Dissertation and Thesis Writing Bootcamp

Spring 2025

Today's Agenda

- Introductions
- Office of Graduate & Professional
 Studies Process and Format
- Developing Research Questions
- Before You Begin
- Dissecting the Dissertation and Thesis
- Helpful Tips
- Resources

Introductions

In chat, please share:

- Name and preferred pronouns
- Degree and anticipated graduation date
- One thing you hope to learn today

Introduction of Presenters: Brittany Blanchard, Alana Kuhlman, Debbie Mariage

Office of Graduate & Professional Studies

Process and Format

Debbie Mariage

Program Manager, Office of Graduate & Professional Studies

Electronic Thesis & Dissertation Coordinator (ETD) etd@nau.edu

928-523-8254

Thesis & Dissertation Processes

Thesis-track Masters' and Doctoral Students

- Confirm enrollment in at least 1 unit of 699 or 799, thesis or dissertation units.
- Complete and submit a Graduation Application for the appropriate term.
- NEW Canvas Thesis Format & Dissertation Format Courses. A zero-credit course to be completed in the semester a student plans to defend. Completion of the course notifies the ETD Coordinator of a student's defense date and fulfills the NAU format check requirement.
- Oral Defense Part 1 form is due to the ETD Coordinator within 48 hours of a defense.
 Known as the voting form and details the required revisions requested by the committee.
- Oral Defense Part 2 form is due to the ETD Coordinator by the last day of the term.
 Known as the verification form confirming revisions have been completed.
- All students are required to upload the final version of their thesis or dissertation to ProQuest.
- Confirmation email will be sent to your NAU email address via ProQuest.



NAU Formatting Guidelines

- NAU Format Checklist & Guide
- Document Sequence
- TITLE page
- ABSTRACT page
- ACKNOWLEDGMENTS
- TABLE OF CONTENTS, LIST OF TABLES, LIST OF FIGURES
- DEDICATION
- Main text Introduction/Chapter 1
- REFERENCES
- APPENDICES



- ☐ Margins top, bottom, right & left set at 1"
- ☐ Font/Text Black, same font size (12 pt) & type
- ☐ Page headers Centered at the top 1" margin
- Refrain from excessive use of bold, italics, or underlines
- Pagination ABSTRACT begins Roman numeral
 "ii" through DEDICATION; Main text Intro/Chapter 1, begins Arabic numeral "1"
- ☐ Page numbers Centered at the bottom 1" margin
- No running headers
- Text double spaced

Graduate & Professional Studies Resources



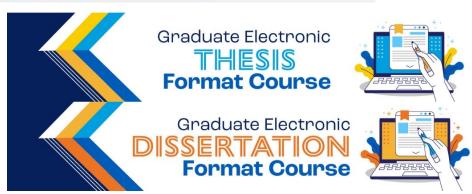
- OGPS Webpage Resources, Thesis & Dissertation https://nau.edu/graduate-college/thesis-and-dissertation/
- NAU Format Checklist & Guide
- Canvas Thesis & Dissertation Format Courses
- Cline Library
- The Lumberjack Writing Center

ETD Information and Guidelines

- ETD Processes & Deadlines Departments
- ETD Committee Policy & Guidelines
- ETD Information
- ProQuest contact information

ProQuest Copyright Resources

- Copyright and Your Dissertation or Thesis
- Copyright Laws Around the World



Important Dates & Deadlines

Academic Year 2024-2025	Spring 2025	Summer 2025	Fall 2025
Last Day for Dissertation Defense	Friday, April 25	Tuesday, July 22	Wednesday, November 26
Last day for Thesis Defense	Friday, May 2	Tuesday, July 29	Friday, December 5
Submit Thesis or Dissertation for a Format Check via Canvas Thesis Format or Dissertation Format Course at least 10 business days PRIOR to defense date	Masters & Doctoral students	Masters & Doctoral students	Masters & Doctoral students
Dissertation Defense Scheduling Forms must be submitted <u>10</u> business days <u>PRIOR</u> to defense date	Doctoral students only	Doctoral students only	Doctoral students only
Students are responsible for uploading the final version of their thesis or dissertation to ProQuest by 11:59 pm MST on the last day of term. (This deadline is not flexible; students who upload their thesis or dissertation to ProQuest after the deadline will not be approved to confer their degree in the term).	Friday, May 9 Last day of term	Tuesday, August 5 Last day of term	Friday, December 12 Last day of term

Developing Research Questions

Presented by:
Andy Koppisch, PhD

Associate Vice President, Research Associate Professor, Chemistry & Biochemistry



Institutional Review Board

Institutional Review Board

The IRB is an independent committee made up of faculty, staff, and community members that ensures NAU human research complies with federal regulations, ethical principles, and university policies.

