

# Language & Technology

How to Ace This Class (and University in General)

Alëna Aksënova & Aniello De Santo

Stony Brook University

`{alena.aksenova, aniello.desanto}@stonybrook.edu`

# For the Impatient. . .

- ▶ Do all the exercises.
- ▶ Spread out exercises and projects rather than doing everything the evening before the deadline.
- ▶ Don't fall behind: minor gaps will quickly grow until you don't understand a word of what's going on.
- ▶ Be proactive: Play around with Python, trial-and-error your way to success.
- ▶ Don't panic if something doesn't work (Python, Blackboard, . . .).

Everybody else, please read on.

*The mind is not a vessel to be filled but a fire to be kindled.*

Plutarch

*Learning is exploring.*

Yours truly

## The Gist

- ▶ Be active, not passive.
- ▶ Develop a thirst for knowledge.
- ▶ Learn how to learn on your own.
- ▶ Understanding trumps memorization.
- ▶ Autonomous thinking is the road to real knowledge.

# Embrace Your Stupidity

*[...] I actively seek out new opportunities to feel stupid. I wouldn't know what to do without that feeling. [...] The more comfortable we become with being stupid, the deeper we will wade into the unknown and the more likely we are to make big discoveries.*

Martin A. Schwartz

The importance of stupidity in scientific research

- ▶ **Never panic**

If something doesn't work (e.g. your Python code) or something unexpected happens (e.g. Blackboard misbehaving), don't panic. Panicking only makes things worse.

Keep your emotions in check and see things through rationally.

- ▶ **Don't rush into things**

Before you start working on an exercise/project, stop for a second.

- ▶ Did you fully process what you are supposed to do?
- ▶ What exactly is the exercise about?
- ▶ Are there complicating factors?
- ▶ Does some of the wording seem vague or unclear, and if so, is that a problem with the wording or with your understanding of it?

## ► **Work on your time management**

- Life is messy, in particular college life (until you get bored of all the booze, parties and drama). But that makes good time management even more important.
- Familiarize yourself with techniques like GTD.
- Leaving everything to the last minute is not only stressful, it also impedes your learning progress.

## ► **Plan ahead and pace yourself**

- Spread out exercises over multiple days.
- The amount of time you invest is not as important for learning as how that time is distributed. 30 minutes a day for 4 days is more efficient than a single 2 hour session.

## ► **Reflect on what you are doing**

- Don't mindlessly do X just because X was assigned in class.
- Ask yourself why it is a requirement, what skills it is supposed to teach you, and how that gels with your own goals and expectations.

- ▶ **Take advantage of us**

We put a lot of effort into helping you achieve your goals:

- ▶ recitations
- ▶ office hours
- ▶ availability via email and Google hangouts

If you don't take advantage of these opportunities, you have no right to complain about grades or homeworks.

- ▶ **Take advantage of each other**

Your peers are a valuable resource, too. Discuss homeworks, exchange ideas, share notes. Collaborate, help each other.

- ▶ **Don't wait too long**

The Matthew effect also applies to education: the rich get richer, the poor get poorer. If you sense yourself falling behind, ask for help right away. The longer you wait, the worse it gets.

## ► **Be playful**

Whatever the subject matter, play around with it.

- Learning Python? Then open up the shell once in a while and just write a small program to play three-dimensional Tic-Tac-Toe.
- Memorizing US history facts? Let's see if we can condense them into a little poem (like the presidents song by the *Animaniacs*).
- Studying protein folding? Fix yourself a serving of spaghetti and try some common folding patterns.

## ► **Hang out like the Vienna Circle**

Make learning a social event. Meet with your peer for coffee/drinks to discuss the class. Explain specific points to each other — teaching others benefits your own learning.



## Grades don't matter much!

- ▶ Unless you want to go to med-/law-/grad-school or need a stipend, forget grades. The real world doesn't care about your grades.
- ▶ A grade is just our feedback to you how much you know about a given topic. It's your choice what you do with it.
- ▶ A bad grade does not ruin your life or make you a failure, just like a high GPA is no guarantee for a successful career.
- ▶ But this is no license to slack off!
  - ▶ A degree opens doors, but that won't last if you suck at your job.
  - ▶ College life gives you a few precious years to prepare yourself for the real world. Don't squander them.