CS 1331 - Introduction to Object Oriented Programming
Spring 2021
(3 credit hours)

Course Instructors

Suzy Watson-Phillips
E-mail: suzy.watson-phillips@cc.gatech.edu
Office - remote
Office hours – By Appointment and open hours as announced
Lectures:
B: M/W/F 9:30 – 10:20am Remote Synchronous (CRN **22294**)
C: M/W/F 11:00 – 11:50am Remote Synchronous (CRN **24145**)
Recitations (optional-recommended): Tuesday 5:00pm or 6:30pm Remote Synchronous (see Oscar)

Richard Landry
E-mail: richard.landry@cc.gatech.edu
Office - remote
Office hours – By Appointment and open hours as announced
Lecture:
D: M/W/F 12:30 pm – 1:20 pm Remote Synchronous (CRN **30858**)
Recitations (optional-recommended): Tuesday 5:00pm or 6:30pm Remote Synchronous (see Oscar)

Required Textbook: Online text via Pearson's REVEL platform based on the book given below. See bookstore for access code to the REVEL platform and access via the link in Canvas.

Title: Introduction to Java Programming and Data Structures - Comprehensive Version
Author: Y. Daniel Liang
Edition: Copyright 2020, 12th edition

The textbook itself can be found here on Pearson's site (but you can probably find it elsewhere)

The REVEL version can be found here on Pearson's site (or through the GT Bookstore site)

Prerequisites:
At least one of CS 1301, CS 1315, CS 1321, or CS 1371, minimum grade of C.

Learning Objectives:
Students will learn how to:

1. Understand object-oriented programming principles and apply them in the construction of Java programs.
2. Demonstrate proficiency in writing medium sized (1-10 source file) Java programs.
3. Create, select, and use appropriate basic algorithms and data structures in Java programs.
4. Understand and apply event-driven programming principles in graphical user interface (GUI) programs.

Description:
Introduction to techniques and methods of object-oriented programming such as encapsulation, inheritance, and polymorphism. Emphasis on software development and individual programming skills.

Course Modality Information:
This course, though fully remote, is still synchronous and students enrolled are expected to be available during the scheduled class time as there may be assessments, assignments, and class participation required. Students are expected to participate in the class through live lecture Q&A, class forum, virtual TA office hours and other activities. Assessments will be given during the assigned lecture period. HonorLock proctoring system may be used to proctor assessments. Students must have a webcam, microphone and reliable internet connection.

Class Policies
All students are required and expected to attend class. An effort will be made in this special distance learning situation to record and post any live lectures, though it may be a recording of a different section than you are registered in. Please make an effort to not just attend live lectures but to pay attention. The live lectures provide you the opportunity to ask questions in real time instead of after the fact when there isn't context for the question.

Note:
Beginning Spring 2020: CS 1331 is a 3 credit and contact hour lecture course with a 0 credit hour, 1.25 contact hour recitation companion, CS 1331R. The fact that CS 1331R contributes 0 credit hours to your schedule simply means that no graded work will take place during recitation and all testable course material will be available outside recitation. **Recitation is provided for small group practice and review and is very valuable.**

Grading:
The course will be graded on a traditional 60-70-80-90 system as shown below.

Grade Scale:

Percent	Grade
90 - 100	**A**
80 - 89	**B**
70 - 79	**C**
60 - 69	**D**
<= 59	**F**

See http://registrar.gatech.edu/info/grading-system for more information about the grading system at Georgia Tech.]

Important: In addition to the total overall class percentage for determining your grade, you must have a **passing (weighted) average (>60 average) on the assessments and the final exam all combined together**, *not each one individually*, in order to pass the course as well. We implement this policy as a check-and-balance with respect to the HWs. Note that this does **not** mean that you have the option of only using the assessments to determine your grade. All the categories above will be used in the grade calculation, *but in addition*, you must have a passing grade on the weighted average of the assessments in order to pass the course. For (non-CS/CM) students who are taking the course P/F, you must earn 70% to earn a P (and on the assessments too).
Questions about specific circumstances or issues can be directed to the instructor via email.

