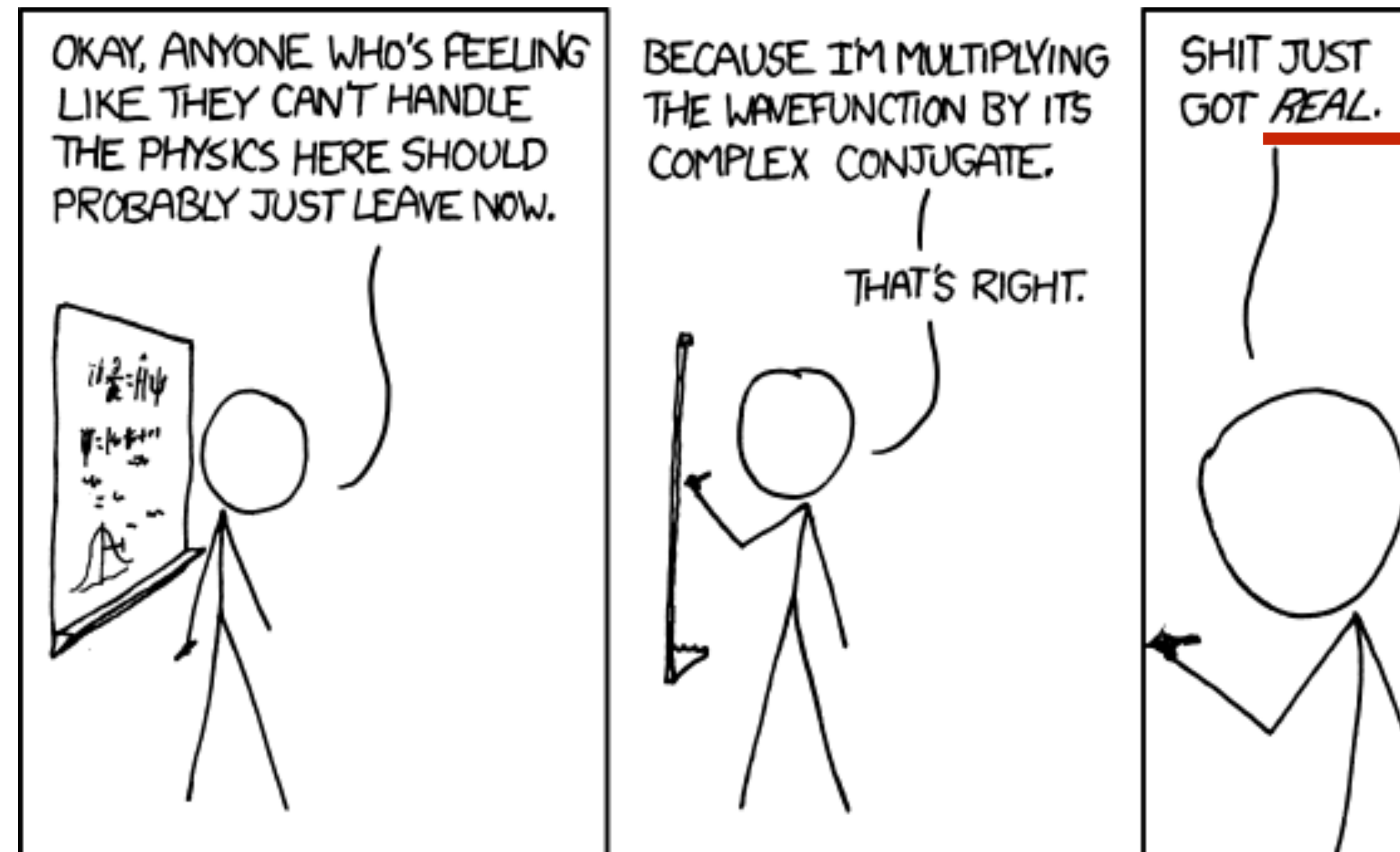
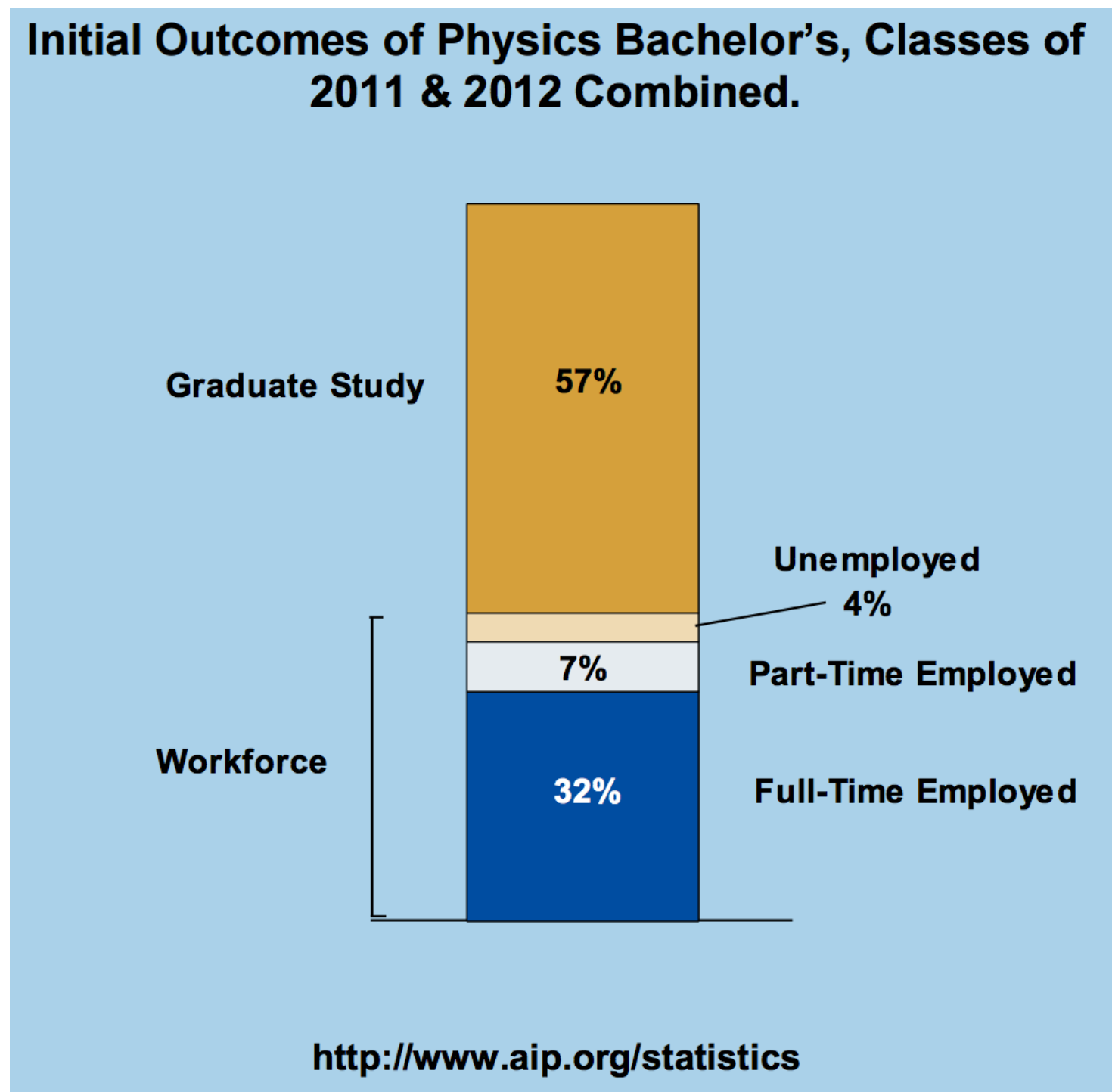


