CIS4930  Problem Solving

Fall 2022

http://www.cs.fsu.edu/~tvhoang/classes/cis4930.html

Class Meetings

MW 3:05 pm – 4:20 pm, at Love 103.

Staff

Instructor: Viet Tung Hoang
Email: tvhoang@cs.fsu.edu
Office hours: TueFri 4pm–5 pm, virtual

Prerequisites

COP 4530 (Data Structures & Algorithms)

Textbook

There is no textbook for our class, but if you want a book to improve your problem solving skill, I highly recommend the following:


What Is This Course About?

This course is an unusual class. It aims to teach you the dirty behind-the-scene work of problem solving; here we focus on algorithm design. For example, for other classes, guessing a solution may be a taboo, but in actual problem solving, guessing is an essential skill.

This course is a discussion-centered class. Like a swimming class, the instructor is there to guide and give you feedback, but you do have to actively practice in the class.
How Will You Be Evaluated?

Scores. The maximum total score is 1000 and its breakdown is shown below. There is no exam in this class.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>150</td>
</tr>
<tr>
<td>Participation</td>
<td>200</td>
</tr>
<tr>
<td>Homework</td>
<td>630</td>
</tr>
</tbody>
</table>

| Total       | 1000   |

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

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-970</td>
<td>A</td>
</tr>
<tr>
<td>969-900</td>
<td>A-</td>
</tr>
<tr>
<td>899-870</td>
<td>B+</td>
</tr>
<tr>
<td>869-840</td>
<td>B</td>
</tr>
<tr>
<td>839-800</td>
<td>B-</td>
</tr>
<tr>
<td>799-770</td>
<td>C+</td>
</tr>
<tr>
<td>769-740</td>
<td>C</td>
</tr>
<tr>
<td>739-700</td>
<td>C-</td>
</tr>
<tr>
<td>699-660</td>
<td>D+</td>
</tr>
<tr>
<td>659-600</td>
<td>D</td>
</tr>
<tr>
<td>599-0</td>
<td>F</td>
</tr>
</tbody>
</table>

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.

Participation Matters, But How?

In-class drills. In each practice session, I’ll call some students to the board to solve algorithm problems. Alternatively, you’ll be called to vocally recap the material in prior lectures to the class.

Homework reflection. For each homework, you need to submit a report that describes how you discovered the solution.

Writing Matters, Too

Bad writing hurts. In your homework, 10% of the points will be reserved for the exposition. See the course website for writing resources.

Writing workshop. We’ll have a workshop to teach you how to write better. To prepare for this, you need to write down the solution of a problem that we already discussed in class.

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.

Group homework. You can form a group of size at most two. Partnership needs to be rotated. That is, you work with $A$ in one homework, you need to find another partner $B$ in the next homework.
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."

ADA

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.