to the local media. Class Cancellation Procedure Students will be notified by DMACC email when instructor-determined class cancellations occur. Academic Academic integrity, based on the values of honesty, trust, fairness, respect, and responsibility, is a fundamental principle of scholarship at DMACC. Dishonesty/Plagiarism Academic Misconduct Policy (ES 4670) prohibits: plagiarism (using another person's writing or copying any work without proper citation), falsification, unauthorized collaboration during a test or on an exam, course or test. If you are to benefit from this class and be properly evaluated for your contributions, it is important for you to be familiar with and follow DMACC's Academic Misconduct policy. Students are encouraged to review DMACC's Academic Misconduct policy. Students and will not be tolerated. Students who are found responsible for a violation of the Academic Misconduct Policy will receive a failing grade for the test or assignments. Students have the right to appeal and may dos so by following the procedures described in the Academic Misconduct policy. Ut is important fo	Missed Exams	No "retakes" are allowed. Students must be present to take the tests at the
Extra Credit To be determined, but not likely Study Expectations 	Lata Assignments	
Study Expectations Attend all class meetings Complete assignments prior to each class meeting Ask meaningful questions and make substantive comments Be responsible for all that is mentioned in class or in the required readings. Talk to the instructor before and any issue becomes a problem. Form and use study groups. Come prepared to think and actively participate in class. Use in-class time appropriately an work outside of class to complete labs Weather Policy Individual circumstances such as health, childcare, rural roads, distance from the College, etc. can vary greatly among students and staff. It is always DMACC's goal to provide safe learning conditions, as well as provide the opportunity for students to attend classes when the vast majority is able to safely attend. The final decision to come to College can only be made by the individual student based on their specific extenuating circumstances that may make it unsafe for them to travel. During adverse weather, DMACC faculty is considerate of students who are unable to attend classes due to unique extenuating circumstances. Notification of Campus/College closures will be sent out through the DMACC RAVE Alet System, posted to the DMACC academic clancellations occur. Class Cancellation <i>Procedure</i> Academic integrity, based on the values of honesty, trust, fairness, respect, and responsibility, is a fundamental principle of scholarship at DMACC. DMACC's Academic Misconduct Policy (ES 4670) prohibits; plagiansm (using another person's writing or copying any work without proper citation, faislification, unauthorized collaboration during a test or on anexam, course Cademic Misconduct Policy ou arot be health		
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	DMACC Information	
	Add/Drop Dates	https://go.dmacc.edu/registration/pages/add_drop.aspx

Refund Policy	https://go.dmacc.edu/registration/Pages/refund.aspx
Support Services	
Services for Students with Disabilities	https://go.dmacc.edu/student_services/disabilities Any student with a documented disability who requires reasonable accommodation should contact the Disability Services Coordinator at 515 - 964-6850 or the counseling & advising office on any campus to apply for services.
Early Alert Referrals	https://www.dmacc.edu/counseling/Pages/facultyreferrals.aspx DMACC faculty are encouraged to help connect students to available resources at the college, including academic advising, counseling, tutoring, and more. Early Alert Referrals result in direct outreach by phone and email to students who have been referred. Students are encouraged to respond to outreach efforts and take full advantage of available resources in support of their success. Questions about this process should be directed to Bobby Nalean at 515-964-6474 or <u>earlyalert@dmacc.edu</u> .

Course Syllabus

DISCLAIMER: "This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change without notice. Any potential exceptions to stated policies and requirements will be addressed on an individual basis, and only for reasons that meet specific requirements. If you have any problems related to this class, please feel free to discuss them with me."

NONDISCRIMINATION POLICY: Des Moines Area Community College shall not engage in nor allow discrimination covered by law against any person, group or organization. This includes in employment, hiring practices or the provision of services, and harassment or discrimination based on race, color, national origin, creed, religion, sex (including pregnancy and marital status), sexual orientation, gender identity, age, disability and genetic information. Veteran status in educational programs, activities, employment practices, or admission procedures is also included to the extent covered by law. Individuals who believe they have been discriminated against may file a complaint through the College Discrimination Complaint Procedure. Complaint forms may be obtained from the Campus Provost's office, the Academic Deans' office, the Judicial Officer, or the EEO/AA Officer, Human Resources. For information about the ADA, the Section 504/ADA Coordinator may be contacted at 515-964-6857. For Title IX questions and concerns contact 515-964-6850.

Students who wish additional information or assistance may refer to Student Services procedure ES 4645 located at <u>https://www.dmacc.edu/student_services/int</u>. Click Policies & Procedures.

Accommodations: The Program Development/Academic Support Services Director is the official Student Accommodation Officer/Section 504/ADA Coordinator for DMACC. The ADA Coordinator's office is located in Bldg. 6-10E on the Ankeny Campus and may be contacted by voice (515-964-6857). The ADA Coordinator is responsible for ensuring that the college complies with federal regulations that guarantee qualified students with disabilities equal access to all programs and services. Any student, faculty, or staff member may contact the ADA Coordinator's office for clarification of federal regulations, appeal of a grievance, or resolution of a disability-related problem.

Additional Information

To access additional information related to DMACC policies and procedures that impact the classroom (i.e. use of technology, weather-related cancellations, classroom conduct, etc.) please refer to the DMACC student handbook.

If you do not have access to a computer and need a printed version of any of the information described above, contact your instructor.

This workforce solution is funded by the IHUM Consortium which is 100% financed through a \$15,000,000 grant from the U.S. Department of Labor's Employment & Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

