



- Expression of sympathy/concern
 - "Bless your heart for having to go thru COVID"
- (Southern US and Michelle) An insult – pity for you for not knowing better, being naïve, or dumb
 - "He thought he'd get that experiment done it a month. Bless his heart."
 - I usually use it for naivety

Tips and Hacks for Navigating the Thesis and Dissertation Process

Michelle Young
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The Doctoral Journey



Why am I doing this?

Where can I find....?

What margins should I use?

What's the format for the presentation?

How often do you meet with your committee?

When am I a candidate?

Should I do a copyright?

How often do you meet with your chair?

Should I provide food?

What reference style should I use?

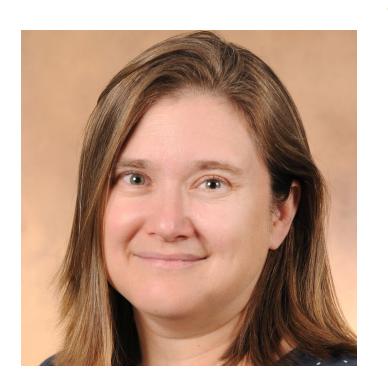
What's the format of the document?

When do I have to submit my document to my committee?

o you meet

r chair?

What's a MIP?



How do I do a table of contents?



- Describe the PhD and thesis
- Provide general tips, tricks and hacks for making the process easier
- Discuss useful tools
- Discuss timelines

LET'S GET ON THE SAME PAGE...



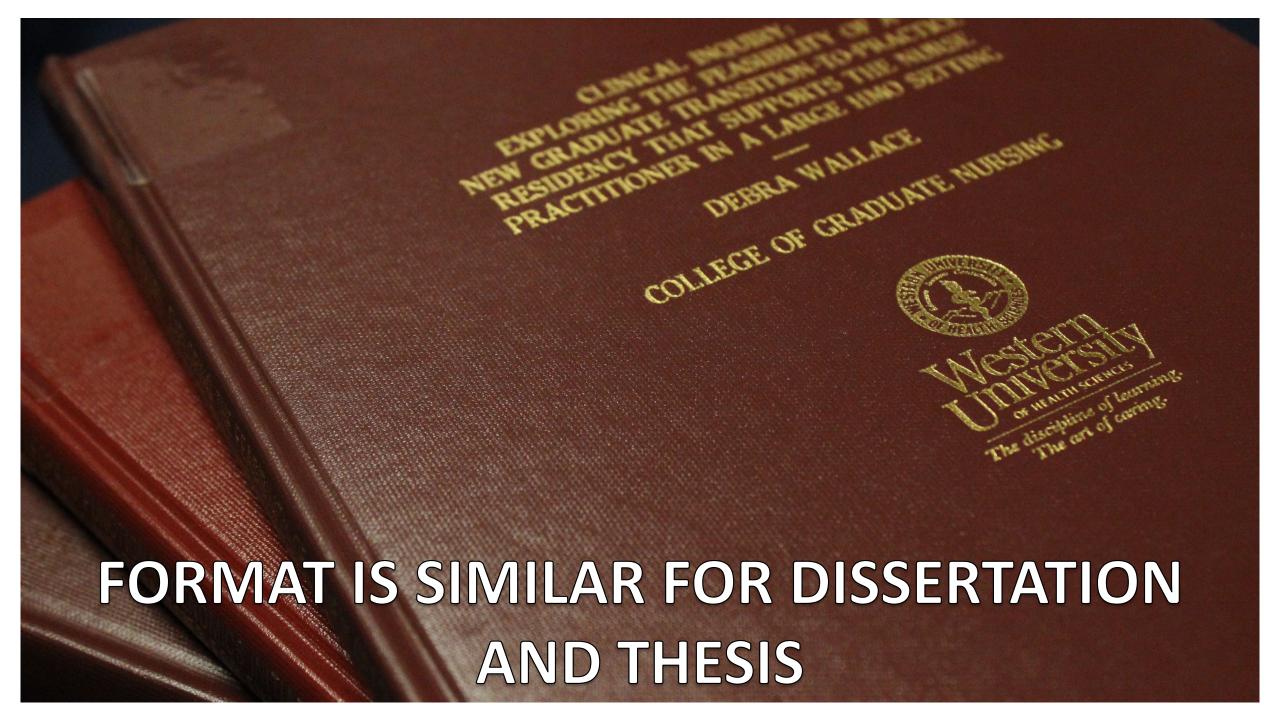


- Master
 - Complete your classes
 - Do research (for thesis/project)
 - Complete thesis or written exam
- PhD
 - Complete your classes
 - THEN....



