Welcome to CMPS 12B

Instructor:

Dustin Adams, PhD

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Topics covered in this class

- Recursion
- ADTs
- Linked Lists (ADT)
- Stacks (ADT)
- Queues (ADT)
- Sorting and Efficiency of Algorithms
- Binary Search Trees
- Dictionary ADT
- C Language

Office Hours

- TuTh 5:10 - 6:10pm, Wednesday 11am-1pm, Monday & Friday by appointment (appointment must be made at least 48 hours in advance)

- Engineering 2 room 249B

Lab Sections

All lab sections in Baskin 109

A: Mo 01:00PM-02:00PM

B: Mo 02:00PM-03:00PM

C: Th 01:00PM-02:00PM

D: Th 02:00PM-03:00PM

E: Fr 12:00PM-01:00PM

You are allowed to attend whichever lab section you wish – it doesn't necessarily need to be the one you enrolled in.

Lecture and Lab

- Attendance in class and lab is not required – although it is your responsibility to learn the material.

Your TAs

Chandranil Chakrabortii (cchakrab@ucsc.edu)

Sean-Ryan Smith (sewsmith@ucsc.edu)

Zehui Cheng (zecheng@ucsc.edu)

TA Office Hours

Sean: Monday 3-4pm, Tuesday 12-1pm (E2 room 309).

Zehui: Monday & Friday 5pm - 6pm (Baskin Engineering room 312 C/D).

Chandranil: Time and location coming soon.

LSS Tutoring

Tyler (tebding@ucsc.edu) - Learning Assistant
Xiangfeng Zhu (xzhu27@ucsc.edu) - Tutor

Times and location coming soon.

Disclaimer

- If you are enrolled in Professor Pat Tantalo's CMPS 12B-01, you MUST also be enrolled in CMPS 12M-01.*
- If you are enrolled in Professor Dustin Adams' CMPS 12B-02, you MUST also be enrolled in CMPS 12M-02.*
- You may not be in mis-paired sections (as noted in the Schedule of Classes). Doing so WILL result in a failed grade for BOTH classes.
- You should have received an email with a permission code. Please check your junk mail.
- *This is not applicable to those that have previously passed lecture or lab.

Online Resources

- Course webpage

- Canvas

- Piazza
  - If your question can't be answered through Piazza, <u>email a TA</u> – emailing the instructor is your <u>last resort</u>.

Recommended Text

- <u>Data Abstraction and Problem Solving with JAVA</u> (2nd edition) by Frank M. Carrano and Janet J. Prichard

- (more supplementary material on course webpage)

Assignments

12B

Midterm 1 (20%)

Midterm 2 (20%)

Programming Assignments (40%)

Final Exam (20%)

12M

Lab Assignments (80%)

Final Exam (20%)

Exam dates

Midterm 1: February 1

Midterm 2: March 1

Final: Wednesday, March 21 4:00–7:00 p.m.

Latework Policy

- Late assignments (even by 1 minute) will be accepted up to 2 days after the assignment due date for 80% credit; assignments will not be accepted after 2 day grace period.

- MAKE SURE you submit the correct assignment. If you submit the wrong assignment, and realize this after the assignment due date, the assignment will not be regraded.

Academic Dishonesty

- In short, this means copying someone else's code for assignments, copying someone's answers on a quiz/exam, in general copying someone else's work and presenting as your own – see course webpage for more details, <u>although you should know what cheating is</u>.

- Consequences for academic dishonesty are receiving an automatic zero for assignment, and being reported to your college provost – this could result in expulsion. **DON'T DO IT**.

DRC Accommodations

If you qualify for classroom accommodations because of a disability, please get an Accommodation Authorization from the Disability Resource Center (DRC) and submit it to me in person outside of class (i.e. during office hours) within the first two weeks of the quarter. Contact DRC at 459-2089 (voice), 459-4806 (TTY), or http://drc.ucsc.edu for more information.

ToDo

- Thoroughly read chapter 3 in text
- Refresh on chapter 1 & 2 as well

Lab 1 – Accessing the Unix Timeshare

Using Mac or Linux: Open up Terminal and type this command:

```
ssh <username>@unix.ucsc.edu
```

Where <username> is your ucsc username, and type in your blue password when prompted.

Lab 1 – Accessing the Unix Timeshare

Using Windows:

Download PuTTY from this link:

https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html

Open putty.exe

Fill in unix.ucsc.edu as the Host Name, 22 as the port number, SSH as the connection type, then press open. Type your CruzID at the login prompt and give your Blue password.

Program 1

- Lets look at Reverse.java and MergeSort.java in Examples

Some Recursive Applications

- Factorial
- Fibonacci Sequence
- Pascal's Triangle