# Computer Science 1321

Section 100, Spring 2023

Class Time: 3:00 – 4:40, Mondays Location: Carson Engg Room 119

**Prerequisite:** Math 1523 or equivalent or concurrent enrollment. This course is appropriate for students with significant programming experience outside of the Java language.

Instructor: Sudhindra Gopal Krishna (feel free to call me Sudhi), he/his/him

Email: sudhi@ou.edu.

Office: DEH 210, Note that this is a shared office space. See Office Hour Schedule for office hour locations.

Link to Office Hours (Only Sudhi's office hours):

https://oklahoma.zoom.us/j/95626422718?pwd=MVhkQVpHdzVQRkpJSXR1QVhGME9aZz09

My office hours sometimes have to be changed during the semester. To see the latest office hour schedule, please view the document in Canvas.

My Office Hours		
Day	Time	Location
Monday	4:45 pm to 6:15 pm	Online,
		Meeting id: 95626422718
		Password: CS132XS23

You may also attend office hours which are held by other TA's and the tutors.

My Office Hours		
Time	Location	Name
		V a cuti
		Keerti
		Meghana
		Chandra

Appointments for additional office hours are scheduled through email, preferably 24 hours in advance.

**Required Materials**: You must purchase the following items immediately (all contain graded assignments that cannot be completed any other way):

- Zyante Introduction to Java (online textbook). You must access this book using the Assignment section of Canvas.
- Do Not BUY from OU Bookstore

- Working laptop computer with 2 hours of battery life, and wireless network access. We will use computers during class time every day. You are expected to bring your laptop to class.
- Adobe Acrobat reader or Apple Preview software is also required.

**Topics:** Programs, Java, input and output, identifiers, variables, assignment statements, constants, memory diagrams, primitive data types, operations on primitive data, conditional statements, repetition, methods, parameters, arguments, return values, nested control statements, one dimensional arrays, objects, introduction to user defined classes, and classes from the Java Application Programmers Interface (API) (including Arrays, ArrayList, Character, Collections, Double, Integer, Float, Math, Scanner, String, StringBuffer, and StringBuilder).

#### Class Schedule:

Wk	Date	Topic	Projects	Due	Zyante
				Dates for	Chapters
				Projects	
1	Jan 16	Martin Luther King Day			1-3, Jan 21
2	Jan 23	Introduction, Data Types & Math, Input/Output	Project 1	Jan 27	4-6, Jan 28
3	Jan 30	(Quiz) Branching & Loops, Arrays of Primitive Data, Logical Operators	Project 2	Feb 6	7-8, Feb 4
4	Feb 6	(Quiz) Methods, Perfect-Size vs. Oversized Arrays, Sorting	Project 3	Feb 13	
5	Feb 13	Midterm Exam	Project 4	Feb 20	9-10, Feb 18
6	Feb 20	(Quiz) Object, Class Methods, Classes with Generics	Project 5	Feb 27	11, Feb 25
7	Feb 27	(Quiz) Malevolent Tools, Encapsulation, Aggregation	Project 6	Mar 4	
8	Mar 6	Final Exam (During the Class hours)			

## All the submission time will be at 11:59 pm. Late submissions will not be accepted.

In this class, students will increase their ability to meet the following ABET outcomes:

- Outcome B: Analyze a complex problem, and apply computing requirements appropriate to its solution.
- Outcome C: Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Outcome K: Apply design and development principles in the construction of software systems of varying complexity.

## **Teaching Assistants and Tutors**

The CS 1323 and CS 1324 Course has TAs who may also help you in this course if you have questions. All teaching assistant office hours will be held in Devon 115. View the Office Hour Schedule Document for up-to-date office hour information for all TAs and Tutors.

The College of Engineering tutoring schedule will be here (usually about two weeks into the semester): <a href="http://www.ou.edu/content/coe/currentstudents/studentsupport/tutoring.html">http://www.ou.edu/content/coe/currentstudents/studentsupport/tutoring.html</a> . These tutors are a great resource for all engineering courses.

#### **Useful Links**

This course is run from <a href="http://canvas.ou.edu">http://canvas.ou.edu</a>. Login with your OU 4x4.

#### **Course Policies**

**Platform:** You are responsible for things posted on Canvas or sent by email with a 24-hour delay.

**Examinations:** There will be one midterm examination and a final examination. Missing an examination without a previously approved excuse will result in a grade of zero for that examination. Makeup examinations are only available when required by University policy, in other words, almost never. The Midterm is currently scheduled on (Monday) Feb 13, and it will be 1 hour and 10 minutes long.

**Final Examination:** The final examination is on **Monday March 06**, during class and it will be **1 hour and 40 minutes long**. The final is comprehensive, as required by College of Engineering policy.

**Laptop Computers:** It is the responsibility of each student in this class to have a working laptop computer available for every class. If your computer requires repair during the semester, it is your responsibility to make arrangements to have another computer available and get the necessary software installed before the class time. A student without a fully usable laptop computer will be at a severe disadvantage in this class.

