Course Overview and Goals

The Senior Project is a capstone project: the culminating piece of your academic work here at Allegheny. This project is an opportunity to experience every aspect of psychological research, from the inception of ideas to the presentation of the completed project in the form of an APA-style article and a poster or a talk. Importantly, this is a time for you to explore a research question that is interesting, novel, substantive, and, above all else, your own. Some will choose to complete projects that require experimental designs, others will complete survey research or oral interviews and yet others will approach questions through the analysis of extant literature without collecting data. This syllabus outlines the process for completing a one-semester project worth 4-credits.

Psychology Department Learning Outcomes

In this Senior Project you should be able to demonstrate that you can:

- Evaluate and use current theoretical and research trends in psychology
- Design and implement a research study including the development of hypotheses that are testable within the context of acceptable research strategies
- Recognize the ethical aspects and implications of psychological research and practice
- Synthesize information arising from different sub-areas of psychology
- Understand the application of psychology to personal and social issues
- Recognize and understand the complexity of sociocultural diversity

...by demonstrating

- An understanding of the various models of behavior (e.g., psychodynamic, behavioral, cognitive, biological, etc.);
- Knowledge of the sub-areas of psychology;
- Knowledge of various strategies for developing knowledge in psychology;
- Knowledge of recent trends in psychology;
- Knowledge of theory in at least one sub-area of psychology

To achieve the above, you need to accomplish the following (as applicable):

- Develop a detailed timeline with sub-goals
- Review the basics of the scientific method and research methods in Psychology (now PSY 206) with an eye towards the data analysis tools you will need to use (now PSY 207)
- Present, refine and finalize your research question(s) and hypotheses, including operational definitions
- Review the setup, structure, and style of a psychological research paper written in APA-style
Complete your literature review  
Collect or create your experimental or study materials (instruments, scales, tests, stimuli, pilot tests, etc.)  
Write a research proposal consisting of an Introduction, a Methods section, and an Appendix consisting of all study materials and stimuli - note, you may use your Junior seminar proposal as a starting place  
Possibly pre-register your comp proposal with the Open Science Framework, or AsPredicted  
Defend your proposal in a pre-comp oral, at this point we will agree on the final project and what is expected of you  
Submit your IRB proposal (must be done after the pre-comp oral), possibly revise and resubmit until approval  
Familiarize yourself with SONA, if necessary, and set up a researcher account  
Possibly begin data collection or collect pilot data to test methodology  
Collect data  
Review JASP and data analysis steps  
Analyze your data  
Write the Results and Discussion sections  
Turn in a draft of the completed comp to your first reader (and possibly your second reader)  
Turn in a final version to both of your readers  
Submit your work as a poster or talk to the Western Pennsylvania Undergraduate Psychology Conference (WPUPC) to be held in late April at a local college.  
Present your completed project to your committee (“post-comp oral”)  
Follow steps after comp defense to submit project to DSpace  
Write end-of-semester reflection and self-evaluation (see your first reader for requirements)

Grading

The grade for Psych 620 will consist of the following components:

1. **Project management (pre-comp oral, IRB proposal, reflection, and Scientific Scholarship (30%):** How well and how independently is the project managed overall? This involves the effort put into the project, solving problems that arise, being proactive and working consistently, active attendance at weekly meetings, seeking guidance when appropriate, staying on top of the project, etc. As applicable, this also involves how independently you approach data analysis – are you reading about your tests and giving it a solid try before coming to me? Are you proposing a draft of a Results section before asking for feedback? Are you getting drafts of Results and Discussion in to me to allow for enough time to get feedback? As a part of this students are required to submit a 1-2 page written reflection of their project management and scientific scholarship alongside the final written document each semester.

2. **Comp oral (20%):** How well prepared are you for your meeting? How well, and how critically, can you discuss your project’s idea, execution, results, interpretation, limitations, and future directions? How proficient are you in foundational theories, ideas, concepts, studies, etc. in Psychology, especially as they pertain to your work? Are you aware of and can you discuss the ideas of other experts on your topic? How scientifically and methodologically proficient are you (e.g. are you accidentally calling a correlational study an experiment? Do you know what r means? Is your study’s title implying causation when your methodology doesn’t allow for that?) How well can you reflect on the entire comping process and your growth and learning?

3. **Written document (50%):** This is the final version of your project. This is due by the deadline posted on the Psych Dept. website. This final project will be evaluated based on how well-written and complete the paper is, how well it follows APA-style (including correct reporting of analyses), how much of the feedback from the pre-comp oral was incorporated, and whether it is submitted on time.

Failure to submit your final paper by the deadline will result in a grade penalty of one-third of a letter grade for each 24h period the paper is late. To avoid such penalties, you should discuss with me the possibility of an extension as soon as it becomes clear that documented extenuating circumstances keep you from completing your project on time. Please note that such extensions are subject to departmental vote.
Resources

Located on the Psychology Department website you will find general information about The Senior Project including information about final deadlines, late penalties, data analysis in JASP (including detailed videos and guides), and writing the project. Please review these requirements and expectations. When you have a problem or question, check the website first and then ask me. The information below describes the expectations specific to this section of Psychology 600.

Your primary contact should always be your first reader for any questions or concerns. Your second reader typically will read your proposal before the pre-comp oral and give ample feedback then before reading the final version right before your comp oral. Some second readers may wish to be more involved, but you should expect to reach out to your second reader only after consulting with your first reader.

For empirical comps: After consultation with your first reader, you may also consult with Prof. Normile on preparing for and conducting your statistical analyses in JASP, how to interpret them, etc. Please be aware that these consultations should not all happen during the week before Senior Projects are due.

Expectations

Independent and consistent work. This is an independent year-long project and as such it is expected that you make consistent progress on your project in line with the specific timeline you develop at the beginning of the semester which should address the goals outlined at the beginning of this syllabus. Although general guidelines for milestones are provided, with the exception of the final due dates, there are no hard and fast deadlines that apply to everyone. Consistent progress on drafts, IRB/ARC proposal, study materials, data analysis, etc. is expected and you are evaluated on your project management. As your first reader, I am here to help, encourage, advise, and mentor you, consult with you, and evaluate your work, but not to make sure you do it or do it for you.

Comp group attendance/ regular check-ins with your first reader. Generally, we will meet weekly as a comp group (students with the same first reader will meet) to discuss the progress you have made, the questions you have, and what you want to accomplish in the week to come. Comp group is not optional, it is a vital part of your experience. Because we will often do peer reviews, give feedback on each other’s work, and discuss common questions, regular attendance or check-ins are mandatory. In fact, this is part of your Senior Project management grade discussed above. In addition to the regular meetings/check-ins, you are expected to initiate regular communication with your first reader (not vice-versa) and respond to their emails in a timely manner.