CS 144: Computer Science I
Sections 005, 008 — Fall 2021

Section 005 - JHSW 216, MWHF 12:20pm-1:15pm

Section 008 - JHSW 216, MTWH 3:35pm-4:30pm

Instructor - Dr. Alexi Brooks

Pronouns: They/Them
Office: JHSW 211
Email: brooksa@uwstout.edu
Office Hours: MTWHF 10am-11am, MTH 4:30pm-5:30pm

SI Tutor Lab - JHSW 235

Any SI should be able to assist you. Our specific SI team has these Tutor Lab hours:
- Harrison Stone (Section 005)
  - Sunday 4:40pm-6:45pm
  - Thursday 6:45pm-8:45pm *online*
- Wyatt Senalik (Section 008)
  - Monday 4:40pm-5:35pm
  - Tuesday 1:25pm-3:25pm
  - Wednesday 2:30-3:25pm
  - Thursday 1:25pm-3:25pm

Course Description

This course is an introduction to computer science. You will learn problem solving using a high-level programming language. Input/output, control structures, functions, arrays, memory management, structured data, documentation, and testing.

Course Objectives

After this course, you should be able to:
- understand, formulate, and apply mathematical and logical principles. (General Education objective)
- analyze a problem specification.
- demonstrate understanding of the general concepts of algorithm development and problem solving with a computer.
- design an appropriate solution using programming concepts.
- implement a solution using the syntax and semantics of a high-level programming language.
- test a solution using appropriate test data.
- demonstrate efficient memory management in implementing programming solutions.

Resources

Course Website

We will be using **Canvas** as our course management system. Announcements, readings, assignments, lecture notes, and grades will all be posted here. You will also be expected to turn in some assignments through Canvas.

Office Hours

My regular office hours will be held in person as long as circumstances permit. My regular hours this semester will be Monday through Friday 10am-11am and Monday+Tuesday+Thursday 4:30pm-5:30pm. Since the latter immediately follows Section 008, I may field questions in JHSW 216 before moving back to my office. Due to UW-Stout COVID guidelines, I will generally keep my office door closed except during scheduled office hours. I am likely still able to talk with you–just knock!

I am also available by appointment. The easiest ways to set up a meeting with me are to (1) email me suggesting two or three specific times that would work for you, or (2) speak to me in person before or after class.

If you would prefer to meet remotely, I can meet via **Zoom** or **Teams**. You don't need a specific reason to meet with me remotely. I can meet remotely during my regular office hours, but please understand that I may not notice an email request if there are students present in person.

Supplemental Instruction

There is a supplemental instructor (SI) assigned to each section. Your SI leader is available to help during our class-time hands-on activities, and during their posted SI Tutor Lab hours in JHSW 235. Students who get help from the SI Tutor Lab on a regular basis typically score one letter grade higher than those who do not. I highly recommend planning to attend the Tutor Lab at least once per week. The SI are a great resource for help reviewing class materials, getting questions answered, getting help on assignments, and so on.

Software

You will need to download and install Microsoft Visual Studio Community https://www.visualstudio.com/vs/community/ and select C++. If you have a non-Windows machine, you will need to go to the Help Desk for assistance getting this installed.

Textbook

There is no physical textbook for this course. We will use an interactive e-textbook through zyBooks:
- Sign in or create an account at https://learn.zybooks.com
- Enter our zyBook code: **UWSTOUTCS144BrooksFall2021**
- Subscribe. You should be able to subscribe immediately for $0 and you will retain access until January 14, 2022.

In addition to our zyBook, I encourage you to use the C++ documentation:
- http://www.cplusplus.com

Your Classmates

I've observed that students who talk to other students about code and computer science concepts typically do better in the course than students who do not. I encourage you to get to know your classmates and form study groups. That said, **please remember that solo assignments must be completed on your own**. Only you, me, or an SI should look directly at your assignment code. Only you should touch your keyboard when you are working on an assignment.

The Internet

Much of the content of this course is widely available on the internet. I strongly encourage you to **be careful** with this resource! The internet includes incorrect and outdated answers as well as correct ones. More importantly, this course is designed to help you develop and practice a set of skills that you will need both in future courses and in the workplace. The SIs and I are trained to guide you effectively. The internet is not. Treat internet sources like students in another section of the course: If code directly relates to an assignment, don't look at it or copy it.

Tentative Schedule

Week		Topic	zyBook Chapter
1	Sep 8-10	Introduction to C++	1
2	Sep 13-17	Variables/Assignments	2
3	Sep 20-24	Branches	3
4	Sep 27-Oct 1	Loops and Files	4
5	Oct 4-8	Review + Exam 1	
6	Oct 11-15	Functions	5
7	Oct 18-22	Arrays/Search	6
8	Oct 25-29*	Sort/Vectors	6
9	Nov 1-5	Objects and Classes	7
10	Nov 8-11*	Review + Exam 2	
11	Nov 15-19	Pointers	8
12	Nov 22-23	More Classes	9
13	Nov 29-Dec 3	More Classes	9
14	Dec 6-10	Text Processing	10
15	Dec 13-14	Final Project + Review	
16	TBD	Final Exam	

- October 26 is Advisement Day. No class.
- November 12 is Senior Project Review Day. No class.
- November 24 - November 28 is Thanksgiving Break. No class.

Expectations

What I Expect From You

Help me build an environment where you and your classmates can effectively learn. To do so...
- **Come to class prepared.** Complete readings (including the interactive exercises) before the class in which we'll discuss them. Complete your assignments on time.
- **Stay current on your email and your Canvas.** I will use campus email and Canvas announcements to contact you. Make sure you check both.
- **Participate.** Ask questions. Take part in class activities. Attendance and participation aren't part of your grade, but do I expect both.
- **Be considerate of your classmates.** Follow University guidelines for COVID safety. Right now, that means wearing a mask over your nose and mouth while indoors. Stay on task during class time; if you distract yourself with social media, you may distract the student sitting next to you as well.
- **Put in effort.** You can expect an average of 8 hours per week spent on this course *in addition to in-class time*. If you find yourself putting in significantly more, please let me know.

