

# Experimental Methods

## PSY 310, Spring 2016, CRN#22484



**INSTRUCTOR: Dr. Michael C. Hout**

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Office: Science Hall, 309

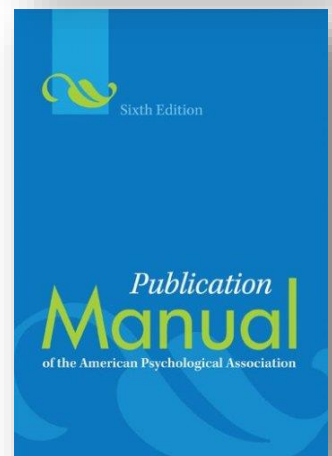
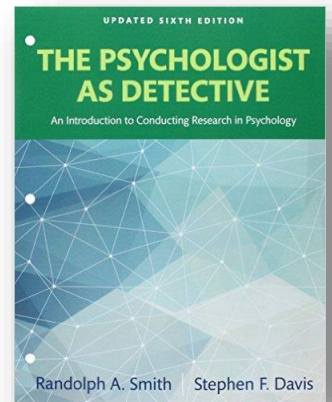
Office hours: Wednesday 4 – 5pm; Thursday 4 – 5pm (or by appointment)

**Please review this syllabus and Canvas before you send an email!** Most of your questions can be answered using this document.

### COURSE MATERIALS:

**1a) Textbook and Revel Package (required):** “The Psychologist as Detective: An Introduction to Conducting Research in Psychology” by Randolph A. Smith and Stephen F. Davis (6<sup>th</sup> Edition). I may also periodically assign research articles or other readings (or podcasts to listen to), all of which will all be posted on Canvas (freely). Note that only the Revel system is required, as it comes with an electronic version of the text. A 3-hole punch version of the text can be purchased for a few extra dollars. Do NOT buy the hardcover version as it is unnecessarily expensive! The whole thing should cost no more than \$80. ISBN: 9780134225739.

**1b) Handbook (recommended):** Publication Manual of the American Psychological Association, 6<sup>th</sup> Edition. This will greatly assist you in writing your APA style papers in the laboratory section of the



course. Much of the information, however, is also freely available on the internet.

**2) Canvas:** Everything you need to know about this course can be found on Canvas at <https://learn.nmsu.edu>. This includes the syllabus, grades, readings, and all other course material. I will also post announcements occasionally. Content on the Canvas site will be updated constantly as we progress through the course. It is your responsibility to check Canvas on a regular basis! That means once per day (preferably in the morning, especially on days when you have class).

**3) Study Resources:** I very strongly encourage you to make friends in this course. Other students (particularly but not necessarily those in your group) can often be helpful study partners. If you encounter any difficulties keeping up with the course content, come to meet with me sooner (rather than later). I'm happy to help out, but be prepared to meet with me, and leave adequate time before the next exam, end of semester, etc.

**4) Pre-requisites:** For this course, you need to have taken STAT 251G, STAT 271G, or A ST 311. If you have not taken one of these courses (and passed it successfully) then you will be at a severe disadvantage in my class.

### **COURSE GOALS (tangible skills I want you to develop in this course):**

This course is designed to provide you with an introduction to the methods that are used to conduct scientific research. Its primary goals are to: (1) teach you the basics of designing, conducting, and communicating psychological research; (2) encourage you to become a critical consumer of basic and applied research; (3) provide you with hands-on research experience; and (4) teach you the basics of using information technology to conduct research and to interpret and present research results. Although the emphasis will be on the application of methodological principles to research problems in various areas of psychology (e.g., cognitive psychology), we will also consider the implications of methodological principles for “real world” research issues.

Beyond learning the material, there are several skills that I want you to gain or develop in this course. This will not be a typical, lecture-based course (more on this below) wherein you come in, sit and listen to me blabber on each week, regurgitating what you've read in the textbook. You will not be hit with a litany of quizzes and tests either; these things will be used lightly to evaluate your progress in the class. So what do I want you to get better at? In short, skills that will serve you as students and as professionals (once you are done with your degree). It's unlikely you'll move on from your degrees and end up sitting in lecture halls or taking exams on a regular basis. So, let's work on building various skill sets that you may actually come to use.

“Such as what?” you may ask. Good question, you astute and good-natured academic! There are a couple of skills I want you to work on, and I’ve structured the course (which I elaborate upon below) in such a way so as to help you with those skills. Specifically, there are three things that I’d like you all to try and work on throughout this class.

