

PROGRAMMING LANGUAGE CONCEPTS

CSc4330 (M and W, 17:30-19:15)

Aderhold, Room 325 CRN Sections: 87810 and 87811(CSc6330)

Course Description

Welcome to **CSc4330: Programming Language Concepts**. My name is William Gregory Johnson and I'll be your professor. You can call me Dr. Johnson or professor. In this course we cover fundamental programming language concepts, including syntax versus semantics, binding time, scopes, and storage management.

Please note, this syllabus reflects a plan for the semester and deviations may become necessary as the semester progresses. The university is requiring each course to use a seating chart, and this must be followed due to COVID-19 infection contact tracing, should you or your classmate become infected with COVID-19 or a variant. (<https://covidinfo.gsu.edu/vaccine>)

Course Outcomes

After finishing this course, you should be able to:

- Evaluate a programming language and its constructs.
- Understand the formal method for describing a syntax in some programming language.
- Describe the design issues for primary constructs in a variety of different programming languages.
- Understand functional and logic programming languages.

Course Prerequisites

Courses must be completed with a 'C' or higher grade in order to be in this course.

- CSc 2720 – Data Structures
- CSc 3210 – Computer Organization and Programming
- CSc 3320 – System-Level Programming

Assessments (exam, quizzes, and homework)

I've designed a variety of assessments to help you practice your disciplinary thinking and skills in Java programming. Your tests will be proctored, face-to-face in this classroom setting. I will be using a seating chart established in the first week of this course. This must be followed due to COVID-19 infection contact tracing, should you or your classmate become infected with COVID-19 or a variant.

Event	Quantity	Course Grade Weight
Regular Exams	2	40%
Quizzes (iCollege)	2-4 (TBD)	20%
Final Exam	1	25%
Homework: undergrad only	3-5 (TBD)	15%

Graduate Student Lecture(s)

1 or 2

15%

COURSE HELP

How to Establish Contact?

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

- **GSU Email:** wjohnson6@gsu.edu (**Do NOT use iCollege email.**)
- Phone/Text: 404-348-6923 (Give your name and course title in first text, so I know it's not spam. I delete after a resolution and within a few days.)
- **Office location:** 1 Park Place, 7th Floor, Rm 717
- My office hours are Monday and Wednesday at 15:30 to 16:30. If this time does not work, please make an appointment with me at least **48 hours in advance**, so our schedules can be adjusted to meet.
- Grader / tutor: Rajath Srinivasa – rcs1@student.gsu.edu

How to Access the Course?

You can login to your course via [iCollege](#). If you need more help, you can review the Welcome to iCollege help-guide.

https://gsutech.service-now.com/sp?id=kb_article&sys_id=0469d624db8e5c90b7bff46c0c9619b7

If you have problems accessing your course, please contact the helpdesk: helpdesk@gsu.edu.

What Are the Required Materials?

The following resources are required for this course:

- *Pearson e-text for Concepts of Programming Languages -- Instant Access, 12th edition*, Robert Sebesta, ISBN: 9780135102268 (<https://www.pearson.com/store/en-us/pearsonplus/p/9780135102268.html>)
- An alternative is to use Pearson's eBook, specific for your class section: <https://console.pearson.com/enrollment/1ghvqs>
- Paper book, rentable from Chegg - ISBN: 9780134997186 <https://www.pearson.com/us/higher-education/product/Sebesta-Concepts-of-Programming-Languages-RENTAL-EDITION-12th-Edition/9780134997186.html>
- The paper book, e-text or PDF is fine.

SCHEDULE

We do have a set schedule and please note that deviations may become necessary as the semester progresses. You'll want to refer to the calendar below frequently as we work together. I have also designed the iCollege course in such a way to help us all stay on track, due dates attached to grade items and calendar events. Since this is a 4-Credit Hour course GSU recommends that you spend

around **4 hours or more per week** interacting with readings, videos, and other sorts of content and **then 4 hours per credit hour per week** completing activities, labs, and assessments.

Please talk to me 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 **October 12th**.