Adjustments for Pregnancy/Childbirth Related Issues: Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see <a href="http://www.ou.edu/eoo/faqs/pregnancy-faqs.html">http://www.ou.edu/eoo/faqs/pregnancy-faqs.html</a> for answers to commonly asked questions.

**Religious Observances**: It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Please check the schedule and inform me of conflicts as soon as possible.

**Title IX Resources:** For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocate on call 24/7, counseling services, and mutual no contact orders, scheduling adjustments and sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5) or the Sexual Assault Response Team 405-615-0013 (24/7) to learn more or to report an incident.

Academic Integrity Violations: The University of Oklahoma defines an integrity violation to be any act that improperly affects the evaluation of a student's academic performance or achievement. The Student's Guide to Academic Integrity (<a href="http://integrity.ou.edu/students.html">http://integrity.ou.edu/students.html</a>) gives examples: "cheating on examinations with cellphones, notes, or neighbors; plagiarism, improper collaboration on assignments intended for individual completion."

The most common violations in this course are plagiarism, usually on laboratory assignments and homework. Plagiarism is defined (<a href="http://dictionary.reference.com/browse/plagiarism?s=t">http://dictionary.reference.com/browse/plagiarism?s=t</a>) as "an act or instance of using or closely imitating the language and thoughts of that author's work as one's own, as by not crediting the original author." I avoided committing plagiarism by putting words in quotes and citing the source in the previous sentence. However, this mechanism does not work on homework and laboratory assignments since it only changes one form of academic misconduct (plagiarism) into another (improper collaboration on assignments intended for individual completion).

When you pass this class with a grade of C or better, I am certifying to the world that you are a competent Java programmer. I cannot make this certification without seeing work that you did on your own. Interactive programming tutors, homework and examinations should be the work of a single individual, not their friends, and not their tutor. Although I can't really believe I have to say this, the solutions to assigned work should not be copied from internet sources, including cheat sites and paid professional programmers. Remember, I can do internet searches too.

- 1. Do not show, give, or email another student a copy of your work before the submission deadline. Every semester I have multiple students submit another student's work as their own with the other student's name still on it. Do not trust other students to not do stupid things that will get you in trouble.
- 2. The penalties for permitting your work to be copied are usually the same as the penalties for copying someone else's work because it is not always possible for me to distinguish the person who copied from the person who allowed his or her work to be copied. In cases where I can make the distinction, the person who copied the work will have a more severe sanction.

It is permissible to talk to other students in the class to get help completing or improving your work as long as this help does not interfere with my ability to properly evaluate the quality and quantity of your understanding of computer programming. For example, in Section 10 laboratories are done in pairs, and this is not any kind of academic misconduct as long as both people contributed substantially to the solution. To understand the distinction, review the examples in the table below. These are typical examples and are not intended to be a comprehensive list of all of the ways in which academic integrity can be or not be violated.

Situation	Integrity Violation?
Students A and B meet and work on their homework together. Neither student prepared anything in advance and the resulting work is identical.	Yes
Students A and B create drafts of their homework assignment independently and get together to compare answers and discuss their understanding of the material. Each person decides independently whether to make changes that are discussed.	No
Students A and B agree to prepare drafts of their homework assignment independently, but only Student A does. Student A shares his draft to Student B who reviews it and offers suggestions for improvement.	Yes
Students A and B agree that student A will work the even problems and Student B will work the odd problems. They share their work.	Yes
Student A has completed a project and is helping Student B complete the same project. Student A explains to Student B what student B's code actually does, which is different than what Student B thinks the code does. Student B determines how to modify the code independently.	
Student A has completed a project and is helping Student B complete the same project. Student B is having trouble getting one part of the program to work, so Student A texts Student B three lines of their solution.	Yes
Student A has completed a project and is helping Student B complete the same project. Student B is having difficulty getting the program to work, so student A tells student B exactly what to type for several lines.	Yes
Student A has completed a project and is helping student B complete the same project. Student B is having difficulty getting the program to work, so Student A suggests that Student B use a specific debugging strategy (e.g. "Print out the contents of the variable").	No

Student A has completed a project and is helping Student B complete the same project. Student A shows Student B an example program in the online textbook that will be		
helpful in figuring out the solution to the problem.		
Students A and B work on a project together. After they have finished it, student A		
takes the code and modifies it so the programs do not appear to be identical. *		

<sup>\*</sup>Please be aware that I have software at my disposal that can detect these kinds of changes, so this strategy is likely to be detected.

If you work with anyone else in completing an assignment, you must include that person's name on the submitted work. Failure to list a student you worked with on the assignment is a violation of academic integrity.

I sometimes use automated software to determine when student work is overly similar. The results of using this software are then evaluated manually by the instructor before any academic integrity violations are filed.

Upon the first documented occurrence of academic misconduct, I will report the academic misconduct to the Campus Judicial Coordinator. If you are found to have committed academic misconduct by this process, the least penalty is usually failing the class and being suspended from college for a semester. If you have committed academic misconduct previously, the sanctions can be more severe. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code. In the event that I elect to admonish the student, the appeals process is described here: <a href="http://integrity.ou.edu/students.html">http://integrity.ou.edu/students.html</a>.

