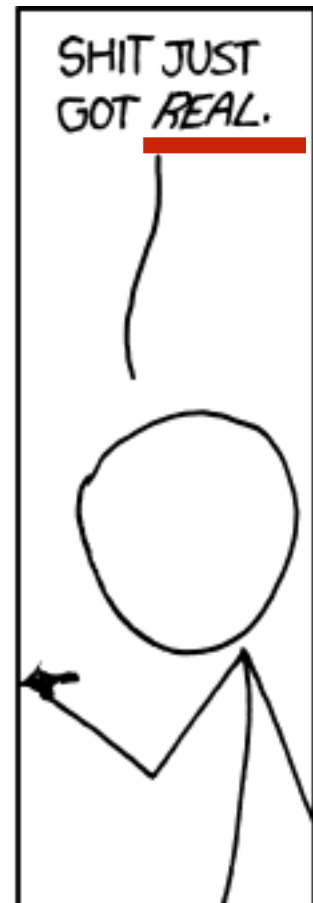
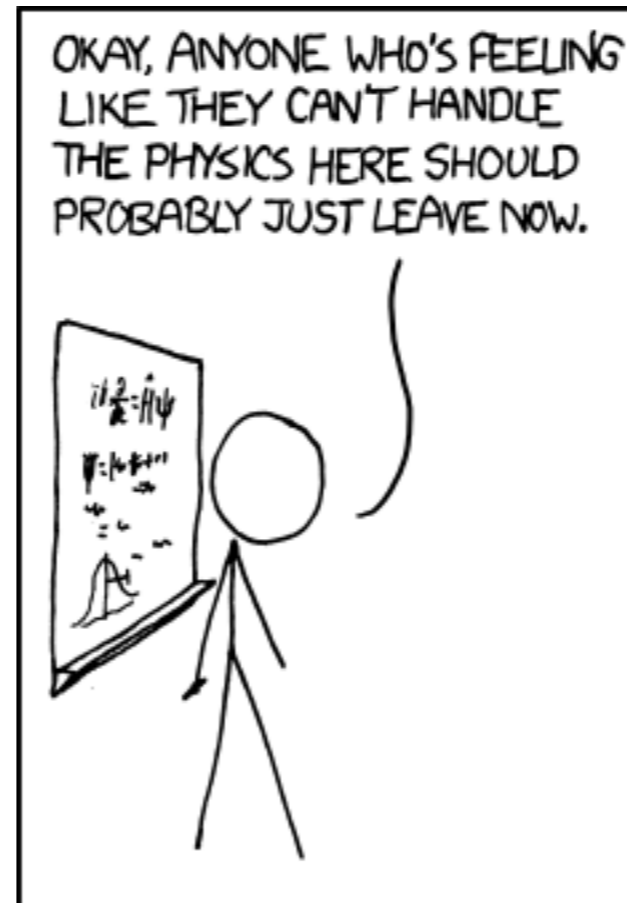
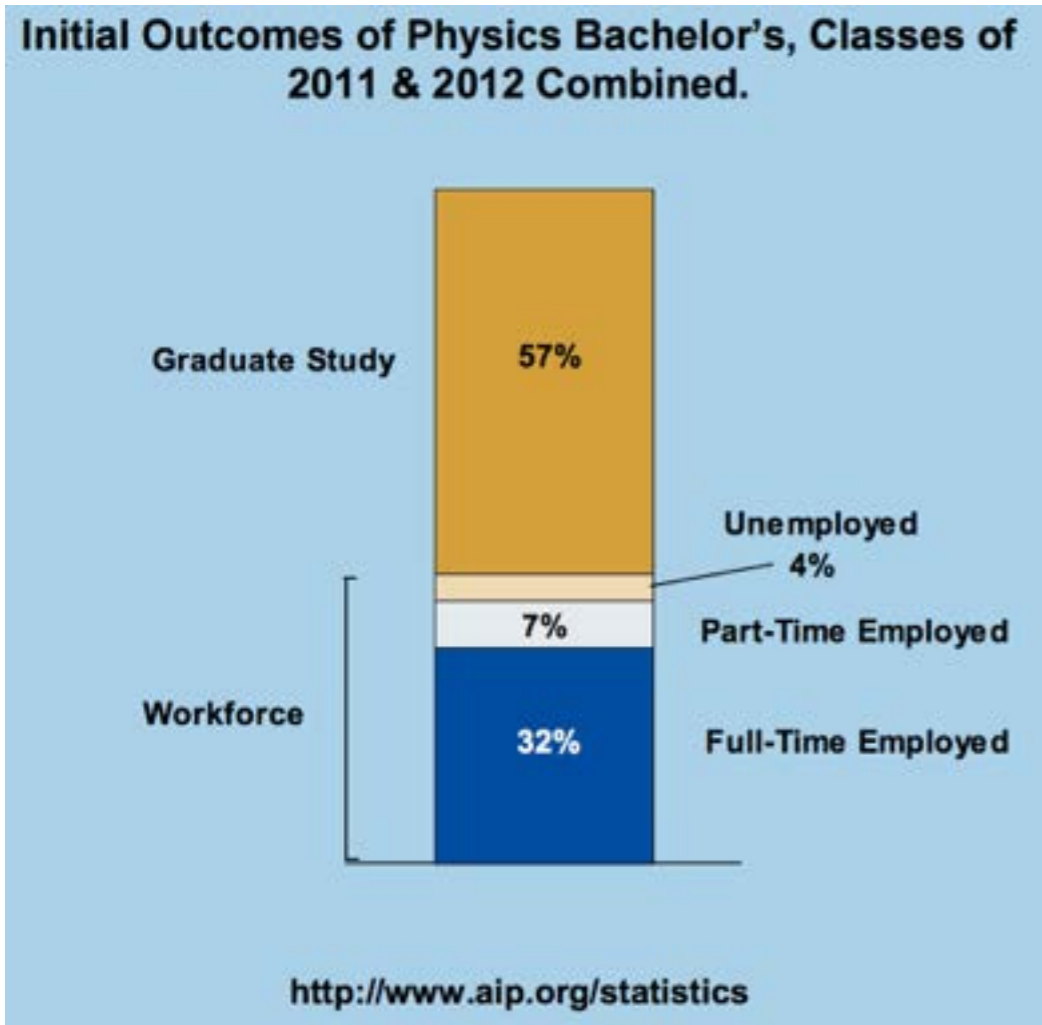