**1) Becoming proficient at giving presentations.** Well, this may seem to be a boring or simple one. Many of us have taken public speaking courses, or given presentations before. But being a good presenter of scientific/philosophic information is about far more than regurgitating what you read in a textbook. In this course, I want you to practice synthesizing complicated / scientifically rigorous information into a manageable “bite size.” I want you to learn to give presentations that are concise, and that hone in on the most important and stimulating aspects of the material you are to present. I want you to be able to present information in an interesting, lively, and fun manner. And I want you to be able to structure a presentation to fit a limited time period, and to stimulate the thinking of members of your audience. These are the skills needed for professional teachers, counsellors, or scientists. Think of condensing a textbook’s worth of material into a semester long course, explaining a new treatment program to a patient, or presenting a year’s worth of research in a 15-minute presentation.

**2) Stepping outside of your technological comfort zone.** I also want you to push yourself to take on new mediums or forms of presentation that allow you to convey information in a way you may not have previously tried. We’ve all given Powerpoint presentations before, and we’ve all written papers. But there are lots of other mediums that you could learn, and importantly, that could convey your information in a really engaging way (or to a different audience altogether). For instance, podcasts are taking off in popularity, and are a great way for people to digest information on the go. In your final project, you’ll adopt a podcast style presentation that will convey information in a way that is more engaging than typical classroom presentations. Such formats of science communication often have a way of targeting a different audience (e.g., science enthusiasts but not necessarily those trained in a particular area), of using a different (often more fanciful and conversational) tone, and so on. So, in this course, I’ll push you outside of the realm of prototypical college assignments a bit.

**3) Learning to work efficiently with a collaborator you do not already know.** This one may be cliché, but it’s important. It’s unlikely that you’ll move off to a new job and work with all your BFFs or be entirely on your own in everything you do. Heck, you might end up working with people you don’t particularly like! You’ll do several things in this course in teams, and I’m going to try to pair you with some people you don’t already

know to make it more challenging, and to allow you to learn from each other's differing perspectives.



### **COURSE FORMAT:**

**Lecture section:** This will be effectively a “flipped classroom” course, wherein you are expected to take part in learning outside the classroom (through the Revel system and your book), engage in a variety of activities during class time, and engage in group work (inside and outside the class) throughout the semester. You will NOT hear me lecture on and on throughout this semester. This will be much more of a hands-on class, and in some ways, that makes it more challenging. But hopefully, it will be a much more fun and engaging class than traditional, lecture-based classes you may have taken in the past. On non-activity days (see schedule, below), attendance is strongly encouraged, but not required. On activity days, attendance is required, and absences must be cleared with me (and your group members!) ahead of time, should they be necessary. Your lecture grade will constitute 65% of your overall grade in this course.

**Laboratory section:** It is very important that you attend the laboratory section for which you are registered. Attendance is mandatory, as the labs are an integral part of your educational experience. They are designed to give you hands-on experience so that the content of the lecture section will be more concrete. You will learn more about the lab section from your lab instructor, and there will be a separate syllabus for that part of the course. Your lab grade will constitute 35% of your overall grade in this course.

### **ASSIGNMENT DETAILS (all the small print!):**

**1) Revel system and requirements.** Throughout the semester, you will be responsible for reading the material from the book, and for answering a series of multiple-choice questions at the end of each chapter. The online Revel systems merges these two things together, so all of it can be done online. When you register for the system, you'll see your assignments and their respective due dates (which are also on the course schedule, below). The quizzes at the end of each chapter are NOT lengthy or cumbersome. They are simply designed to make sure you are making progress with the material in the course. You are expected to work on these questions alone (i.e., not with your group)! However, one day per section will be dedicated to giving you time to work on these in class. You can bring your laptop to class that day, and plan to work through the questions with me as a resource. I will NOT give you the answers to the questions, of course, but I will be here to work with you and help you understand the material so as to best answer the multiple-choice quizzes. If you do not have a laptop, simply make notes about areas of difficulty prior to the “Revel days” in class, so I can help you face to face (alternatively, you can come to my office hours

and use my computer). I do not want to penalize anyone for not having a laptop, so take advantage of these alternatives if the need arises! Each section's Revel quizzes (e.g., your quiz average for Chapters 1 – 4 for Section 1) will be worth 5% of your grade. So, overall, the Revel quizzes are worth 20% of your lecture section grade.