Regrades:
You have **one week** from the time we post your assessment or homework grade to file a challenge to the grading if you feel that you were graded incorrectly until it is posted otherwise (mainly at the end of the semester). After that time, the grade will stand. The regrade request doesn't need to be resolved in 1 week, but you must notify someone via the posted channel (Gradescope, form, etc.) with specific issues about a question on the assessment or homework for the grade to be eligible to be changed.
All grades will be determined by work done throughout the semester. **Students will never be allowed to do "extra work or projects" after the term to boost their grade**. Please do not appeal at the end of a term for special consideration. All students will be treated equally and fairly.

Course Grade Percentages:

Homeworks	20%
Programming Exercises (PEs)	10%
Quiz Assessments	50%
Final Exam	15%
Participation	5%

Academic Integrity:
Academic dishonesty will not be tolerated. This includes cheating, lying about course matters, plagiarism, or helping others commit a violation of the Honor Code. Some exams may (when specifically announced in class) allow the use of self-prepared supporting information (one sheet of paper, either typed or handwritten, could be double-sided); no other support materials are allowed at tests unless specifically announced in advance of the Exam. Plagiarism includes reproducing the words of others without both the use of quotation marks and citation.
Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit
http://www.catalog.gatech.edu/policies/honor-code/
or http://www.catalog.gatech.edu/rules/18/.
Any student suspected of cheating or plagiarizing on a quiz, exam, or other assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Learning Accommodations:
If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404) 894-2563 or http://disabilityservices.gatech.edu/, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodation letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Quiz Assessments and Exam Policy
The quiz assessments and exams will be conducted virtually and during lecture periods as indicated on the class schedule. The timeframe of the assessments may extend past the actual lecture period to allow more flexibility due to the distance learning environment; details will be posted prior to the actual assessment. The assessments will cover concepts, as well as aspects of coding. Material from lecture and from the assigned sections of the book will be covered in each assessment. It is also expected that you will be familiar with the material and concepts from any programming homework that is due prior to an assessments. One of the best ways to

do well in this class is to thoroughly complete all the HWs and learn all the ideas that are embodied in them. **This is not a course about memorization**; it is about problem-solving and applying object-oriented principles. There are no cheat-sheets or calculators allowed during the assessments. You may NOT collaborate with anyone else; collaboration will be considered a violation of the honor code and will be treated as such. Assessments will limit the use of specific resources such as websites, tools (like an IDE) and specific actions (like copy and paste) using proctoring software. The specific restrictions for the assessments will be announced prior to the assessment.

Note: Each of the assessments, including the final exam, may be ***shorter*** than the assessment period; *specifically the final exam may be shorter than full two hours and fifty minutes allotted.*

This course will use digital proctoring for all exams. The following are required of students:

- Students must have a broadband internet connection
- Students must have a webcam and microphone
- Students must have a secure private location to take an assessment
- Students will be asked to provide a picture ID and take a picture of themselves via a webcam as part of the assessment process
- Honorlock is not compatible with Linux OS, Virtual Machines, tablets, or smartphones
- Honorlock requires the installation of Google Chrome and the Honorlock Chrome extension

The student is responsible for ensuring they can complete the assessments with this proctoring software.

All students are expected to complete the assessments. *Forgetting about the* assessments *or simply missing it are not proper excuses and will receive a zero score.* If documented excused school absence will prevent you from taking an assessment, you should get written confirmation of the approved absence from the Registrar's office and notify the instructor *prior* to the day(s) of the absence if possible.

In the event of a medical emergency or an illness that is severe enough to require medical attention, students are responsible for contacting the Office of the Vice President and Dean of Students as soon as possible to report the medical issue or emergency, providing dated documentation from a medical professional and requesting assistance in notifying their instructors. The medical documentation will be handled confidentially within the Office of the Vice President and Dean of Students and will inform a decision as to whether communication with instructional faculty is appropriate.

