

Grad School Essentials

CPS 300: Introduction to Graduate Study
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September 8, 2010



1

Announcements

- “Resources” panel of the course website has lots of useful pointers
- Departmental meeting this Friday 4:30-6:00
 - You will introduce yourselves
- Sign up for grad retreat (Sept. 24-26)
- Mentoring
 - Faculty mentor assignments will be finalized soon
 - PhD students: connect with your student mentors
 - 3 lunches are on us (the department)
 - MS students: group lunch with yours truly



http://www.ncparks.gov/Visit/parks/hari/pics/hari_lake_canoe.jpg

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?

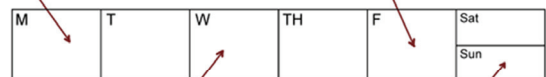
Beginning of the week

Pro: Get it over with quickly

Con: You have a guaranteed date with work on Sundays

End of the week

Pro: You might actually have something to show by then.
Con: You might not (!)



Mid-week

Pro: Good balance. Gives you time to work on feedback

Con: Your advisor will probably not show up (actually, this might be a pro)

Saturday/Sunday

Pro: There is no “pro”.

Con: Your advisor is a workaholic maniac. Good luck with that.

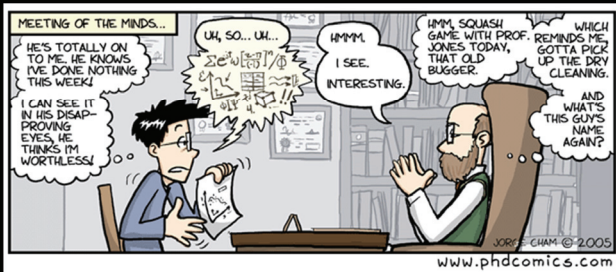
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WWW.PHDCOMICS.COM

<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

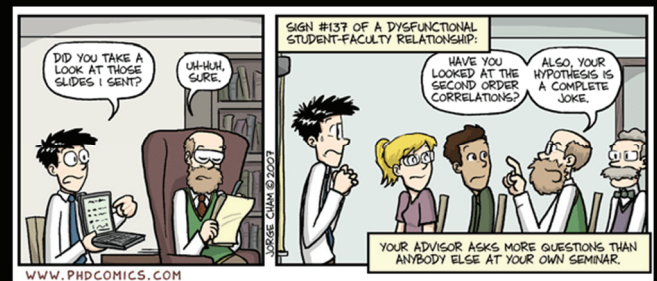
Make meetings more effective

- 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)
 - Good Looking, Young Scientists, Rawxs
- “Is It Plagiarism?” (p. 18)
 - Amazing Five, Enigma, Couch Potatoes
- And a question from the instructor (all teams):

Suppose you didn’t know who to record a .WAV file and you received help from a fellow classmate when recording your name. Must you acknowledge this help when you submitted the .WAV file?

11

Homework

- Study CS degree requirements for Jeopardy! next week
 - There will be a prize!



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

http://en.wikipedia.org/wiki/File:Jeopardy_2009.png

12