

Research Focused Honors Program: Semester I
Psychology 404
Spring 2011
Location: PSYC 2102
Time: Tuesdays and Thursdays, 3:00pm – 4:15pm

Instructor

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Overview of the Research Focused Honors Program

The purpose of the Research Focused Honors Program (RFHP) is to provide instruction and guidance to outstanding undergraduate psychology majors on how to conduct an independent empirical project. Each project will be designed and carried out under the close supervision of a faculty member. As a participant in this program, you will be enrolled in a two-semester seminar (PSY 404 and 405) during the spring semester of your junior year and the fall semester of your senior year. You will also enroll in PSY 391H (under the supervision of your faculty advisor) for the spring semester of your junior year and PSY 498H for the fall and spring semesters of your senior year.

The major tasks in this program are organized in the following sequence:

1. Spring semester junior year is devoted to learning the literature relevant to your project, defining and designing an independent empirical project in close consultation with your faculty advisor, and submitting an IRB proposal.
2. Fall semester senior year is devoted to collecting and analyzing data. In addition we will discuss various issues relevant to pursuing a career in psychology (e.g., graduate school admissions).
3. Spring semester senior year is devoted to fulfilling three requirements: (1) completing your independent research project, (2) writing a formal APA-style thesis, and (3) presenting your research project at a poster session held by the Department of Psychological Sciences.

There will be a number of assignments and activities in the RFHP seminar to help you develop your skills as a researcher. Students in this seminar are working in different areas of psychology (e.g., behavioral neuroscience, cognitive psychology, clinical psychology, industrial/organizational psychology, social psychology), and therefore our discussions will focus on developing research skills rather than learning about specific content areas.

Goals of the RFHP Seminar

The ultimate goal of this seminar is to help prepare you for a career in psychological research. Therefore the aims of this seminar differ from those of typical undergraduate courses. We will focus heavily on hands-on training about how to conduct research. Your major aims are to:

- Learn what steps one takes to conduct an independent research project, such as how to master the existing research literature relevant to your project, how to design a project that allows you to make appropriate inferences, how to seek and obtain IRB approval, how to design and carry out appropriate methods, and how to analyze data and draw appropriate conclusions.
- Discuss various considerations in identifying a career goal. This involves defining your areas of interest, defining your career goals, contacting people who can help you learn more about potential career paths, and taking steps to pursue a career (e.g., preparing parts of a graduate school application, preparing a resume).
- Learn how to present yourself in professional research settings. This involves developing effective self-presentation and communication skills. We will discuss and practice how to summarize your research in a concise, precise, jargon-free, and understandable manner, how to address challenging questions, how to give research presentations at professional conferences, and how to display professional behavior in general.

Be proactive. I will not spoon-feed you information, or hold your hand through each requirement, or tell you repeatedly what to do. I expect you to be highly motivated to learn and to take responsibility for your honors project. Unlike your other undergraduate courses, the point of the RFHP seminar is not merely to do what is necessary for a good grade. The real point is to attain the skills you need to advance your research career. To do well in this seminar, you need to exhibit the levels of intrinsic motivation and discipline that will be necessary to succeed in graduate school and beyond.

But remember that this is an undergraduate course. Thus you are responsible for observing the policies, rules, and regulations as stated in the Purdue University Regulations, Part 5 – Student Conduct (for a detailed description see http://www.purdue.edu/univregs/pages/stu_conduct/stu_conduct.html). It is expected that anything you specify as your own work is truly your own work. Dishonesty in academic work will not be tolerated and may result in a failing grade for this course as well as other actions by Purdue University.

Structure of the Seminar

This is a seminar, not a lecture course, so I will not "lecture" in the traditional sense. My job is to guide and facilitate class discussions. Therefore you should come to class every day prepared for active participation in discussion.