- It is there to protect participants in human research.
- Includes: recruitment, consenting process, study intervention(s)/procedures, identifiable data analysis
- Specific populations (minors, immigrants, international research & more) have additional considerations
- Need to have approval BEFORE you start your research

Institutional Review Board

Submissions to the IRB are processed and reviewed on a first-come, first served basis. Timelines for approvals varies based on category, number of submissions, revisions need and quality of submission. In general, investigators should plan to submit a complete application for IRB review at least 30-45 days prior to beginning studies.

Review level – timeframe

- Exempt 1 to 3 weeks
- Expedited 2 to 4 weeks
- Full Committee 1 to 2 months

More information: https://in.nau.edu/human-research-protection-program/irbnet/

Contact: IRB@nau.edu with questions or for additional help

Other things to consider before you begin

- Do you need approval from elsewhere?<u>international</u>, <u>conflicts of interest</u>, <u>biological safety</u>, <u>radiation safety</u>, <u>HIPAA</u>, <u>FERPA</u>, <u>FDA</u>, data repositories, listserv permission, <u>conducting University surveys</u>, <u>data security</u>, <u>sponsor approval</u>, <u>clinicaltrials.gov</u>, <u>tribal consultation</u>, or <u>school approval</u>.
- Tests/measurements fall under copyrighted materials and may require permission for use or a fee in order to use. Make sure you know the permissions for any you are using and have received permission where applicable.
- If using secondary data make sure it is useful for the question you are asking

Break

Dissecting the Dissertation and Thesis

- Organizing your dissertation or thesis
- How to write your abstract and introduction
- How to write your literature review
- How to write your methodology and results/findings
- How to write your discussion
- How to write your conclusion

With the exception of the Literature Review slides, the

upcoming slides were designed with the support of:

Cindy Browder, PhD

Professor, Organic Chemistry

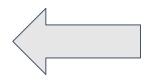
Jennifer Kim, PhD

Assistant Teaching Professor, Department of Sociology

Organizing Your Dissertation or Thesis

Typical Content Includes:

- Front Matter (Abstract, etc.)
- Introduction
- Literature Review
- Methodology
- Results/Findings
- Discussion
- Conclusion
- Back Matter



Traditional dissertations will closely follow this organization.

Some dissertations/theses may be organized in article-style/more topically; talk with your chair about whether this is appropriate for you. Article-style dissertations/theses include overall introductions and conclusions with articles in between.

How to Write Your Abstract and Introduction

ABSTRACT PURPOSE: Lets a prospective know if your document is relevant to their research.

Types of abstracts:

- Descriptive tells your reader what type of information they will find in the article but does not provide results or conclusions.
- Informative more comprehensive than descriptive abstracts, providing some detail about results and conclusions that allow other researchers to determine whether the article is relevant to their research.

INTRODUCTION PURPOSE: Introduces your reader to your study.

Introductions should:

- State the purpose/problem and significance of the study
- Introduce the theoretical framework
- Provide necessary background information
- Provide the research questions
- Offer a structural overview of the dissertation or thesis

HELPFUL TIPS!

- Read several theses, dissertations, and other publications in your discipline to use as models.
- Your research questions may be stated in multiple sections.

Dissecting the Literature Review

Presented by:

Brittany Blanchard (Brittany.Blanchard@nau.edu)

Not all literature reviews are the same

- Literature reviews for an article
 - Shorter
 - Highlights, not exhaustive
- Literature reviews that are articles
 - Several pages long, more encompassing
- Systematic reviews
 - Exhaustive
 - Specific inclusion/exclusion
- Literature reviews for traditional theses/dissertations
 - Generally longer, chapter length
 - Not exhaustive but more than highlights

What is a literature review?

It is not:

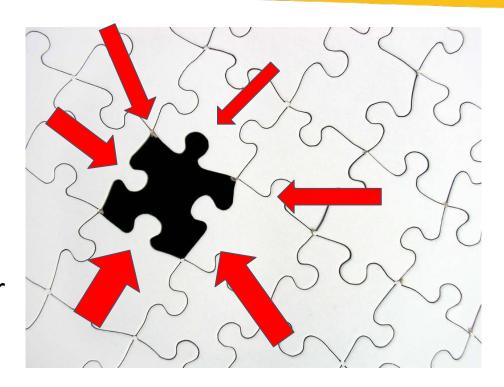
- A list of articles
- Annotated bibliography
- Just a summary

It is a(n):

- Examination of extant research on a defined topic/question
- Synthesis
- Critique
- Analysis
- Argument

Why do one?