For a confirmation of a medical excused absence please contact the Dean of Students office here instead of sending me anything: https://gatech-advocate.symplicity.com/care_report/

If a student is going to miss an assessment and this can be coordinated with the instructor ahead of time, then it may be possible to schedule an alternative make-up assessment. We will try to do so in the 1-2 school days following the exam. **If you need to makeup the** assessment **for some reason, contact the instructor immediately**. If that can't be worked out or isn't possible, alternatively, *we will instead substitute the student's score/percentage on the final exam for the missed exam's score/percentage*. Note that this does not mean that anyone can substitute the final exam grade for another exam's grade or simply decide not to take an exam. The policy only applies for legitimate excused absences.

Honorlock
You should have a quiet place where you can take the assessments alone, as you will be recorded during the time you are taking the assessments. You may also be required to show your Student ID. If you do not have your Student ID with you, you will need another photo ID that is in English so that we may verify your identity and provide you a placeholder in case the system requests your ID.

Google Chrome can be downloaded here:
https://chrome.com

The Honorlock Chrome Extension can be downloaded here:
https://static.honorlock.com/install/extension

See the following links for more information about Honorlock:
Honorlock Help and Knowledge Base
Standard Testing Guidelines
Walkthrough of Exam Setup
Video Resources and Tutorials
24/7 Support
Honorlock Privacy Statement

Homework Practice
During the course of the semester, there will programming assignments of various sizes; specifically programming exercises and homeworks. Programming exercises are intended to help you learn how to do things in the specific programming language and therefore emphasize syntax and semantics more and problem solving less. Programming homeworks will be larger programming assignments meant to emphasis the application of object oriented principles through programming in Java. The programming exercises and HWs will be distributed via Canvas. They will be due at 11:59 pm on the date provided in the Canvas assignment, typically on Thursday evenings. We recommend that you start on the HWs early. Do not leave them until the night they are due. If you are stuck on a portion of the program for longer than the recommended time, you should definitely see your TA to get a stronger understanding of the concepts involved prior to putting continued effort into the assignment.

Late Homework Policy: You may submit your homework up to 24 hours late for a 25% reduction in possible points. This means that if the assignment is worth 100 points and you turn it 12 hours after it is due, there will be -25 points on whatever the result of your grade is. No late homework submissions will be accepted after 24 hours without a valid excused absence from the Dean of Students Office.
Note that an assignment turned in at one minute after midnight is still late, you have had the assignment for an adequate amout of time (usually a week).

You should also read the collaboration policy below to learn about our policies about how you can work on the HW assignments with your peers, if you so choose. For all assignments, you will submit all the source files (.java) that you created to Canvas or Gradescope. Make sure to practice safe-submission and retrieve your submission after you submit it to make sure all the files you thought you turned in were there. You are responsible for ensuring what you want graded is submitted correctly.

After receipt of a homework grade, you have **one week to inquire about the grade and check into any potential grading problems with your homework.**

Please read the following carefully:
Non-compiling submissions are 0s. If the TA downloads your HW, tries to compile it, and errors are generated that prevent complete class files from being generated, it will be a 0. It is your responsibility to make sure you completely and successfully submit the proper files for your assignments turned in. Once you submit your HW files, we suggest that you download them into an empty folder and compile/run the HW to see if it works using your uploads alone. This will prevent issues like renaming valid '.java' files or adding comments after testing from crashing compilation. On this note, make sure you even submit any files that we give you for the HW (e.g. images) unless the description says otherwise. **Expect a final homework that will be due on the final instruction date of the class**. I must explicitly state this according to paragraph C.1.c. here: http://catalog.gatech.edu/rules/12/

Attendance and Participation
All students are required and expected to attend lectures virtually. Attending the live lectures allow students to ask questions and get answers on the topics covered.
While we will not be taking attendance you will be required to participate in the class via participation activities. The timeframe for the participation activities may extend beyond the lecture period to allow you to focus on the lecture material and complete the activity at your own pace.

HW Collaboration Policy
We have chosen to focus the assessment of students' knowledge of course concepts and skills primarily on in-class exams rather than homework assignments. Homework assignments are opportunities for learning and discovery; they are not significant instruments of evaluation. That is, the weights of weekly HW assignments on your final grade is intentionally low. (In fact, homework assignments are a component in the final grade largely to motivate students to work on the assignments.)

