Berkeley CS61B Data Structures, Spring 2021

https://sp21.datastructur.es/about.html

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**Please post administrative issues to Ed or send an email to  cs61b@berkeley.edu**

## 1 Course Structure

Small minority of your learning:

* **Introduction to new material**: Lectures / reading.

The vast majority of your learning:

* **Theory**: Discussion sections, study guides, theory homework.
* **Programming, Tool Usage, Problem Decomposition:** Labs, coding HW, projects.
* **Design:** Projects 2 and 3.

## 2 Course Phases

Phase 1: Programming Intensive Introduction to Java.

* Weeks 1-4.
* One browser-based programming HW (this HW0 is optional).
* Four labs to introduce you to various tools (starting this week).
* Two projects (proj0 and proj1).
* Midterm 2/10 at time TBD.

Phase 2: Data Structures.

* Weeks 5-10.
* Incredibly important and foundational material: Expect an CS job interview to lean heavily on this part of the course.
* One programming HWs (HW1) and one exam-prep theory HW (HW2).
  + Applications and deeper insight into data structures.
* One very large solo project (Proj 2), due 4/2. Checkpoint due 3/12.
* Labs:
  + Lab 5: Peer review on project 1.
  + Two labs that implement data structures (hash table and BST).
  + Remaining labs are focused on project 2.
* Midterm 3/17 at time TBD.

Phase 3: Algorithms and Software Engineering.

* Weeks 10-14
* Project:
  + Proj 3: Build Your Own World: An open ended project where you and a partner build a 2D world with physics according to your own design. Due during lab in the last week of the class.
* Labs devoted to project.
* One theory homework due 5/3.

See calendar at <http://datastructur.es> for more.