PROGRAMMING LANGUAGE CONCEPTS

CSc4330 (M and W, 17:30-19:15) Lectures: Room 223, Aderhold Learning Center
CRN Sections: 16516 and 87811(CSc6330)

One GTA grader/assistant is assigned to your class to grade and help with understanding homework assignments. Also, they can answer general questions about course topics.

They are: Taku Chikwanda; tchikwanda1@student.gsu.edu The tutoring hour each week is Thursday, 12:30pm. The WebEx room is: https://gsumeetings.webex.com/meet/tchikwanda1

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. I will follow CDC guidelines and GSU policy for responding to COVID-19 issues. (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, homework, graduate lectures)

I've designed a variety of assessments to help you practice your disciplinary thinking and knowledge acquired in this course. Your tests will be proctored, face-2-face in this classroom setting. The exams will be on paper, supplied by university. Grading will be completed no more than one week after each event.

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

Graduate Student Lecture(s)	1	20%
Graduate Student Paper	1	20%

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 (put your name and course title in first text, so I know it's not spam.)**
- Office location: **1 Park Place, 7th Floor, Rm 717**
- My office hours are Monday and Wednesday at 12:30pm to 1:30pm. 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. We can meet online or face-2-face.
- See above for GTA grader(s) and tutor(s).

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. 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
- Note: you will need a paper book or printed sections for your exams.

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, readings, and exam events.

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 passing (WP) is <mark>**March 1st**</mark>.   **Tentative Schedule:**

Date for scheduled class	Events	Contents
Jan 10, 12	Introduction, Syllabus, seating chart, Chapter1	Preliminaries of the course
Jan 19	Chapter3	Syntax and Semantics
Jan 24, 26	Chapter3, Chapter4	Names, Bindings, and Scopes, Parsers
Jan 31, Feb 2	Chapter3, Chapter4 selected exercies, Quiz1	
Feb 7, 9	Chapter5, Chapter6	Data Types
Feb 14, 16	Chapter6, Review for Exam1	Expressions and Assignment Statements
Feb 21, 23	Exam1(1,3,4,5,6), Chapter7	
Feb 28, Mar 2	Chapter8	Statement-Level Control Structures
Mar 7, 9	Chapter9, Quiz2	Subprograms
Mar 14-18	SPRING BREAK: no classes	
Mar 21, 23	Chapter9, Chapter10	Exam2 covers: Chapters 7,8,9,10,11
Mar 28, 30	Chapter10, Chapter11	Concurrency
Apr 4, 6	Exam2 (7,8,9,10,11), Chapter12	
Apr 11, 13	Chapter13, Quiz3	Exception Handling
Apr 18, 20	Chapter14, Chapter15, Grad Presentation	Functional Programming Languages
Apr 25	Chapter16	Logic Programming Languages
FINAL EXAM: Wednesday, April 27	Same location as classroom, earlier time - 16:15 (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 **Room 223**, **Aderhold Hall Learning Center**. You are encouraged to wear a face covering in all class meetings. 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 I will work to the best of my 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 semester and you are expected to attend class if you do not have an excused absence. 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. The course attendance will be utilizing a tool built by the CS department. If you are using the GSU Wi-fi, no need for the Cisco VPN. The attendance/seating-chart system is found here: https://ousp.cs.gsu.edu/seat/ You are expected to utilize the system each time you come into the classroom. It records the date/time and location for each record, so be aware of connecting from elsewhere if you are a face-2-face student.

Make-up Policy

- Make-up exams are not allowed for any reasons other than excused absences from the Dean of Students. This is not negotiable.
- Make-up lab quizzes are not allowed for any reasons other than excused absences from the Dean of Students. This is not negotiable.
- Make-up homework assignments are not allowed for any reason(s). The homework assignments are specifically timed to coincide with the course content and pedagogy delivery. This paring is by design to aid in your learning of the course topics. Solutions are posted in iCollege immediately after the 'due' date/time so you may benefit from the correct answers. This is not negotiable.

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.