Class Meetings
MW 5:15 pm – 6:30 pm, at Love 103.

Staff
Instructor: Viet Tung Hoang
Email: vhoang@fsu.edu
Office hours: MW, 2pm–3pm, Love 261

TA: Mohammad Imran Chowdhury
Email: mc15ax@my.fsu.edu
Office hours: TR 11am–12pm, 336 Dittmer

Prerequisites
Algorithms (COP 4531). You are also expected to have mathematical maturity to write proofs.

Textbooks
Here’s the official textbook of the course.


Exam Date
Midterm: March 25. There is no final exam.

What Is This Course About?
In this class, we’ll learn techniques to analyze complex algorithms. Here is a sample of questions of interests that we’ll cover.

• How fast is Randomized QuickSort?

• The running time of queries in a Binary Search Tree (BST) of \( n \) nodes can range from \( O(\log(n)) \) to \( O(n) \). What’s the situation in a random BST?

• In algorithm analysis, we often encounter pesky sums and recurrences. Is there a general way to handle them?
How Will You Be Evaluated?

Scores. The maximum total score is 1000 and its breakdown is shown below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>100</td>
</tr>
<tr>
<td>Midterm</td>
<td>300</td>
</tr>
<tr>
<td>Homework</td>
<td>500</td>
</tr>
<tr>
<td>Quizzes</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>

Grading. Your total score will be converted to letter grade as shown below.

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>770 - 1000</td>
<td>C+</td>
</tr>
<tr>
<td>740 - 769</td>
<td>C</td>
</tr>
<tr>
<td>700 - 739</td>
<td>C-</td>
</tr>
<tr>
<td>670 - 699</td>
<td>D+</td>
</tr>
<tr>
<td>640 - 669</td>
<td>D</td>
</tr>
<tr>
<td>600 - 639</td>
<td>D-</td>
</tr>
<tr>
<td>570 - 599</td>
<td>F</td>
</tr>
</tbody>
</table>

Participation Matters, But How?

Blackboard Drills. We'll frequently have problem-solving drills in our class. You'll be called to the blackboard to (i) solve small problems and (ii) explain your solution to the class.

Peer Feedback. For each homework, after the deadline, you'll receive some anonymized papers of your classmates. You need to provide critical feedback for improving the exposition of those papers.

Writing Matters, Too

Bad Writing Hurts. In your homework, 5% of the points will be reserved for the exposition, and that will be judged anonymously by your classmates. See the course website for writing resources.

Writing Workshops. We will occasionally hold a writing workshop to teach you how to write better.

Skip Class? You Won’t Pass

Attendance is required in this class. If your score is just a bit below the cutoff line, I’ll use your attendance to move you to the better grade.

Homework Policy

No Late Submission. In order to provide timely solutions to assignments, I do not accept late homework submissions.

Typesetting. Homework solutions must be typed, and submitted as a PDF file. See the course website for resources on typesetting mathematical writing, as well as a template for homework.
University Attendance Policy

Excused absences include documented illness, deaths in the immediate family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. Accommodations for these excused absences will be made and will do so in a way that does not penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy

FSU Academic Honor Policy (found at http://fda.fsu.edu/Academics/Academic-Honor-Policy):

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to “. . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University.”

Americans With Disabilities Act

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; and (2) bring a letter to the instructor indicating the need for accommodation and what type.

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu
http://www.disabilitycenter.fsu.edu

Syllabus Change Policy

This syllabus is a guide for the course and is subject to change with advanced notice.