PRINCIPLES OF COMPUTER SCIENCE II

CSc1302-Online (Asynchronously)

Lab sessions are online, Synchronously at your chosen lab time from CRN:

15530 Wednesday 3pm-4:40pm (sec 026) 15531 Friday 1pm-2:40pm (sec 028) 15532 Monday 3pm-4:40pm (sec 030) 15533 Friday 3pm-4:40pm (sec 032)

Course Description

Welcome to **CSc1302: Principles of Computer Science II**! We're going to have a great time this Fall as we continue to explore **object-oriented programming (OOP) with Java** together. My name is **William Gregory Johnson** and I'll be your professor. You can call me Dr. Johnson. I've taught this course more than 11 times. I always enjoy teaching **Principles II** because this course gives you final parts of the foundation to understanding and learning the essence of computer science. Trust me, even though it is a programming class, you will be surprised to learn OOP principles that cover MANY CS courses.

Here's a little about me and how I got into **CS.** I fell in love with programming at 14 years old (a long time ago!) and always wanted to discover more about computers, systems, algorithms and education. I defended my PhD dissertation and graduated in CS this past December. I study you, the CS undergraduate student through educational data mining and machine learning with a goal of improving your learning experiences and building prediction models. I'm looking forward to working with all of you this semester. Please do note that this syllabus reflects a plan for the semester. Deviations may become necessary as the semester progresses.

My two office hours are Mondays at 10:00am. You may reserve a fifteen-minute time slot here: <u>Google Doc with Office Hours</u>.

Course Outcomes

After finishing this course, you should be able to:

- Compare and contrast abstract data types versus objects.
- Demonstrate an understanding of polymorphism and inheritance for objects.
- Determine output from a segment of code, which uses a recursive subprogram.
- Create and handle program exceptions properly, taking into account the context of the exception.
- Compare and contrast static and dynamic data structures.
- Choose and manipulate computer files, streams, and buffers.
- Create a graphical user interface (GUI) for a program using basic and advanced libraries.

Your new skills should help you in the following ways:

- Prepare you for Data Structures (CSc2720).
- Give you the tools to deconstruct complex, abstract problems using algorithms and logic.
- Interpret programming code through analysis.

Assessments

I've designed a variety of assessments to help you practice your disciplinary thinking and skills. More detailed instructions for course assessments can be found in the Welcome to the Course Module in iCollege. Your tests will be proctored using TopHat. Here is a link to help you prepare yourself for the exams. <u>Students: Taking a Remotely Proctored Test</u>.

(https://success.tophat.com/s/article/Student-Taking-a-Remotely-Proctored-Test

-) Ensure you have the following:
- 1. You must take the test on a **laptop or desktop computer** with a working webcam and microphone.
- 2. You must access Top Hat through a <u>Google Chrome</u> browser.
- 3. You will be given a 'practice exam' approximately two weeks prior to your real exam to ensure you have the necessary technology.
- You must install the Proctorio web extension on your Google Chrome browser prior to starting the test available for download for free in the <u>Chrome Web</u> <u>Store</u>

(<u>https://chrome.google.com/webstore/detail/proctorio/fpmapakogndmenjcfoajif</u> <u>aaonnkpkei</u>).

- 5. You must have you either a GSU student or official photo ID on-hand, which will be scanned by the webcam, in order to access each test.
- If you run into any issues creating your Top Hat account or accessing the practice test, please contact Top Hat's support team (available weekdays 9am-9pm EDT), by email (<u>support@tophat.com</u>), or phone (1-888-663-5491).

Event	Quantity	Course Grade Weight
Exams	2	45%
Labs	13 (TBD)	30%
Final Exam	1	20%
Attendance and Participation	Discussed below	5%

COURSE HELP

Note that this is a 100% online course for lectures, quizzes, exams, reading, reflections, and surveys. The labs will be online, and time sequenced, and synchronously. Solution files will be uploaded in iCollege assessments.

How Do I Contact You?

I prefer to be contacted in the following way(s):

- GSU Email: wjohnson6@gsu.edu
- Office: 1 Park Place, 7th Floor, Rm 717
- <u>Extreme emergency</u>: 404-348-6923 (put name and course title in first text, so I know it's not spam.)

How Do I Access My Course?

You can login to your course via <u>iCollege</u>. If you need more help, you can review the Welcome to iCollege help-guide. If you have problems accessing your course, please contact the helpdesk: helpdesk@gsu.edu. Other resources: <u>https://cetl.gsu.edu/resources/resources-for-learning-remotely/</u><u>https://success.students.gsu.edu/student-support-services/</u>

What Are the Required Materials?

The following resources are required for this course:

- Java Programming, Ninth Edition, Joyce Farrell, ISBN-13: 978-1-337-39707-0
- *MindTap* (Part of the publisher's, Cengage, system, separate fee.) •
- TopHat account with your GSU email as ID (separate fee: \$32.00). •
- Webcam and microphone needed for online exam and proctoring through TopHat.
- You will need a computer (not Chromebook) on which to build your java programs and save your labs to upload into iCollege Assessments. It should be capable to run the current version (15) of the Java Standard Edition (SE) Development Kit (JDK).
- Recommended to use the Eclipse IDE, but you are not required. In order to work on the programming components in your later course and Labs related to JavaFX, you will need a text editor and the Scene Builder (free) from Oracle.

Are There Any Required Meetings?

Your Labs are also required and are synchronous in your chosen time and assigned lab instructor. They will be conducted in the time window corresponding to your CRN. Look in "Assessments -> Assignments" to find your lab available from your selection at course registration.

How Do I Succeed in This Course?