Physics 4601

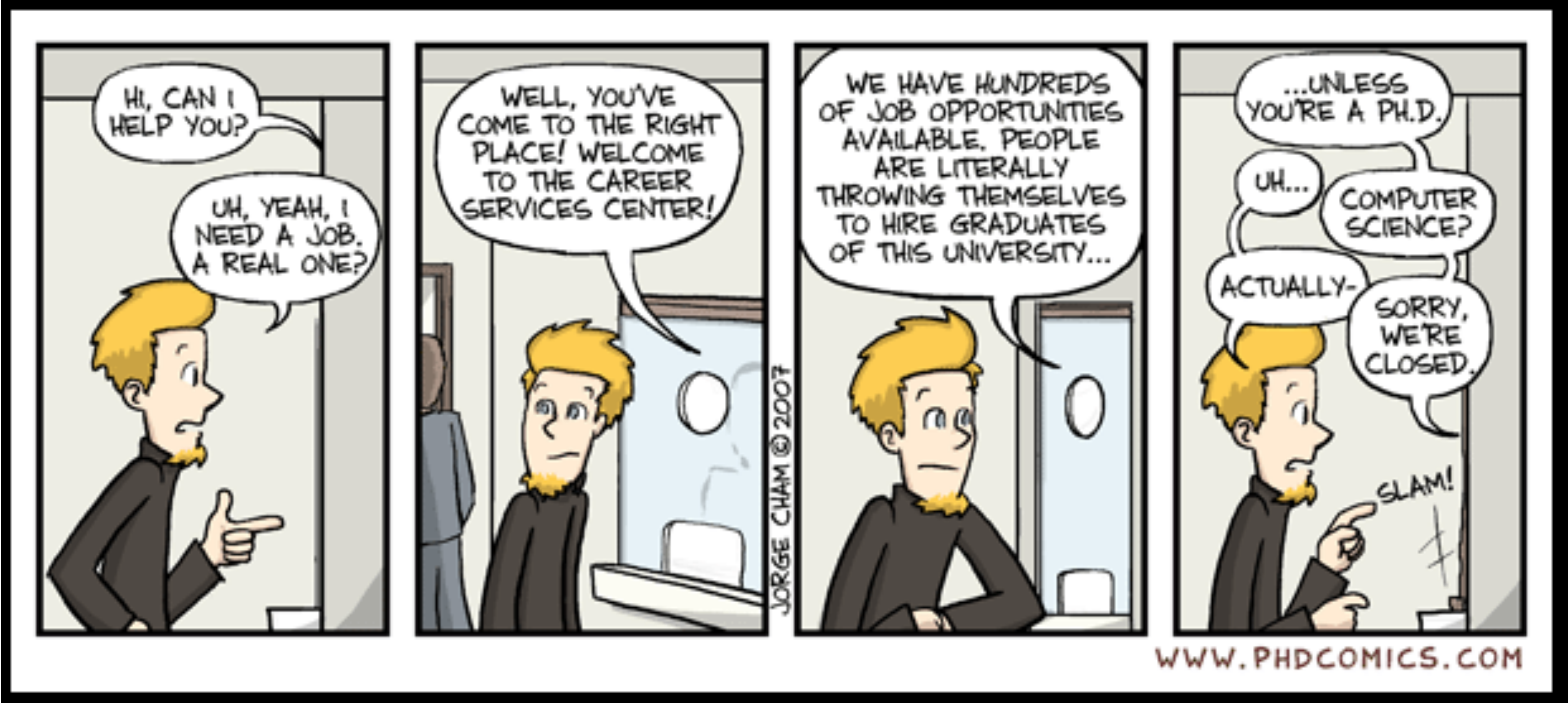
Senior Seminar I



James C. (JC) Gumbart

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

What senior seminar is:
Exploring career options...

