


# Grad School Essentials

CPS 300: Introduction to Graduate Study  
Jun Yang  
September 14, 2011




1

## Announcements

- Departmental meeting next Friday 4:30-6:00
  - You will introduce yourselves
- Mentoring
  - Faculty mentor assignments are being finalized
  - PhD students: connect with your student mentors
    - 3 lunches are on us (the department)
  - MS students: a group lunch meeting
    - To be scheduled soon

2

## On picking profs/topics



- Most important: work on things that you **love**
  - Or else grad life will be miserable
    - But then, tastes are sometimes acquired...
- Flexibility vs. concrete projects
- Large vs. small groups
- Hands-off vs. hand-on
- Practical impact vs. intellectual challenge
- Junior vs. senior
- Funding prospects
- Non-CS advisor is fine; just beware some procedural steps

<http://soberingconclusion.com/movies/wp-content/uploads/2008/05/kung-fu-panda.jpg>

3

## On approaching professors

- **Start early**; they want to see you "in action" before committing
- Show you have the required **background/skills**, or can acquire them quickly
  - Past projects, current course projects, RIP/MS ideas, ...
  - Communicating, thinking, coding, writing, ...
- Show you have the right **attitude/habits**
  - Initiative, punctuality, genuineness, independence, meticulousness, tenacity, flexibility, ...

4

## What if...

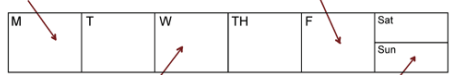
- You got completely lost in this first meeting?
- You were just given a paper to read?
- Nothing concrete came out of the meeting?

5

## When to meet with advisors

### WHEN TO MEET WITH YOUR ADVISOR

Is there ever a good time?

<p><b>Beginning of the week</b></p> <p><b>Pro:</b> Get it over with quickly</p> <p><b>Con:</b> You have a guaranteed date with work on Sundays</p>	<p><b>End of the week</b></p> <p><b>Pro:</b> You might actually have something to show by then.</p> <p><b>Con:</b> You might not (!)</p>
	
<p><b>Mid-week</b></p> <p><b>Pro:</b> Good balance. Gives you time to work on feedback</p> <p><b>Con:</b> Your advisor will probably not show up (actually, this might be a pro)</p>	<p><b>Saturday/Sunday</b></p> <p><b>Pro:</b> There is no "pro".</p> <p><b>Con:</b> Your advisor is a workaholic maniac. Good luck with that.</p>

LSP&E, CMU © 2008

WWW.PHDCOMICS.COM

<http://www.phdcomics.com/comics/archive.php?comicid=1025>

6

## The guilt game



- Often, advisors make advisees pressured, guilty, and scared
- But it should be the other way around
  - Make advisors feel (happily) pressured, guilty, and even scared!

<http://www.phdcomics.com/comics/archive.php?comicid=588>

7

## Take initiative!

- Propose weekly goals, meeting agendas, new problems
  - “Propose” ≠ “set”; you need your advisor’s guidance
- Learn related work yourself and fill your advisor in
  - It’s your thesis area—you ought to know it better than your advisor
- Keep churning out high-quality write-ups until advisor cannot keep up
  - Good strategy for getting time from busy advisors

8

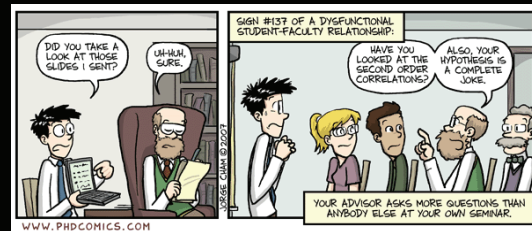
## Make meetings more effective

- Be organized
  - Start with a summary of last meeting and an agenda for this one
  - End with concrete goals for next week
- Short productive meetings > long monologs
- Write-ups must show enough polish
  - Faculty have little time, and get tired of correcting simple mistakes
- What if you get stuck?
  - Try alternative approaches yourself
  - Log all things you tried, and why they failed
  - Ask senior students for help with low-level stuff
  - If all else failed, don’t wait until the next meeting to tell your advisor

9

## Communication is important

- Want your advisor to be your best advocate?
- Always keep him/her in the loop!



<http://www.phdcomics.com/comics/archive.php?comicid=935>

10

## ON BEING A SCIENTIST

### Team discussion!

- “The Selection of Data” (p. 10)
  - JARS, Jymasher
- “Is It Plagiarism?” (p. 18)
  - Bob, Tachikoma

11

## Homework

- Study CS/grad school requirements for Jeopardy! next week—there will be a prize!



- Fill out a (short) “Why Duke?” online survey
  - Survey URL will be emailed to you

[http://en.wikipedia.org/wiki/File:Jeopardy\\_2009.png](http://en.wikipedia.org/wiki/File:Jeopardy_2009.png)

12