If this is your first time taking an online course, you should refer to GSU's online student success guide. I also have specific tips for this course located in the Welcome to The Course Module once you login to the course. Online tutoring from the department is available at schedule times during the semester. Go here in your browser <u>https://cstutoring.cs.gsu.edu</u>

SCHEDULE

Although this is an online course, we do have a set schedule. You will want to refer to the calendar below frequently as we work together. I've also designed the Principles of Computer Science II

iCollege course in such a way to help us all stay on track, including building in **module introductions, due dates attached to grade items and reading assignments, announcements, and calendar events**. If this is your first time taking an online course, you'll want to review the <u>Online Time Management Essentials</u> guide. <u>Attendance</u> is gathered through event analytics within iCollege and MindTap, lab assignments, and other events.

This course is divided into **FOUR** Modules. For detailed information about what's required for each Module, visit iCollege and check out the Module Introductions. While you're working, I'll also be working hard to give you quality feedback and grade your assessments by the dates indicated below.

So, how much time do you need to spend working on this course? This is a 4-Credit Hour course GSU recommends that you spend around **3 hours or more per week** interacting with readings, videos, and other sorts of content and **then 3 hours per credit hour per week** completing activities, labs, and assessments.

Please talk to your instructor and your advisor before withdrawing from this course. We care about your success and are here to discuss your options with you. The last day to withdraw without penalty is March 02. 2021.

January 11 – January 28	Welcome To The Course	Your task is to complete the Module by 01/28	My task is to validate by 01/31
January 31 – February 11	Module 1 Review, Chapter9	Your task is to complete the Module by 02/11	My task is to validate by 02/14
February 14 – February 25	Module 2 Chapter 10 and 11	Your task is to complete the Module by 02/25	My task is to validate by 02/26

February 26 – March 27 <u>(Exam1</u> on February 26 th)	Module 3 <u>EXAM 1</u> (<u>Ch 9, 10, 11</u>), Chapter 12 and 13	Your task is to complete the Module by 03/27	My task is to validate and test by 03/30
March 15 – March 21	Spring Break	No Classes	
March 29 – April 26 <u>(Exam 2 on</u> April 19 th)	Module 4 Chapter 14, Chapter 15, and Recursion, EXAM 2 (Ch 12, 13, 14)	Your task is to complete the Module by 04/26	My task is to validate and test by 04/26
April 27 – May 04 <u>FINAL EXAM</u> (Comprehensive)	FINAL EXAM, 48- hour window	2.5 hours to complete once started. Window period, TBD.	

COURSE POLICIES

I have developed several policies that seem to work well in this course. Please review these very closely. You'll have an opportunity to voice your opinion on these policies and other aspects of the course when we reach evaluation points during the semester.

GSU Policy Prohibiting Students from Posting Instructor-Generated Materials on External Sites

The selling, sharing, publishing, presenting, or distributing of instructorprepared course lecture notes, videos, audio recordings, or any other instructor-produced materials from any course for any commercial purpose is strictly prohibited unless explicit written permission is granted in advance by the course instructor. This includes posting any materials on websites such as Chegg, Course Hero, OneClass, Stuvia, StuDocu and other similar sites. Unauthorized sale or commercial distribution of such material is a violation of the instructor's intellectual property and the privacy rights of students attending the class, and is prohibited.

Attendance And Participation Policy

Course participation is beneficial to your success. You are encouraged to login to iCollege each day to maintain your participation and timeliness of assigned readings, quizzes, reflections, and surveys. I will be using the analytics of iCollege to evaluate your level in this area.

Make-up Exam Policy

Make-up exams are not encouraged unless a true emergency situation is involved. If you do find yourself with this dilemma, you will be given a live, online oral exam by myself within 7 days of the missed exam date.

Course Evaluation And Evolution

Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take time to fill out the online course evaluation.

OTHER POLICIES

Academic Honesty

All parties involved in cheating and/or plagiarism will be given a zero on the specified assignment for the first offense. By all parties, I mean the person(s) who used someone else's work and the person whose work was used. A second offense of cheating and/or plagiarism will result in a grade of F for the course and possible expulsion from school.

Academic Honesty Policy: <u>https://deanofstudents.gsu.edu/files/2019/07/Academic-</u> Honesty-Policy.pdf

Special Needs

Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed <u>Accommodation Plan</u> and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought.

Students with special needs should then make an appointment with me during the first week of class to discuss any accommodations that need to be made.

FERPA

In keeping with USG and university policy, this course website will make every effort to maintain the privacy and accuracy of your personal information. Specifically, unless otherwise noted, it will not actively share personal information gathered from the site with anyone except university employees whose responsibilities require access to said records. However, some information collected from the site may be subject to the Georgia Open Records Act. This means that while we do not actively share information, in some cases we may be compelled by law to release information gathered from the site will be managed in compliance with <u>the Family Educational Rights and Privacy Act (FERPA)</u>, which prohibits the release of education records without student permission.

Sexual Harassment

In instances of sexual misconduct, the present instructor(s) and teaching assistants, are designated as Responsible Employees who are required to

share with administrative officials all reports of sexual misconduct for university review. If you wish to disclose an incident of sexual misconduct confidentially, there are options on campus for you do so. For more information on this policy, please refer to the <u>Sexual Misconduct Policy</u> which is included in the Georgia State University Student Code of Conduct.

Basic Needs Statement

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable us to provide resources that we may possess. The <u>Embark program at GSU</u> provides resources for students facing homelessness.

Campus Carry

The Campus Carry legislation allows anyone properly licensed in the state of Georgia to carry a handgun in a concealed manner on university property with noted exceptions. Information about the law can be found at <u>safety.gsu.edu/campus-carry</u>. It is the responsibility of the license holder to know the law. Failure to do so may result in a misdemeanor charge and may violate the Georgia State Student Code of Conduct." Please follow the guidelines established by the BOR.