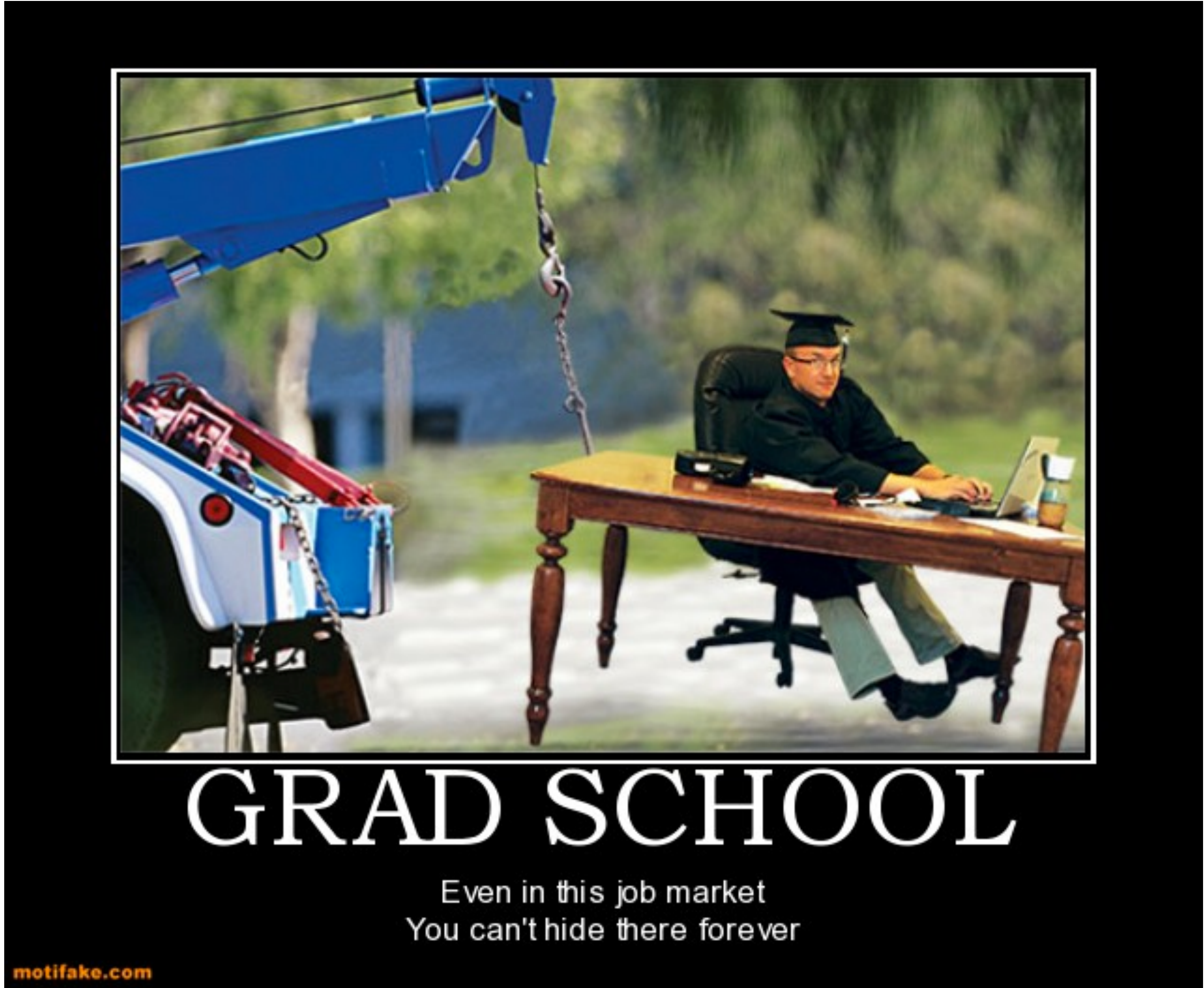


What senior seminar **is**:



