

# **Welcome to “Introduction to Computer Science”**

**CS 8: Introduction to Computer Science  
Lecture #1**

Ziad Matni

Dept. of Computer Science, UCSB

# A Word About Registration for CS8

---

## FOR THOSE OF YOU NOT YET REGISTERED:

- This class is currently **FULL**
- If you are on the waitlist, you will be added automatically as others drop the course
- If you are not on the waitlist, you will not get into this class
- If you are an extension student, please see me after class

## **Disabled Students Program Notetaker Needed**

CMPS 8 TR 3:30

**\$25 per unit (of the class)**

(prorated based on the number of weeks selected)

**Questions: Please contact WANDA THOMAS:**

**Phone: 805-893-2668**

**Email: [thomas-w@sa.ucsb.edu](mailto:thomas-w@sa.ucsb.edu)**

**Please apply online at <http://dsp.sa.ucsb.edu/services>**

# Your Instructor

---

Your instructor: **Ziad Matni** (*zee-ahd mat-knee*)

Email: *[zmatni@cs.ucsb.edu](mailto:zmatni@cs.ucsb.edu)*

(please put **CS8** at the start of the subject header)

My office hours:

Tuesdays **10:00 AM – 12:00 PM**, at **SMSS 4409**

(or by appointment)

# Your TAs

TA NAME	LAB SECTION	OFFICE HOURS
Mahnaz Koupae	Wed. 3 pm	Wed. 10 am – 12 pm
Sourav Medya	Wed. 4 pm, 5pm	Tue. 5 pm – 7 pm
Shiyu Ji	Wed. 6 pm	Mon. 3 pm – 5 pm
Zhongqi Yi (grader)	-	-

All labs will take place in **PHELPS 3525**

All TA office hours will take place in **TRAILER 936**



# TRAILER 936



4/4/17

Matni, CS16, Sp17

7

# You!

**With a show of hands, tell me... how many of you...**

- A. Are Freshmen? Sophomores? Juniors? Seniors?
- B. Are Engineering majors?
- C. Are Science (Physics, Chem, Bio, Geog, etc...) majors?
- D. Are Math, Stats, ActuarialSci, etc... majors?
- E. Are Econ or Psych majors?
- F. Are Social Science (Soc, Comm, PoliSci, etc...) majors?
- G. Are Humanities (English, languages, history, etc...) majors?
- H. Have programmed anything before? What language?
- I. Have used a Linux or UNIX system before?



# This Class

- A **beginner's** class in computer science
- Designed for non-majors
  - CS majors welcome to prepare for CS 16
- Through the lens of the *Python* programming language
  - More specifically, Python 3 (nothing earlier than ver. 3.4.3)
- We'll discuss motivations (why? / who cares?)  
and techniques (how do I do that?)

# What CS 8 is Not

- *Not* for people with zero computer experience
  - Instead start with short courses offered by IC
    - Word processing, spreadsheets, web browsing, e-mail, ...
  - Otherwise you might be frustrated by CS 8's requirements and expectations
- *Not* a comprehensive course in Python either
  - We'll focus on a subset – enough to teach fundamental programming concepts
  - After CS 8, you should be sufficiently trained to learn some advanced Python on your own

# About Python

- *Python is one of the most widely used and in-demand programming languages for both engineering and non-engineering applications*
  - Very popularly used in
    - Dynamic Web Pages, Small Apps Building, etc...
    - Data Mining, Content and Text Analysis, etc...
- A gateway programming language
  - Forgiving *syntax* and *form*
  - ...You know you want to program...
- It looks great on your resume!

# How Is This Class Taught?

- Every class has a lecture based on the readings

**YOU SHOULD DO THE READINGS BEFORE CLASS!!!**

- You will be in a lab on Wednesdays

**YOU SHOULD READ YOUR LAB ASSIGNMENT BEFORE YOU GO TO LAB!!!**

- You have to do a lot of (short) homeworks and (kinda-short) lab assignments

**PRACTICE MAKES PERFECT!!!**



There's **A LOT OF** ~~actual~~ "work" to do...

- ~8 Homeworks
- ~8 Lab Assignments
- ~3 Project Assignments
- 2 Midterm Exams
- 1 Final Exam

*... and a partridge in a pear tree...*

# Why All the Work?

- Programming is a skill
- Learning how to program requires *time*, *perseverance*, and *consistent* practice
  - Exactly like practicing a musical instrument
  - There's a *science* behind programming,  
but it is also about *technique*
- You learn by doing and by getting “*your hands dirty*”