- Shows that you have a firm grasp of the topic, surrounding issues/controversies
- Places your research within the larger academic narrative.
- Demonstrates the importance of your research
- Proves that there are knowledge gaps in your field that merit investigation
- Shows that you are adding new knowledge to your field
- Creates an intellectual, historical, and theoretical framework for your thesis/dissertation



Adapted from "Puzzle 2" cc-by Willi Heidelbach flickr.

Where to begin?

Brainstorm your topic and breakdown your question into parts that need to explained or that you need to find evidence for.

What are your inclusion & exclusion criteria?

- Date, type of study, intervention or application, demographics?
 - This can help guide your research by eliminating results that are not applicable

Some strategies: talk it through out loud, write down a list, try mind mapping or spider diagrams

Where to begin?

Ask yourself:

- What do you already have?
 - Articles from classes, readings you've already done etc.
- If this information exists where would I find it?
 - What fields/subjects would that topic fall under?
 - Is this information that would be in data sets?
 - Not everything will be in a journal article
- Which questions/sections are more important/easiest to tackle?
 - Piecemeal approach
 - Write what you have
- Create keywords & search strings

Starting the search

Has someone done some of the work for you?

- Other dissertations/theses (Dissertations & Theses ProQuest)
- Review articles & systematic reviews

Big names/studies

- Who is everyone else citing?
 - Utilize forward citation searches
- Talk with your advisor, people in your field

Start with broad searches then assess and narrow as needed

Get familiar with where you're searching

- How can you import citations to your citation manager?
- Is there a way to set up alerts?
- How fancy can you get with your searches? Some databases allow you to use truncation, wildcards, near searching, etc.
 - Music*, wom?n, oil N5 pollution
- Does it use controlled vocabularies (subject terms) & is there a thesaurus that allows you to search for terms?
- Can you use NOT or to exclude things from your search?
- For Google Scholar, make sure you link the library

Tips

- Adapt as you go: This is an iterative process that takes time. You may need to search multiple places in multiple ways to find the articles you need.
- Pause to weed, skim & evaluate
- Keep track of where/when/what you are searching for ease of reference
- Save money by requesting articles from Document Delivery Services
- Searching off-campus? Login to the VPN

You + Your Librarian = Awesome

MEET WITH YOUR LIBRARIAN



nau.edu/library/ contact-your-subject-librarian

Staying organized with your lit review

- Use a bibliographic management tool
 - Zotero (open source, free)
 - Mendeley (institutional account available through Cline Library)
- Save, save, save
 - Take pictures of the non-digital
- Consider using a synthesis matrix or the notes tool in Zotero & Mendeley to keep track of what you've read
- Find ways to stop yourself from going down rabbit holes

Themes in research about PhD students	Humbug et al (2009)	Mewburn (2012)	Whathisname (2013) Doesn't mention this – many people don't actually. Is this a problem with the literature?	
Reasons for undertaking a higher degree	Argues that this varies by discipline	Argues that there is a clear gender division in the discipline enrolments - but older people less so.		
Completion rates.	Shows that men drop out more than women in almost all disciplines.	Shows that older people who are enrolled part time are more persistent than those who enrol part time	Shows that attrition varies by institution and that the 'richer' institutions lose less students	
Social learning in PhD student communities	Doesn't mention this	Shows examples of conversations to show that older people have more complex discussions about 'meta' issues in PhD study than younger students	Suggests the community in richer institutions is better than that in poorer institutions.	
Relationships with supervisor - how important is it?	Argues that the relationship with supervisor is a key determinant of success	Argues that older people deal with poor supervision better than younger people	Suggests that poorer institutions have a 'younger' supervisor profile	

"We can better understand problems like attrition if we know why people choose to undertake a PhD in the first place, however scholars do not pay attention to the reasons why students are motivated to enroll in a PhD. Two notable exceptions are Humbug et al (2009) and Mewburn (2012). Humbug et al noted that different disciplines report very different reasons for beginning a PhD. Mewburn further developed this work in her studies of older students, claiming that gender further complicated the picture of motivation."