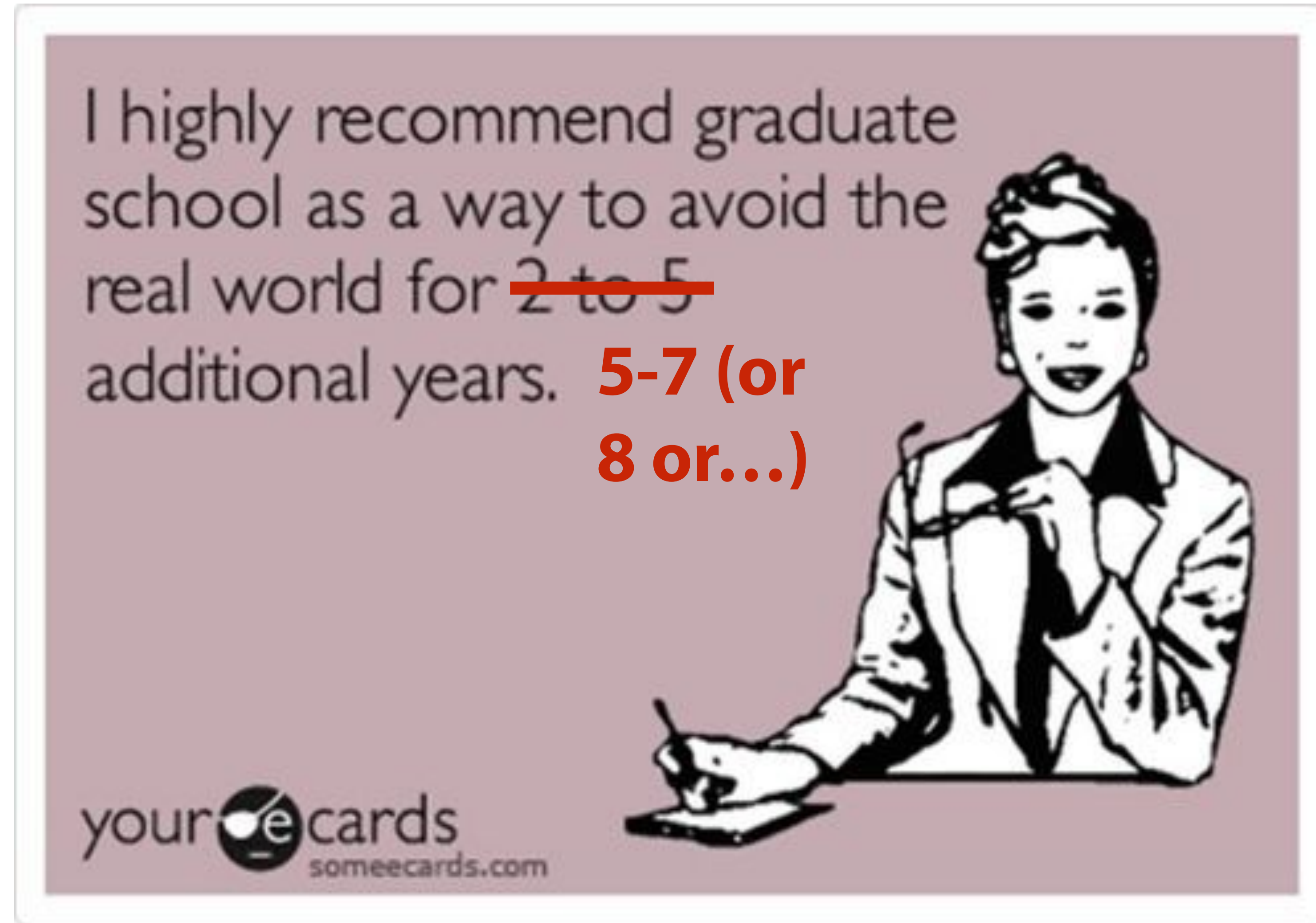
and avoid unemployment!

What senior seminar **is**:



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

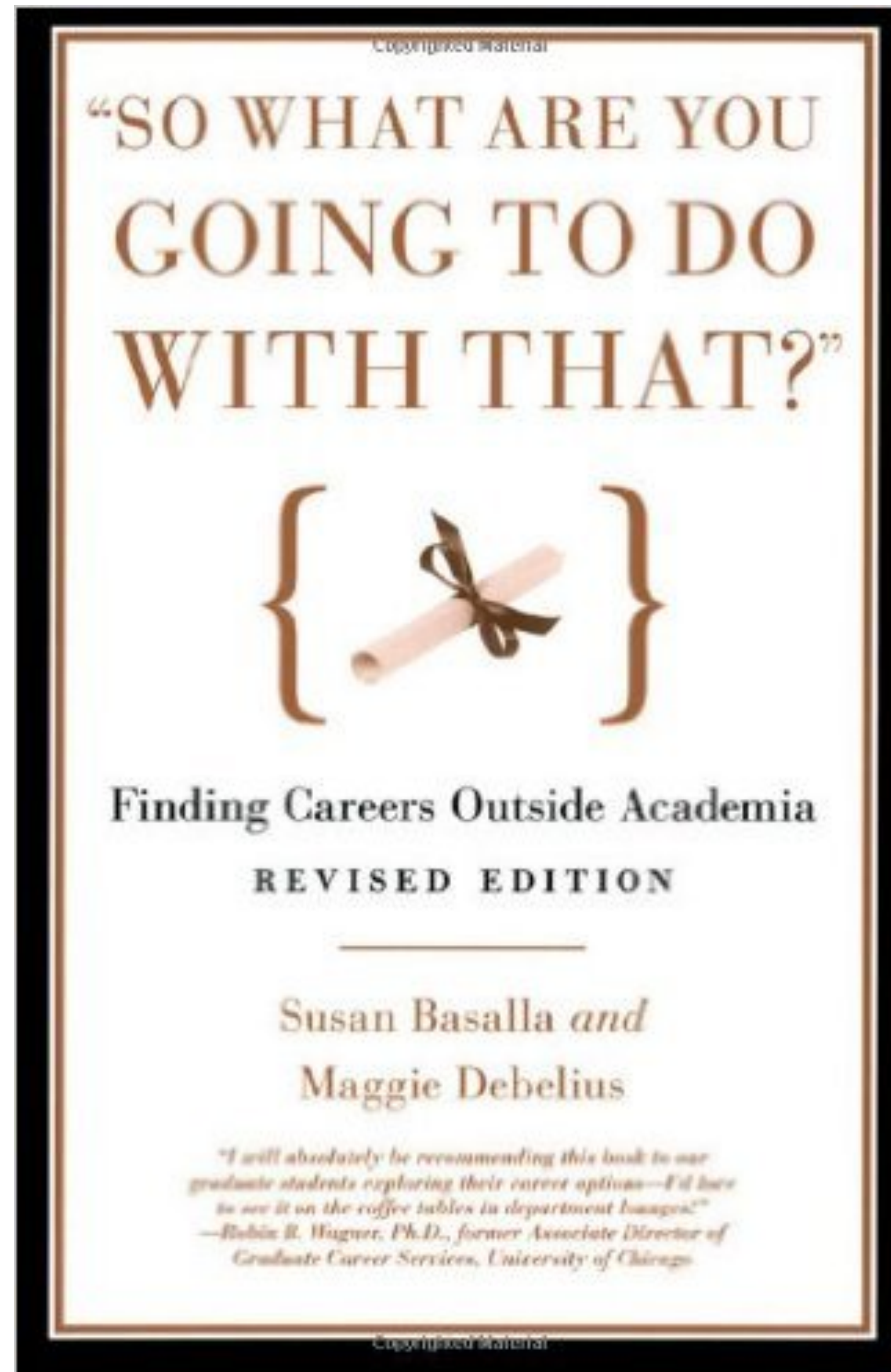
What senior seminar **is**:



But we'll talk about how to 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.

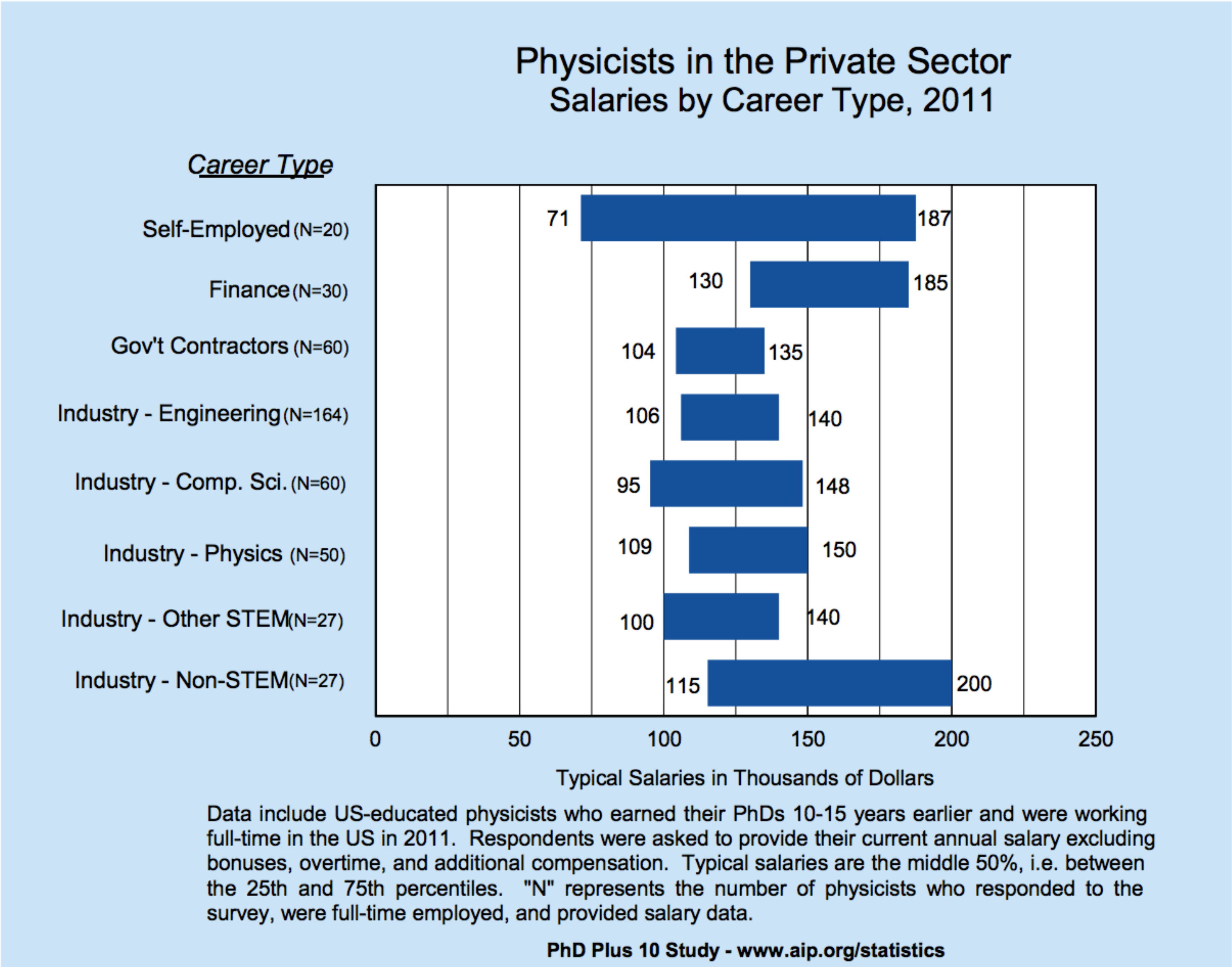
Every year US research universities hire about 200 new tenure-track physics faculty across all sub-disciplines.