What You Can Expect From Me

I will support your learning. I will...
- Come to class prepared with material and participatory exercises.
- Regularly check my campus email and Canvas inbox. Anything sent to my campus email which contains "144" will receive an acknowledgement at least within 1 day (not counting weekends or holidays).
- Lead a positive learning-focused classroom. All of you belong in my class, and I will do my best to support your success in the course.
- Put in the effort to release and grade assignments in a timely fashion.

Assessment

Requirement work for this course includes homework, zyBooks interactive readings, labs, programming projects, and exams. I may also provide you with non-required work to help you practice your skills.

If circumstances prevent you from turning in an assignment on time, please let me know as far in advance as possible. I am more likely to excuse an assignment than grant an extension. For assignments allowing multiple submissions, I will *always* ask you to turn in whatever you have completed so far.

All assignment grades will be posted to your Grade Book on Canvas. However, as zyBooks, Labs, and Programming Projects are not fully automated, there will be a delay between submission and your scores being posted.

Homework

The most common form of homework in this course will be zyBooks interactive exercises. These are part of your readings, and you may complete them multiple times for practice and to improve

your score. I may also assign additional homework through Canvas. The due date for each homework assignment is listed in Canvas.

Labs

There will be a weekly lab designed to reinforce that week's concepts and skills. Each lab must be checked off either by the SI or me, and you will receive either 100% (complete) or 0% (not complete). **Labs are due on the Wednesday following the week they cover.** Since labs must be checked off manually, note that the last scheduled office hours before the deadline are 10-11am (me) and 2:30-3:25 (Wyatt). Since assignments are the same for both sections, you may get your lab checked off by either section's SI.

Programming Projects

There will be several programming projects, including a "final project", throughout the semester. You will submit programming projects through Canvas. Unless otherwise specified, programming projects are due Thursday evenings at 11:59pm. I will download submissions from Canvas sometime Friday morning–if you submit before I download, your work will be graded as on-time.

You may submit your projects as often as you like, and I encourage you to submit partial work every day you work on the project. I will only consider your last submission unless you tell me differently.

If circumstances (example: illness) prevent you from turning in a programming project on time, please speak with me as soon as your are able. Turn in whatever you were able to complete prior to the deadline. No-penalty extensions may be granted at my discretion of they do not interfere with your ability to complete other coursework.

Exams

Exams will be conducted via Canvas quiz and will be available for a 24-hour period. You may take the exam (once) at any time during this period. If you will be unable to take the exam during the 24 hour window, contact me in advance to arrange an alternative time.

In order to keep these evaluations fair for your peers, you may not discuss the exam until after I have announced that everyone has taken it.

Grades

Final Grade Cutoffs

If you attain the following overall scores, I guarantee that you will receive these letter grades (or better). If I determine that assignments were particularly difficult this semester, I may lower the grade cutoffs to compensate. **CS major, AMCS major, and CS minor students must achieve a C or better for credit towards their program.**
- 94% or above → A
- 84% or above → B
- 74% or above → C

- 64% or above → D

Grade Weights
- Homework: 25%
- Labs (10): 25%
- Programming projects (4): 25%
- Exams (3): 25%

Policies

Incompletes and Withdrawals

As per the UW-Stout Registrar, course drops ARE NOT ALLOWED AFTER DATE LISTED DIRECTLY BELOW except in the case of extenuating circumstances. Poor course performance is not an extenuating circumstance. Incompletes can only be given in circumstances that do not allow a student to finish the class, but only if it is beyond the student's control. Again, poor performance is not a condition for an incomplete.
- Tuesday, September 21 – Last day to drop with no penalty (without a W on your transcript)
- Tuesday, November 16 – Last day to drop without documented extenuating circumstance

Academic Misconduct

Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions. The disciplinary procedures can be found on the Student Academic Misconduct/Academic Discipline Procedure website.

Inclusive Environment

UW-Stout strives for an inclusive learning environment. If you anticipate or experience any barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure full access. If you determine that additional disability-related accommodations are necessary please contact the Disability Services office (120 RSSLLC, 232-2995, http://www.uwstout.edu/disability).

Sexual Misconduct and Title IX

Title IX prohibits sex discrimination that includes sexual misconduct: harassment, domestic and dating violence, sexual assault, and stalking. If you or someone you know has been sexually harassed or assaulted, you can report the behavior on-line or to the Title IX Coordinator in the Dean of Students Office. As "Responsible Employees" faculty members are required to report sexual misconduct to the Title IX Coordinator.

Non-Discrimination

The University of Wisconsin-Stout is committed to maintaining a learning and working environment that is free of bias, prejudice, and harassment-an environment that supports, nurtures, and

rewards career and educational advancement based on ability and performance. See the Discrimination, Harassment, and Retaliation Policy for more information.

Veterans and Active Military Members

Veterans and active duty military personnel with special circumstances (e.g., drill requirements) are encouraged to communicate these in advance to their instructors. Students who may need short- or long-term absence for military active duty should consult the Student Military Leave policy/or more information. Veterans and active duty military personnel who have a documented disability and may qualify for academic accommodations should contact the Disability Services, located in the library.

Syllabus Change Policy

The instructor reserves the right to make changes throughout the semester to the syllabus and schedule if necessary. It is each student's responsibility to be present and regularly review the course management system for updates.

Last revised: September 7, 2021