# Physics 4601

## Senior Seminar I

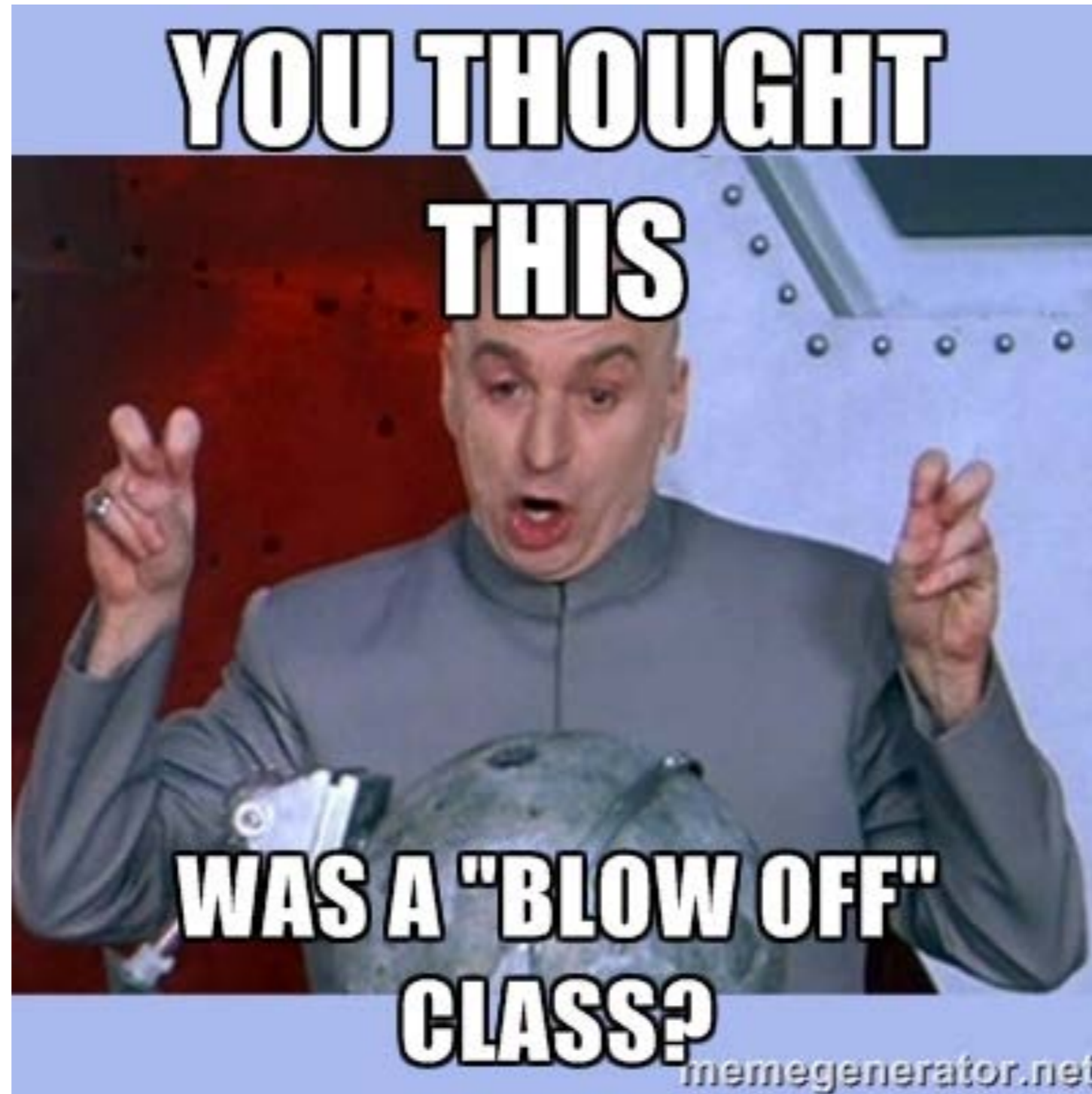


James C. (JC) Gumbart

<http://simbac.gatech.edu/phys4601/>

School of Physics | Georgia Tech | Fall 2015

What senior seminar is ***NOT***...