<i>Date for scheduled class</i>	Events	Contents
<i>August 23 and August 25</i>	Introduction, Syllabus, seating chart, Chapter1	Preliminaries of the course
<i>August 30 and September 1</i>	Chapter1, Chapter3	Syntax and Semantics
<i>September 6 and September 8</i>	Holiday (no class), Chapter3	
<i>September 13 and September 15</i>	Chapter3, Chapter5	Names, Bindings, and Scopes
<i>September 20 and September 22</i>	Chapter5, Chapter6 I will not be in class on 20 th , either quiz from GTA or online work.	Data Types
<i>September 27 and September 29</i>	Chapter6	Expressions and Assignment Statements
<i>October 4 and October 6</i>	Exam1(Oct4th), Chapter7	
<i>October 11 and October 13</i>	Chapter8	Statement-Level Control Structures
<i>October 18 and October 20</i>	Chapter9, Quiz2	Subprograms
<i>October 25 and October 27</i>	Chapter10, Chapter11	Implementing Subprograms and Abstract Data Types, Encapsulation Constructs
<i>November 1 and November 3</i>	Chapter11, Exam2	Exam2 covers: Chapters 7,8,9,10,11
<i>November 8 and November 10</i>	Chapter13, Quiz3	Concurrency
<i>November 15 and November 17 Fall break</i>	Chapter15, Haskell, Scheme	Functional Programming Languages
<i>November 29 and December 1</i>	Chapter16, Prolog, Python	Logic Programming Languages
<i>FINAL EXAM December 6</i>	Same location as classroom, 17:30-20:00 (2.5 hours)	

COURSE POLICIES

Sharing Instructor Created Materials

University policy prohibits students from posting instructor-generated materials on external sites. The selling, sharing, publishing, presenting, or distributing of instructor-prepared 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, YouTube, 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. This course has **27** required meetings on **Mondays and Wednesdays at 17:30** in the **Aderhold Hall, Room 325**. It also has **1** required meeting on **Mondays December 13, 16:15** in the **Aderhold Hall, Room 325**. You are encouraged to wear a face covering in all class/lab meetings. I know that face masks may make some aspects of class more difficult. It will be harder for us all to project our voices and read each other's facial expressions. However, I am willing to sacrifice these elements since wearing a mask is one thing I can control to support the health and safety of our community. Be aware that wearing a face mask is not required by GSU, so there is no penalty if you choose to not wear a mask. Our university community has a strong tradition of upholding the value of mutual respect, I therefore ask students to not engage in behavior that would be disruptive if your fellow students make a different choice about wearing masks. If you have concerns, please discuss them with me and your Lab Instructor and we will work to the best of our ability to provide a comfortable environment conducive to student learning. COVID mask restriction information can be found here: <https://covidinfo.gsu.edu/vaccine>.

A well-developed attendance policy will be especially helpful this year and you are expected to attend class if you do not have an excused absence because of illness. University has a process for students seeking excused absences through the Dean of Students Office. Students submit documentation to: <https://deanofstudents.gsu.edu/student-assistance/professor-absence-notification/>. I will be notified by the Dean of Students of any excused absence without the need to manage medical information individually.

Make-up Policy

- Make-up exams are not allowed unless a true emergency situation is involved and unavoidable. If you do find yourself with this dilemma, you must contact me via text AND email as soon as possible when it is safe to do so. Waiting longer past your exam event will worsen your chances of

being granted a make-up opportunity. Your situation will be evaluated, and a live, face-to-face, oral exam will be given by myself within seven (7) days of the missed exam date. This period may be adjusted with regards to your individual circumstances.

- Make-up and late homework assignments are not allowed.

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 Embark program at GSU provides resources for students facing homelessness.

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.

Academic Honesty

All parties involved in cheating and/or plagiarism will be given a zero on the specified assignment or event 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 university.

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

Accommodation

Students who wish to request accommodation may do so by registering with the Office of Access and Accommodation. Students may only be accommodated upon issuance by a signed Accommodation Plan and are responsible for providing a copy of that plan to me and lab instructors 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.

<https://access.gsu.edu/>

FERPA

In keeping with University System of Georgia and GSU 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. Also, the site will be managed in compliance with [the Family Educational Rights and Privacy Act \(FERPA\)](#), 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 [Sexual Misconduct Policy](#) which is included in the GSU Student Code of Conduct.

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 safety.gsu.edu/campus-carry. 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 Board of Regents.