

Psychology 360-361
Research Experience in Psychology I & II
Winter, 2018

Course Instructors:

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Other Faculty Mentors:

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Courses Meet:

Psyc 360: Tuesdays, 6th, SMAC E-116
Psyc 361: Thursdays, 6th, SMAC A-107

Course Description

This course is a two-term research-based experience in which students conduct an independent research project. Regardless of your plans for after Knox, the senior research project you conduct will provide you with concrete evidence of your ability to find information, analyze data, and communicate difficult material to other people.

Most of our efforts during the first term (360) will be geared toward getting you started on your senior research projects, whereas the second term (361) you will be primarily occupied with carrying out the project and analyzing the resulting data.

The department has already assigned you to a faculty mentor, with whom you will spend two terms working on your research project. All work conducted for this class should be turned in to the mentor, and s/he is primarily responsible for guiding you through all of the various steps of this class. The professor running this seminar is only responsible for organizing some of the experiences had by all the senior research project students. Naturally, there will be some variations among what different mentors will expect of you, and they are free both to make assignments in addition to those listed below and to set additional deadlines for the completion of work. All grades will be assigned by your mentor. Despite differences across mentors, all members of the psychology department agree on the essential requirements for the class, the minimal methodological requirements for the study, and a general philosophy of grading your work.

Essential Requirements

Psychology 360

By the end of this term you will have completed the Introduction & Method sections of your research paper according to the guidelines established by the American Psychological Association Publication Manual (6th Ed.).

Psychology 361

By the end of this term, you will have successfully submitted an ethics proposal to the Institutional Review Board (IRB), completed the collection and analysis of your data, written a finished, article-length research paper in APA format, and made a poster presentation of your work to the psychology department faculty and other students in the department. It is also expected that you will present the results of your research at the ILLOWA undergraduate psychology conference in April, 2018.

Methodological guidelines

The Psychology Faculty has agreed that senior research projects will have at least one of the following methodological components:

- 1) The study is a true experiment in which an independent variable is manipulated to observe its effects on a dependent variable. A study considering race, gender, etc. as the independent variable does not meet this requirement, as such variables are not manipulated by the experimenter.
 - 2) The study is a quasi-experiment or correlational study that includes a difficult-to-obtain sample, i.e., a sample other than college students or rats. For example, the student may use children, elders, adults receiving mental health services, college students outside of North America, etc. as subjects.
 - 3) The study is a quasi-experiment or correlational study in which one of the main variables is operationally defined by using a method that the student has devised. This might involve the construction of a new questionnaire, coding system, etc. The student must also test the reliability of the measurement that s/he has devised.
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Grading philosophy

The Psychology Faculty agree that the following variables are involved in assigning grades for Psyc 360/361. Individual mentors may of course put different weight on variables, or may add other requirements for their students.

- 1) Working Independently. We expect students to show self-motivation and the ability to engage in the various aspects of the project without the mentor overseeing every detail. Projects in which the mentor finds him/herself doing much of the work will be considered less acceptable. However, note that we expect and encourage you to frequently ask us for help and advice; we just don't expect to do the work for you.
- 2) Ambitiousness and Creativity of the Project. Higher grades will be awarded to projects involving a broader scope, more work in the running of subjects or the design of methodology, or theoretically ambitious projects testing novel ideas via creative means.
- 3) Quality of Writing. We expect all work to follow the publication manual of the American Psychological Association (6th Ed.) that is on reserve in SMAC library. Further, papers should be grammatically correct, free of typographical errors, well organized, clear, and concise. Furthermore, all drafts of papers need to follow the Psychology Department Writing Policy available at:
http://departments.knox.edu/psychdept/Psych_Writing_Policy.html
- 4) Completion of All Assignments. Although some of the assignments and sub-assignments in this class are essentially ungraded, we expect students to complete all requirements. That is, they must: (a) meet all deadlines set by individual faculty mentors, (b) complete required course readings, (c) make a poster presentation (361 only), (d) attend poster presentations on days they are not presenting (all students), and (e) turn in papers at the end of each term.
- 5) Promptness. We expect students to be on time for meetings with their mentors and for their presentations, and to turn in assignments on the dates set by the mentor.
- 6) Effort and Diligence. We expect students to continue to work hard and persist at the project.
- 7) Statistical Significance. Finally, one factor that will **NOT** affect your grade concerns whether your hypotheses are supported. Thus, you will not be graded down if your results are non-significant. Conversely, you will not necessarily receive a good grade if your hypotheses are supported. Note however that projects that are well thought-out and that are well executed methodologically are more likely to yield significant results, and thus may receive higher grades for this reason.