# What senior seminar is...

## How to look for a job...



all images © jorge cham

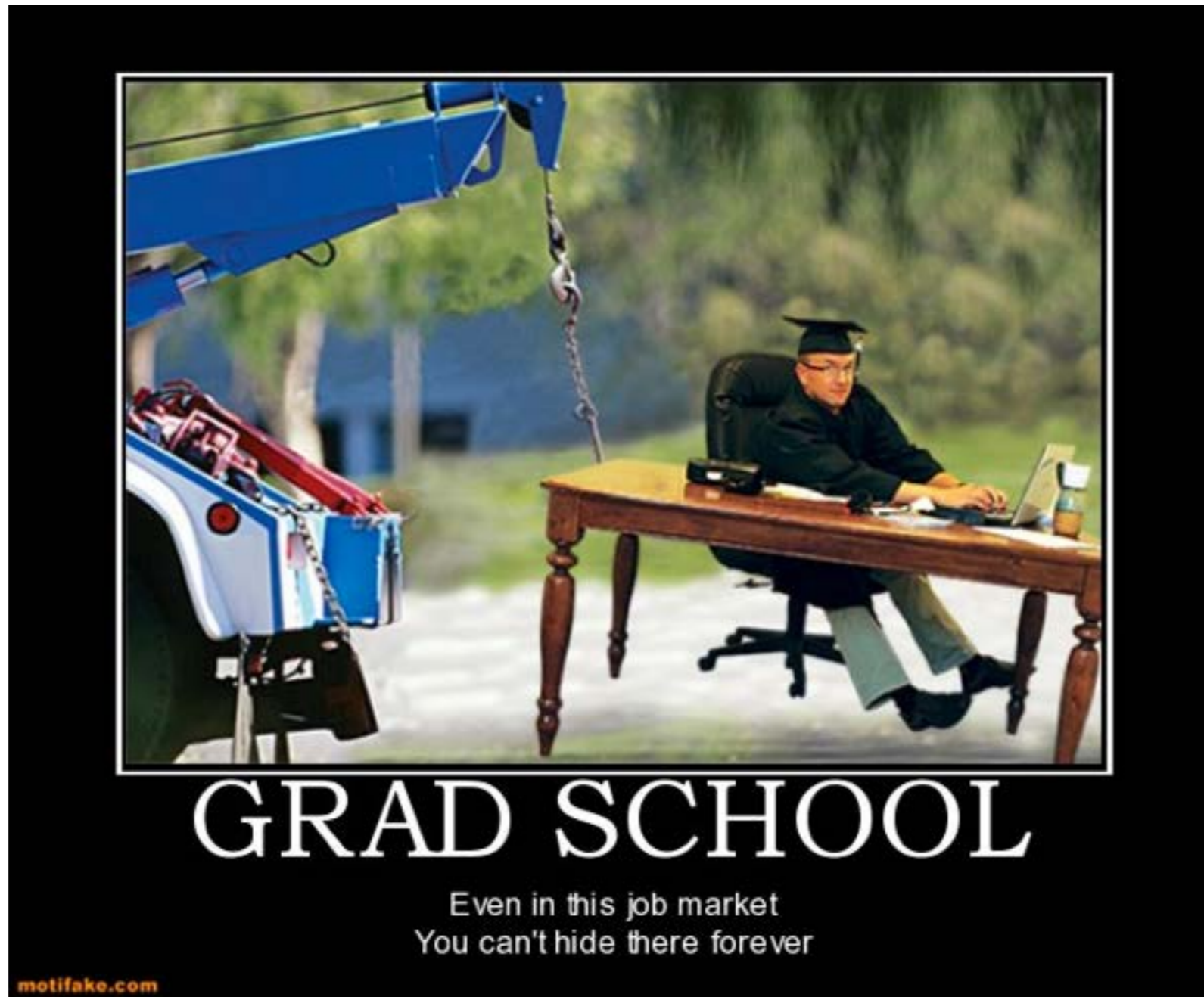


What senior seminar is...



**and avoid unemployment!**

What senior seminar is...



Even if you are going to grad school, you are not immune!

# What senior seminar is...



Nonetheless, I'll help you get there too!

# Think carefully about your choice...

Every fall about 2,500 students start physics PhD programs at US universities.