The weekly programming HWs and exercises are opportunities for each student to learn object-oriented programming and Java well. Thus, what you submit for these assignments should be **your own work,** and they should be code that you have written. We do expect that you understand and can explain the homework solution that you submit.

Students should be aware of the approved sources of assistance, help, and collaboration in our course. You can definitely use resources provided for everyone, including the instructor, teaching assistants, the textbook, recitations, and Piazza. In particular, you should take advantage of our TA helpdesk/office hours to get personalized assistance on HW assignments. It also is permissible, and actually recommended, that you post questions about course concepts and HW assignments to Piazza. Please refrain from posting code in public (readable by all) messages there, however. If you post code, make it a private message to the instructor and TAs.

We also seek to create a culture where you can interact with and learn from other students in class as well. Interaction between students at a **conceptual, high-level is permitted**. You can discuss course concepts and HW assignments broadly, that is, at a conceptual level to increase your understanding. If you find yourself dropping to a level where specific Java code is being discussed, that is going too far. Those discussions should be reserved for the instructor and TAs. To be clear, you should never exchange code related to an assignment with anyone other than the instructor and TAs.

In addition to what is allowable, it is important for you to understand what is not permitted in our class. Sharing code, either an entire program or even just a portion of a program, between students is not allowed. Taking/Receiving assignments from other classmates, being given a homework solution, or downloading completed assignments from websites are considered plagiarism and are not allowed. These are activities that are simply meant to earn a score, not understand our course material. Similarly, you should not give (email, IM, etc) or even show a copy of your code, or a portion of your code to another student. In this course, giving code is considered just as bad as receiving code, so you must not succumb to other student's requests to see your program(s). If you are caught doing any of the prohibited activities above, you will be dealt with according to the GT Academic Honor Code and the incident will be submitted to the Office of Student Integrity.

For quizzes and assessments, all work must be your own. Cheating off of another person's assessment or quiz is unethical and unacceptable. Cheating off of anyone else's work is a direct violation of the GT Academic Honor Code and will be dealt with accordingly.

Use of any previous semester assessments to help studying is allowed for this course; however, I remind you that while they may serve as examples for you, they are not guidelines for any tests, quizzes, homework, projects, or any other coursework that may be assigned during the semester and should not be used as a study guide.

A general list of resources for students at Georgia Tech is available via your Canvas site.

Course Expectations

- Keep up with the content as it is released.
- Try the code from the online content and in-person lectures.
- Do your own homework and experiment with examples! Learning to program is like learning a sport. It takes actual practice and time to get comfortable with programming. The assignments that are given are opportunities to learn the material that you will be responsible for on exams. Copying your friends HW will only expose your limitations during quizzes and assessments.
- Use TAs to help you learn.
- Be prepared when you go to get help from a TA or your instructor. Bring your work with you.
- Avoid waiting until the end of the semester to ask for help.
- Take initiative. Begin your assignments early and if you think you need help, come prepared. Use the resources that are provided for you and be determined to succeed from the start.

Digital Etiquette: You are expected attend lecture and recitation (if registered) and to actively participate via any poll or quizzes posted and chat question and answer. It is expected that you will be respectful and use acceptable language free from vulgarity in any medium but specifically in chatrooms (like lecture Q&A), forums (like Piazza), meetings, and email. When requesting help from the professors and TAs it is expected that you are respectful of their time preparing your questions in advance and making sure to show up to any requested meeting.

University Use of Electronic Email

A university-assigned student email account is the official university means of communication with all students at Georgia Institute of Technology. Students are responsible for all information sent to them via their university-assigned email account. If a student chooses to forward information in their university email account, he or she is responsible for all information,

including attachments, sent to any other email account. To stay current with university information, students are expected to check their official university email account and other electronic communications on a frequent and consistent basis. Recognizing that some communications may be time-critical, the university recommends that electronic communications be checked minimally twice a week.

Finally, when sending an email to the instructor and/or TAs, be sure it is from your GT email and to use an informative email subject that **includes *CS1331* in the subject** of the email! For example, Subject: CS1331 assignment 2 question. Definitely do not email saying "I'm in your CS class..."

