CS 1113 – Computer Science I Fall 2020

Instructor

Name	Lecture	Office Hours	Email
Dr. Sadiq Albuhamood	TR 12:00 -1:15 SU265 MWF 1:30-2:15 SU203	TR2-3	albuham@okstate.edu

Teaching Assistants (TA)

Personnel	Email	Zoom ID	Office Hours
Dr. Albuhamood	albuham@okstate.edu	637 782 1532	TR 2-3
Michael Oliver	michael.j.oliver@okstate.edu	455 123 2397	W 3-4pm
Stevens Johnson	stevens.johnson@okstate.edu	407 698 3065	R 10:30- 11:30
Vineela Indla	vindla@okstate.edu	717 210 0754	F 2:30 - 3:30
Vennela Indla	veindla@okstate.edu	705 716 8598	M 10:30 - 11:30
Duangchanoke Suwanvesh	dsuwanv@okstate.edu	250 023 3089	F 11:30 - 12:30
Zugiang Ke	zugiang.ke@okstate.edu	514 104 6209	
Tanusha Katepalli	tanusha.katepalli@okstate.edu	485 168 9246	R 2:30-3:30

Supplemental Instructional Leader SI

The leader of SI will be holding 50-minutes sessions to cover the weekly slides and to clarify any misconception. The sessions will be conducted virtually and the SI leader will be able to assist in any assignment.

Meeting times	Email
T 3-3:50 session1 R 8-10 office hours R 3-3:50 session2 R 4-4:50 session3	jose.enriquez@okstate.edu Enroll in the SI sessions using the following link: https://canvas.okstate.edu/enroll/A7CC7W

Collaborative Learning Laboratory

Collaborative Laboratory is designed to help out students who received partial credit due to not finishing lab assignments during the lab session to show their work in these collaborative sessions to complete the full credit, also to provide the assistance needed for the programming assignments.

Day and Timings	Location	TA	Contact info
M 4-5:50	MSCS206	Oliver	michael.j.oliver@okstate.edu
T 2:00 -3:50	MSCS206	Steven	stevens.johnson@okstate.edu
W 4-5:50	**Virtual**	Ke	514 104 6209
R 4-5:50	MSCS206	Tanusha	tanush.katepalli@okstate.edu
F 4-5:50	**Virtual**	Vineela	717 210 0754

Computer Science I

Introduction to Java Programming language, Introduction to computer science using a block-structured high-level computer language, including subprograms, arrays, recursion, records, and abstract data types. Principles of problem solving, debugging, documentation, and good programming practice. Elementary methods of sorting and searching. Use of operating system commands and utilities.

Prerequisites MATH 1513 or equivalent

Objectives

Learn problem solving using computers. Learn to design, write, and debug computer programs using the Java programming language. Learn to read and understand Java code. Learn some of the basics of Unix systems. Explore design and programming methodologies including object-oriented methodologies. Learn the basics of GUI programming in Java using Swing. Topics covered (as time permits):

- Introduction to UNIX operating system utilities
- Computer problem solving
- Fundamentals of Java programming
- Data types
- Java arithmetic
- String processing
- If statements
- Loops
- Arrays and ArrayLists
- Dividing code into methods
- Reading and writing files
- Debugging techniques
- Object-oriented programming

Textbook

Primary Text In this particular course, an online textbook and assignment system called zyBooks will be used. Most of the assignments and programs will be covered through zyBooks and zyLabs, so it is a must to subscribe on zybooks. The following is how to subscribe:

1. Sign in or create an account at learn.zybooks.com
2. Enter zybook code: **OKSTATECS1113AlBuhamoodFall2020**
3. Subscribe:
    a. Subscription cost is $77.
    b. Students may begin subscribing on Aug 3rd, 2020.
    c. The cutoff to subscribe is Nov 21st 2020.
    d. Subscriptions will last until Dec 18, 2020.

Secondary Text Resource (Recommended): Introduction to Java Programming and Data Structures, Y. Daniel Liang

Instructor Response Time

Response time is 24-48 hours for all student inquiries. Providing grades and/or feedback for assignments will take up to 2 weeks of the assignment due date.

Your emails are important to me. To ensure that I see your email, please make sure to begin the subject line with the course number in square brackets, followed by the message subject; for example: [CS 1113] Unable to compile a source code

Participation Expectations

This class will be challenging, and require a significant amount of time. You are, after all, learning a new language. The only way to become proficient is to do a lot of it. The typical rule of thumb is that you should expect to spend 2-3 hours studying the materials. This means that in addition to viewing the lectures, you should plan to spend 6-9 hours per week on average reading the text, doing the labs, writing the assigned programs, and other studying. Some weeks may require even more time than this.

zyBook reading of recommended topics and participating in some activities.

Exercises are given on most lectures to help improve understandings and be familiar with important skills. It will be in the form of a 15-minute exercise that is open book and open notes and you are encourage to consult with a colleague in solving it.

Quizzes are given weekly and some will be given as traditional quiz and some will be online on Canvas. The quizzes will specifically go over points from the week's slides. The quizzes will be given in class which will be timed at 5 to 7 minutes. If an online quiz is given in class, students are required to do it using a phone or a laptop.

