

PSYCHOLOGY GRADUATION WITH DISTINCTION THESIS WORKSHOP
Spring 2018
Wednesday 1:40-4:10 PM
Languages 109

Instructor:

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Office hour by appointment
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Course Description:

Conducting and interpreting research in psychology can be fun, challenging, and very rewarding. This course is meant to provide you with the deeper understanding of the process of conducting psychological research that can only come from taking the responsibility to complete your own project successfully.

In this course you will be introduced to all aspects of formulating, pitching, conducting, and communicating a Psychology research project, including:

- Crafting and “pitching” a research question
 - Understanding the purpose and form of each component of a research paper
 - Optimally presenting your project in oral form, poster form, and as a written research paper
 - Learning to write a research-based grant/scholarship proposal
 - Appreciation of the process of publishing an article, including peer review
 - Appreciation of ethical dilemmas in research
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Learning Objectives:

As psychology students who wish to graduate with distinction in your major, this workshop is meant to help you:

1. to successfully complete and communicate your honors project;
2. to get the most out of your experience conducting a study for which you are primarily responsible and for which you have the collaborative supervision of your mentors;
3. to critically think about, and give feedback on, important questions in psychology and neuroscience, and the research and publication process; and
4. to prepare you for further study in psychology by giving you a sense of what it is like to be a student in a psychology graduate program; or , alternatively

to help provide you with a comprehensive perspective on inquiry in the behavioral sciences that might be applicable to any career path you choose.

Course Requirements:

- Class attendance, readings and written exercises when assigned, and participation in discussion
 - Preparing and giving a PowerPoint-based oral presentation of your thesis
 - Preparing a scientific poster of your research and presenting it at the annual Visible Thinking fair
 - Preparing a written proposal for a follow-up research project
 - This is a “no laptop” class, unless you are specifically told to use one
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Grading:

This is a full-credit graded course. On the one hand, successful completion (i.e., not failing) this course is an obligatory component of your honors thesis. If you do not perform satisfactorily, you will fail this class and will not be able to obtain a Graduation with Distinction. On the other hand, the grading of this course is independent from your thesis work, in that we are not evaluating your GwD thesis project in this class. Rather, the course grading will be based on a number of written and presentation assignments that are related to your thesis but could apply to any other research project. ***All written assignments that are due for a particular date must be submitted on Sakai by midnight the day before.*** There is no final exam or single “big paper”. The following is the grading breakdown (for more information, see the detailed syllabus below):

Graded assignment 1: 10% of grade (research question statement)

Graded assignment 2: 5% of grade (“key researcher” historical vignette)

Graded assignment 3: 10% of grade (opening paragraph and title assignment)

Graded assignment 4: 25% of grade (full introduction with meta-commentary)

Graded assignment 5: 5% of grade (thoughts on peer review)

Graded assignment 6: 5% of grade (thoughts on replicability and open science)

Graded assignment 7: 5% of grade (ethical dilemmas in research)

Graded assignment 8: 10% of grade (*new* research question statement)

Graded assignment 9: 25% of grade (significance/innovation of grant proposal)

IMPORTANT DATES/DEADLINES:

April 19 – Visible Thinking poster session

April 19 – Last day to defend and turn in 2 copies of thesis *if nominated for Zener Award*.

April 26 – Deadline for all students *not* applying for Zener Award to defend thesis

May 1 – Final bound copy of thesis due to the DGS Office

Remember that you need to turn in your paper to your committee **one week before** your defense!

Expectations:

You are all enrolled in this course because you intend to graduate from Duke with a distinction in Psychology. This course will provide you with guidelines, feedback, and resources that will help you complete an honors thesis that will meet the expectations of the department and that will be the culmination of your undergraduate academic career. It will also provide you with an understanding of how you would formulate a research-based grant or fellowship application, for example in graduate school studies. We hope that you will strive to produce a publication-worthy project that will further your research career and be a source of great pride. We expect that you will make the most out of the resources and suggestions provided in this workshop, and we expect for you to take initiative to work independently and consistently on your project throughout the year.

Readings:

General Reference Texts (available at Duke Libraries):

American Psychological Association (2009). *Publication Manual of the American Psychological Association* (6th. Ed .) APA: Washington, DC .

