Course Description

Problem Solving with Computers is a first course in computer science for undergraduate students. This course provides fundamental concepts of contemporary computer systems with emphasis on fundamental programming constructs such as assignments, sequential operations, iteration, conditionals and functions. Students will then learn about abstraction, which is one of the most powerful tools in computer science, for algorithmic complexity, program efficiency, computer organization, hierarchical decomposition, recursion, and object-oriented programming.

Topics

The topics to be covered include
- Introduction to Computer Science and Media Computation
- Introduction to Python programming
- Working with pictures and sounds
- Creating and modifying text and movies
- Building bigger programs

Grading

(Tentative, subject to change)
Open Lab Assignments (OLA): Exercises & Projects 20%
Closed Lab Assignments (CLA) 10%
Quizzes and Attendance 10%
Exams (in-term) 40%
Comprehensive Final Exam 20%

Required Texts


Chapter coverage: 1 - 15

Prerequisites

None.

Grading Scale

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
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<tr>
<td>80 – 89</td>
<td>B</td>
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<tr>
<td>70 – 79</td>
<td>C</td>
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<tr>
<td>60 – 69</td>
<td>D</td>
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<tr>
<td>Below 60</td>
<td>F</td>
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