That means a new grad student has <10% chance 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

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

prepare for the GRE Physics test

figure out how to apply to graduate schools

read a scientific paper

learn how to write a proposal



REACHING YOUR GOALS

Take pride in the fact that you've accomplished something.
Even if that something is nothing.

Syllabus and other important resources can be found here:

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

Schedule

- Jan. 14: Intro; summer internships
- Jan. 21: guest lecture on résumés and cover letters [examples](#)
- Jan. 28: résumé cross-reading and 1-minute pitch
- Feb. 4: “alternative” careers (outside of academia)
- Feb. 11: applying to grad schools
- Feb. 18: personal statements ([statement tips](#))
- Feb. 25: personal statement/cover letter cross-reading
- Mar. 4: NSF GRFP – (see “Fellowship Info” on the right for more)
- Mar. 11: scientific papers and publishing
- Mar. 18: reading an example paper
- Mar. 25: spring break
- Apr. 1: GRE prep
- Apr. 8: GRE prep
- Apr. 15: TBD
- Apr. 22: Proposal cross reading



GT Spring All Majors Career Fair (Virtual)

<http://career.gatech.edu/>

<https://careerfair.gatech.edu/Spring2022careerfair>

McCamish Pavilion

**Mon. Feb. 7 & Tues. Feb. 8,
11:00pm until 6:00pm EST**

Even if you aren't sure what you want to do, consider participating!

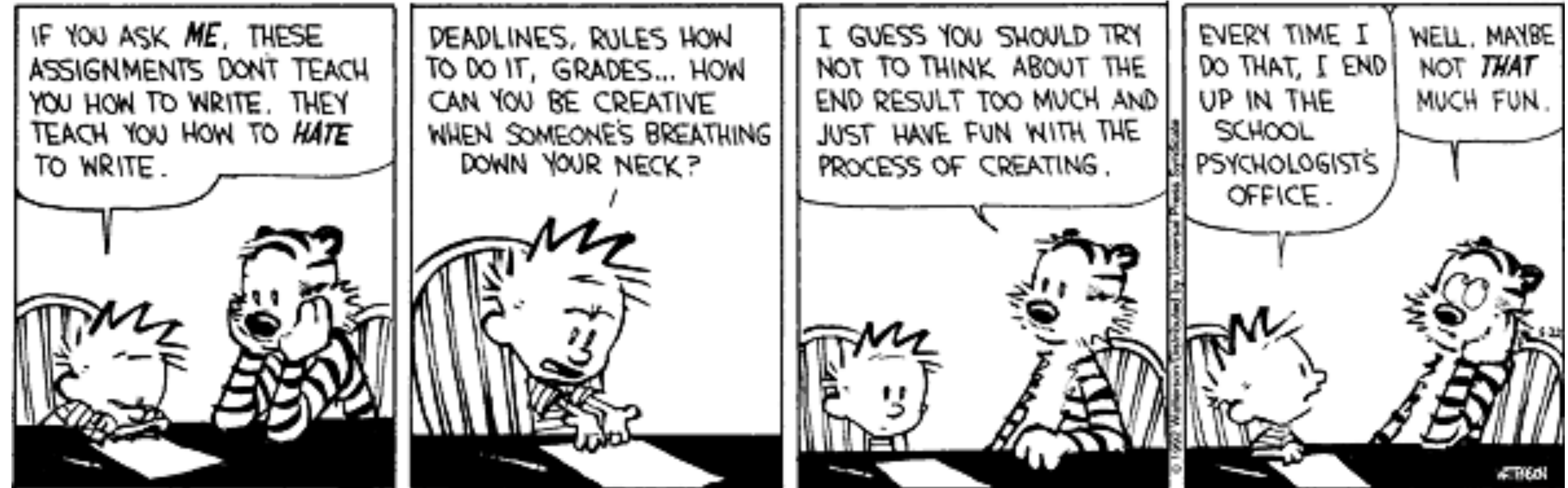
I will excuse one absence if you participate and talk to at least one recruiter (bring me evidence!)



Okay, what else do you have to do?

résumé:

- shouldn't you have already done this?



One of the following:

- write a cover letter for a job
- write a personal statement for graduate school

Proposal:

- a research proposal suitable for the NSF graduate research fellowship (two pages, including references)

GRE preparation

- a **survey** of graduating seniors in 2015 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! (although this is changing!)

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.”