Different majors call the basic PhD steps different things

	Environmental Eng. (EnvE)	Chemical Eng. (ChemE)	Microbiology/MCB (Micro)
Step 1	Comprehensive exam	Qualifying exam	Comprehensive exam
Step 2	Proposal	Comprehensive exam	Prospectus
Step 3		Dissertation	



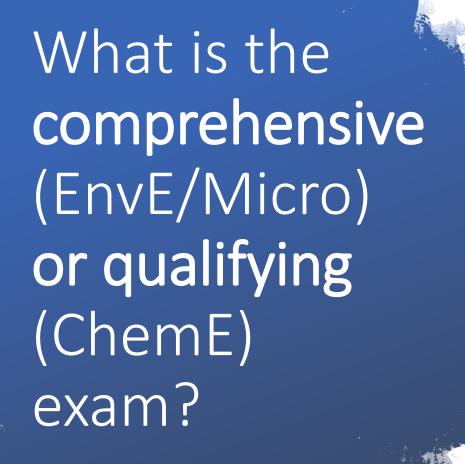
Theses and dissertations have different formats

Dissertation **Thesis** 1. Introduction Introduction Background 2. Background Methods 3. Research chapter 1 Thesis parts 1-5 for this chapter 4. Results and Discussion 4. Repeat #3 for all research 5. Conclusions and chapters Recommendations 5. Conclusions and 6. References Recommendations 7. Appendices 6. References 7. Appendices One appendix must include permissions from coauthors and

journals to use published materials

What is the basic timeline?

	Environmental Eng. (EnvE)	Chemical Eng. (ChemE)	Microbiology/MCB (Micro)
Comprehensive/Qualifying exam	After core classes are completed2-4 semesters	• 2-3 semesters	2 semesters w/MS4 semesters w/BS
Proposal/ prospectus/ comprehensive exam	 2 years into your research Cannot be the same semester as your graduation 	 2 years into your research Cannot be the same semester as your graduation 	End of second/third year
Dissertation		Bless your heart	8 semesters w/MS10 semesters w/BS



- After core classes are completed
- Combined written and oral exam evaluating the student's competency and mastery of their subject
- Private defense
- Committee does not usually include your chair

What is required of the comps?

	EnvE Comprehensive Exam	ChemE Qualifying exam	Micro. Comprehensive Exam
Committee	3 professors	Graduate committee	PhD committee
Topic	Comprehensive review of a paperOutside your direct research area	Original research idea to be made into a publication	Proposal to a funding agencyOutside your direct research area
Written length	Up to 8 pages	10 pages of textUp to 10 pages references, figures, etc.	7-pag NIH grant OR written exam of fundamental questions
Presentation length	30 min.	20 min.	20-30 min.
Collaborate with others?	No	Yes	No

What is the proposal (EnvE)/ prospectus (Micro)/ comprehensive exam (ChemE)?

- Written and oral exam
- Private defense
- Present your proposed research for your PhD
- Fill out form on iPOS
- Once successfully completed, you become a PhD Candidate

What is required for the proposal?

	Environmental Eng. Proposal	Chemical Eng. Comprehensive Exam	Microbiology Prospectus
Submit to committee in advance	1 week	1 week	
Document length	Committee dependent 🗡		
Presentation length	Up to 50 min.	Up to 50 min.	

What is the thesis/dissertation document and defense?

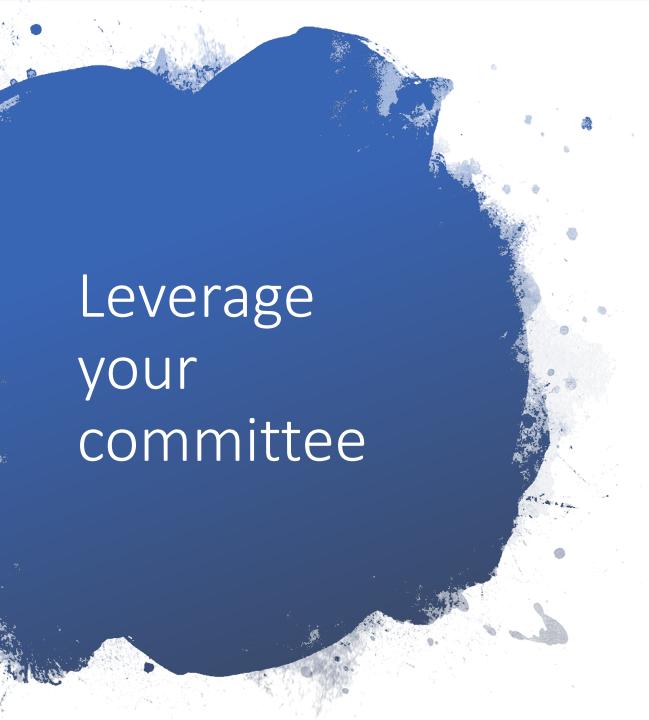
- Written and oral exam
- Culminating event for your degree where you present your research, conclusions and recommendations
- Very individual and specific to your advisor and committee