Sternberg, R.J. (2000). *Guide to publishing in psychology journals*. Cambridge University Press: New York

Downloadable text:

Ethical Principles of Psychologists and Code of Conduct

<http://www.apa.org/ethics/code2002.pdf>

<http://www.psychologicalscience.org/observer/the-science-of-scientific-writing#.WGxVf7Yrj-U>

Available on Sakai:

“The Graduation with Distinction Basics” resource guide (the GwD Handbook)

Many additional selected readings will be given to you during the term and posted on Sakai.

Class Schedule:

DATE	TOPIC/ASSIGNMENTS
01/17	<u>Assignment for this class:</u> read the GwD Handbook prior to this class Topic 1: Introductions, syllabus review, class expectations, etc. (Also: introducing the Duke Reader Project)

	<p>Topic 2: Graduate School – how to get in and flourish (We discuss components of grad school applications and issues you face when getting there)</p> <p><u>Assignments for following class</u> Graded assignment 1 (10%): Read Evans (2007) chapter, plus my slides (“Crafting a research question.ppt”) and write a succinct draft (max. 8 sentences!) of your research question/project (What? Why? How?), which you will submit to Sakai and present orally as an “elevator pitch” in the next class. Submission deadline on Sakai is midnight before class. <u>Also:</u> Read the Bem chapter and Kording & Mensh paper on writing an empirical research paper, and the Kendall et al. chapter on crafting an Introduction.</p>
<p>01/24</p>	<p>Topic 1: Elevator pitch of your research question (Students present and critique elevator pitches in class)</p> <p>Topic 2: Topic: The anatomy of a research article and Introduction writing (Overview of writing a good article, with particular emphasis on crafting an optimal introduction)</p> <p><u>Assignment for following class</u> Graded assignment 2 (10%): Employ one of the discussed strategies to write an opening paragraph for your thesis introduction (2-4 sentences). Moreover, read the Sternberg book chapter on crafting a title and abstract, and come up with a cool potential title for your paper. You will present your opening gambit and title in the next class. Submission deadline on Sakai is midnight before next class.</p> <p><u>Also:</u> Read the Reis book chapter on writing effectively about experimental design, the Salovey chapter on crafting a Results section, and the Calfee chapter on writing a Discussion section.</p>
<p>01/31</p>	<p>Topic 1: “Drawing them in” – your article’s title and opening paragraph (Students present possible titles and opening gambits for their introductions)</p> <p>Topic 2: How to write Methods, Results, and Discussion sections (Overview of important considerations for writing a great research paper)</p> <p><u>Assignment for following class</u> Read the following articles on peer review:</p> <ul style="list-style-type: none"> - Walsh et al. 2000.pdf - http://www.psychologicalscience.org/observer/twelve-tips-for-

	<p>reviewers#.WGxYZbYrJ-U</p> <ul style="list-style-type: none"> - https://www.washingtonpost.com/news/morning-mix/wp/2015/03/27/fabricated-peer-reviews-prompt-scientific-journal-to-retract-43-papers-systematic-scheme-may-affect-other-journals/?postshare=3741427469958229&utm_term=.c4caa4cbc907 - http://www.sciencemag.org/news/2015/08/pubpeer-s-secret-out-founder-controversial-website-reveals-himself <p>Graded assignment 3 (5%): Note one potential advantage and disadvantage of blind vs. open peer review practices, and generate one suggestion on how to potentially improve the peer review process. Submission deadline on Sakai is midnight before next class.</p>
<p>02/07</p>	<p>Part 1: Publishing a research article (We discuss the different stages, and associated pitfalls, of getting your research published)</p> <p>Part 2: Peer Review Discussion (We discuss the pros and cons of blind and open peer review)</p> <p><u>Assignment for following class:</u> Read the following articles on the “replication crisis” and on open science projects (the first two are obligatory):</p> <ul style="list-style-type: none"> - Simmons et al. 2011.pdf - Spellman 2015.pdf <p>Optional additional readings:</p> <ul style="list-style-type: none"> - https://digest.bps.org.uk/2016/09/16/ten-famous-psychology-findings-that-its-been-difficult-to-replicate/ - Open Science Collaboration 2015.pdf - Gilbert et al. 2016.pdf <p>Graded assignment 4 (5%): Note one potential advantage and disadvantage of the “open science” approach and generate one suggestion on how to ensure that more replicable findings are published in the literature. Submission deadline on Sakai is midnight before next class.</p>
<p>02/14</p>	<p>Part 1: Replicability/Open Science Discussion</p> <p>Part 2: Key components of a research grant proposal I: Significance, Innovation, Approach</p> <p><u>Assignment for following class</u></p> <p>Graded assignment 5 (5%): Describe an ethical dilemma in conducting</p>