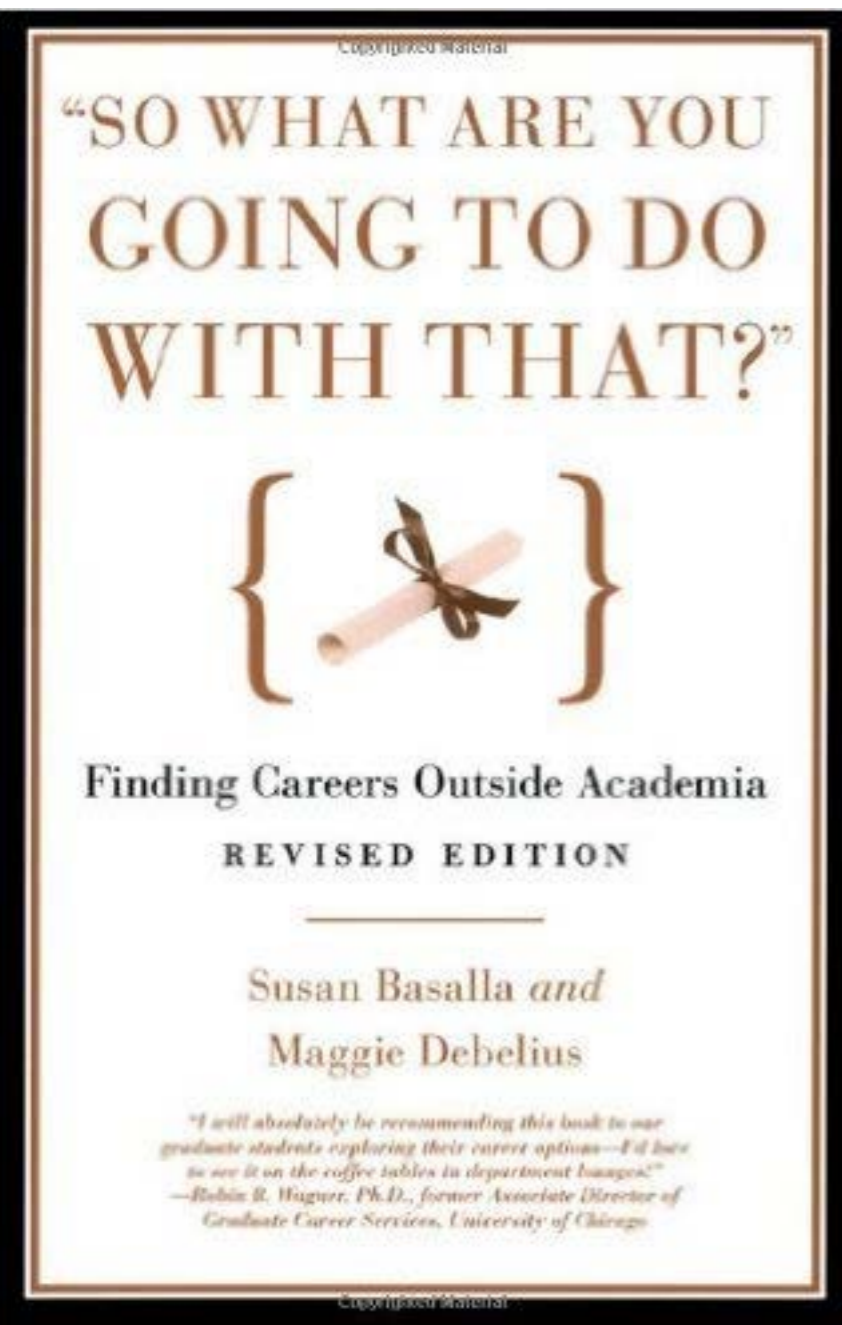
Roughly 1,500 of those students earn a PhD an average of 6.3 years later.

Every year US research universities hire about 200 new tenure-track physics faculty across all sub-disciplines.