HOW TO WORK SMARTER NOT HARDER





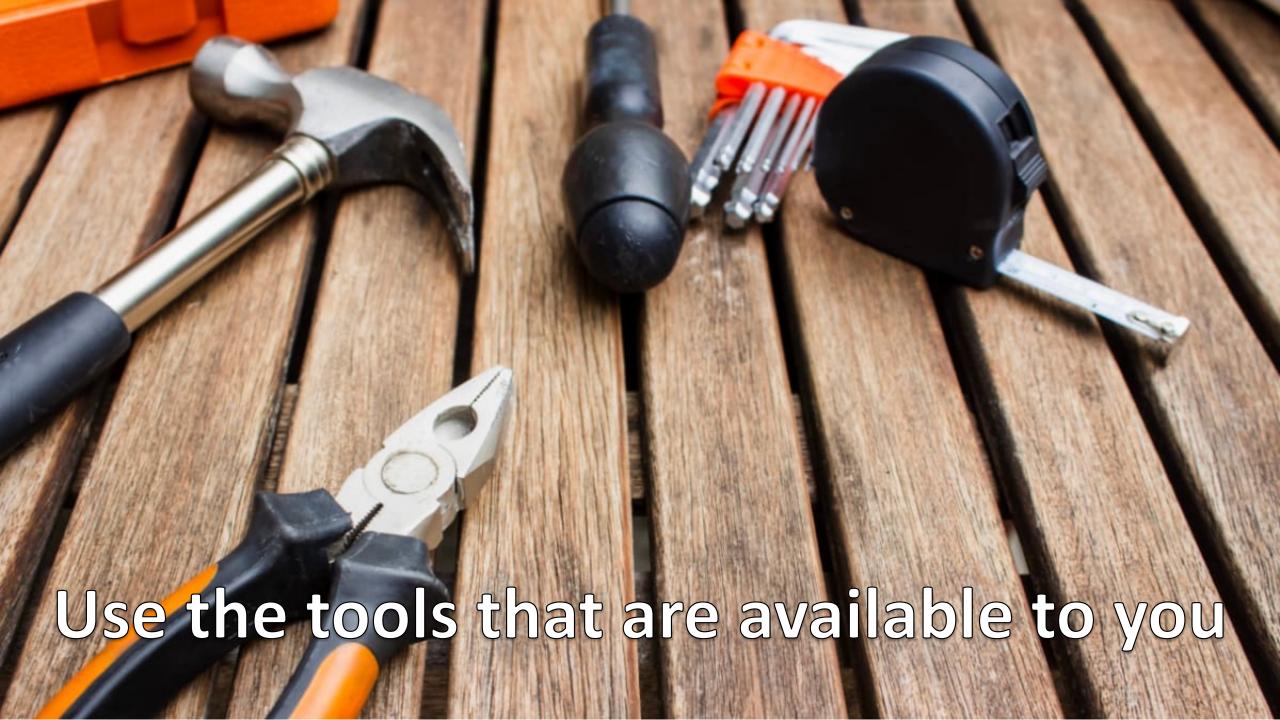
- What are they looking for?
- What do they expect from your work?
- Do they agree with each other?
- How many manuscripts do I need published at the time of defense?
 How many submitted?
- How should I iterate with my chair(s) and committee on drafts?
- Meet with your committee regularly
- Set a timeline but be flexible



- Use them as a sanity check
- Get feedback from your chair(s) and committee early and often!
 - Don't worry if it is not perfect
 - What do I want to communicate?
 - Is this the story you want to tell?
 - Does my timeline make sense? Do we agree on it?
- Hold each other accountable for progress
- Practice the 24-hour rule