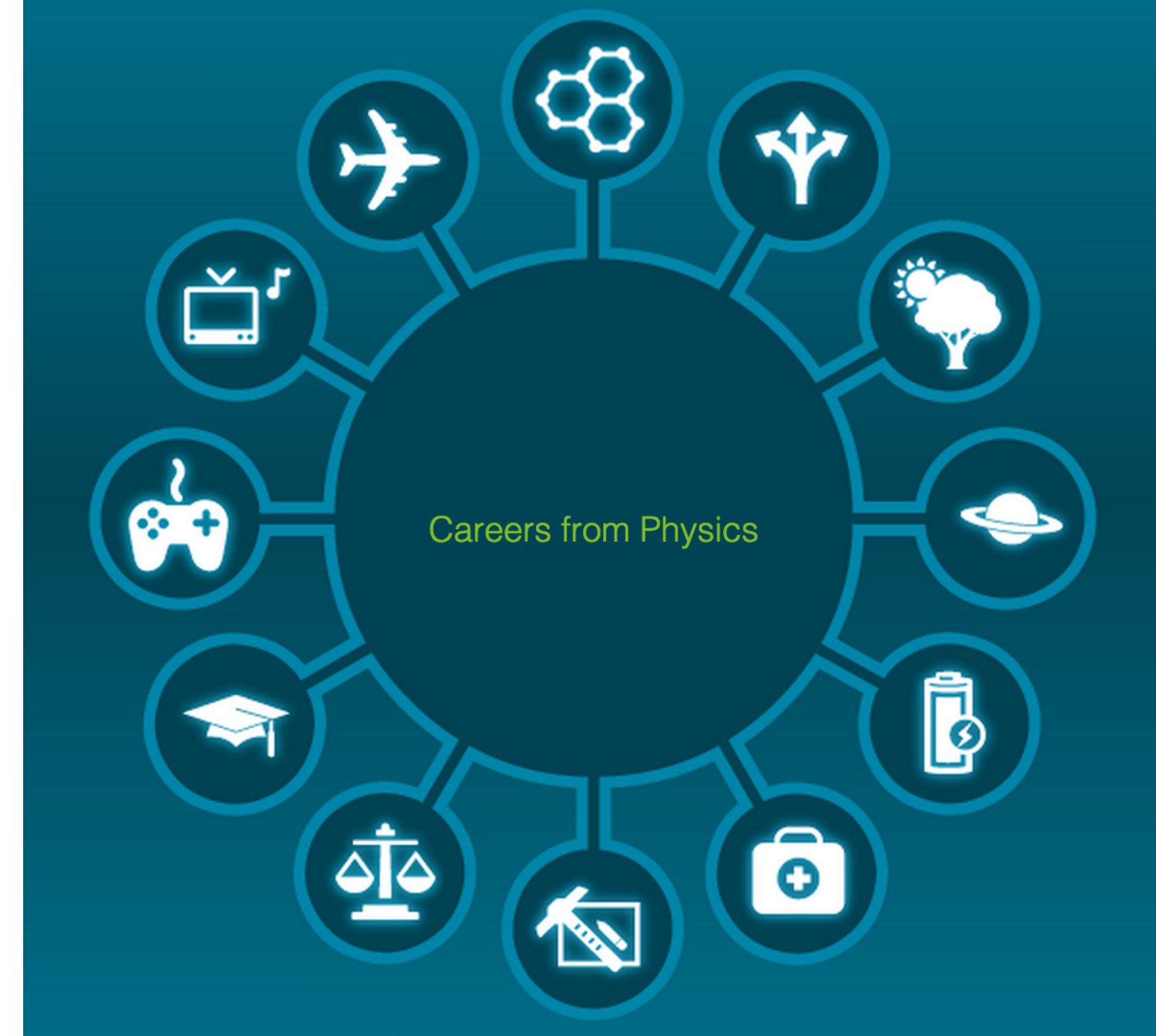
A few career resources

among many others

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

PROSPEROUS PHYSICIST

Accept No Career Limitations



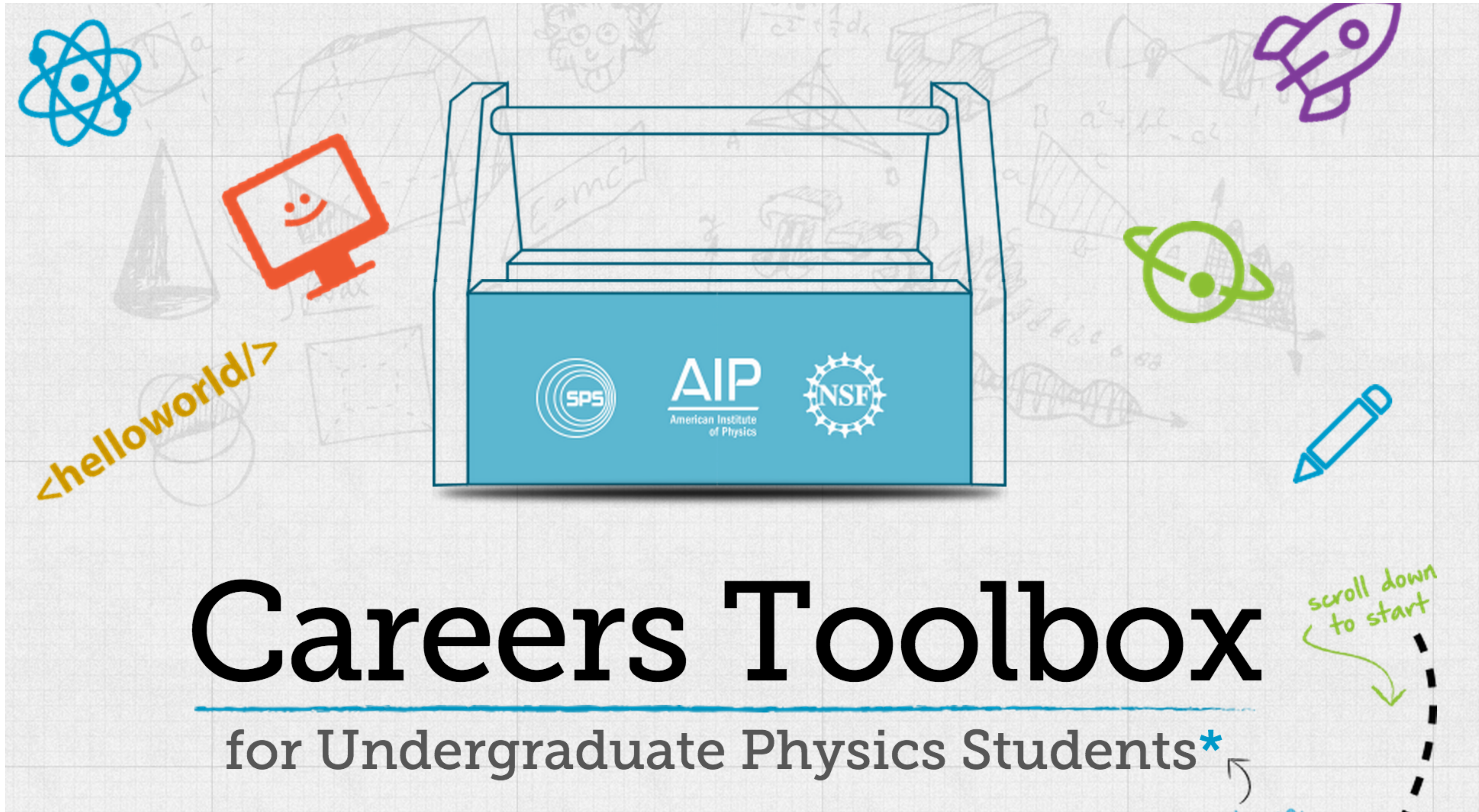
[https://www.iop.org/
careers-physics](https://www.iop.org/careers-physics)



