University of North Texas at Dallas

Spring 2024

Syllabus

CSCE 1040: Computer Science II (3hrs)	
School	Liberal Arts and Life Sciences
Department	Mathematics and Information Sciences
Instructor name	Dr. Muhammad Adeel
Office Location	FH 261
Office Phone	TBD
Email Address	Muhammad.Adeel@untdallas.edu
Office Hours	Tu/Th 11:20 AM to 1:20 PM Face-to-Face Tu/Th 7:45 AM to 9:45 AM Online on Zoom (the link is available on the course homepage on Canvas)
Course Format/Structure	Face to Face
Classroom Location	FH 136
Class Meeting Days & Times	Tu/Th: 10:00 AM - 11:20 AM
Course Catalog Description	Continuation of CSCE 1030. Software design, structured programming and object-oriented programming.
Prerequisites	CSCE 1030: Computer Science I
Corequisites	MATH2424: CALCULUS 1
Required Text	Introduction to Java Programming and Data Structures, Comprehensive Version, 11th Edition, Y Daniel Liang, 2017, ISBN: 9780134670942.
Recommended Texts and References	
Access to Learning Resources	**UNT Dallas Library:** Phone: (972) 338-1616; Website URL: http://www.untdallas.edu/library **UNT Dallas Bookstore:** Phone: (972) 780-3652; Website URL: http://www.untdallas.edu/bookstore Email: untdallas@bkstr.com
Canvas Resources **Supported Browsers:** • Chrome 67 & 68 • Firefox 60 & 61 • Flash 29, 30 (for audio/video) • Respondus Lockdown Browser • Safari 10, 11 **Supported Devices:**	**Getting Help with Canvas:** **Canvas 24/7 Phone Support for Students: 1-833-668-8634** **Canvas Help Resources:** **Canvas Student Guide -** https://community.canvaslms.com/docs/DOC-10701 For additional assistance, contact Student Assistance (UNT Dallas Distance Learning): DAL1, Room 157 Phone: 972-338-5580 Email: distancelearning@untdallas.edu

• iPhone • Android • Chromebook *Note: Tablet users can use the Canvas app* **Screen Readers:** • VoiceOver (Safari) • JAWS (Internet Explorer) • NVDA (Firefox) *Note: There is no screen reader support for Canvas in Chrome*	**If you are working with Canvas 24/7 Support to resolve a technical issue, please keep me updated on the troubleshooting progress.** **If you have a course-related issue (e.g., course content, assignment trouble, quiz difficulties), please contact me during office hours or use canvas messaging. In the circumstances where you don't have access to canvas messaging, use email to get in contact.**

Course Goals:

This course provides an overview of multi-dimensional arrays, object-oriented programming. It also introduces such data structures as lists, stacks, and queues. The Java programming language will be used to develop computer programs.

Student Learning Outcomes: Upon successful completion of this course, the student will be able to:

- Explain the principles and concepts of multi-dimensional arrays, object-oriented programming, lists, stacks, and queues.
- Analyze complex programming problems and identify their requirements.
- Design UML class diagrams for solving complex programming problems.
- Use Java language to develop complex computer programs.

Course Outline

Priority will be given to understanding the material in depth. This schedule is subject to change by the instructor, any changes to this schedule will be communicated in class.

Date	Topics	Tasks	Reference in the Text
Week 1 1/16	• About the Course • Recap of Computer Science I: Elementary Programming, Inputs from Console, Selection, Iterations, Methods, Scope of Variables	Assignment 1 **Please note that all assignments are required to be submitted on *Discussion Boards*.** Quiz 1	Chapters 2, 3, 5, 6, 12
Week 2 1/22	• Single Dimensional Arrays	Assignment 2 Quiz 2	Chapter 7
Week 3 1/29	• Multidimensional arrays	Assignment 3 Quiz 3	Chapter 8
Week 4 2/5	• Objects and Classes	Assignment 4 Quiz 4	Chapter 9
Week 5 2/12	• Objects and Classes	Assignment 5 Quiz 5	Chapter 9
Week 6 2/19	• Objects and Classes: Constructors, *this* keyword.	Assignment 6 Quiz 6	Chapter 9
Week 7 2/26	• Inheritance & Polymorphism	Assignment 7 Quiz 7	Chapter 11
Week 8 3/4	**Exam 1: Quiz-based Exam**	Exam 1 comprises of topics covered between weeks 1 and 7.	
Week 9 3/11	**Spring Break**		
Week 10 3/18	• Abstract classes and interfaces	Assignment 8 Quiz 8	Chapter 13
Week 11 3/25	• Advance Topics in OOP: *super* keyword, constructor chaining, Object Class in Java, arrays of objects	Assignment 9 Quiz 9	
Week 12 4/1	• Java Collections: Introduction • Java Collections: Stacks	Assignment 10 Quiz 10 Assignment 11 Quiz 11	Chapter 20, 24

Week 13 4/8	• Java Collections: Lists	Assignment 12 Quiz 12	Chapter 20, 24
Week 14 4/15	• Java Collections: Queues • Advanced Topic in Collections: Storing and retrieving objects in collections.	Assignment 13 Quiz 13	Chapter 20, 24
Week 15 4/22	• Advanced Topics in OOP: File Handling and Exception Handling. • Review & Practice for Exam 2. Students will be given Java programs to practice.	No Assignment or Quiz	
Week 16 4/29	**Exam 2: Practical Exam** **Exam 3: Quiz-based Exam**	Exam 2 and Exam 3 comprise of topics covered between weeks 4 and 14.	

