CSE 1310: Introduction to Computers and Programming

Fall 2023

Last updated 8/21/2023

Instructor Information

Instructor:
Alexandra Stefan

Office Number:
ERB 625

Office Telephone Number:
817-272-3785 (CSE Department phone number)

Email Address:
astefan@uta.edu

Faculty Profile:
http://ranger.uta.edu/~alex/

Instructor Office Hours:
MoWe 2:40pm-3:10pm, TuTh 12:40-1:40 or by appointment. *Office hours will be in person in room ERB 625. During in-person office hours, students that are physically there will have priority. If I am free, I will check Teams and conduct online office hours (via Teams video call or chat).*
For the online office hours, I will not have an ongoing open meeting for students to join due to privacy issues. Instead, I will have individual calls with students. Please send a chat message to indicate that you want to join office hours and we can continue as a chat or with a call. For calls during office hours I typically use video and I encourage you to use it as well, but you are free to use only voice or chat. Same rules apply for TA office hours.

Course Information

Section Information:
CSE 1310-004

Time and Place of Class Meetings:
MoWe 1:00pm - 2:20pm, ***COBA 154*** ~~***NH 229***~~
All lectures will be in person and at the same time an online meeting using Teams will be available for those that want to attend remotely. The Teams meeting will be recorded and available to all students.

Description of Course Content:
This course introduces students to computers, to the algorithmic process, and to programming using basic control and data structures. The programming language is C.

Student Learning Outcomes:
1. DETAILED student learning outcomes are specified on the CSE 1310 departmental page. This page may have the information from the previous semester, but will be updated in the first days of classes: https://mavsuta.sharepoint.com/sites/cse13xx/SitePages/CSE-1310.aspx
2. High level student outcomes:
    a. Be able to **write programs that implement basic functionalities** such as math functions (e.g. the factorial), processing of strings and lists, games (e.g. Tic-Tac-Toe, The Hangman) or simplistic real-world applications (e.g. a phonebook).
    b. **Debug** programs written by you or by others.
    c. **Test** programs
    d. When reading code, be able to **explain what each line of code does and how it affects the program state**.
    e. Write programs to read and write text files

f. Write programs where the functionality is split over three or more **functions**.
g. Develop **problem-solving skills**:
    i. break a problem into smaller components,
    ii. identify which of those you know how to do and which you do not,
    iii. develop solutions for each component that can then be combined to work together as a complete program
    iv. identify special cases for which your program may not work as expected (e.g. invalid data is given to it)

Textbook and Other Course Materials:
There is no required textbook for this class. All the information needed for assignments and tests will be provided in slides and/or presented during lectures.
Optional textbook: *"C by Discovery" by Foster and Foster, 4-th edition, ISBN-13: 978-1576761700, ISBN-10: 1576761703*. I am using the 4th edition, but the 3rd one is also ok. This book is also the official textbook for CSE 1320, but I do not know what version each CSE 1320 instructor allows or if they require the book or not.

Technology Requirements
The following tools will be used:
- Canvas – announcements, online quizzes, homework submission, discussion board, course materials
- Teams – for online lectures and office hours (for both instructor and TA). It is recommended to use the Microsoft Teams App (as opposed to the Microsoft Teams webpage).
- **Respondus Lockdown** - software that will block your browser when taking a quiz
- **A webcam (integrated in the laptop or external)** – will be needed during online exams (for video recording and monitoring of the student taking the exam) and possibly for some assignments where students may need to record a video as part of the assignment.
- Use of an IDE (Integrated Development Environment) to facilitate developing and debugging code. Information on this will be provided in Canvas and in the first lecture. I recommend Code::Blocks, but any IDE where you can develop and debug C code is fine.
- Headphones with microphone are strongly encouraged so that you can easily communicate with us.
- *For tutorials on these tools see the resources linked under the "Help" section in Canvas.*

Other Requirements:
The **exams will require writing code WITHOUT the use of an IDE or a compiler** (i.e. without being able to run the code or the program you are writing). Practice writing your programs (for homework or practice) on paper first and then on the computer.

Course Schedule

See the course schedule at: http://ranger.uta.edu/~alex/courses/1310/Schedule_CSE1310_2023_Fall.pdf

Grading Information and Major Assignments

Grading and major Assignments and examinations:
Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (starting with the instructor and TAs) if their performance drops below satisfactory levels; see "Student Support Services," below.
See the Final Grade Reports Schedule for dates and deadlines related to grades.

The grading scheme below and the class schedule may be adjusted if deemed beneficial for the class. In that case the changes will be clearly stated and posted as announcements in Canvas.

