CSC 1300-500 Syllabus
Intro to Problem Solving & Computer Programming

Summer 2024

Department of Computer Science, College of Engineering

Instructor

April Crockett (Call me Mrs. Crockett)

Welcome to CSC 1300! I am a Senior Lecturer in the Department of Computer Science and have been teaching full-time in the department since 2018. I typically teach the introductory programming courses and the Computer Science (CS) professionalism course that students typically take during their junior year.

Contact Information & Office Hours

Email: *acrockett@tntech.edu*
Office: Bruner Hall Room 330
Phone: 931-372-6435
Office Hours: I will often announce times I am available via Teams for answering questions. Email me to schedule a specific appointment day/time. I respond to messages within 24 hours Monday through Thursday and within 48 hours Friday through Sunday.

Course Overview

Course Description & Goal

This 4 credit-hour computer programming course introduces the student to the concepts of problem-solving and algorithm development in computing. The student will design and develop solutions to problems by writing procedural C++ computer programs.

It's All Online!

This course is offered completely online and asynchronous and is designed to be completed in about 7 weeks but may be completed faster if your time permits or in 10 weeks if you want a slower pace.

What Happens Each Week

Students watch lecture videos and complete practice assignments for developing proficiency in problem solving and computer programming where design and testing are emphasized. Students will demonstrate proficiency and comprehension by completing a programming assignment and taking a quiz for each of the 7 modules. The quiz in each of the modules must be passed with an 80% to advance to the next module's material.

Requirements to Take the Course

Course Prerequisites/Corequisites

Students must meet one of the requirements below.

- Minimum Grade of D in CSC 1200 Principles of Computing – may be taken concurrently.
- Minimum grade of 'D' in MATH 1845 Technical Calculus – may be taken concurrently.
- Minimum grade of 'D' in MATH 1910 Calculus I – may be taken concurrently.

Technology Requirements

- Laptop with internet access. Students should follow the College of Engineering recommended Computer Specifications https://www.tntech.edu/engineering/programs/resources/comp-specs.php
- Follow the "Getting your computer set up for CSC 1300" document to get the required software for the course, which includes a text editor and C++ compiler.

Time Requirements

- This course is a 4-credit hour course which means there will be up to 4 hours per week of lecture videos/practice and then about 8 to 12 additional hours for assignments and the quiz for each module.
- In total, you can expect to spend 12 to 16 hours per week on this course.

Major Teaching Methods

- Content Videos with practice programs
- Online interactive textbook with practice exercises (ZyBooks)
- Programming assignments
- Quizzes

Required Materials & Instructional Platforms

Required Textbook – CSC 1300 ZyBook

There is no print textbook for this class. Instead, you will use an online textbook platform called ZyBook. You will have required reading and homework that must be completed within this platform. You may either purchase access to the course ZyBook via the TTU bookstore, or alternately you can purchase directly through the ZyBook website after creating an account and entering in the code below. Either way works.

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: **TNTECHCSC1300OnlineSummer2024**
3. Subscribe

iLearn (TNTECH Learning Management System)

Tennessee Tech's learning management system, iLearn https://elearn.tntech.edu, is where announcements, and course materials are for this course. All quizzes will be taken in iLearn. All grades are posted in iLearn. You will post and reply to discussions in iLearn, and you will also upload practice programs and programming assignments in iLearn.

Turn on notifications in iLearn to ensure you do not miss any due dates. Set up your Notifications (pdf): https://www.tntech.edu/ilearn/pdf/ilearn-notifications.pdf. Download the Brightspace Pulse App on your phone for quick access to course materials, schedules, and notifications.