Lab Assignments (Labs) are due during the lab session. Some labs must be shown to your Teaching Assistant for grading. Some labs will be turned into a zyBook auto grader that will assign the grade. **Labs cannot be turned in late and there will be no grading outside the lab session.**

Programming Assignments (Programs) are to be submitted after 2 weeks of assignment on the designated folder on Canvas. Programs will be evaluated line by line and a score is going to be given based on the logic of the Program and weather the Programs runs and provide the correct output to get a full grade.

Exams will be three monthly exams during the semester at the normal lecture time. All of these exams will be held in the lecture hall. A handwritten sheet of notes of two sides is allowed in the exam.

Late work policy

Instructor may accept assignments turned in after the due date with a penalty **(-10% per day)**. **No assignment will be accepted after one week of the due date or** after the answers are published or shown in the lecture.

Grading Policy

Your grade in this course will be calculated according to the completion of the following assignments:

Assignment	Number	Points	Total	Percentage
Exercises	13	3	39	4%
Quizzes	13	7	91	9%
Labs	12	25	300	30%
Programs	6	35	210	21%
Exams	3	70	210	21%
Final	1	150	150	15%
Total			1000	

Final grades will be assigned according to the following scale:

Grade	Points Earned
A	>=900
B	800 – 899
C	700 – 799
D	600 – 699
F	<600

Assignment submissions

Programs must be submitted to Dropbox on Canvas. The code will be inspected for proper style, compiled, and executed on a few test cases. Code may be submitted and passed off multiple times, as long as the Canvas late submission window is open. After the last submission date, all submitted programs will be graded. All submitted source code will be checked for plagiarism. Plagiarized assignment will receive 0.

Collaboration

Discussion of concepts, ideas, and techniques is allowed. After discussion, each student must write up his/her own solution. Copying another person's work, in part or whole, is not allowed. Giving another student your work, in part or whole, is considered cheating as well. If you are unsure whether your collaboration is acceptable, speak with the instructor in advance. The internet is a great place to find out how to do things in Java, and we encourage you to use it for that purpose. However, copying a whole program or assignment, or a large chunk of one, and turning it in as your own work is cheating. Think about the purpose of an assignment. If what you are doing bypasses the purpose of the assignment, then it is probably cheating. Any

violation of academic integrity would result in a undroppable grade of zero for that assignment and an additional reduction of one letter grade in the course and a report to the university administration. Major violations will result in a grade of F!.

Getting Help:

There are quite a few ways to get help in this class. Here are some of them:

- Come to the office hours of the instructor or TAs.
- Visit the supplemental instruction leader sessions, reward will be giving to those who attend and ask for help.
- Free tutoring is available on campus through the Lasso center (https://lasso.okstate.edu/tutoring).
- You may go to any of the lab sessions and ask the TA for help about anything CS1 related, not just the labs.
- If you feel you may want study support, form a study group.
- If you find yourself getting behind, don't just drop out of the class. Instead, come in and discuss your options with the instructor or TAs. Do this early. It's hard to help you if you have missed a third of the semester's work.

Development Environment

The course will use Java as the programming language. Lectures will use version 11 of Java.

- Java Development Kit (JDK), Version 11.0.1, at https://jdk.java.net/11/. Download the zip or tar.gz file for you operating system (under Builds heading).
- Netbeans (https://netbeans.org/) is a helpful tool that can be used to code and detect errors on early stages.

Course Schedule

Legends: E=Exercise Q= Quiz L=Lab P=Program

Week	Reading	Topics	Assignments
1	Syllabus		
8/20	zyBook 1	Introduction to Java	E1, L1
8/25	zyBook 2	Variable /assignments	Q1
8/28			E2, L2,P1
9/1	zyBook 3	Branches	Q2
9/3			E3, L3
9/8	zyBook 4	Loops	Q3
9/10			E4, L4, P2
9/15		**Review**	Q4, E5
9/17		**Exam1**	L5

9/22	zyBook 5	Arrays	E6
9/24			Q5, L6, P3
9/29	zyBook 6	User-Defined Methods	E7
10/2			Q6, L7
9/30	**Six weeks grade due by noon**		
10/6	zyBook 7	Objects and classes	E8
10/8			Q7, L8, P4
10/13		**Review**	E9, Q8
10/15		**Exam2**	L9
10/20	Selected topics	ArrayList, LinkedList	E10
10/22			Q9, L10, P5
10/27	Selected topics	File Input/Output	E11
10/29			Q10, L11,
11/3	Selected topics	Exception , Recursion	E12
11/5			Q11, L12
11/6	**Last day to withdraw**		
11/10	Selected topics	**Inheritance**	E13
11/12			Q12, L13,
11/17		**Review**	Q13, L14
11/19		**Exam3**	L13, P6
11/23	11/23 to 11/27	FALL BREAK	
	11/30 to 12/4	Pre-Finals Week	
12/1		**Review**	E15,Q14
12/3		**Review**	L15
12/7	12/7-12/11	Final week no class	
12/11		**Final week**	
12/16	**Final grades due from faculty 12/16/2020**		

Disabilities act: If any student feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with you and Student Disability Services, 315 Student Union, to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class. Please advise the instructor of such disability and the desired accommodations at some point before, during, or immediately after the first scheduled class period.