Mewburn, Inger "Using a matrix to organize your notes" https://sites.google.com/site/twblacklinemasters/using-a-matrix-toorganise-your-notes-for-faster-writing

	Year	Purpose	Life style addressed	Intervention	Sampling	Number of participants	Results
A randomized controlled trial of a health promotion education programme for people with multiple sclerosis. Ennis M. et al. Clinical rehabilitation 2006 20;783-792	2006	Evaluate effectiveness of a health promotion education programme for people with multiple sclerosis	Exercise, fatigue, stress, nutrition	Group based eight weekly sessions of 3 hours, "Optimize"		61 patients randomised, 31 in intervention, 30 in control	Significant higher levels of health promotion activity undertaken.
Education in stroke prevention: Efficacy of an educational counselling intervention to increase knowledge in stroke survivors. Green T. et al. Canadian Journal of Neuroscience Nursing 2007 29(2);13-20	2007	Examine impact of one-to-one brief nurse-patient interview on acquisition of knowledge of stroke and influence on lifestyle behaviour change	Smoking, exercise, alcohol	Nurse consultation and lifestyle class	Patients consulting an ambulatory stroke prevention clinic	200 patients randomised, 100 in intervention, 100 in control	No significant difference between groups on the identified risk factors
A quasi-experimental study on a community-based stroke prevention programme for clients with minor stroke. Sit JWH <i>et al.</i> Journal of clinical nursing 2007(16)272-281	2007	Determine the effectiveness of a community stroke-prevention programme	Stroke prevention issues, food, smoking, blood pressure	Nursing consultation (nurses as facilitators), 8 weekly 2 hours sessions	Participants who have had a minor stroke	190 patients, 107 in intervention, 83 in control (randomized by time slots)	No significant improvement in smoking or drinking alcohol, maintaining exercise in intervention group

Konradsen, H., Nielsen, H., Larsen, M. and Hansen, C. (2012) Patient participation in relation to life style changes—A literature review. Open Journal of Nursing, 2, 27-33. doi: 10.4236/oin.2012.22005

- How do I know when I'm finished?
 - Do you have a good understanding of the research landscape and are you able to convey it to your reader?
 - Oid you run it by your advisor?
- What if I can't find anything?
 - Take a step back from your question
 - Find similar populations or break-up the question and make the connections yourself (the research tells us _____ about X population and _____ about Y population but little research has been done on what it means for populations with both X & Y)
 - Citations are your friend.
 - Talk to your librarian.
- Beware of ghost citations

Writing it up

Look back at your matrix/think about your readings

- What are the themes?
- What are the major agreements/disagreements/controversies?
- How do they relate to your research?
- How is your study situated within the existing research? What gap does it fill?

Write what you have, you can always move things around

Structure it...

- Chronologically
- Topically/thematic
- Methodology/theory

How to Write Your Methodology and Results/Findings

METHODOLOGY PURPOSE: To tell your reader what you did and how you did it.

- •Varies significantly by type of research (quantitative, qualitative, or mixed methods), research design, and discipline.
- •You'll typically provide information about the context, data collection methods, data analysis techniques, and more depending on your discipline and type of study.
- •Work with your advisor/chair to determine how to best approach your methodology section.

RESULTS/FINDINGS PURPOSE: To share your data with your reader.

- •You may report your data and save analysis for your discussion.
- •You may blend your data and analyses into multiple chapters.
- •Work with your advisor/chair to determine how to best present your results/findings.

Helpful Tips!

- Offer rationale for methodology used.
- Both describe and illustrate your results/findings.

How to Write Your Discussion

DISCUSSION PURPOSE: To contextualize your results/findings within your field.

- Connect your results/findings to your research questions.
- Approach as a discussion with your literature review.
- Provide analysis.
- Decide where to focus/where your stories are.
- •Consider your discussion as an interplay of your different sections; where your roads connect.

Helpful Tip!

 Show how your study is an example of the application of your underlying theory.

How to Write Your Conclusion

CONCLUSION PURPOSE: Provides your reader a summary that offers insight for future practice and research

- •Restate major highlights/findings and results and connect back to your research questions.
- •Discuss limitations of your research (may be in discussion).
- •Discuss implications for future research and for practice (may be in discussion).

Helpful Tip!
Do not introduce
new information.

Questions

Break

Helpful Tips

- Read other dissertations in your area: ProQuest
- Choose your committee wisely (work with chair, interview potential faculty, consider expertise)
- Involve your full committee as much as possible; be patient and work closely with chair about any confusion
- Make sure your underlying theory is strong
- Identify your research interests early in your program
- Just write something every day
- Set reasonable long and short term goals; reward yourself along the way
- Form or join a writing group
- Visit the Lumberjack Writing Center for feedback
- Attend presentations and workshops on campus: Cline, OGPS, TLC, CHER, etc.
- Recognize and accept when it is "good enough"

Resources

Lumberjack Writing Center

- Dissertation and Thesis Assistance Appointments (5 weeks)
- Individual (or small group) writing support appointments in person or online
- Drop in support (online and at Cline) 9-11am on Wednesdays

Cline Library

- Discipline specific research support
- Proquest

Office of Graduate and Professional Studies

- Graduate student roadmaps
- Canvas thesis and dissertation format courses

University Ombuds Office

 Offers support to graduate students to address concerns that impact their work, life, or study at NAU

Questions