Netiquette & Discussion Expectations

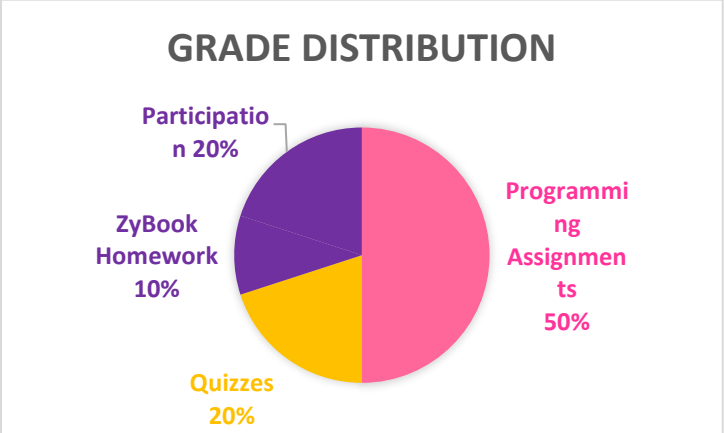
In this online course, I hope to foster a climate of mutual **respect** where we learn and communicate together as a community where diverse perspectives are heard. Below is a list of expectations to ensure productive and effective online communication via MS Teams:

- Assume that others have the best intentions in their communication.
- Recognize and value the diverse backgrounds, experiences, abilities, and knowledge each person brings to the class.
- Pay close attention to what your classmates write in their online comments. Ask clarifying questions when appropriate. These questions are meant to shed new light, not to minimize or devalue thoughts.
- Read your posts and comments twice before posting to ensure you used appropriate, clear language.
- Don't type in all capital letters. This is yelling in text and is considered rude.
- Emoticons are encouraged to enhance emotion and meaning.
- Be careful with the use of humor and sarcasm because they can easily be misunderstood without body language and facial expressions.

Course Goals & Assignments

Course Goals
1. Students will be able to demonstrate problem-solving techniques.
2. Students will be able to create algorithms using problem-solving techniques.
3. Students will be able to write introductory-level procedural programs using C++.
4. Students will be able to demonstrate acceptable computer programming practices.
5. Students will be able to evaluate, test, and debug computer programs.

Assessment



Grade Distribution

A:	90.0 to 100
B:	80.0 to 89.9
C:	70.0 to 79.9
D:	60.0 to 69.9
F:	59.9 and below

Assignments for each Module

Module	Topic	Assessment
1	**Introduction / Problem Solving / Algorithm Design / Input-Output-Processing**	Video, Discussion, and Survey Participation
		ZyBook Homework 1
		Program 1 Assignment (computer set up)
		Quiz 1
2	**Programming Basics / Variables / Data Types / Arithmetic Expressions**	Video Participation / Practice Programs
		ZyBook Homework 2
		Program 2 Assignment
		Quiz 2
3	**Branching & Loops**	Video Participation / Practice Programs
		ZyBook Homework 3
		Program 3 Assignment
		Quiz 3
4	**Files & Functions**	Video Participation / Practice Programs
		ZyBook Homework 4
		Program 4 Assignment
		Quiz 4
5	**Arrays & Vectors**	Video Participation / Practice Programs
		ZyBook Homework 5
		Program 5 Assignment
		Quiz 5
6	**Pointers**	Video Participation/ Practice Programs
		ZyBook Homework 6
		Program 6 Assignment
		Quiz 6
7	**Structures / OOP – Classes & Objects**	Video, Practice, and Survey Participation
		ZyBook Homework 7
		Program 7 Assignment
		Quiz 7

Course Policies

Grading Policy

- If you have an issue with any grade posted, you must contact me via email **within 3 days of the grade being released**.
- All grades will be posted to ilearn.
- Final grades are not rounded up.
- Quizzes are automatically graded upon completion.
- ZyBook participation exercises and discussion posts will be graded within 1 week of completion.
- Programming assignments will be graded within 1.5 weeks of completion.

Late Assignment Policy

There are only due dates for the ZyBooks homework assignments**.** You may complete up to 1 week late but you must email me to formally request this extension.

Student Academic Misconduct

Maintaining high standards of academic integrity in every class at Tennessee Tech is critical to the reputation of Tennessee Tech, its students, alumni, and the employers of Tennessee Tech graduates. The Student Academic Misconduct Policy describes the definitions of academic misconduct and policies and procedures for addressing Academic Misconduct at Tennessee Tech. For details, view the **Tennessee Tech's Policy 217 – Student Academic Misconduct** (https://www.tntech.edu/policies/). It is the student's responsibility to read, understand, and comply with this policy and ask for clarification if it is unclear about what is and is not allowed in all the requirements of this course.