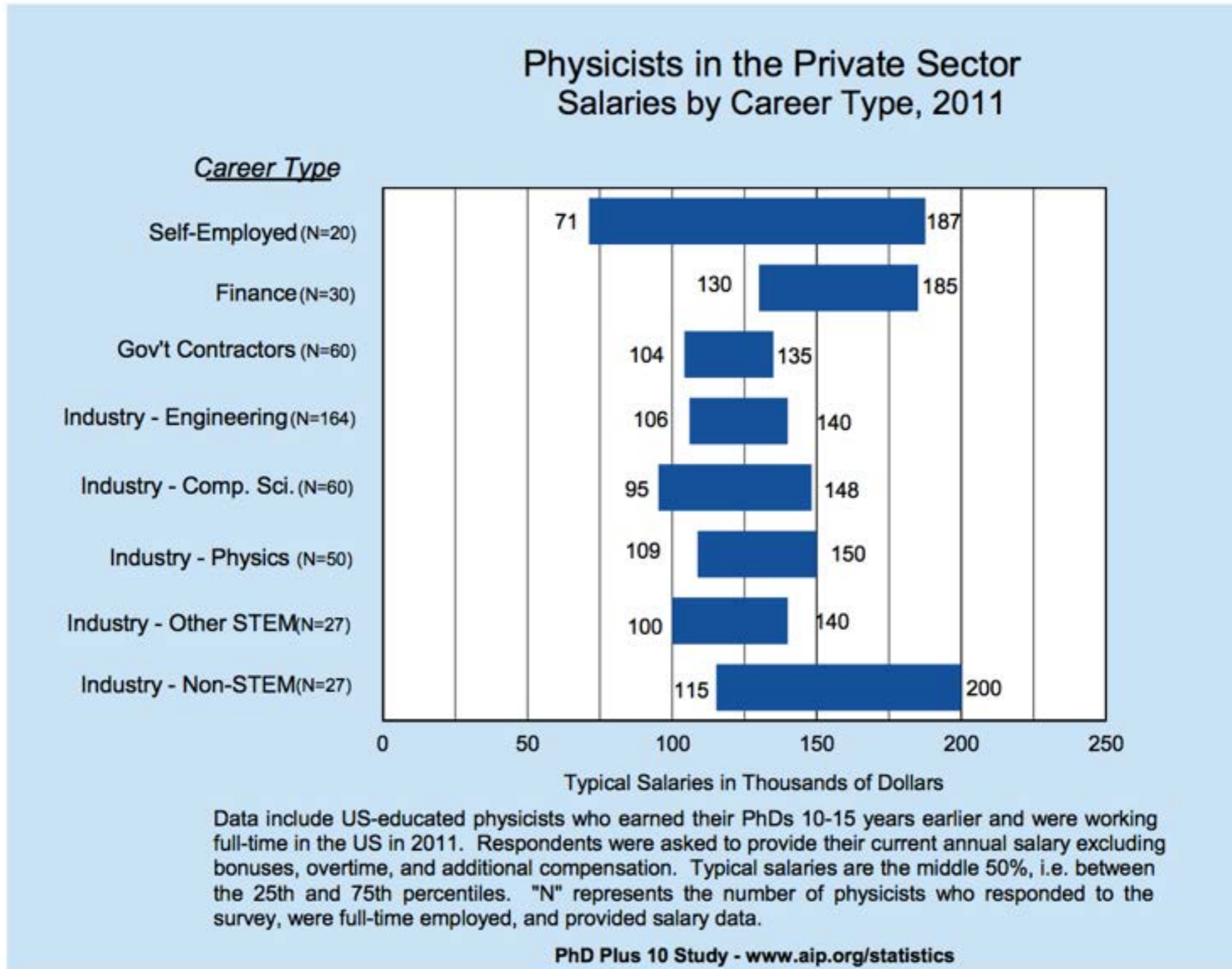
**That means you have ~10% of a becoming a professor!**

Academia is the *alternative* career!

<http://www.prosperousphysicist.com/know-the-odds-of-becoming-a-research-university-professor/>