**2) In-class activities / presentations.** In each section of the class, you will have one (or two) in-class activities to work on. You will be paired with up to 4 other students throughout the semester. I will assign groups, and they will remain constant throughout the semester. On each activity day, the class will be given an assignment to work on. These will be related to the material that is being covered in the current section, and will require you to think critically about the material in the book. These activities will also require group presentations. On the first day of each activity, you'll be given specific details about the assignment, and you will begin working on it in class. You will then have at least 24 hours to work on the project outside of class, with your group, in preparation for your presentation. On the second day of each activity, each group will give a 3 – 5 minute presentation on their group's work. These presentations will be graded using a simple rubric (3 sections, each scored out of 4 points; see below), and each group member will receive the same score, so please work together equitably. Each group member need not be part of the presentation, but must contribute in some way to the activity. The particular duties of each member (e.g., writing the script for the presentation, speaking, etc.) will be left to each group to decide for themselves. Each activity will be worth 5% of your grade, for a total of 30% of your lecture section grade.

**3) Final project / listening parties.** The final project in this class is designed to simultaneously challenge you and entertain the class. I want each team, at the end of the semester, to present an 8-10 minute audiovisual podcast. The basic format of the final presentation should be in the style of a history or science podcast (e.g., "Hidden Brain," "Stuff You Should Know"). I will make examples of these podcasts available on Canvas, but you can also download many of them for free, simply by Googling (or asking me for examples). The basic gist is that you are to present some interesting and fun psychological science to the class. The particular topic is up to you, but you have to have the topic approved by me ahead of time (see course schedule for proposal deadlines). I don't need a formal proposal, you simply need to chat with me (in class, or over email) about the topic on which your group is going to present. I have set aside several class periods for your group to work on this, but you will likely have to do considerable group work outside of class. What I want is for you to present the findings of 2-3 related and interesting research articles. Find a fun and interesting topic, learn about it, and convey that information to the class.

Typically, podcasts are simply auditory in nature, but I'd like this to be a visual presentation as well. Use visuals to convey your information. You can show plots of data from the papers you're discussing, videotape your group discussing the material, present visuals of the experimental setup and/or materials, etc. These do NOT have to be high budget presentations. For instance, dubbing your voice over a Powerpoint presentation is more than sufficient (and easy and free!). The goal is to present material in a really fun and engaging way, and to do so in a medium that you are not universally comfortable with. At the end of the semester, we'll all listen/watch these and will vote on the best ones. The top three best presentations will receive extra credit points.

The final presentation will be graded as a group; every member receives the same score. I will use the same rubric that is used to evaluate activity presentations. The final project is worth 15% of your overall lecture grade, so please take it seriously!

**4) In-class "work days."** As noted in sections 1 and 2, there will be days each section that allow you to work in class on your Revel assignments, or with your group on your final projects. Take advantage of these times set aside! I will always be in class on these days to help you work through your assignments.

**5) Exams.** At the end of each section, you will take an in-class, multiple choice format exam. The form of the questions will follow the Revel quizzes, so it should simply be a natural extension of what you are learning outside of class. The only difference will be that the quizzes are open book, and these exams are not. I will provide bubble-sheets to you, so you do not need to bring them to class. Each exam will be worth 8.75% of your grade, for a total of 35% of your lecture grade. Exams will not be cumulative, with the exception of the optional final (more on this below).

If for any reason you cannot attend class the day of an exam, you must contact me at least 24 hours before class to schedule a make-up exam. I will not require any form of documentation, but please note that the make-up may be significantly more difficult than the standard exam and must be taken within 1 week of the original exam date. Failure to inform me 24 hours in advance or failure to take the exam within 1 week of the scheduled date will result in a grade of zero. This is non-negotiable. If the situation arises wherein you receive a zero on an exam, you are not entirely out of luck. There will not be an official final in this course, but I will allow students to take an optional cumulative final exam (similar to the other exams, but longer) during the official scheduled time (see calendar, below). If you decide to take this exam, you do so at your own personal risk or reward. This exam may be used to replace a zero, or to replace your lowest exam score (reward!). However, if you score lower on the final than your lowest exam score, the grade you receive on the final will replace it (risk!). This may be harsh, but it is designed to encourage

you to make it to every exam, and to do well on the first four (and save yourself the hassle of a cumulative final!).

Curves: For each exam, I will curve each student’s score in the following way. I will take the mean (average) of the top 5% (treating that value as the perfect-score mark), and adjust all other scores accordingly. For instance, if there were 100 students, I would calculate the average for the 5 students who scored the best. Say that average came out to be 95%. I would then bump every student’s score up by 5% ( $95\% + 5\% = 100\%$ ). That way, if an exam is particularly difficult for the entire class, grades will be adjusted accordingly. It also means that the top 2.5% may receive a score over 100% on any particular exam. This is a generous policy, but in practice, it often does little to change people’s scores. The reason for this is that there are often several students who score 100% on my exams. The closer that top 5% gets to a perfect score, the smaller the curve. So don’t rely on the curve to bump up your grade! The main purpose of this curve is to ensure that if I mistakenly make an exam too difficult, the students are not punished for it.