Assignment	Weight	Modality
Two Midterms and one Final exam	25%	In classroom, in person
Departmental **Benchmark** Quizzes: 5 quizzes, online - Available for 30 hours starting at 6pm.	20%	In Canvas, by topic (not cumulative)

- Will require a Video Camera and the Lockdown Browser Software. - 70% of the class, must score 70 or higher. If not, we will review the material and the exam will reopen. If a retake opens, and you scored less than 70 in the first attempt, and you do not take the retake, your grade will be 0. If you retake it, and score lower, the higher score will be kept. Note that if the class passes the first time (70% of the students score 70 or more) the test will NOT reopen and you will not have the possibility to retake it. - **Managed and administered by the cse13xx coordinator, Miss Donna French via a separate Canvas course that you will be automatically added to, AFTER Census Date.** There will be no cost for this course. It is not a course per se, but a mean to administer these exams across different sections. - Study guides will be provided for each Benchmark in Canvas. - A practice test will be provided in the "CSE1310 Benchmarks" course. Take it 2 or more days BEFORE you need to take your first benchmark quiz to ensure your system is working well.		Due dates: Specific dates will be picked during the semester. They will be soon after we finish that material.
Lecture Quizzes – Review and Lecture-based quizzes (in Canvas) or activities. Tentative due date: the night before each lecture (at 11:59pm Sunday and Tuesday). They will not require a Camera and the Lockdown Browser. Their purpose is to motivate studying the material covered each lecture and to review past material. Students can use any class material and discuss the answers for these quizzes with classmates. **1 lowest score Lecture Quiz (LQuiz) will be dropped**	15%	in Canvas, cumulative, but with focus on the new material
Coding Homework – one per week To help with the adjusting period at the beginning of the semester, the lowest of the first 4 (1 to 4) Coding assignments can be dropped if it improves your overall homework score. *If you want that, send the instructor an email requesting it*. This is to help getting used with the course style. Do NOT use this rule to just skip one of the first 4 coding homeworks. Submit them all!!! Coding assignments become more challenging as the semester progresses. Do the best you can now! See the rules for up to 24hrs late submission penalty and early submission bonus.	40%	Submitted in Canvas, cumulative
Total class score	100%	
Learn how to compute your class score yourself! *Plan 2 hours of work each day for this class adding to a total of 12 hours per week, outside of lecture time.* I know this is a tight schedule, but it is designed to keep you up to pace with the material and that should reduce time spent in debugging, which can save hours. Let me know if you have any concerns or suggestions.		

Late and Early Submission rules for Coding Homework

Definitions:

- Available date – date until the assignment is available (i.e it can be opened in Canvas and a solution can be submitted)
- Due date – date an assignment is due. Students may not be able to submit after this date. If the Available date is after the due date, students can submit answer after the due date, but before the available date; such submissions will be late submissions and the late penalty will apply.

Early submission bonus for Coding Homework only: students that submit a Coding Homework 24 hour or more before the DUE date receive 5 bonus points for each such homework. There is no partial bonus if you submit less than 24 hours early (e.g. no bonus if you submit 20 hours before the deadline).

Late submissions are allowed only for Coding Homework. Any other type of assignment has no late submission.

Coding Homework can be submitted up to 24 hours after the DUE date with 4% penalty per missed deadline every hour:

a) In Canvas, an assignment that can be submitted late will have both a DUE date and an AVAILABLE date. The DUE date is the actual due date. The AVAILABLE date is 24 hours after the DUE date to allow late submission.

You cannot submit anything after the AVAILABLE date. Coding homework or Exam-quizzes submitted after DUE date, but before AVAILABLE date will be.

b) Late penalty: 4% of the total points penalty for every missed deadline in one hour increments. Note that this is a PERCENTAGE, not a fixed number of points. If a homework is worth 200 points, for each missed deadline you lose 8 points, not 4 points.

c) You have 2 "extension days"

d) "one extension day" – allows you to submit late (between the DUE date and AVAILABLE date) one coding homework of your choice. It cannot be combined with the hourly late penalty.

e) No submission is allowed after 24 hours (the AVAILABLE date). You CANNOT use both extensions, or a combination of an extension with late penalty to get more than 24 hours extension from the due date.

f) The TA can only remove the late penalty AFTER you submitted your homework. They will manually mark that assignment as not late in Canvas.

g) Example:
Coding Homework 5 shows DUE Wednesday 11:59pm and AVAILABLE until Thursday 11:59pm.