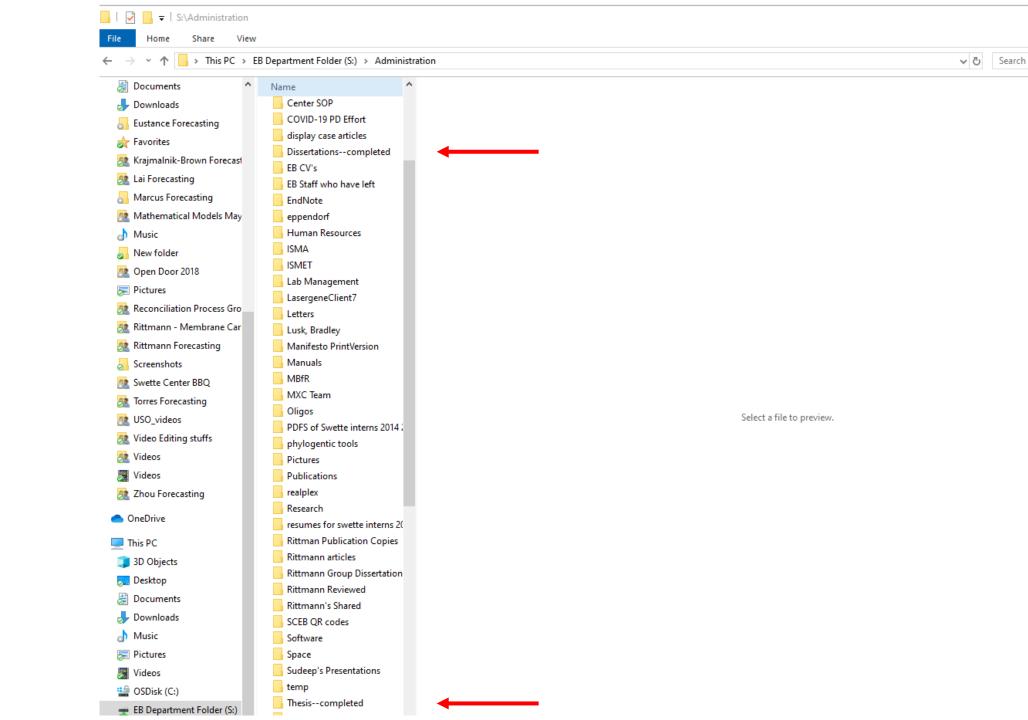


- Talk to other people who have defended in your group recently for their experience
- Have them read your material
- Present to them
- Use them as a sanity check



Look at other people's dissertations and theses

- Dissertations have different formats than theses
- Ask your chair(s)
 - What format they are looking for
 - Copies of dissertations to follow
- Ask peers for copies of their dissertations/theses
- Look for
 - Organization
 - Content
 - Formatting
- Shared drive