	<p>research that you either have encountered, or could imagine encountering in your work, and how it may be overcome or prevented (5 sentences or so). Submission deadline on Sakai is midnight before next class.</p>
02/21	<p>Part 1: Ethical Dilemmas in Research Discussion Describe an ethical dilemma in conducting research that you either have encountered, or could imagine encountering in your work</p> <p>Part 2: Key components of a research grant proposal II: Significance, Innovation, Approach</p> <p><u>Assignment for following class</u> Graded assignment 6 (10%): Go back to your short project summary, and now add a second part (again max. 8 sentences) that outlines a <i>new, follow-up research proposal</i>. You will present this new proposal as another short “elevator pitch” in the next class. Submission deadline on Sakai is midnight before next class.</p> <p><u>Assignment for 03/07</u> Graded assignment 7 (25%): Write a full introduction to your thesis paper following the structure we discussed in class. For each section or paragraph, write a comment (1-2 sentences) that details the purpose or core message of that paragraph. Submission deadline on Sakai is midnight before 03/07.</p>
02/28	<p>Elevator pitch of your new research question (Students present and critique elevator pitches in class)</p> <p><u>Assignment for following class</u> Think about what date(s) would suit you for your practice presentation. We will run a lottery for picking slots in the next class...</p>
03/07	<p>Remember: Today is the deadline for submitting your full (and commented) introduction!</p> <p>Part 1: Crafting a poster for a conference presentation (Lecture on “dos” and “don’ts” of poster design, plus we will critique some posters from previous years)</p> <p>Part 2: Scheduling of, and tips on, your practice presentation (Lecture, plus we run a little lottery for picking practice presentation dates, and then go over some basic rules and tips for the presentation)</p> <p><u>Assignment for 03/28</u> Graded assignment 8 (25%): Write a concise statement (max. 4 pages) describing the background/motivation/significance and innovation of</p>

	<p>your proposed study. For each paragraph/section, write a comment (1-2 sentences) that details the purpose or core message/argument of that paragraph. Submission deadline on Sakai is midnight of 03/28. Helpful reading: Przeworski & Salomon.pdf</p>
	<p><i>Spring Break</i></p>
03/21	<p>My comments on your introductions will be returned to you today!</p> <p>Topic: Student presentations</p> <ul style="list-style-type: none"> • • • • • <p><u>Assignment for following class</u> Remember that graded assignment 9 is due by midnight of 3/28!</p>
03/28	<p>Remember: your mini proposal (with comments) is due today!</p> <p>Topic: Student presentations</p> <ul style="list-style-type: none"> • • • • • <p><u>Assignment for following class</u> Create a poster based on your research project in powerpoint format and submit to Sakai by 04/04. You will get feedback by 04/11.</p>
04/04	<p>Topic: Student presentations</p> <ul style="list-style-type: none"> • • • • • <p><u>Assignment for following class</u> None</p>
04/11	

	<p>Topic: Student presentations</p> <ul style="list-style-type: none"> • • • • • <p><u>Assignment for following class</u> Remember to get your poster printed before the Visible Thinking fair!</p>
04/XX	Visible Thinking Poster Session
04/18	<p>Topic: Student presentations</p> <ul style="list-style-type: none"> • • • • • <p><u>Assignment for following class</u> None</p> <p>Also: today is the Zener Award thesis submission deadline!</p>
04/25	<p>Topic: Reflection on what we've learned in this class</p> <p>Also: today is the last day to defend your thesis!</p>
04/30	Final day to submit bound copy of thesis and final PDF to the Undergraduate Studies Office.