**PRESENTATION RUBRIC**

	<b>Excellent – 4</b>	<b>Good – 3</b>	<b>Fair – 2</b>	<b>Unsatisfactory - 1</b>
<b>Delivery</b>	<ul style="list-style-type: none"> <li>• Holds attention of entire audience with the use of direct eye contact, seldom looking at notes</li> <li>• Speaks with fluctuation in volume and inflection to maintain audience interest and emphasize key points</li> </ul>	<ul style="list-style-type: none"> <li>• Consistent use of direct eye contact with audience, but still returns to notes</li> <li>• Speaks with satisfactory variation of volume and inflection</li> </ul>	<ul style="list-style-type: none"> <li>• Displays minimal eye contact with audience, while reading mostly from the notes</li> <li>• Speaks in uneven volume with little or no inflection</li> </ul>	<ul style="list-style-type: none"> <li>• Holds no eye contact with audience, as entire report is read from notes</li> <li>• Speaks in low volume and/or monotonous tone, which causes audience to disengage</li> </ul>
<b>Content / Organization</b>	<ul style="list-style-type: none"> <li>• Demonstrates full knowledge by presenting with helpful explanations</li> <li>• Provides clear purpose and subject; pertinent examples, facts, and/or statistics; supports conclusions/ideas with evidence</li> </ul>	<ul style="list-style-type: none"> <li>• Is at ease with material, but without good explanation</li> <li>• Has somewhat clear purpose and subject; some examples, facts, and/or statistics that support the subject; includes some data or evidence that supports conclusions</li> </ul>	<ul style="list-style-type: none"> <li>• Is uncomfortable with information</li> <li>• Attempts to define purpose and subject; provides weak examples, facts, and/or statistics, which do not adequately support the subject; includes very thin data or evidence</li> </ul>	<ul style="list-style-type: none"> <li>• Does not have grasp of information</li> <li>• Does not clearly define subject and purpose; provides weak or no support of subject; gives insufficient support for ideas or conclusions</li> </ul>

<p><b>Enthusiasm / Audience Awareness</b></p>	<ul style="list-style-type: none"> <li>• Demonstrates strong enthusiasm about topic during entire presentation</li> <li>• Significantly increases audience understanding and knowledge of topic; convinces an audience to recognize the validity and importance of the subject</li> </ul>	<ul style="list-style-type: none"> <li>• Shows some enthusiastic feelings about topic</li> <li>• Raises audience understanding and awareness of most points</li> </ul>	<ul style="list-style-type: none"> <li>• Shows little or mixed feelings about the topic being presented</li> <li>• Raises audience understanding and knowledge of some points</li> </ul>	<ul style="list-style-type: none"> <li>• Shows no interest in topic presented</li> <li>• Fails to increase audience understanding of knowledge of topic</li> </ul>
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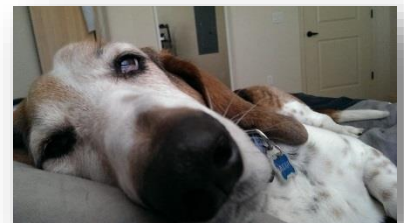
**OTHER IMPORTANT POLICIES:**

**Cell phones:** During class, please turn your phones off, or on silent. Do not check your phone during class. You’re in class. You’re an adult. You pay for this course. So please behave accordingly.

**A comment on scholarships, graduation and the like:** Very often, students come to me and tell me that if they do not receive a certain grade in my course, they are going to lose their scholarship, or they won’t graduate, or they will become ineligible for something or other. Let me be clear: I can relate. I understand how hard it is to succeed in education, to pay for school, etc. I in no way wish for anything bad to happen to anyone as a result of failing my course. But it is your responsibility to get a good grade in my course; it is not my responsibility to give you a good grade. You must earn it. Do NOT ever tell me about these types of concerns. Please. It puts an unfair pressure on me as an instructor, whether it is done intentionally or not. I will never assign a student a grade that s/he did not earn, so please do not come to me saying “I need a grade bump or I will lose my scholarship.” It would be completely unfair to the rest of the class to grant anyone a grade they did not earn. Besides, many of your fellow classmates also have scholarships, graduation concerns, etc. Please keep that in mind.