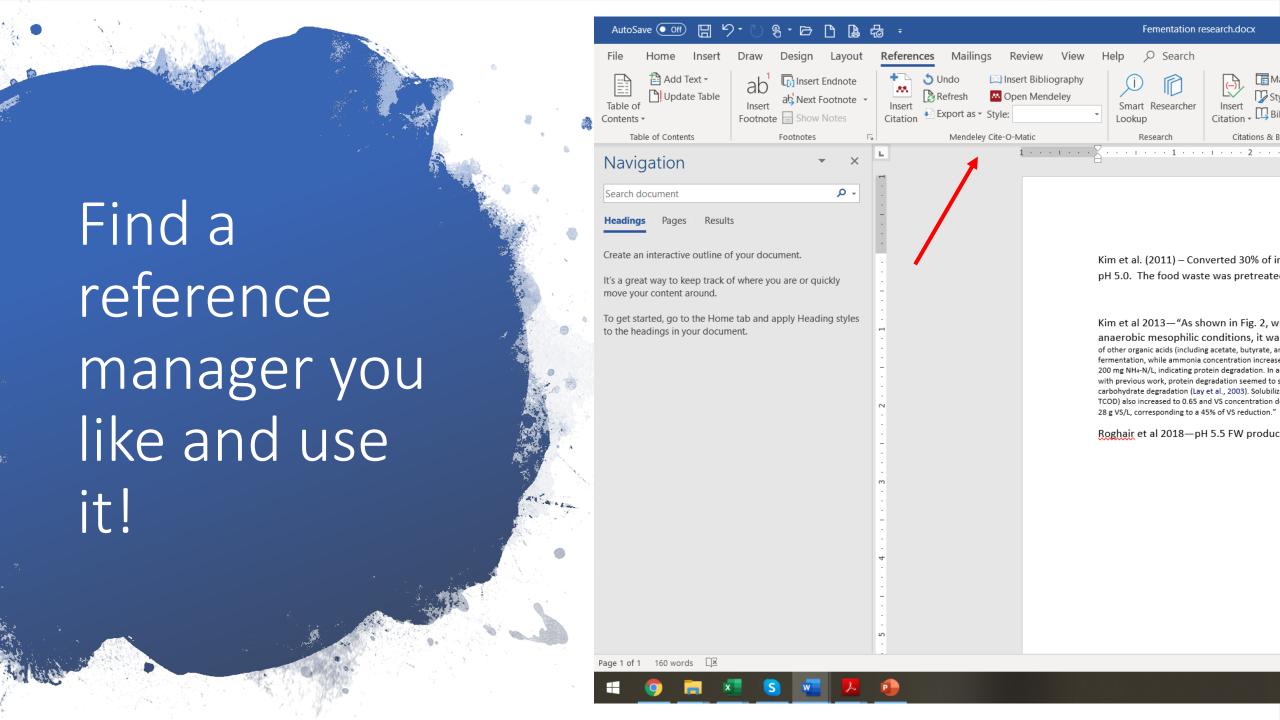


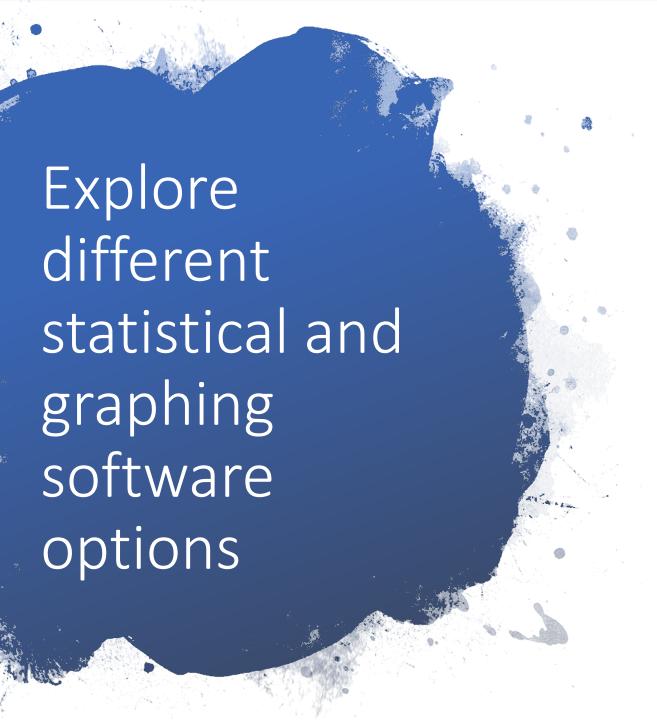






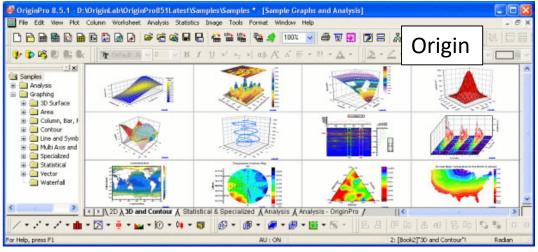




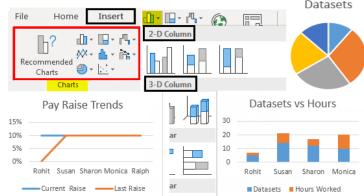








Types of Graphs in Excel





- Automatically numbering figures, tables, and equations
- Style functions
- Equations editors

These will make managing changes to graph order and tables of contents, etc. much easier to manage!

