

Week 7 - Monday

**SLD 2600**

# Graduate School

# Graduate school

- As most of you are sophomores, you *might* be thinking about graduate school
- Why would you want to do that?
- What are the pros and cons?

# What is graduate school?

- Graduate school is one or more additional degrees beyond a bachelor's degree
- For STEM, the most common of these degrees are an MS (master of science) and a PhD (a doctor of philosophy)
- Otterbein has almost no graduate programs left, since we are moving them over to Antioch as part of the Coalition for the Common Good
- Larger schools, both big public schools like OSU and big private schools like MIT typically have better graduate programs than small schools

# What does it take to get a master's degree?

- A master of science degree typically takes between 18 months and 3 years, with 2 years being common
- For some programs, a master's degree requires only coursework
- For others, students are expected to write a thesis, a significant paper, in addition to the coursework
- Some programs let you choose the option you want
- Note that, in graduate school, all coursework is typically in your area of study
  - No general education

# What does it take to get a PhD?

- A PhD program typically has at least as much coursework as a master's degree
- However, a PhD also requires a dissertation, a publication-quality product of original research that increases the total knowledge in a given field
- In some programs, getting a PhD automatically gets an MS along the way, but not always
- A PhD usually takes between 4 and 7 years
- In some fields, a post doc is also required, doing more research after finishing the PhD
  - This is especially true in lab sciences, where the results take a very long time to produce

# Professional school

- Several kinds of post-graduate training are usually called **professional school** rather than graduate school
  - Medical (MD), dental (DDS), and veterinarian (DVM) schools
    - Medical school takes 4 years, plus another 3-7 years of residency, working in hospitals
    - Usually requires an MCAT for admission
  - Law school (JD)
    - Law school takes 3 years
    - Usually requires an LSAT for admission
  - Business school (MBA)
    - Business school usually takes 2 years
- These completion times are assuming full-time study, usually without working another job

# How much does grad school cost?

- It really depends!
- If you go to OSU, you can get in-state tuition for something like \$15,000 a year
- Out-of-state tuition for state schools can be much more, \$40K or \$50K, and private schools can be much more
- Medical, law, and business schools are often even more expensive than non-professional graduate schools
- There are many fewer scholarships for graduate school than undergraduate
- But there are fellowships and assistantships that can cover all costs plus add stipends for living expenses

# Why Graduate School?

# Why graduate school?

- There are a few reasons that make graduate school a great choice
  - You want a job that requires specialized training
  - You really love studying your subject
  - You are an international student who needs a way to extend your visa

# Special training

- Some jobs require special training
- Or you can get higher pay if you have an advanced degree
- Working in academia or doing research all but requires a PhD
- Clinical psychology requires a master's degree or higher
- Most K-12 school systems require teachers to get a master's degree eventually
- Professions like medicine and law require an advanced degree
- An MBA is mostly about networking, but it is an expectation for higher tiers of management

# Loving your subject

- Some people just really love their subject
  - Or love going to school
  - Or are scared to leave school
- Grad school is a great place to work with other people who are deep in a subject
- Some people love hanging out with smart people
- Sometimes people create start-ups and don't finish grad school

# Extending your visa

- It used to be that bright international students could stay in the US longer by going to grad school
- Now, the rules are changing so that they probably have to re-apply even for grad school

# When to do graduate school

- Some students wonder if they should go to grad school right after undergrad or work in the real world for a while
- I usually recommend going to grad school earlier
  - It's hard to make real money and then go back to being broke
  - Once you've started a family, it gets even harder to juggle time and money
- Exceptions:
  - If you're getting a job that will pay for grad school
  - MBA programs prefer students to have real-world working experience

# Online vs. in-person

- There are many online opportunities for grad school these days
- These are attractive because:
  - It's often possible to do them while working full time
  - No commute
  - They're usually cheaper
- However, some of them are low quality and most of them will be judged as inferior, especially the PhD programs
- But they're certainly worth considering if you only need the credential to get a bump in pay or position