# But it's not all bad news!





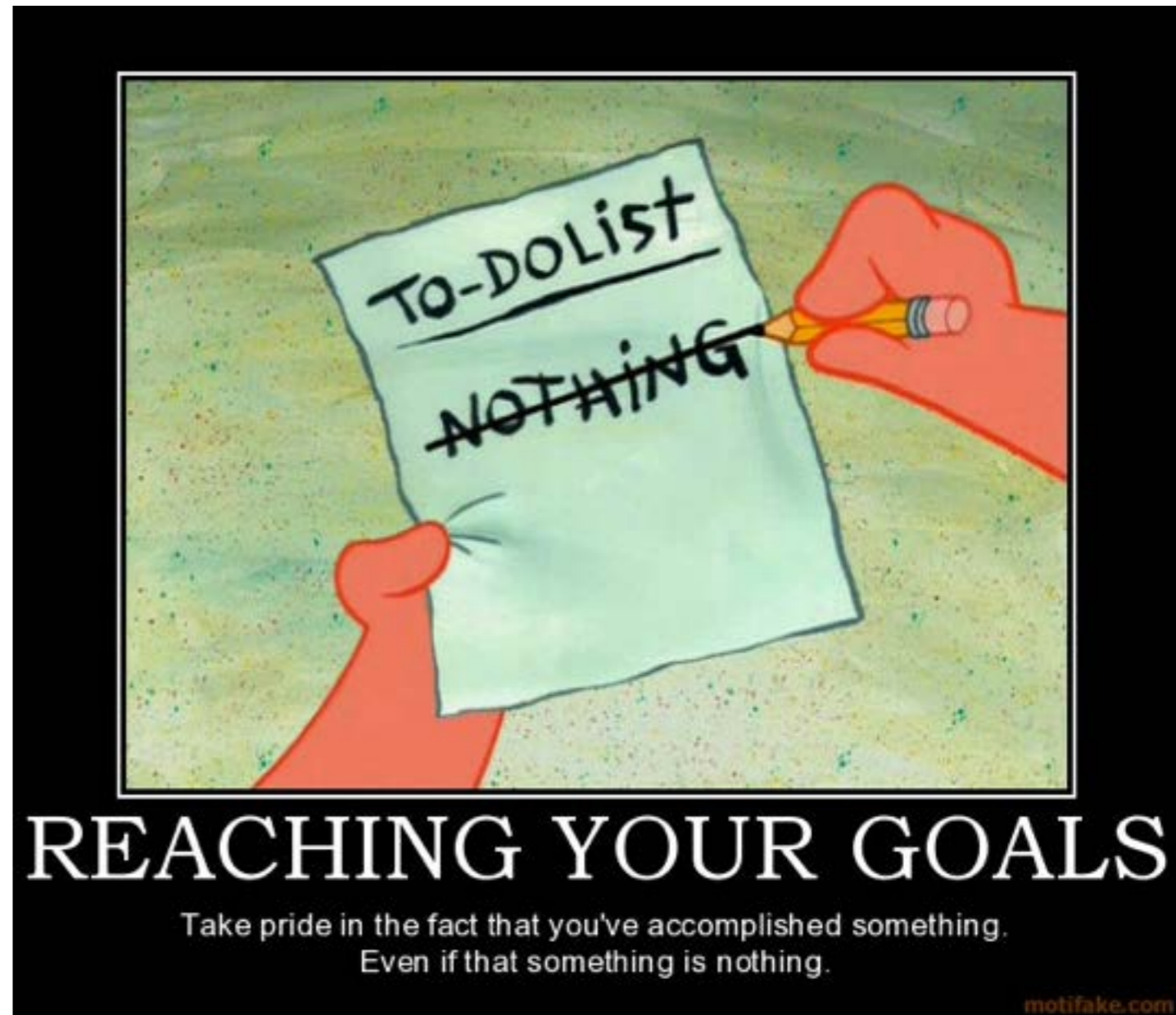
# Learning Goals for the Course

identify potential career paths

learn how to write a résumé (or CV) and apply to jobs

choose graduate schools to which to apply

prepare for the GRE  
Physics test



# Syllabus and other important resources can be found here:

<http://simbac.gatech.edu/phys4601/>

## Schedule

Aug. 21: syllabus day; discussion of course content and direction; creating a résumé and linkedin profile

Aug. 28: GRE review – what do you need to know?

Sept. 4: talk from Career Services: résumé, personal statements for grad school, and cover letters

Sept. 11: résumé cross reading, 1-minute pitch (career fair next week!)

Sept. 18: test taking skills, estimation, statistics, etc. (GRE next day)

Sept. 25: NSF Graduate proposal; other fellowships; letters of recommendation

Oct. 2: choosing grad schools and/or other careers

Oct. 9: GRE review

Oct. 16: GRE review

Oct. 23: GRE review (GRE next day)

Oct. 30: Prof. Zangwill on what admissions committees look for

Nov. 6: more discussion of grad schools (come prepared with list and questions)

Nov. 13: grad students talk about graduate school

Nov. 20: grad student(s) talk about industry

Nov. 27: Thanksgiving

Dec. 4: no class



# GT Career Fair <http://www.career.gatech.edu/careerfair/>

**CRC**  
**September 14th**  
**and 15th,**  
**9:30am until**  
**4:00pm.**



Attendance is **MANDATORY** for this class! (take a selfie of yourself there and email it to me)

*(If you have a problem with this, please talk to me after class)*

## Requirements to Attend the GT Career Fair:

Students do **not** need to register for the Career Fair. Just come to the CRC on the day of the Career Fair with your buzzcard or GTID number.

**Students are required to dress in business formal attire to gain entry to the fair.** Heels will be allowed at the Career Fair this year. Yes ladies, you read that correctly.

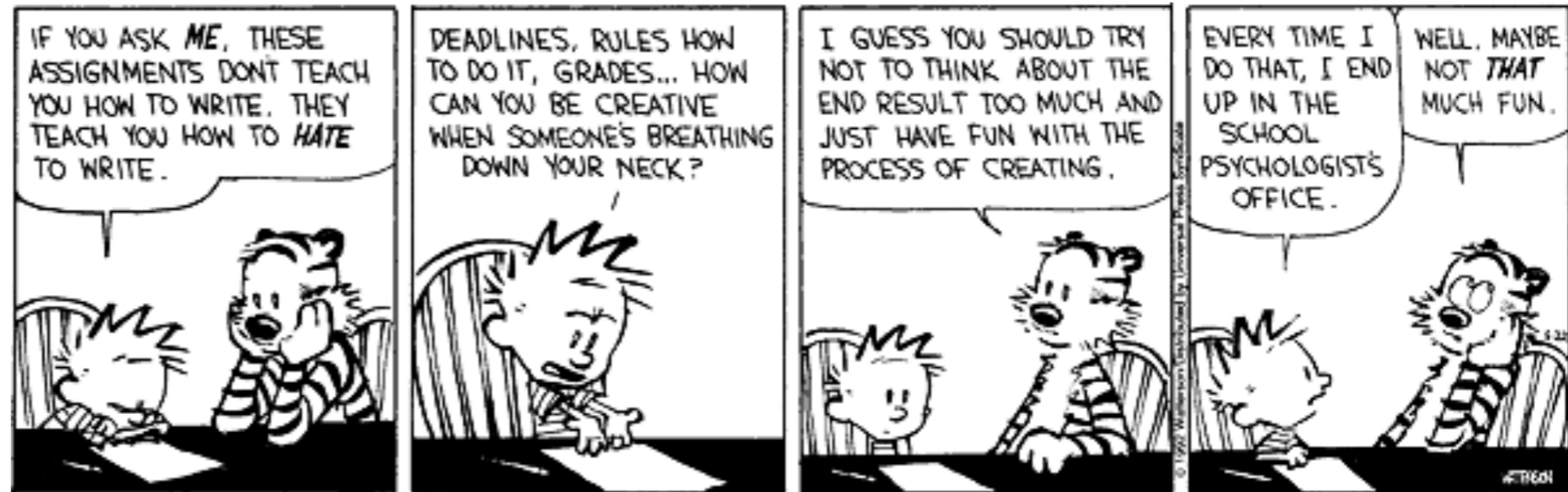
The Georgia Tech Fall Career Fair is open to all Georgia Tech students, faculty, staff, and alumni. Those not affiliated with the institute will not be permitted to attend.