# Resources?

---

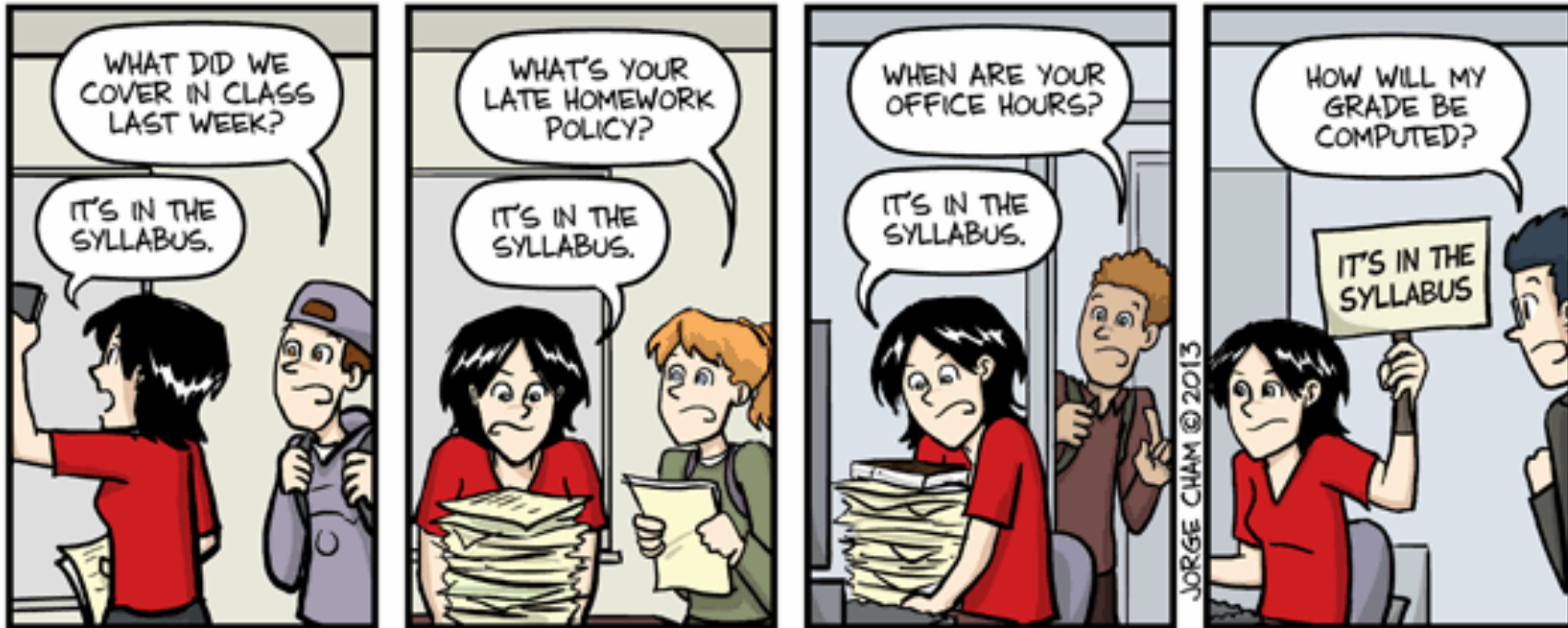
Class webpage:

<https://ucsb-cs8-s17.github.io>

Piazza discussions/Q&A:

<https://piazza.com/ucsb/spring2017/cs8>

# Just in Case...



# IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.

[WWW.PHDCOMICS.COM](http://WWW.PHDCOMICS.COM)



# So... let's take a look at that syllabus...

---

**Electronic version found at:**

**[http://cs.ucsb.edu/~zmatni/syllabi/CS16S17\\_syllabus.pdf](http://cs.ucsb.edu/~zmatni/syllabi/CS16S17_syllabus.pdf)**

**Also found on the class webpage**

# Switching About In The Labs...

... is frowned upon ☹

- Please stick to the lab time that you have per your registration
  - The labs are pretty full and at capacity

**IF YOU WANT TO SWITCH LAB SECTIONS,  
YOU MUST:**

- 1. Find a person in the other lab to switch with you**
- 2. Get the OK from BOTH T.A.s**

# What YOU have to do *by tomorrow*

## *YOU HAVE A LAB TOMORROW!!!*

- Log into **Piazza** and have a look around
  - Sign up for this class' page. Go to:  
<https://piazza.com/ucsb/spring2017/cs8>
- Go to the **class main website** and have a look around
  - Go to: <https://ucsb-cs8-s17.github.io/>
- Download/print out the homework assignment (**h00**)
  - This is a “companion-piece” to the first lab
  - It's a very simple, very easy homework. DO IT TONIGHT!
  - Bring the finished hard-copy with you to lab TOMORROW!
- Read the lab assignment (**lab00**) *before* you go into your lab: BE PREPARED

# What YOU have to do *before Thursday*

**YOU HAVE ANOTHER LECTURE ON THURSDAY!!!**

- **Read *at least* the first 4 sections of Chapter 1**
- Confirm that you have access to Python, version 3.x
  - If you want to install on your own computer – see <http://www.python.org/>
  - Available at CSIL and Collaborate labs too
- Play with Python at every opportunity
  - For instance, try out examples from text and lectures

# YOUR TO-DOs

- Sign up on Piazza
  - Go to the class website
  - Download and print **Homework0**
  - Do **Homework0** TODAY
  - Read **Lab0** TODAY
  - Do **Lab0** TOMORROW (in lab)
- 
- Solve world hunger
  - Reverse global warming

**</LECTURE>**