Grading in the First and Second Terms

Around the *middle* of the first term, mentors will informally provide students with a **tentative** mid-term grade. At the *end* of the first term of senior research, the mentor will again informally provide students with a **tentative** grade. If the work to date is satisfactory, the student's grade will be recorded as P (for passing, or satisfactory). If the work to date is judged to be **not** satisfactory, the student will receive the letter grade (C- or lower) that the faculty member assigns.

Around the *middle* of the second term, mentors will informally provide students with a **tentative** mid-term grade. At the *end* of the second term of senior research, if a student received a P for the first term, the mentor will replace the P for 360 with a final letter grade and will assign a final letter grade for 361. If a student received a letter grade for the first term (i.e., a C- or lower), *that letter grade will remain on the student's transcript* and a final grade will be assigned for the second term. (In the case that the capstone involves a college requirement that must be a C or higher, the grade from the second term will be the one used to meet this mark.)

Relevance to Departmental Learning Goals

The psychology department has seven goals that inform its curriculum. PSYC 360/361 works towards five of these goals. First and foremost, the course will help students “effectively and ethically apply the scientific method to studying the mind, the brain, and behavior” (Goal 1), as the process you will undertake is primarily about how to design and conduct a research project that meets standard ethical principles. Second, the course will help students “successfully search the scientific psychological literature to find existing work that can inform the specific claims they are making” (Goal 2), as this process is fundamental to what you will do in PSYC 360 as you read the literature about your topic and develop a hypothesis. Third, the course will help students to “select and conduct appropriate statistical tests in order to empirically test a claim” (Goal 4), as all projects will be empirical in nature and require statistical testing. Fourth, the course will help students to “effectively communicate with clear, grammatically-correct writing that conforms to APA style” (Goal 5), as you will go through multiple drafts of all sections of your paper and receive frequent feedback on your writing. Fifth, it will help students to “make effective oral presentations that are clear, well-organized, and interesting” (Goal 6), as you will have to present your work in a poster session and briefly present on your topic in the combined 360 class.

Helpful Resources

The department has developed a website with a variety of helpful and necessary resources for students conducting research: <http://departments.knox.edu/psychdept/studresinfo.html>. The website includes information concerning how to recruit subjects, forms for obtaining ethics approval, information about writing well and in APA format, and other resources. If you are running a lab study in which you will come into direct contact with human subjects, make sure to read the section concerning safety guidelines.

Course Schedule: Psychology 360

During the term, you will meet primarily with your mentor, whom you should contact early in the term to set up meeting times. In addition, we will meet as a class a few times throughout the term. All class meetings will be 6th hour (2:40-3:50) Tuesday in Room E-116 SMC.

Week of (Tuesday):	<u>Meetings</u>	<u>Assignments / Progress Guide</u>
January 9	Class meeting: Introduction to Senior Research	Meet with faculty mentor about your meeting/task schedule for the term
January 16		
January 23		
January 30		
February 6	Class meeting: Mid-term check-in	<input checked="" type="checkbox"/> Give brief presentation on progress
February 13		
February 20		
February 27		
THURSDAY, March 1	Attend Poster Session	
THURSDAY, March 3	Attend Poster Session	
FINALS		Final papers due; due date set by individual mentors

Notes:

- Class presentations will be informal and brief (approximately 5 minutes). For each presentation, you will describe what you have done so far for your project, and let us know your plans for the coming weeks.
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During the term, you will meet primarily with your mentor, whom you should contact early in the term to set up meeting times. In addition, we will meet as a class a few times throughout the term. All class meetings will be 6th hour (2:40-3:50) Thursday. Some will take place in Room A-107 SMC; others will be held in a computer lab.

Week of (Thursday):	<u>Meetings</u>	<u>Assignments / Progress Guide</u>
January 4	Class meeting: Introduction to Senior Research	Meet with faculty mentor about your meeting/task schedule for the term
January 11	Qualtrics Workshop (Hertel) (CAT Lab)	
January 18	No Meeting	
January 25	Class meeting: SPSS Review (CAT Lab)	
February 1	No Meeting	
February 8	Class meeting: APA Format and Writing Results (McAndrew & Hoffmann)	
February 15	Class meeting: Workshop on Making Posters (CAT Lab)	
February 22		
March 1	Poster Session I	Poster presentation
March 6 (TUESDAY)	Poster Session II	Poster presentation
FINALS		Final paper due; date set by mentor