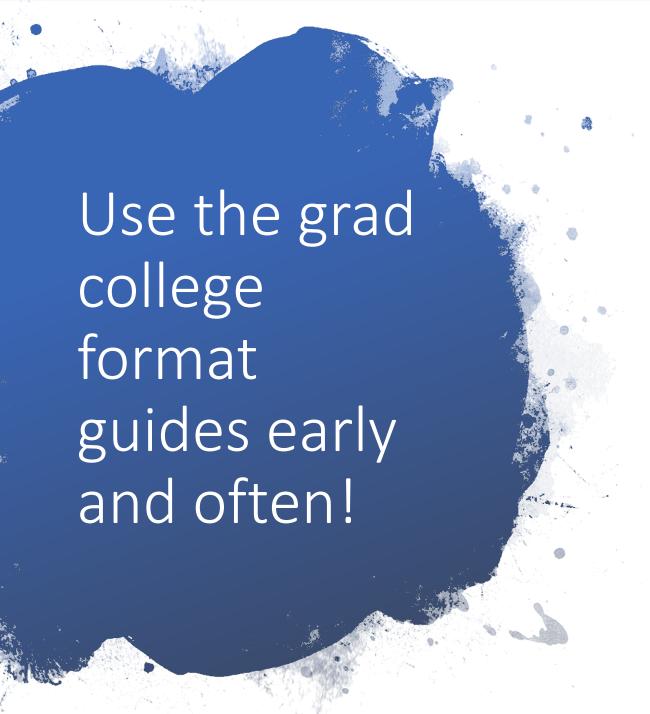


- Write early and often!
- Write with others (Work Cycle, etc.)
- Keeping detailed notes in your lab notebook, online journal, etc.
- Find your writing zone and stick to it!
 - Space
 - Time
 - How you work best
- There is no right order for writing you document – the important part is that you are writing
- It will never be perfect so send it as progress is made

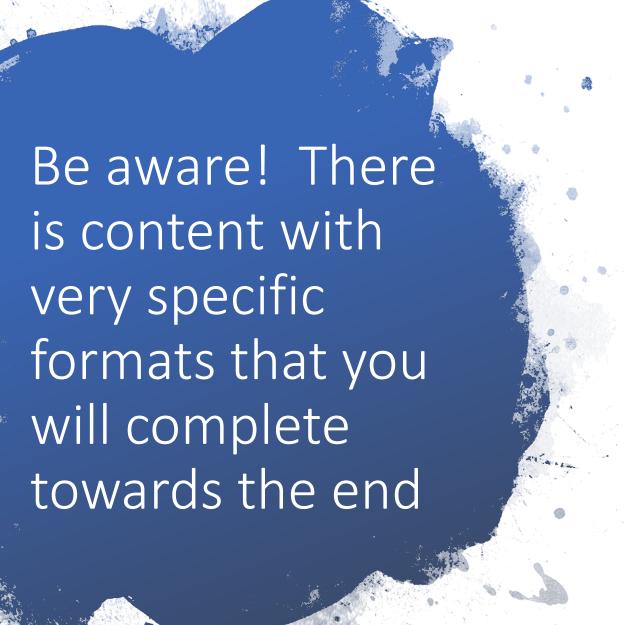


Start formatting your dissertation or thesis immediately. And start with your proposal!

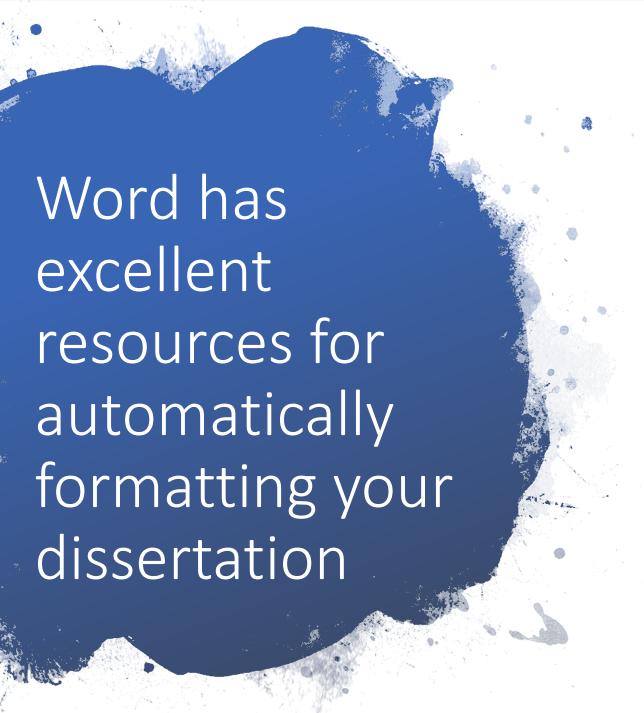
- You and your committee can dictate chapter/references/ appendices format
 - What bibliography style you want to use
 - Bioresource Technology is an easy format to apply to everything
 - How you organize the chapters
 - Appendix vs. Supplemental Information
- Be consistent or you will not pass format review!