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Grading Matrix

Assessment method	Details	Points	Total
Quizzes	Quizzes will be given on different topics. There will be approximately 13 quizzes.	4.5% Per Quiz	58.5%
Assignments (To be submitted on Discussion Boards)	Assignments will involve analyzing, designing, and writing computer programs in Java. There will be approximately 13 assignments.	0%	0%
Exam 1	The exam will follow a format similar to quizzes. The exam will be conducted in the classroom.	15%	15%
Exam 2 (Practical Exam)	In this exam, you will be given program(s) to write using Eclipse on the Lab PCs. The exam will be conducted in the classroom.	6.5%	6.5%
Exam 3	The exam will follow a format similar to quizzes. The exam will be conducted in the classroom.	15%	15%
Attendance	Marks for attendance will be uploaded on the Canvas during the last teaching week.	5%	5%

Total:		100%	

Grade Determination

The following standard grading scale will be used to determine your final letter grade:

A = 90% or better

B = 80 – 89 %

C = 70 – 79 %

D = 60 – 69 %

F = less than 60%

Course-Specific Policies

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol. Class attendance and participation is mandatory because the class is designed as a shared learning. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent. Successfully completing this class is a function of many factors. Two such factors are class attendance and assignment/exams completion.

Assignment Policy:

All assignments are due in class on the due dates stated on the assignments. No late assignments will be accepted, except for documented emergencies. All assignments are to be done individually unless stated otherwise on the assignment.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol).

Email Policy:

Use Canvas messaging to contact me. In circumstances where you don't have access to Canvas messaging, use your Canvas/university email account to contact me. You should check your email every day as you are responsible for all information I send out. Due to privacy rights, I will not discuss grades over the phone and I will only answer emails from your Canvas/university email account.

Cell Phones:

Cell Phone use (ringing, texting, reading, etc.) in class is strictly prohibited.

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas at Dallas makes reasonable academic accommodations for students with disabilities. Students seeking accommodations must first register with the Disabilities Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delays in implementation. Note that a student must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letter during their designated office hours to protect the privacy of the student. For additional information see the Disability Services Office website at http://www.untdallas.edu/disability. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu on the first floor of the Student Center.

Canvas Instructure Accessibility Statement: University of North Texas at Dallas is committed to ensuring that online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. The Canvas Instructure Accessibility Statement is provided at https://www.canvaslms.com/accessibility.

NOTE: Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism)

will be handled in accordance with the University's policies and procedures. Refer to the UNT Dallas Academic Integrity Policy in the appropriate Catalog at http://dallascatalog.unt.edu.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Web-based Plagiarism Detection*:* Please be aware in some courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student's Rights, Responsibilities, and Conduct will be referred to the Dean of Students as the instructor deems appropriate (UNTD Policy 7.001 found at https://www.untdallas.edu/hr/upol).

Classroom Disruption:

Students are expected to engage with the instructor and other students in this class in a respectful and civil manner at all times to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be directed to leave the classroom. A student who is directed to leave class due to disruptive behavior is not permitted to return to class until the student meets with a representative from the Dean of Students Office. It is the student's responsibility to meet with the Dean of Students before class meets again and to provide the instructor confirmation of the meeting. A student who is directed to leave class will be assigned an unexcused absent for that class period and any other classes the student misses as a result of not meeting with the Dean of Students. The student is responsible for material missed during all absences and the instructor is not responsible for providing missed material. In addition, the student will be assigned a failing grade for assignments, quizzes or examinations missed and will not be allowed to make up the work.

The Code of Student's Rights, Responsibilities, and Conduct **(UNTD Policy 7.001 found at** https://www.untdallas.edu/hr/upol**)** describes disruption as the obstructing or interfering with university functions or activity, including any behavior that interferes with students, faculty, or staff access to an appropriate educational environment. Examples of disruptive behavior that may result in a student being directed to leave the classroom include but are not limited to: failure to comply with reasonable directive of University officials, action or combination of actions that unreasonably interfere with, hinder, obstruct, or prevents the right of others to freely participate, threatening, assaulting, or causing harm to oneself or to another, uttering any words or performing any acts that cause physical injury, or threaten any individual, or interfere with any individual's rightful actions, and harassment. You are encouraged to read

the Code of Student's Rights, Responsibilities, and Conduct for more information related to behaviors that could be considered disruptive.

Course Evaluation:

Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester via your campus email, providing you a chance to comment on how this class is taught. I will not have access to the results of the evaluations until after final grades have posted. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

Bad Weather Policy:

Campus facilities will close and operations will be suspended when adverse weather and/or safety hazards exist on the UNTD campus or if travel to the campus is deemed dangerous as the result of ice, sleet or snow. In the event of a campus closure, the Marketing and Communication Department will report closure information to all appropriate major media by 7 a.m. That department will also update the UNTD website, Facebook and Twitter with closing information as soon as it is possible. For more information please refer to http://www.untdallas.edu/police/resources/notifications.

Technology Assistance:

In order to successfully access the materials in Canvas, UNT Dallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you experience difficulty accessing or using components of the course, try using Google Chrome browser. If you still experience technical difficulties, first, notify your instructor.

If the problem is still not resolved, call Distance Learning at the phone number listed on the first page of the syllabus. Also, no matter what browser you use, always enable pop-ups.

For more information see:

- UNT Dallas Canvas Technical Requirements: https://community.canvaslms.com/docs/DOC-10721
- Canvas Instructure Support & Unsupported Operating Systems: https://community.canvaslms.com/docs/DOC-10720