# Why Not Graduate School?

# Why not graduate school?

- There are lots of good reasons not to go to graduate school:
  - More time and money spent on school
  - It might be more theoretical than has practical use
  - Getting in takes effort
- For many jobs, the two years spent working in the field will be worth more (in salary) than the two years needed for a master's degree
  - And those two years are spent earning money rather than paying it

# How to Get into Graduate School

# How to get into graduate school

- Keep your grades up
- Do research
- Pick schools to apply to
- Get professors to write letters of recommendation
- Take standardized tests (if applicable)
- Fill out your applications

# Keep your grades up

- This one is obvious
- Many schools will not take anyone below a 3.0
- A 3.3 to 3.5 might be enough to get into a master's program
- Usually 3.5 and higher is needed for a competitive PhD program
- Professional programs have their own cut-offs based on many factors

# Do research

- Undergraduate research is really helpful if you want to go to grad school
- Since grad programs care so much about research, undergraduate research shows them that you can do the work
- There are limited opportunities at Otterbein, but the Research Experience for Undergraduates (REU) is a national summer program that lets students do research at other schools
  - And it's paid!

# Pick schools to apply to

- Admission into graduate programs is competitive
- It's good to have a long list (20-30) of programs you're considering
- You can find rankings of schools on sites like U.S. News and World Report
- Try to find specific professors you might want to work with
  - An okay school can have a good program and a great professor
- Pick a range of schools so that you have a better chance of getting in somewhere
- Think about cost of living and quality of life as well as school ranking

# Get professors to write letters of recommendation

- Most schools want three or more letters of recommendation from professors
- You should have an advantage at Otterbein, compared to big schools, since your professors will actually know you and be able to write a meaningful letter
- **But you have to ask their permission!**
- Give them at least a month of lead time and make sure they know when all the deadlines are

# Take standardized tests (if applicable)

- Some programs require standardized tests
- The Graduate Record Examination (GRE) is the most common one
  - Its use has declined somewhat since the pandemic
- There are also GRE subject exams for some programs
- See what the schools you want to attend require

# Master's or PhD?

- Deciding whether to apply for a master's program or a PhD is important
  - You can apply for different programs at different schools
- Master's programs are usually less competitive
  - But you usually have to pay
- PhD programs often provide funding in the form of teaching or research assistantships
- When possible, apply for PhD programs
  - You can quit after you get your master's degree, in most cases

# Fill out your applications

- Each school has an application, which are all digital now
- Customize your statement of purpose for each school
- Make sure that your professors are prepared to get their letters of recommendation in before the deadline
  - Your application won't be considered complete until their letters are in!
- Many PhD programs have deadlines in November, December, January, or February to start the following fall
- Some programs, especially master's programs, have later deadlines
- Application fees are around \$100, sometimes less, sometimes more
  - Plus the cost of an official transcript from Otterbein
  - Application fees can be waived for students with less money

# Academia

# Academia

- Academia is one of the places where a graduate degree is indispensable
- Even if you aren't a professor, you get a lot more respect working in administration if you have a PhD
- If you want to work in higher education, be prepared to get a terminal degree, usually a PhD or an EdD

# Pros of Academia

- Academia has a lot of benefits:
  - Summers off or lighter duties
  - A lot of individual freedom about how to structure your working time
  - No boss telling you what to do (in many cases)
  - A life of the mind
  - Teaching, if you enjoy that
  - Research, if you enjoy that
  - It's hard to get fired, especially if you get tenure
- Health insurance and retirement benefits are relatively good in higher education

# Cons of Academia

- Obviously, academia has its downsides too:
  - Funding can be unpredictable, either due to grant money or enrollment
  - The pay is typically lower than industry
  - Limited open positions
  - Geographically sparse options
  - It might be hard for you to get fired, but that's true of unpleasant people as well

# Upcoming

# Next time...

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- Cohorts and mentors

# Reminders

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- Our next class meeting is October 19
  - No class on October 12 because of October Break
- **Assignment 3 is due next Monday**