**DRESS  
APPROPRIATELY!**



# Okay, what else do you have to do?

- write a résumé
- make a GRE study plan



One of the following:

- write a cover letter for and apply to a job
- write a personal statement for graduate school

One of the following proposals:

- a research proposal suitable for the NSF graduate fellowship (two pages, including references)
- a proposal on how a recent discovery/breakthrough in physics could be applied to create/market a new technology or product (also two pages)

# **GRE preparation** (starting next week)

- a **survey** of graduating seniors last year revealed inadequate preparation for the GRE as a contributor to some low scores
- GRE Physics score is one of the two most important factors in getting into a graduate school! (*unfortunately*)

## **One of the most useful comments received:**

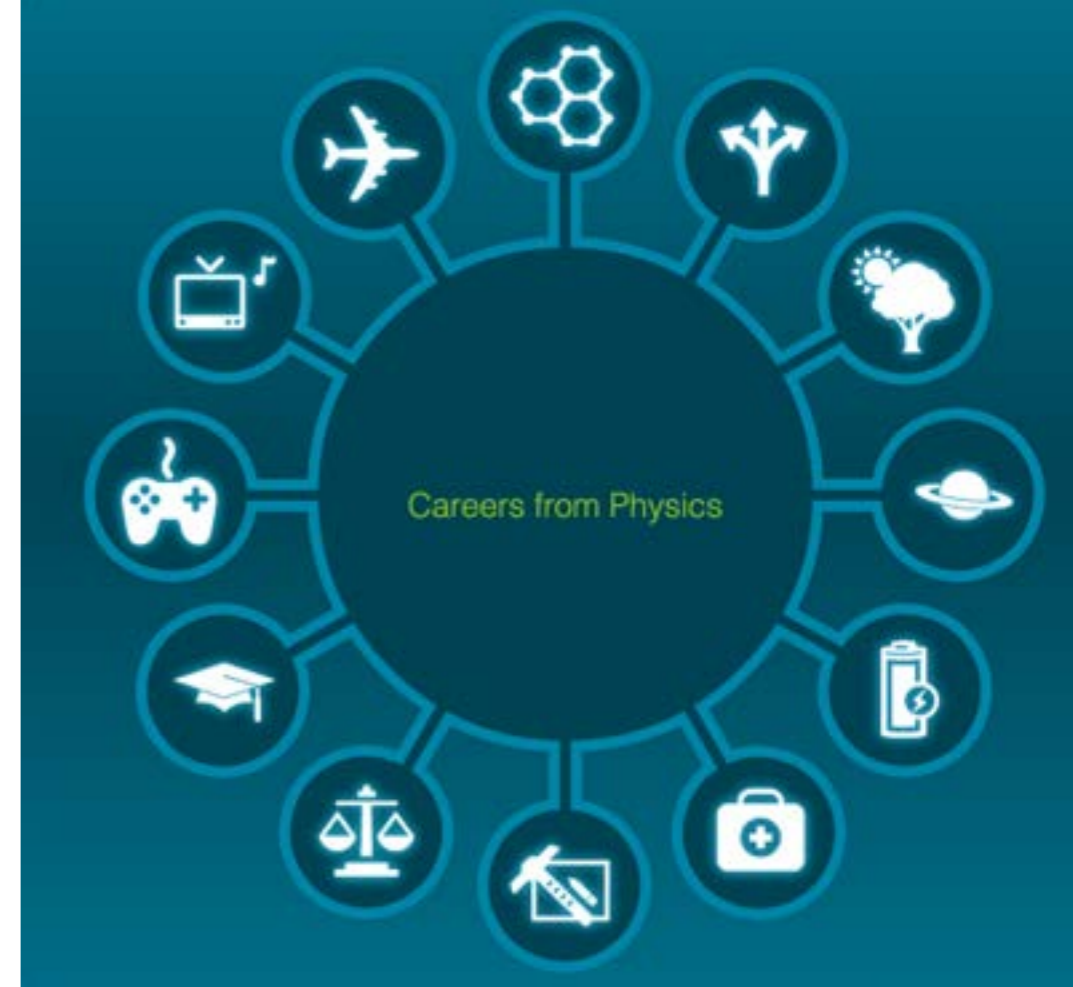
“I don't feel like there is any specific guidance about how to apply to grad schools or what the GRE will be like built into the curriculum. Maybe some kind of 1-2 hour course telling you all about how to transition to grad... would be a cool class. Of course it could also address how to enter the other areas, like industry or a national lab. It could talk about the GRE and how it works and how to study for it, etc. A course like this would do a lot to help students decide what they want to do after grad school.”