Student-Faculty Expectations Agreement

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See http://www.catalog.gatech.edu/rules/22/ for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Subject to Change Statement

The syllabus and course schedule may be subject to change. It is the responsibility of students to check Piazza, email messages, and course announcements to stay current in their courses.

Instructor Illness or Exposure to Covid-19

During the fall 2020 semester, some faculty members may be required to quarantine due to exposure or isolate due to a Covid-19 diagnosis. Some disruption to classes or services is inevitable, but Georgia Tech is making every effort to ensure continuity of operations. As is the case in any semester, faculty may cancel a class if they have an illness or emergency situation and cover any missed material at their own discretion. If an instructor needs to cancel a class, they should notify students as early as possible.

Faculty who are staying home due to symptoms should monitor their health closely and consult with their school chair to determine if remote instruction or substitute instruction is most appropriate for the course. If they need to cancel a class repeatedly, a backup will be supplied in the form of a temporary substitute instructor or asynchronous work. No course will be canceled after the first class has occurred.

If you have not tested positive but are ill or have been exposed to someone who is ill, please follow the Covid-19 Exposure Decision Tree (http://health.gatech.edu/coronavirus/decision-tree) for reporting your illness.

Student Illness or Exposure to Covid-19

During the semester, you may be required to quarantine or self-isolate to avoid the risk of infection to others. Quarantine is the separation of those who have been exposed to someone with Covid-19 but who are not ill; isolation is the separation of those who have tested positive for Covid-19 or been diagnosed with Covid-19 by symptoms.

If you have not tested positive but are ill or have been exposed to someone who is ill, please follow the Covid-19 Exposure Decision Tree (http://health.gatech.edu/coronavirus/decision-tree) for reporting your illness.

During the quarantine or isolation period you may feel completely well, ill but able to work as usual, or too ill to work until you recover.

Remote courses and remote class sessions during hybrid courses. Unless you are too ill to work, you should be able to complete your remote work while in quarantine or isolation.

In-person courses and in-person class sessions during hybrid courses. When in isolation or quarantine you will be unable to attend in-person course sessions but your instructor may require you either to participate in the course remotely, complete some complementary work that parallels what you are missing in class, or make up some class work when you return.

If you are ill and unable to do course work this will be treated similarly to any student illness. The Dean of Students will have been contacted when you report your positive test or are told that it is necessary to quarantine and will notify your instructor that you may be unable to attend class events or finish your work as the result of a health issue. Your instructor will not be told the reason. We have asked all faculty to be lenient and understanding when setting work deadlines or expecting students to finish work, and so you should be able to catch up with any work that you miss while in quarantine or isolation. Your instructor may make available any video recordings of classes or slides that have been used while you are absent, and may prepare some complementary asynchronous assignments that compensate for your inability to participate in class sessions. Ask your instructor for the details.

CARE Center, Counseling Center, Stamps Health Services, and the Student Center

These uncertain times can be difficult, and many students may need help in dealing with stress and mental health. The CARE Center and the Counseling Center, and Stamps Health Services will offer both in-person and virtual appointments. Face-to-face appointments will require wearing a face covering and social distancing, with exceptions for medical examinations. Student Center services and operations are available on the Student Center website. For more information on these and other student services, contact the Vice President and Dean of Students or the Division of Student Life.

Recordings of Class Sessions and Required Permissions

Due to Covid-19 concerns and the increased use of distance learning, our class sessions may be audio visually recorded for use by enrolled students. Class recordings, lectures, and other classroom presentations presented through video conferencing and other materials posted on Canvas are for the sole purpose of educating the students enrolled in the course. Students may not record or share recordings, including screen capturing, unless the instructor states so or individual permission is obtained. Assessments may require students to engage the video camera, but those recordings will not be shared with or disclosed to others without consent unless legally permitted. Additional information may be found here.

- For classes where participation is voluntary, students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded.
- For classes requiring class participation, if students are identifiable by their names, facial images, voices, and/ or comments, written consent must be obtained before sharing the recording with persons outside of students in the class.