- **i.** No submission possible after Thursday 11:59pm.
- **ii.** Solution submitted before Tuesday 11:59 pm is early. It receives 5 bonus points.
- **iii.** Solution submitted on Wednesday is on time (no bonus and no penalty).
- **iv.** Solution submitted on Thursday is late.
  1. Solution submitted Thursday at 12:05 am – missed one deadline (the 11:59pm Wednesday) => 4% penalty
  2. Solution submitted 4:00am missed 5 deadlines (11:59pm, 12:59am, 1:59am,2:59am,3:59am) => 20% late penalty
  3. If the student chooses to use one "extension" for this assignment, the late penalty will be removed. To use the first extension, the student will submit a comment in Canvas under BOTH "Coding Homework 5" AND "1st Extension" saying "use 1st extension for coding hw 5".

Make-up Exams/Quizzes:
Make-up exams or any other additional work towards "improving ones grade" **will not be offered**.
Some bonus points are available from early submission.

Expectations for Out-of-Class Study:
Practice, practice, practice! Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend an additional **12 hours** per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

Before every new lecture, you should have reviewed and understood the previous lecture. After each lecture you should type and run the programs covered in class (if possible, all from memory, without using your notes).

Practice the right way! If working on a single aspect of a problem takes you a very long time, you may be doing it wrong! It should not be trial and error, but a guided process. Talk to the instructor, TA and other classmates about it.

Grade Grievances:
Any issues and regrading requests for an assignment (e.g. coding homework, quiz) must be resolved within 7 days of the day the grades are posted for that assignment. After 7 days the grade will not be modified and such requests are dismissed.

For a homework grade issue contact first the TA that graded it. If not resolved, contact the instructor.
For a quiz or exam grade contact the instructor first.

An official appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. See Undergraduate Grading Policies and Student Complaints.

Academic Integrity:
The penalty for cheating or collusion in a homework or exam is a ***grade of 0 for the entire exam or homework****.*

During monitored online exams that are closed notes, you must remain seated, have the camera on at all times and not exit the exam (in Canvas) until you finished it. Respondus Monitor software will record a video of you taking the exam and flag your video if suspicious behavior is detected. If, after inspection, I also find the behavior suspicious

I will report the student to the Office of Student Conduct for cheating in an exam. During an online exam quiz students must work on their own without any help from other classmates, friends and without using class materials, cheat sheets or web resources. They must remember the material and be able to answer questions and write code based on the knowledge they know.

In cases of collusion, ALL students involved will be reported to the Office of Student Conduct. For example if one student wrote his solution on his own, but shared it with a friend, BOTH students are reported and both are penalized with a grade of 0 for that assignment (even if one admits that he/she copied after the other student).

The homework for this class is individual (no group projects) unless otherwise stated in the assignment.

You are NOT allowed to work as a team and develop together the homework solution (or a significant/critical part of it), or let another classmate see or have access to your code. Do NOT show your code or part of your code for a homework or exam to any other student.

You are allowed and encouraged to discuss with classmates the homework requirements, but NOT specific code for the homework solution. You can practice and review programming language concepts covered in class, programs covered in class, and other practice problems that are NOT part of the homework.

You must solve the homework and exam problems yourself, using only the materials covered in this class. You should not search and look at any solution (from the web, or from a friend or classmate) for homework or exam problems or part of those problems. If you need help, you should contact the instructor or a TA. You are not allowed to look at an existing solution, not even to "get inspiration". That is considered cheating for this class and is reported.

Standard policy: You should reference all the resources you used in preparing for a homework solution especially if they may have influenced your solution. REFRENCING MATERIAL DOES NOT JUSTIFY COPYING a solution.

If code or homework are stored on a cloud service, it must be private and password protected.

If an exam is administered in person, I may take pictures of students during the exam to document the seating arrangement. Let me know if that is a concern for you. During the exam you should only look at your exam, the board or the ceiling. If you tend to look to the side when you think, make sure you sit at isle seat, where you can look towards the side wall.

Please do not hesitate to talk to me regarding any concerns you may have.

Institution Information

Please review the UTA Syllabus Institutional Policies page (https://resources.uta.edu/provost/course-related-info/institutional-policies.php) which covers the following policies and more. For questions, reach out to the specific office.

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey

Additional Information

Face Covering Policy
Face coverings are not mandatory; all students and instructional staff are welcome to wear face coverings while they are on campus or in the classroom.

Attendance:
Attendance is an important factor in succeeding in this class. Students are expected to attend lectures and keep up with the class. If you fall behind it is hard to catch up as the material keeps building on top of previous concepts and becomes more complex as well. Attendance itself (being present) will not be factored into the class grade.

