


Campus Name: Urban Campus

Course Title: Data Structures

Course Number: CIS 152

Section Number & CRN: WW1 & 30464

Instructor Information

Name	Michelle E. Ruse
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Office Location	UC01-226
Office Hours	Tuesday 9:30 am – 10:40 pm, 2:30pm – 3:30pm Thursday 9:30 am – 10:40 pm, 2:30pm – 3:30pm and by appointment
Instructor Introduction	<p>My name is Michelle Ruse. I joined DMACC Urban Spring 2016 as full time faculty</p>  <p>My educational background includes a BA in Mathematics and French, MS in Applied Mathematics and PhD in Computer Science. I have taught Computer Science for 12 years and have four years of experience as a Software Engineer, two at Xerox, two at Workiva, not including an internship at Boeing. I joined DMACC Urban Spring 2016. In my free time, I like to bike, run, do yoga, play trivia and create vegan dishes.</p>
Instructor Web Page Address	https://www.dmacc.edu/instructors
Blackboard	https://dmacc.blackboard.com

Course Information

Semester & Year	Summer 2017
Date Syllabus Created and/or Revised	5/29/17
Days & Time & Location	Online
Course Description & Credits	https://go.dmacc.edu/Schedule/Pages/coursedescriptions.aspx
Prerequisites	CIS 171
Course Competencies	https://go.dmacc.edu/competencies

Course Overview	See Course Outline.
Study Tips	To do well in this class, you must do your homework regularly (see schedule and dateline on the last pages). Study the assigned readings, contribute to discussion boards. Ask questions. Students are expected to devote three hours of study time for each course hour. This is a fast paced, hands-on course. It is realistic to expect to spend at least 6-9 hours per week studying for this class. 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.
Textbooks & Materials	
Required Textbooks & ISBN	Title: Data Structure and Algorithm in Java Edition: Second Author: Robert LaFore. Publisher: Sams Publishing Copyright Year: 2003 ISBN: 0-672-32453-9
Required Materials	Computer with high speed internet connection. Ability to install required software Applications.
Software Applications	Textbook and download resources. Microsoft Office. Please install and use Firefox (free internet browser). This will improve your experience using Blackboard. You can get Firefox using this link http://www.mozilla.com/en-US/firefox/ . If you have any problems installing Firefox, please contact the Help Desk (515-965-7300) for support. Java and Eclipse: http://www.eclipse.org/downloads Git: http://www.github.com Source Tree: https://www.sourcetreeapp.com
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	
Participation	Participation in the class is mandatory. Participation will be monitored every week and will affect your final grade. If you are unable to participate, in class and by logging on to Blackboard, you will not be able to learn. If you are aware that you will be missing a deadline (illness, family emergencies, etc.), notify the instructor as soon as possible via email. In the case that the student missed class work, the student must present a valid excuse and documentation (i.e. a doctor's note) to gain the opportunity to make up that work. Without this documentation, the student will not receive the chance to make up points lost.

Netiquette	<p>Students who are disruptive in the online environment are subject to the university's Academic Misconduct Policy and the Student Code of Conduct. Disruptive behavior in the online environment includes violations of the following netiquette guidelines and the Student Code of Conduct. Netiquette is a set of standards for appropriate behavior when communicating with others online. Basic netiquette guidelines include:</p> <ul style="list-style-type: none"> • Be respectful of other people and their opinions • Write clearly and pick your words carefully, avoiding humor and sarcasm. Visual cues used to convey meaning when speaking to others in a face-to-face environment are missing in online communications, so be sure to convey your thoughts carefully. Posts based upon race, religion, color, national origin, age, sex, sexual orientation, gender identity or expression, genetic information, or disability, out of the context of the discussion, generally are inappropriate. • Do not post or distribute material that would offend or frighten a reasonable person. • Inflammatory, condescending, harassing, or derogatory remarks are inappropriate. • Use proper spelling, grammar, capitalization, and punctuation. Using all capital letters in online communications is considered SHOUTING, and inappropriate. • Do not use emoticons, (E.G. smiley faces) and chat acronyms (E.G. LOL, BRB) because they could be misinterpreted and are not appropriate in professional communication. • When posting to a public forum, keep your post on topic and be sure to add content that contributes to the topic. • Be aware of plagiarism and copyright guidelines. Cite your sources and refrain from posting or distributing content that is copyright protected.
Grading Criteria	<p>Based on percentage of points possible accumulated throughout the course. Points will be awarded for Exams, Quizzes, Assignments, and Participation.</p> <p>A = 93-100%, A- = 90-92%, B+ = 87-89%, B = 83-86%, B- = 80-82%, C+ 77-79%, C = 73-76%, C- = 70-72%, D+ = 67-69%, D = 63-66%, D- = 60-62, F = 0-59%</p> <p>See Blackboard for assignment directions and specifications, failure to follow directions or meet specifications will result in a loss of points at the discretion of the instructor.</p>

