# **CS124: Data Structures and Algorithms**

Section A: Tuesdays and Thursdays 8:30 - 9:45am in Votey 254 Section B: Tuesdays and Thursdays 10:05 - 11:20am in Perkins 102

Instructor: Lisa Dion GTA: Nisha Chaube

TAs: Jose Chan, Arlo Cohen, Meghan King, Ramy Koudsi, Lindsey Stuntz

Instructor Office Hours in Votey 329:

Mondays and Wednesdays 2:00 - 4:00pm

TA Office Hours in Votey 351A:

Mondays 5:00 - 6:30pm Tuesdays 1:00 - 3:00pm Wednesdays 6:00 - 7:30pm

#### Course Overview

You will learn the common data structures for abstract data types and algorithms, including trees, heaps, sorting, hashing, disjoint set find-union and basic graph algorithms. You will also consider their performance comparison.

#### Course Materials

Required Textbook:

Data Structures and Algorithms in C++ by Mark Allen Weiss

4th Edition

ISBN-10: 0-13-284737-X ISBN-13: 978-0-13-284737-7

Software: I recommend CLion (cross-platform, so can be used with any OS). If you do not want to use an IDE, gcc/g++ will work fine in terminal/command prompt.

### Important Dates

Final Exam: Tuesday, December 12 at 7:30am (Section A) or Thursday, December 14 at 7:30am (Section B)

### Grading

50% - Projects

30% - Quizzes

10% - Final Exam

10% - Attendance

**Projects**: Projects will be graded on a point system. Each project will be out of a number of points, and the total points for the projects will be 50% of your final grade.

**Quizzes**: Quizzes will be given at the end of class every two weeks during the semester. If you miss a quiz with an excused absence, contact the instructor.

**Final Exam**: The final exam is cumulative. See the Important Dates section above for the date and time of your final exam.

**Attendance**: For each lecture you attend, you earn 0.5% toward your final grade, and for each day you are late to class you earn 0.25% toward your final grade. Absences earn 0%. Attendance credit is capped at 10%.

### Class Policy

Project lateness: You will lose 10% of the project points for each day a project is submitted late, up to 3 days per project. Any project you do not submit or that you submit after three late days will receive a 0 for the project grade.

If you submit a wrong file or omit a file from a project, you will be contacted via email. If you submit the correct file within 24 hours of being contacted, you will lose 10% of the project points; otherwise you will earn a 0 for the project.

There will be a zero tolerance policy for any vulgarity in the course. This includes in any work handed in, as well as language expressed during class.

Any questions or concerns about grades must be made within 1 week of the grade release.

# Academic Integrity

You must abide by the Code of Academic Integrity: <a href="https://www.uvm.edu/policies/student/acadintegrity.pdf">https://www.uvm.edu/policies/student/acadintegrity.pdf</a>

Any suspected violation will be reported to the Center for Student Conduct.

#### SAS

If you have a documented disability and are interested in utilizing accommodations, you should contact Student Accessibility Services (SAS). SAS works with students and faculty to create reasonable and appropriate accommodations via an accommodation letter to professors with suggested accommodations as early as possible each semester. Contact SAS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; or http://www.uvm.edu/access.

# Religious Accommodations

You have the right to practice the religion of your choice. Your documented religious holiday schedule for the semester should be sent to me by the end of the second week of classes. You will be able to make up any work you miss for the purpose of religious observance.