The U.S. Department of Education requires that UT Arlington have a mechanism in place to verify Federal Student Aid recipients' attendance in courses. UT Arlington instructors are expected to report the last date of attendance when submitting students' final

course grades; specifically, when a student earns a course grade of F, instructors must report the last date a student attended their class. For on-campus classes, last date of attendance can be based on attendance rosters or on academic engagements—a test, participation in a class project or presentation, or Canvas-based activity. Online or distance education courses require regular and substantive online interaction and participation. Students must participate in online course activities in Canvas to demonstrate attendance; logging into an online class is not sufficient by itself to demonstrate attendance. The last date of attendance is reported to the U.S. Department of Education for federal financial aid recipients.

Emergency Exit Procedures:

Should we experience an emergency event that requires evacuation of the building, students should exit the room and move toward the nearest exit. **See the Evacuation Map for COBA 154.** When exiting the building during an emergency, do not take an elevator but use the stairwells instead. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.
Students are encouraged to subscribe to the MavAlert system that will send information in case of an emergency to their cell phones or email accounts. Anyone can subscribe at Emergency Communication System (https://www.uta.edu/uta/emergency.php).

Student Success Programs:

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring by appointment, supplemental instruction, academic coaching (time management, study skills, etc.), TRIO Student Support Services, and student success workshops. For additional information, please email resources@uta.edu, or view the Maverick Resources website.

The IDEAS Center (https://www.uta.edu/ideas/) **(**2nd Floor of Central Library) offers **FREE** tutoring and mentoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593.
Supplemental Instruction (SI) leader – find the SI leaders. You can see any of them.

The English Writing Center (411LIBR):
The Writing Center offers **FREE** tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at the Writing Center (https://uta.mywconline.com). Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see Writing Center: OWL for detailed information on all our programs and services.

The Library's 2nd floor Academic Plaza (http://library.uta.edu/academic-plaza) offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation.

Librarian to Contact:
Each academic unit has access to Librarians by Academic Subject that can assist students with research projects, tutorials on plagiarism and citation references as well as support with databases and course reserves.

Emergency Phone Numbers

In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Library Information

Research or General Library Help
Ask for Help

- Academic Plaza Consultation Services (library.uta.edu/academic-plaza)
- Ask Us (ask.uta.edu/)
- Research Coaches (http://libguides.uta.edu/researchcoach)

Resources

- Library Tutorials (library.uta.edu/how-to)
- Subject and Course Research Guides (libguides.uta.edu)
- Librarians by Subject (library.uta.edu/subject-librarians)
- A to Z List of Library Databases (libguides.uta.edu/az.php)
- Course Reserves (https://uta.summon.serialssolutions.com/#!/course_reserves)
- Study Room Reservations (openroom.uta.edu/)

				Fall 2023 Tentative Schedule
Lecture	DoW	Day	Month	Topic
1	M	21	Aug	Syllabus, Introduction, IDE
2	W	23	Aug	IDE, first program (output, functions, comments, error messages, user input, int)
3	M	28	Aug	Variables, types, operations on numbers
4	W	30	Aug	Variables, types, operations on numbers
		4	Sep	No class - Labor Day Holiday
5	W	6	Sep	Number Conversion (B1) (Census date)
6	M	11	Sep	Unix commands, strings (B1)
7	W	13	Sep	Strings, formatted output (B1 exam, online)
8	M	18	Sep	Conditionals (switch) (B2)
9	W	20	Sep	Conditionals (if, if-else, if-else-if) (B2)
10	M	25	Sep	Boolean expressions; (B2)
11	W	27	Sep	Loops (B2, ?? mock midterm??)
12	M	2	Oct	Loops (B2)
13	W	4	Oct	**Midterm 1 - tentative date**
14	M	9	Oct	Loops (B2)
15	W	11	Oct	Random number generation (B2 exam, online)
16	M	16	Oct	Strings (part 2)
17	W	18	Oct	Math functions
18	M	23	Oct	Functions (B3)
19	W	25	Oct	Functions (B3) (Oct 27 - Last Day to Drop)
20	M	30	Oct	Functions (B3)
21	W	1	Nov	1D arrays (B3 exam, online)
22	M	6	Nov	1D arrays data processing
23	W	8	Nov	**Midterm 2 - tentative date**
24	M	13	Nov	2D arrays (B4)
25	W	15	Nov	2D arrays (B4)
26	M	20	Nov	2D arrays (B4 exam, online)
27	W	22	Nov	No class (day before Thanksgiving Holiday)
28	M	27	Nov	File input/output (B5)
29	W	29	Nov	File input/output (B5)
30	M	4	Dec	Last day of classes (B5 exam, online)
		6	Dec	No class - Student Study day
	W	13	Dec	**FINAL Exam, 11am-1:00pm**
				This schedule is tentative. As the instructor for this course, I reserve the right to adjust the schedule in any way that serves the educational needs of the students enrolled in this course.– Alexandra Stefan