The Department of Computer Science considers cheating to be a very serious offense and this conduct will result in a zero on the assignment as well as a submission for academic misconduct for all involved parties. Here is a list of activities that are considered cheating (Academic Misconduct) in CSC 1300 for individual assignments:

1. Showing another CSC 1300 student more than a few lines of your code (both the person who shows code & the person receiving the code will be charged with Academic Misconduct). This includes emailing (or otherwise sending) your code to someone or looking at code that was emailed (or otherwise sent) to you.
2. Using Artificial Intelligence (ChatGPT, Copilot, etc) to create or assist in creating your program. (See the Generative AI Policy below)
3. Taking solutions off websites (such as Chegg) and forums and submitting them as your own work.
4. Posting your solution to a public website (like Chegg or https://repl.it/).
5. Paying someone to write your code.

You ARE encouraged to search for solutions to your problems online via resources discussed in class (cplusplus.com or stackoverflow) but do not copy/paste any code!

Generative AI Policy

In this course, Generative AI resources are not permitted. Students are expected to do all coursework themselves, as an individual or collectively, as designated by the instructor per assignment. The use of a Generative AI Tool to complete coursework constitutes academic misconduct for this course.

Disability Accommodation

Students with a disability requiring accommodation should contact the Accessible Education Center (AEC). An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The AEC is in the Roaden University Center on TTU campus, Room 112; email disability@tntech.edu and phone number (931) 372-6119.
For details, view the Tennessee Tech's Policy 340 – Services for Students with Disabilities at Policy Central.

Let Others Get to Know You

One way that you can help build community between students and the instructor in this course is by letting others get to know you. Below are instructions on how you can change your name to your preferred name in iLearn and add your profile photo in iLearn and in your school email.

Change to Your Preferred Name in iLearn!

The **Preferred Name Form** is a form that you can fill out to update your preferred name information with Tennessee Tech systems (like TechConnect). This form is accessible on the Records, Registration, and Graduation Office's forms site - https://www.tntech.edu/records/forms.php within the section "**Student Records Forms**" > "**Preferred Name Change**".

Add Your Profile Photo to ILearn

1. Click on your name in the top-right corner of ilearn once you are logged in.
2. Click "**Profile**"
3. Click "**Change Picture**"

Add Your Profile Photo to Microsoft 365

One helpful thing you can do to let your instructors or potential future employers get to know you is to add a profile picture to your TTU email in outlook. It is easy. Here are directions on how to do it: https://support.office.com/en-us/article/add-your-profile-photo-to-office-365-2eaf93fd-b3f1-43b9-9cdc-bdcd548435b7

Additional Campus Resources

Technical Help

If you are experiencing technical problems, visit the myTech IT Helpdesk for assistance.

If you are having trouble with one of the instructional technologies (i.e. Zoom, Teams, Qualtrics, iLearn Respondus, or any technology listed here) visit the Center for Innovation in Teaching and Learning (CITL) website or call 931-372-3675 for assistance.

For accessibility information and statements for our instructional technologies, visit the CITL's Learner Success Resource page.

Tutoring

The university provides free online and in-person tutoring to all Tennessee Tech students – including in Computer Science classes. Tutoring is available for any class or subject, as well as writing, test prep, study skills, and resume support. Appointments are scheduled, so contact the Learning Center website for more information.

Health and Wellness

Counseling Center

The Counseling Center offers brief, short-term, solution-focused therapeutic interventions for Tennessee Tech University students. The staff of the Counseling Center is available to assist students with their personal and social concerns in hopes of helping them achieve satisfying educational and life experiences. To learn more or schedule an appointment, visit the Counseling Center website.

Health Services

Health Services offers high-quality, affordable care that is accessible and promotes the health and wellness of our Tennessee Tech communit. Visit the Health Services website to learn more.