**Tutors and Academic Integrity:** Private tutors can be a source of support for students who are having difficulty in the class, but only if the tutor is aware of the distinction between teaching you the material so that you ultimately can do your own work, and doing work for you. Tutors who do work for you are not only failing to help you learn, they are committing academic misconduct. All of the situations in the table of academic integrity scenarios above apply equally when student A is a tutor.

Ownership of Course Materials: The instructor retains ownership and all rights to original content. This includes but is not limited to exams, lectures, quizzes, handouts, protocols, electronic documents, syllabi, and all other materials. Original or transcribed course content may not be copied, recorded, retransmitted, posted on-line, or sold without the expressed written consent of the instructor. Violation of content ownership will be treated as academic misconduct.

**Incompletes:** The grade of I is intended for the rare circumstance when a student who has been successful in a class has an unexpected event occur shortly before the end of the class. I generally will not consider giving a student a grade of I unless the following three conditions have been met.

- 1. It is generally within two weeks of the end of the semester.
- 2. The student has a grade of C or better in the class.
- 3. The reason that the student cannot complete the class is properly documented and compelling.

**Accommodation of Disabilities:** The University of Oklahoma and I are committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with me as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 405/325-3852 or TDD only 405/325-4173.

# Laboratory, Homework, Quizzes, Attendance

**Late Work:** I do not accept late work. Flat tires, parking problems, trips (even if academic), alarm clock failures, personal illness, internet outages, doctor's appointments, and dependent care are not acceptable excuses for submitting late work.

**Excused Absences:** The grading policies in the course are designed to allow students to miss one full week of class without a grade penalty. There will be no further excused absences for any event of duration shorter than a week. If you have a properly documented absence that is longer than one week, work can be excused.

**Computer Literacy Expectations:** A list of specific expectations for computer literacy is posted on Canvas. If you do not meet these expectations, the TAs and I will help you remedy this situation immediately or drop this class.

**Projects:** Projects are due at 11:59 pm. Incomplete projects may be turned in for partial credit. Projects which do not compile will generally receive no credit (beyond Project 2). Projects that do not execute to completion also generally will receive no credit (after the first three projects).

**Project Submission:** The .java file(s) (not the .class files) should be exported from eclipse, uploaded to Gradescope through Canvas. A single file should be submitted.

**Backup Copies of Projects:** It is your responsibility to back up your files appropriately. No extensions to deadlines will be given as a result of lost files, unless there is a massive, network wide problem that affects the entire class. Buy a jump drive and make backing up your work a routine part of computer usage. Dropbox or other cloud services are also useful for this if you have reliable internet access. It is particularly important to save a backup copy of any homework or laboratory project that is submitted. This backup version should not be opened or edited after submission in case something goes wrong with the submission (like submitting the .class files instead of the .java files, a very common error).

## **Evaluation**

**Grade Summary:** Canvas has a grade book that is used to store the raw data that is used to calculate your course grade. It is the responsibility of each student in this class to check their grades periodically and make sure that they are properly recorded. If an error is found, bring the grading document to me, and I will correct it.

**Submission and Formatting Failures:** Submitting files on Canvas is a two-step process. First the file is uploaded, then submitted. Each student will be forgiven for failing to hit submit once during the course of the semester. Each student will also be forgiven for submitting assignments in the wrong format only once (usually submitting a Word document instead of a PDF file, or submitting .class files instead of .java files).

**Grading:** There are 6 components to the course grade. They are weighted as follows. The percentage of the grade that comes from interactive tutors, homework and laboratory activities is designed to be small to allow students to make mistakes and learn from them with only small penalties. However, completing these exercises is how most students develop the conceptual understanding that make it possible to do well on the homework, midterms and final.

Item	Weight	Forgiveness Policy
Zyante	15 %	First two weeks- deadlines extended
Projects	30 %	1 lowest excused

Quiz	10 %	None
Midterm Examinations	20 %	None
Final Exam	25 %	None

<sup>^</sup> Zyante grades are based on the number of problems answered correctly before the deadline for **participation exercises only**. The challenge problems are not graded. They can be used to get additional practice.

The grading scale will be no higher than the following. It may be lower at the discretion of the instructor.

Grade	Percentages
A	90+
В	80-89
С	70-79
D	40-69
F	Otherwise

**Borderline Grade Decisions:** Although it would be preferable that all grades are cleanly decided, it is usually the case that a few final course grades are decided by only a few points. I have an algorithm for determining grades in these difficult cases. A grade is a borderline grade if it is within three points of the next higher grade. Therefore, grades like 89, 69 and 79 are borderline grades, but grades like 81 and 92 are not. The grade on the final examination will be used to determine borderline grades. If the grade on the final is below

the threshold for the higher grade, the lower grade will be given. If the grade on the final is above the threshold for the higher grade, the higher grade will be given.

Failure to attend Final exam will result in a "F" grade.