Requirements, Assignments, and Grades

First regarding grades: You should expect to get an A in this seminar and consider anything less poor performance. An A indicates that you are making excellent progress with your honors project and you are ready to move on to PSY 405 in the fall semester. With that in mind I have established this scheme for determining grades:

Grade	Requirements
A	You meet or exceed <u>all</u> expectations in the seminar, including active participation in class, completion of all in-class presentations, and completion of all assignments on time. You are making excellent progress and are well on your way to completing your honors thesis project.
B	You fail to meet all of the expectations in the RFHP seminar.
F	You do not meet any requirements in the program.

Class participation is critical. Remember, the goal of this class is to sharpen your skills as a researcher and scientist. Scientists participate in class! Scientists engage in the active exchange of ideas, and that's what you're doing when you participate in class.

There will be several specific assignments and activities throughout the course. Here are some major assignments to put on your radar:

- Assignment 1: Present key article, present your advisor's research
- Assignment 2: Identify relevant literature, create Master reference list
- Assignment 3: Define a project with advisor, turn in Project Summary
- Assignment 4: Present honors project
- Assignment 5: Submit IRB proposal (if needed)
- Assignment 6: End of Semester: Turn in a draft of your Introduction and Method sections, signed by your advisor

I will give you details about these assignments and activities throughout the semester.

Good Textbooks

There are no required textbooks for this seminar, but here is a list of texts you might find helpful as you work toward completing your honors project:

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th Ed.). Washington DC: American Psychological Association.

****Important Note:** The 6th edition of the APA manual came out in 2009 and it is rife with errors and typos. I don't recommend purchasing it. Stick with the 5th edition, or wait until the 6th edition is fixed, or just get a library copy if you need it.

Cone, J. D., & Foster, S. L. (2006). *Dissertations and theses from start to finish* (2nd Ed.). Washington DC: American Psychological Association.

****This is a pretty good practical guide for doing exactly what the title says: completing your thesis project from start to finish. It's only about \$20 on Amazon. I am not requiring it because a lot of the material is not directly relevant to the class, but you may find it useful as a resource.**

Kachigan, S. K. (1991). *Multivariate statistical analysis: A conceptual introduction*. New York: Radius Press.

****This is an outstanding statistics book written with the goal of conceptual understanding in mind. And it's paperback and only about \$20 on Amazon. There is also a more expensive (\$60) version that covers more topics.**

Shadish, W. R., Cook., T. D., & Campbell, D. T. (2001). *Experimental and quasi-experimental designs for generalized causal inference*. New York: Wadsworth.

****This is a "gold standard" graduate-level book on research methods and experimental design. Though it's a graduate book, I think you will find it accessible. I can recommend other research methods books if you wish.**

Strunk, W., & White, E. B. (2008). *The elements of style*. New York: Longman.

****If you own only one book about writing, this should be it. In 2008 a 50th Anniversary edition was published. I prefer older editions (newer editions contain strange revisions) and you can probably find older used copies online.**

Tentative Schedule of Topics and Assignments

Week	Dates	Topics	Reading
1	1/12 – 1/14	Orientation / Scholarship	Lord (2003)
2	1/19 – 1/21	Idea Generation	
3	1/26 – 1/28	Mastering the Literature	
4	2/2 – 2/4	Assignment: Present Key Article	
5	2/9 – 2/11	Assignment: Present Key Article	
6	2/16 – 2/18	Assignment: Present Key Article	
7	2/23 – 2/25	Research Methods	
8	3/2 – 3/4	Research Methods	
9	3/9 – 3/11	Research Methods	
10	3/16 – 3/18	<i>(No Class – Spring Break)</i>	
11	3/23 – 3/25		
12	3/30 – 4/1	Assignment: Present Honors Project	
13	4/6 – 4/8	Assignment: Present Honors Project	
14	4/13 – 4/15	Assignment: Present Honors Project	
15	4/20 – 4/22	Assignment: Present Honors Project	
16	4/27 – 4/29		
17	5/4 – 5/6	Paper is due (Intro + Methods)	

***This schedule and the procedures in this course are subject to change in the event of extenuating circumstances.*