

2720: Data Structures

Kiril Kuzmin

Spring, 2022

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Office Hours: F 10–11:55am

Office: 621, One Park Place

Class Hours: T/R 2:15–3:30pm

Class Room: Petit Science Center 169

Course Description

This course provides an introduction to fundamental data structures including arrays, linked lists, stacks, queues, hash tables, heaps, trees, and sets. It covers basic programming techniques and algorithms that operate on these data structures (like searching, sorting, hashing, etc.). The course emphasizes the relationship between algorithms and programming, and introduces rudiments of analyzing space and time requirements of algorithms.

Labs

CRN	Session	Day	Time	Location	Lab Instructor
21765	016	W	3–3:50pm	Classroom South 225	Md Abdullah Al Rahat Kutubi
14983	010	W	4–4:50pm	Classroom South 225	Md Abdullah Al Rahat Kutubi
14982	014	W	5–5:50pm	Classroom South 203	Akshay Juyal
14981	012	W	6–6:50pm	Classroom South 203	Akshay Juyal

Lab Instructors

Name	email	Office hours	Location
Md Abdullah Kutubi	mkutubi1@student.gsu.edu	11am–12pm, T	613, One Park Place
Akshay Juyal	ajuyal1@student.gsu.edu	TBA	619, One Park Place

Homeworks

First of all, remember that *the completion of all assignments (on your own) is one of the main keys to succeed in this class*. You must follow all requirements for the homework submissions that will be posted on iCollege.

Each submission should consist of

- 1) the source code as a java-file;

2) (if required) the report in a pdf- (preferable) or MS Office format.

Please note that the report must be typed, not handwritten and/or scanned.

The submissions must be uploaded on iCollege dropbox into the relevant folder. If the teaching assistant cannot open and read it, or if you submit a flawed document, the grade will be zero. It is your responsibility to ensure that each file opens correctly. Having submitted it on iCollege, go and try to open/download it. Always make sure that you hit the “submit” button, and get a notification from iCollege that your submission has successfully gone through.

Your homework assignments will be checked by

Name	email	Office hours	Location
Srikar Chowdavarapu	schowdavarapu1@student.gsu.edu	TBA	TBA

Textbooks

Course materials along should be sufficient to do well in this class. If you need a book, I suggest the following:

- ✓ Weiss, Mark Allen (2012). Data Structures and Algorithm Analysis in Java. 3rd ed. Prentice Hall. ISBN: 9780132576277

Prerequisites

- Programming in at least one programming language. Preferably in Java, as labs and homework will be given with expectation of some knowledge of Java.

Course Policies

Grading

The typical GSU grading scale will be used:

A+	A	A-	B+	B	B-	C+	C	C-	D	F
[97, 100]	[93, 97)	[90, 93)	[87, 90)	[83, 87)	[80, 83)	[77, 80)	[73, 77)	[70, 73)	[60, 70)	[0, 60)

Curving is left at the instructor’s discretion and is (very) unlikely to happen.

The grade will count the assessments using the following proportions:

- 30% of your grade will be determined by lab assignments (expect about 7 lab assignments; one lowest result will be dropped);
- 30% of your grade will be determined by homework assignments (expect about 4 homework assignments; one lowest result will be dropped);
- 20% of your grade will be determined by the midterm (held during normal class hours);
- 20% of your grade will be determined by the final (held during the exam week in the same classroom, on **Thursday, April 28th, 1:30–4:00pm**).

Makeup exams – midterm and final – are not given! Exceptions to this policy may be made only in case of a family or medical emergency, which must be clearly documented.

Attendance Policy

Attendance of the lectures (on Tuesdays and Thursdays) is not mandatory but why not go if

- 1) you need to be taught;
- 2) you can ask the instructor questions if have them;
- 3) you have friends in class;
- 4) you are already on campus anyway?

Attendance of the labs is very important, but still is left at your lab instructor's discretion.

Late Assignments

Late assignments may be accepted for no penalty if a valid excuse is communicated to the instructor before the deadline. If you exceed the deadline for more than 1 hour, your assignment will be penalized. The penalty is a 20% deduction for each extra 24 hours after the deadline. E.g., a homework scored 83% but submitted one day late (more than 1 hour and less than 24 hours late) will only receive 63% for the grade; the same homework submitted 2 days late (more than 24 hours and less than 48 hours late) will only receive 43%, and so on. Thus, even a perfect 100%-score submission which is more that five-day-late will receive no credit (but may receive some feedback).

Cheating

Do not cheat! You can discuss problems with other people, but when you start coding, do it on your own! If you are stuck, you can google how to approach the problem (e.g., stackoverflow.com is a good source of the solutions), however, do not bluntly copy a solution, understand it, then close it and do it as you have remembered and understood it.

Copying information from another student's work will be punished severely resulting in the grade zero for this type of activity (lab/homework/exam) for *all* students involved. In some cases of plagiarism (at the instructor's discretion), students may receive a failing grade for the course.

Students with Special Needs

Students who need special accommodations should arrange a meeting with the instructor as soon as possible. Bring a copy of your Student Accommodation Form to the meeting. If you do not have this form, please make an appointment with the university's Office of Disability Services, 230 New Student Center, 404-413-1560.

Closing of the University

Sometimes the university closes because of weather conditions. To find out if the university is closed, go to gsu.edu or listen for an announcement on local TV or radio channels. If a class is canceled, planned activities will take place during the next class session.