**A few career resources**  
*among many others*

<http://www.prosperousphysicist.com/>

**PROSPEROUS PHYSICIST**

Accept No Career Limitations



<http://www.physics.org/careers.asp?contentid=381>

<http://www.aps.org/careers/guidance/development/index.cfm>



Planning | Skills Inventory | Informational Interviews | Networking | Opportunity | Resume | Interviewing

<http://www.spsnational.org/careerstoobox/>



# Careers Toolbox

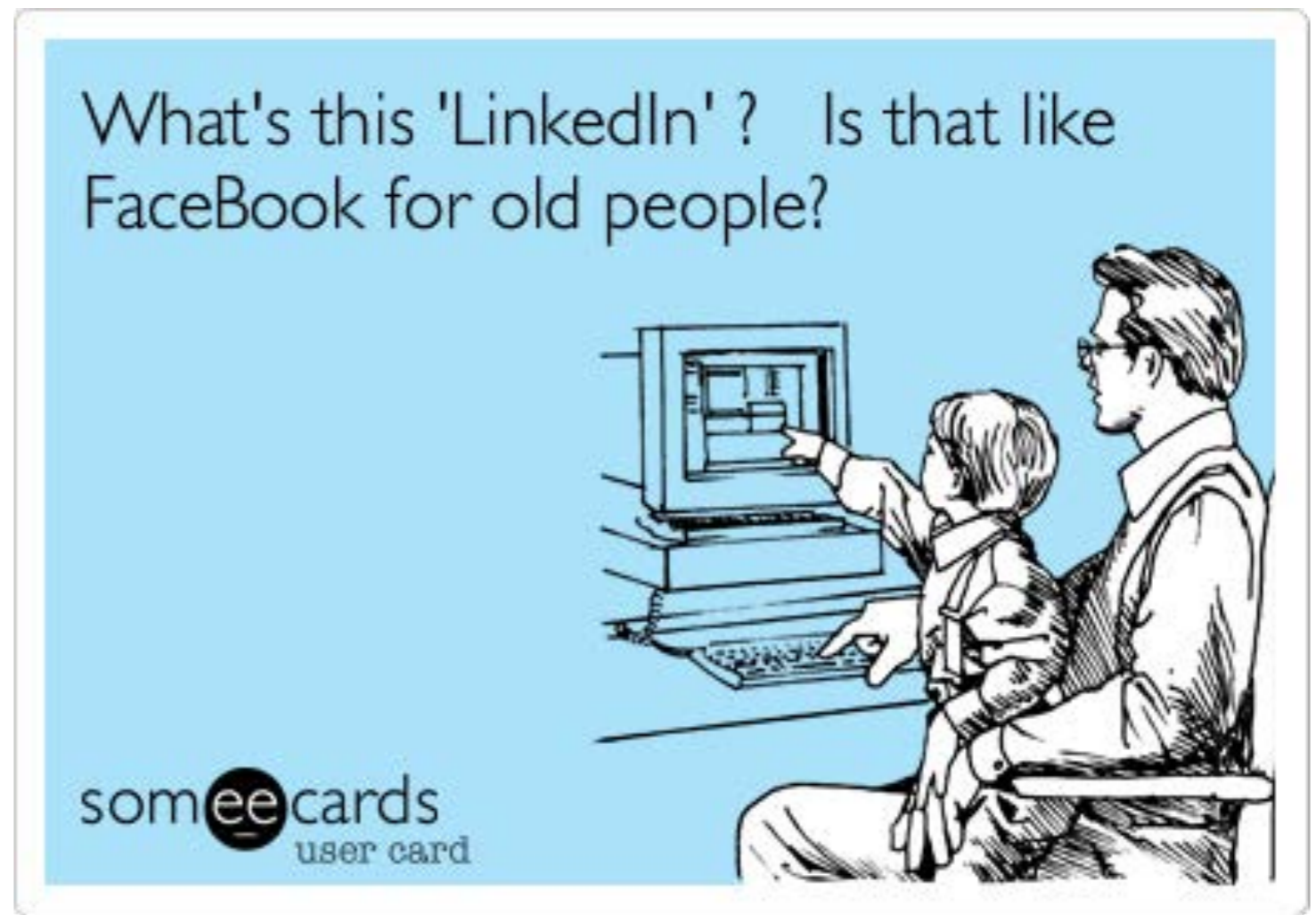
for Undergraduate Physics Students\*

includes guide for making a résumé! (see links on course webpage)



# LinkedIn

I assumed this for a long time, but...



1) 94% of recruiters use, or plan to use social media for recruiting. This number has increased steadily for the last 6 years.

2) 89% of all recruiters report having hired someone through LinkedIn. Facebook and Twitter trailed by a wide margin, reaching only 26% and 15% respectively.

<https://www.linkedin.com/in/jcgumbart>

<http://blog.capterra.com/top-15-recruiting-statistics-2014/>

***Any suggestions?***