

CAMPUS NAME: DMACC Ankeny Campus

Course TITLE: Microprocessors

Course number: ELT 623

SECTION NUMBER & CRN: 1 / 14639

INSTRUCTOR INFORMATION

NAME: Rick Wagner

EMAIL ADDRESS: rewagner@dmacc.edu

PHONE NUMBER: 515-965-7155 (office) or 515-770-9105 (cell)

FAX NUMBER: 515-964-6815

OFFICE LOCATION: Building 3 East room 112

OFFICE HOURS/APPOINTMENTS: Mondays and Wednesdays 1:00 pm to 3:30 pm

BLACKBOARD: https://secure.dmacc.edu/myonlinelearning/login.aspx

COURSE INFORMATION

SEMESTER/YEAR: Fall 2016

DATE SYLLABUS CREATED AND/OR REVISED: August 28,2016

Days & TIME & Location: Mondays and Wednesdays 11:30 am to 12:25 pm

Course description & credits: http://www.dmacc.edu/courses/crsrod.asp

Prerequisites: ELT 325, ELT 326

Course competencies: https://go.dmacc.edu/competencies

Course overview: This course is an introduction to microprocessors and microcontrollers. Students will learn their structure, programming and how they interface with various interfaces and input/output devices. This class will consist of lectures, labs, tests, quizzes and various programming assignments.

STUDY TIPS: This is a fast paced course. Previous knowledge from first year electronics classes is essential to succeed in this course. Expect to study at least 6 hours each week outside of class for this course. If you cannot find at least 6 hours each week to study because of work, or other responsibilities, then you should not be taking classes at DMACC. Study in small amounts each day and not the day before an exam.

TEXTBOOKS & MATERIALS

REQUIRED TEXTBOOKS & ISBN: None: But be prepared to purchase technical books as needed. Most course materials are online from www.microchip.com.

REQUIRED MATERIALS:

Microchip Debug Express 3. This is available through several Electronic suppliers or the bookstore. www.microchip.com Price is about \$69.99. If you purchase it from other sources, make sure it has the demo board included. Be prepared to purchase electronic components as needed for projects.

Scientific Calculator.

Computer capable of operating MPLAB X software. Software is available from the Microchip website. There versions available for Microsoft, Linux and Apple operating platforms. Some operating systems and PCs may not be compatible. Check Microchip website for compatible systems.

Be prepared to purchase electronic components as needed for projects.

SOFTWARE APPLICATIONS:

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/PARTICIPATION: Students are still expected to show up each class period. If 4 or more classes are missed, there will be a 10% deduction in the students final grade. Three missed classes will result in a 5% deduction. No grade deductions for 2 or less missed classes. If a student does not show up within the first two weeks, he/she may be dropped from the class.

GRADING CRITERIA: Grading is based upon tests, homework, class participation, and quizzes.

10% participation, quizzes, and homework

80% labs

10% final exam

CLASSROOM CONDUCT: https://go.dmacc.edu/handbook

I expect students to behave in a professional manner. Any behavior that will get you fired in the real world will give you a failing grade in this class. If you don't like this, then take the class from a different instructor.

MISSED EXAMS: Only one exam may be made up if there is a legitimate reason for it. Quizzes cannot be made up after their due date. Instructor must be notified ahead of time for excused absences.

LATE ASSIGNMENTS: 10% deduction per day (Not the next class period!) on Homework assignments. Missed Exams have a 10% deduction per week unless arrangements are made before the date of the missed exam.

EXTRA CREDIT: To be determined

STUDY EXPECTATIONS: Study ahead of time! Microprocessors and digital systems in general take time to comprehend. This cannot be learned the day before a test.

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. It is the responsibility of each faculty member to notify their students (in addition to their dean or provost) through some predetermined means if they are must postpone or cancel a specific class due to weather or illness."

CLASS CANCELLATION PROCEDURE: Check local news and your Email frequently on mornings of possible bad weather. If I am not here at the beginning of class, call me on my cell phone number listed in this document. If I am not reachable by my cell phone and you have not been informed by other information and a substitute does not appear after 25 minutes, you may leave.

ACADEMIC DISHONESTY/PLAGIARISM: Not Cool. I have a zero tolerance for plagiarism. If I suspect plagiarism I reserve the right to verbally quiz students about assignments they have turned in. If the student cannot show competence in his/her work, he/she will receive a failing grade.

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 on-line at https://go.dmacc.edu/handbook/polprocedures/pages/academicmisconduct.aspx or in the DMACC Student Handbook.

Contacting Instructor If you have questions or concerns you may call, stop by my office during office hours, or email. I prefer email for questions and notifications of being absent.

DMACC INFORMATION

INSTRUCTOR HOME PAGES: http://www.dmacc.edu/instructors

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 **515-964-6850V or hlcoon@dmacc.edu** or the counseling & advising office on any campus to apply for services.

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 or allow discrimination covered by law. This includes harassment based on race, color, national origin, creed, religion, gender, sexual orientation, age, and disability. 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 Procedures. Complaint forms may be obtained from the DMACC Web site, the Ombudsperson, Judicial Officer, Human Resources Department, the campus Provost's Offices, and Academic Deans' Offices.

Students who wish additional information or assistance may contact the **Executive Dean, Student Services**, **Laurie Wolf**, Bldg. 1 on the Ankeny Campus, 515-964-6437 or the **Judicial Officer, Debbie McKittrick**, Bldg. 1 on the Ankeny Campus, 515-964-6574 or they may refer to Student Services procedure ES 4645 located at https://go.dmacc.edu/student_services/int. Click Policies & Procedures.

Employees and applicants who wish additional information or assistance may contact the **EEO/AA Officer, Dr. Sandy Tryon**, Human Resources, Bldg. 1 on Ankeny Campus, 515-964-6301 or refer to HR Procedures 3000, 3005, 3010, 3015, and 3020 at http://www.dmacc.edu/hr/hrpp.asp

Program Development/Academic Support Services Director, Sharon Bittner, is the official Student Accommodation Office/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) or sgbittner@dmacc.edu. 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.

SYLLABUS ADDENDUM

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.), the DMACC student handbook, registration information (including add/drop dates and refund dates), student service information (including counseling and advising), the DMACC academic calendar, and campus-specific resources (i.e. Academic Achievement Center, library, computer, labs, etc), go to https://go.dmacc.edu/handbook and click "Syllabus Addendum" in the left navigation.

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/.