Classroom Conduct	https://go.dmacc.edu/handbook The above link includes DMACC Student Handbook Web link. Show consideration for your classmates and instructor through the following courtesies: (1) participate in online activities on time, (2) be prepared for class by completing assigned readings, and (3) participate actively and respectfully in class activities.
Missed Exams	No makeup Exams or Quizzes will be given, except in cases of extreme circumstances to be determined by the instructor. A zero score will be awarded for missed Exams or Quizzes. If an Exam or Quiz has a time limit, students who exceed the time limit will have two points deducted from their score for each minute beyond the time limit.
Late Assignments	Each assignment will have a due date, 20 percent will be deducted each day an assignment is late. No credit after assignment is 5 days late. No credit on any assignments after the last scheduled exam. Late assignments must be sent to the instructor by DMACC email attachment for late credit. It is the responsibility of the student to retrieve assignments from Blackboard before the Unit or Module due date and to submit assignments on Blackboard. Assignments are due at 11:59 (Central Time Zone) on the date shown as the due date within Blackboard.
Extra Credit	No extra credit for late assignment, extra credit awarded at the discretion of the instructor.
Study Expectations	Class members are expected to (1) complete assigned readings, discussion questions, exercises, and writing assignments in preparation for class or assignments, (2) ask meaningful questions and make substantive comments, and (3) be prepared to discuss the assigned material or participate in online activities when they are available.
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 Alert System, posted to the DMACC webpage at www.dmacc.edu , and where possible sent to the local media.

Class Cancellation Procedure	Check Blackboard or DMACC email for information regarding canceled or postponed classes/assignments.
Academic Dishonesty/Plagiarism	<p>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: 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 on-line at https://go.dmacc.edu/handbook/polprocedures/pages/academic_misconduct.aspx or in the DMACC Student Handbook. Work that violates these values is incompatible with the goals of this class and will not be tolerated. Students who are found responsible for a violation of the Academic Misconduct Policy will receive a zero score on the exam, quiz or assignment, multiple occurrences will result in a failing grade for the course. Students have the right to appeal and may do so by following the procedures described in the Academic Misconduct policy.</p> <p>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/academic_misconduct.aspx or in the DMACC Student Handbook.</p>
Technical Problems	<p>Students having technical problems with course software or Blackboard must first contact the DMACC Help Desk 515-965-7300 or 1-800-362-2127 ext. 7300 https://go.dmacc.edu/helpdesk/pages/welcome.aspx</p> <p>Contacting the Help Desk creates a log of the technical issue. Failure to contact the Help Desk may result in a score of zero on assignments, quizzes or exams. After contacting the Help Desk students should email the instructor to inform them of the technical issue, the Help Desk Log file can then be verified by the instructor if needed.</p>
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	<p>https://go.dmacc.edu/student_services/disabilities</p> <p>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.</p>

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. This includes harassment 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 (ES4645). Complaint forms may be obtained from the Campus Provost's office, the Academic Dean's office, the Judicial Officer, or the EEO/AA Officer, Human Resources. 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 https://go.dmacc.edu/student_services/int. 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.

REV 6-11-2015

Course Schedule		
Week	Assignment	Due Date
1	Define Data Structures Java Review (OO principles, arrays, classes) (Chapter 1) Big-O (Chapter 1)	May 28, 2017 11:59PM
2	Stacks (Chapter 4) Recursion (Chapter 6)	June 1, 2017 11:59PM
3	Queues (Chapter 4) Lists (Chapter 5)	June 8, 2017 11:59PM
4	Trees & Traversals (Chapter 8)	June 15, 2017 11:59PM
5	Sorting (Chapters 3 and 7)	June 22, 2017 11:59PM
6	Hash tables (chapter 11) Exam Final Project Proposal	June 29, 2017 11:59PM
7	Heaps (Chapter 12) Final Project Retros	July 6, 2017 11:59PM
8	Final Project Due	July 13, 2017 11:59PM