[Planning](#) | [Skills Inventory](#) | [Informational Interviews](#) | [Networking](#) | [Opportunity](#) | [Resume](#) | [Interviewing](#)

[https://www.aps.org/careers/
guidebook/index.cfm](https://www.aps.org/careers/guidebook/index.cfm)

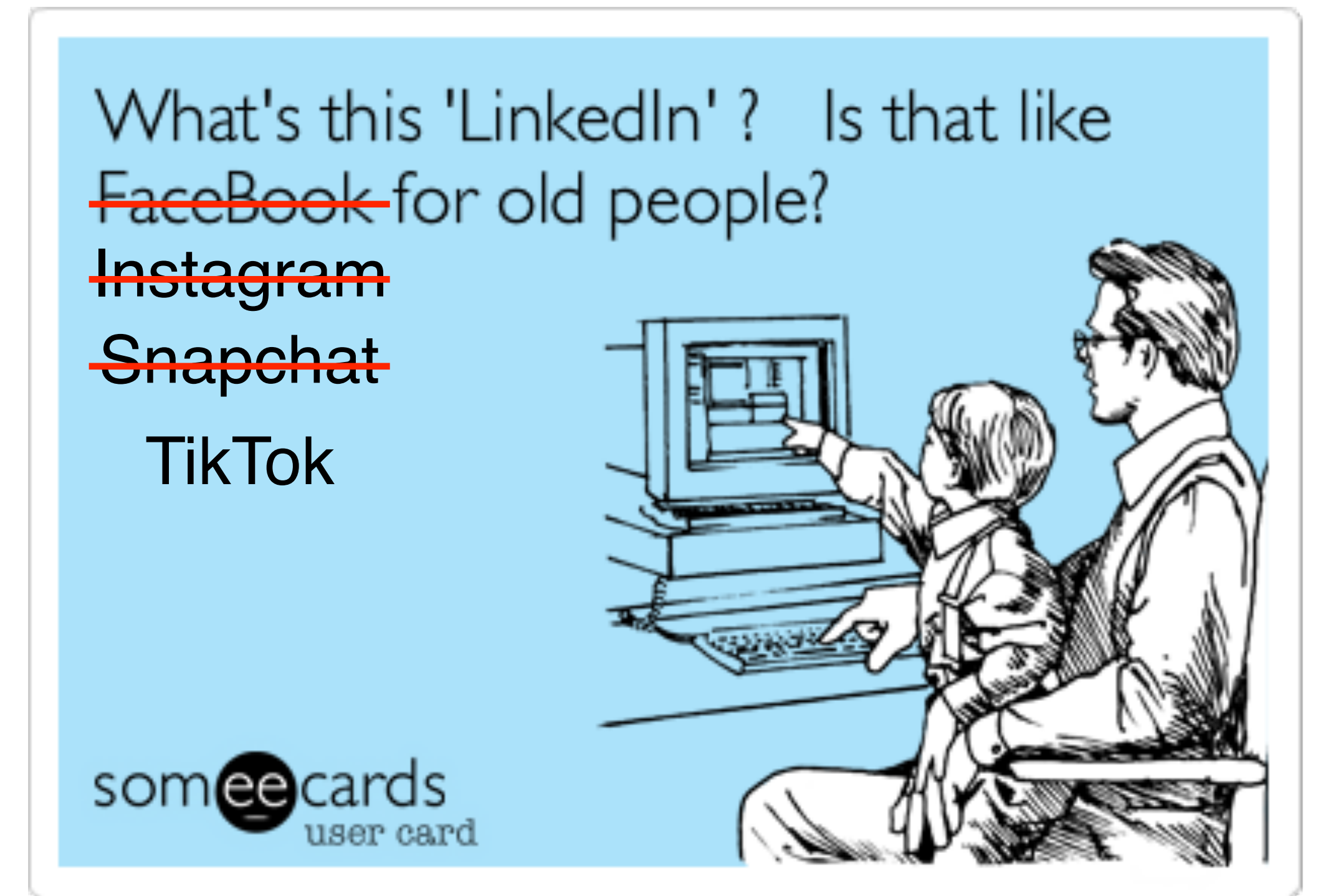
<https://www.spsnational.org/sites/all/careerstoobox/>



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*.

**but they may still look at them!*

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

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