Algorithms and Data Structures, CSE 2010, Sections 1-4
Fall 2024
MW 5-6:15pm (labs: TR 9:30-10:45pm; TR 3:30-4:45pm)
OLS 130 (labs: OEC 228)

Instructor Name: Philip Chan **Phone: 321-674-7280**

Office Location: 209 Harris Center **Email: pkc@fit.edu**

Office Hours: MW 1-3pm

Teaching Assistants:

Samuel Boddepalli, sboddepalli2023@my.fit.edu, 211 Harris Center, office hours: Thu 1-3pm

Rutvi Khamar, rkhamar2023@my.fit.edu, 211 Harris Center, office hours: Wed 3-5pm

Course website: https://cs.fit.edu/~pkc/classes/ds/

Course Objectives

1. understand basic data structures
2. understand basic algorithms
3. understand basic analysis of algorithms

Required Texts / Materials:

- Goodrich et al., Data Structures and Algorithms in Java, 6th Edition, Wiley, 2014.

Required Training (if applicable): Pre-requisites

- CSE 1001 and 1002: Familiar with a high-level programming language.
- CSE 1400 / MTH 2051: Discrete Math.

Grading Policy (including late work policy):

- 6 homework assignments (40%), term project (10%)
- Test 1 (15%), Test 2 (15%) & Final Exam (20%)
- A: 90%, B: 80%, C: 70%, D: 60%
- Late assignments are accepted, but 20% is deducted for each day.

Course Attendance Policy:

- students are expected to attend lectures and labs

Where to Find Extra Help:

- CS Help Desk: https://cs.fit.edu/~pkc/dept/csHelpDesk.html
- Academic Support Center: https://www.fit.edu/academic-support-center/

Academic Honesty Definitions & Procedures: Is located in the student handbook at https://www.fit.edu/policies/student-handbook/standards-and-policies/academic-honesty/

- Students are encouraged to help each other on assignments, but plagiarism (copying) is prohibited.
    - first violation: zero on assignment/test
    - second violation: 'F' for the course

Title IX Statement: The university's Title IX policy is available at https://www.fit.edu/policies/title-ix/

Title IX of the Education Amendments of 1972 is a federal civil rights law that prohibits discrimination on the basis of sex in federally funded education programs and activities. Florida Institute of Technology policy also prohibits discrimination on the basis of sex.

Florida Tech faculty are committed to helping create a safe learning environment for all students that is free from all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you, or someone you know, have experienced or is experiencing any of these behaviors, know that help and support are available.

Florida Tech strongly encourages all members of the community to take action, seek support, and report any incident of sexual harassment or gender discrimination to

Dennis Kwarteng, Title IX Coordinator

- Phone: 321-309-3068,
- Email: dkwarteng@fit.edu,
- Office: John E. Miller Office Building (401QAD), Room: 137.

Please note that as your professor, I am required to report any incidents to the Title IX Coordinator.

If you wish to speak to an employee who does not have this reporting responsibility, please contact the **Student Counseling Center** at 321-674-8050.

Academic Accommodations: Florida Tech is committed to equal opportunity for persons w/disabilities in the participation of activities operated/sponsored by the university. Therefore, students w/documented disabilities are entitled to reasonable educational accommodations. The Office of Accessibility Resources (OAR) supports students by assisting w/accommodations, providing recommended interventions, and engaging in case management services. It is the student's responsibility to make a request to OAR before any accommodations can be approved/implemented. Also, students w/approved accommodations are encouraged to speak w/the course instructor to discuss any arrangements and/or concerns relating to their accommodations for the class.

Office of Accessibility Resources (OAR):

- Phone: 321-674-8285
- Email: accessibilityresources@fit.edu
- Website: https://www.fit.edu/accessibility-resources

Recording Disclosure (Privacy Waiver): This course may be recorded for use by students and/or faculty. Enrolled students are subject to having their images and voices recorded during the classroom presentations, remote access learning, online course discussions, and remote office hours/meetings. Course participants should have no expectation of privacy regarding their participation in this class. Recordings may not be reproduced, shared with those not registered in the courses, or uploaded to other online environments. All recordings will be deleted at the conclusion of the academic term.

Anticipated Weekly Subject Matter and Assignment Schedule:

	Weekly Topic	Assignment
Week 1	Arrays and linked lists (Ch3)	
Week 2	Analysis of Algorithms (Ch4)	
Week 3	Recursion (Ch5)	Sep 5: HW1 due
Week 4	Stacks and Queues (Ch6)	
Week 5	Trees (Ch8)	Sep 19: HW2 due
Week 6	Trees (Ch8)	Sep 25: Test 1
Week 7	Priority Queues (Ch 9)	Oct 3 : HW3 due
Week 8	Maps and Hashing (Ch 10)	
Week 9	Sorted/Ordered Maps (Ch 10)	Oct 17: HW4 due
Week 10	Graphs (Ch 14)	Oct 23: Test 2
Week 11	Graphs (Ch 14)	Oct 31: HW5 due
Week 12	Text Processing (Ch 13)	
Week 13	Text Processing (Ch 13)	Nov 14: HW6 due
Week 14	Search Trees (Ch11)	
Week 15	Search Trees (Ch11)	Nov 26: term project: initial
Week 16	Sorting (Ch12 MergeSort, QuickSort)	Dec 5: term project

This schedule is subject to change at the instructor's discretion.

FINAL EXAM Information: Dec 9 (Mon), 6-8pm