- Website
 - https://graduate.asu.edu/cu rrent-students/completingyour-degree/formattingyour-thesis-or-dissertation
- Downloadable PDF update often!
 - https://graduate.asu.edu/sit es/default/files/asugraduate-college-formatmanual.pdf
- Questions? gradformat@asu.edu

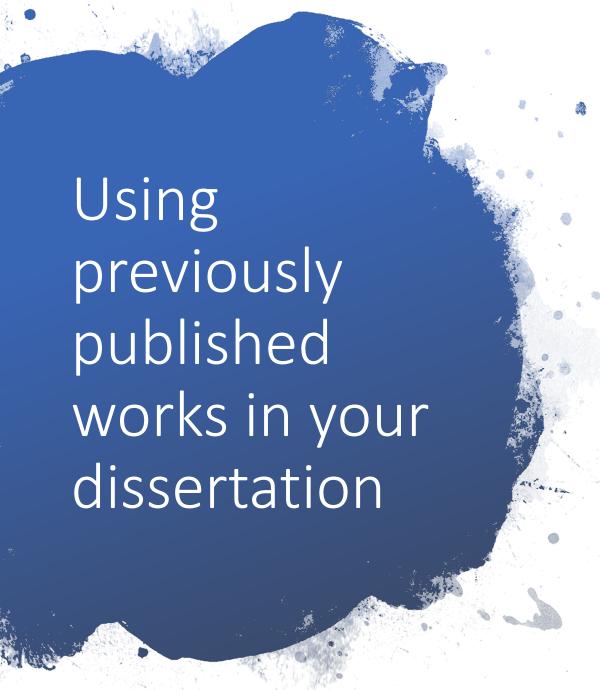


- Title page
- Abstract
- Table of Contents
- List of Tables
- List of Figures
- List of Symbols or Abbreviations (optional)



- Using "References" → "Captions"
 - Insert captions that will automatically update figure/table numbers
 - Automate your table of contents, etc.
- Use your reference manager
- Writing centers and workshops
 - https://tutoring.asu.edu/studentservices/graduate
- Automatic formatting tool
 - https://graduateapps.asu.edu/forma tadvising
- Other options for writing are LaTeX and BibTeX





- You **MUST** have permission from the authors to publish their work in your dissertation (i.e., figures, etc.)
- You MUST have permission from your other coauthors to use previously published articles in your dissertation
 - https://graduate.asu.edu/sites/default/fi les/policy-on-using-previouslypublished-work.pdf
- You MUST have permission from the journal to republish an article in your dissertation
- The *last* appendix in your dissertation is all of your documentation of this



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 Understanding the impact
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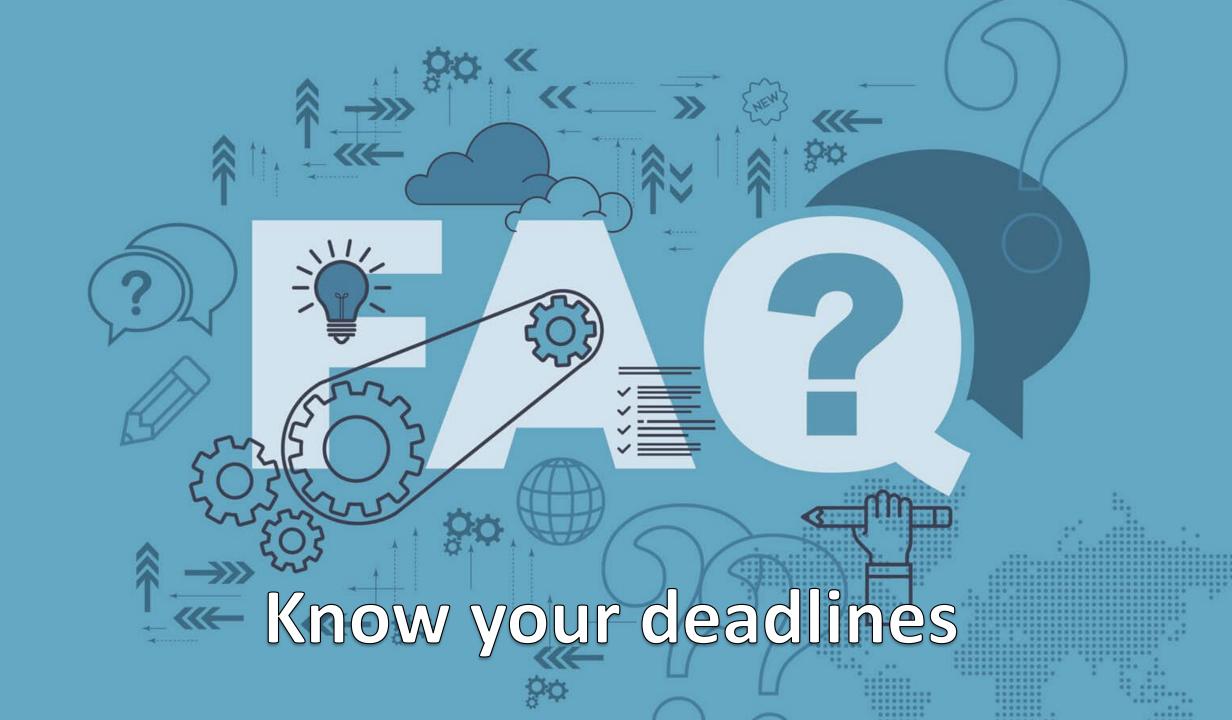
- Different chair(s) have different advice on formatting previously published work in your dissertation
- Change "we" to "I"
- Disclaimer at the beginning of the chapter

CHAPTER 3

Understanding the Impact of Operational Conditions on Performance of Microbial Peroxide Producing Cells

This work was published in a modified version in Journal of Power Sources by Young et al. (2017).

 Change reference formats to match the rest of the document





- For PhD students only
- Option to receive a MS without doing a thesis
- Apply in iPOS
 - ChemE and Micro: After advance to candidacy
 - EnvE: Complete 30 credit hours



- https://graduate.asu.edu/currentstudents/completing-yourdegree/about-your-defense
- https://graduate.asu.edu/currentstudents/policies-forms-anddeadlines/graduation-deadlines
- Deadline to apply for graduation
- Deadline to schedule your defense
- Last day to hold a defense for the semester
- Deadline to submit final documents to ProQuest





- Update your iPOS
 - 4 weeks to update in the system
- Get permissions from your coauthors
 - I suggest doing this as you go
- Get permissions from journals
- Set explicit writing/feedback deadlines with you and your chairs
- Go watch other people defend!
 - https://graduateapps.asu.edu/d efensecal



- Check iPOS approval
- Schedule your defense date and room
 - 50% of the committee must be in the room
 - The chair or at least 1 co-chair must be present
- Ask your chair what format your defense will take
 - When does the committee need the final document (2 weeks in advance)
 - Will you take questions during the presentation?



- Schedule your defense in iPOS at least 10 working days (2 weeks) in advance
 - https://graduate.asu.edu/sites/defau lt/files/10-working-daycalendar 0.pdf
 - You must input your room information
- Submit a copy of dissertation for format review 10 calendar days in advance
- Supply a copy to your completed document to your committee
 - Paper or electronic?
- Fill out absentee committee member form
- Should I request an embargo on publication?



- Practice in front of peers and people who have defended!
- And......



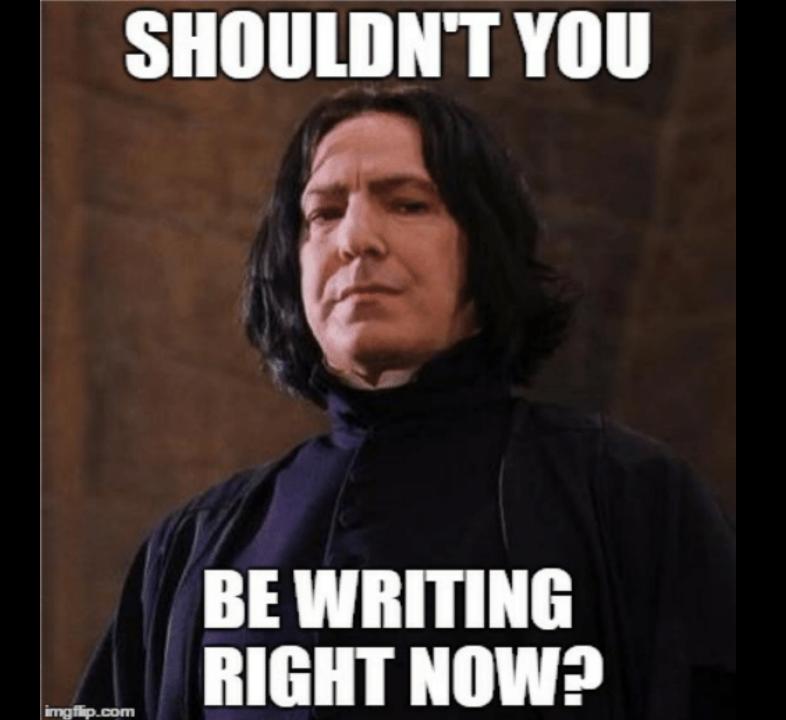




- Submit your dissertation for approval...
 - To your committee
 - For format approval
 - To ProQuest
 - Copies for committee?
- Submit Survey of Earned Doctorate
- Should you copyright your work?

SUMMARY

- Understand the timeline and what is required of you
- Leverage your peers and committee
- Identify useful resources early and use them often
- Start formatting early
- Be aware of deadlines



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PICTURE QUOTES, com-