You may see this policy as cold. I see it as being fair to everyone in the course. If you are worried about something like this and need to drop the course, come to see me early, and we can discuss options for withdrawal, figure out if it is possible for you to pass the course (given your current scores), etc. In this regard, my door is always open. Just do not pressure me to give you a better grade.

**Grade calculation:** Exams are worth 35% of your grade (8.75% each), activities are worth 30% of your grade (5% each), Revel quizzes are worth 20% of your grade (5% per section), and the final





project is worth 15% of your grade. But remember, the lecture section is worth 65% of your overall grade, and the lab accounts for the remaining 35%.

Final letter grades are assigned as follows:

Percentage	Letter Grade
> 97.6%	A+
92.6 – 97.5%	A
89.6 – 92.5%	A-
87.6 – 89.5%	B+
82.6 – 87.5%	B
79.6 – 82.5%	B-
77.6 – 79.5%	C+
69.6 – 77.5%	C
59.5 – 69.5%	D
< 59.5%	F

Incompletes (I Grades): The grade of I (incomplete) is given for passable work that could not be completed due to circumstances beyond the student's control. The "I" grade will not be used to avoid a student receiving a D or F grade.

Formally, the NMSU course catalogue states: "Instructors may assign *I* grades only if the student is unable to complete the course due to circumstances beyond the student's control that develop after the last day to withdraw from the course. Examples of appropriate circumstances include documented illness, documented death, or crisis in the student's immediate family, and similar circumstances. Job related circumstances are generally not appropriate grounds for assigning an *I* grade. In no case is an *I* grade to be used to avoid the assigning of *D*, *F*, *U*, or *RR* grades for marginal or failing work."

### **DISABILITIES:**

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) covers issues relating to disability and accommodations. If a student has questions or needs an accommodation in the classroom (all medical information is treated confidentially), contact:

Trudy Luken, Director  
Student Accessibility Services (SAS) - Corbett Center, Rm. 208  
Phone: (575) 646-6840 E-mail: [sas@nmsu.edu](mailto:sas@nmsu.edu)  
Website: <http://sas.nmsu.edu/>

## **DISCRIMINATION:**

NMSU policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on discrimination issues, Title IX, Campus SaVE Act, NMSU Policy Chapter 3.25, NMSU's complaint process, or to file a complaint contact:

Gerard Nevarez, Title IX Coordinator  
Agustin Diaz, Title IX Deputy Coordinator  
Office of Institutional Equity (OIE) - O'Loughlin House, 1130 University Avenue  
Phone: (575) 646-3635 E-mail: [equity@nmsu.edu](mailto:equity@nmsu.edu)  
Website: <http://www.nmsu.edu/~eeo/>

## **Other NMSU Resources:**

NMSU Police Department:	(575) 646-3311 <a href="http://www.nmsupolice.com">www.nmsupolice.com</a>
NMSU Police Victim Services:	(575) 646-3424
NMSU Counseling Center:	(575) 646-2731
NMSU Dean of Students:	(575) 646-1722
For Any On-campus Emergencies:	911

## **CHEATING/PLAGIARISM POLICY:**

Plagiarism is using another person's work without acknowledgment, making it appear to be one's own. Intentional and unintentional instances of plagiarism are considered instances of academic misconduct and are subject to disciplinary action such as failure on the assignment, failure of the course or dismissal from the university. The NMSU Library has more information and help on how to avoid plagiarism at <http://lib.nmsu.edu/plagiarism/>

## **EMAIL / CONTACT POLICY:**

My typical response time to emails is between 24 and 72 hours. If you don't get a reply, please double check that you have the correct address ([mhout@nmsu.edu](mailto:mhout@nmsu.edu)) and try emailing me again (or stop me in class). I prefer that you send emails to my personal email rather than message me through Canvas. It's easier for me to respond through direct email, and therefore you are more likely to get a speedy response from me there.

**DISCLAIMER:**

This syllabus is subject to change without notice!

**TENTATIVE SCHEDULE:**

Date	Activity	Required Chapters	Deadlines
Wednesday, January 20, 2016	Syllabus Day / Explanation of the Class Format		
Monday, January 25, 2016	Activity 1		
Wednesday, January 27, 2016	Revel Registration / Group Introductions		
Monday, February 01, 2016	Activity 1 (Present)		
Wednesday, February 03, 2016	Activity 2		
Monday, February 08, 2016	Activity 2 (Present)		
Wednesday, February 10, 2016	Revel Day - Work on Revel In Class		Section 1 Revel Assignments Due
Monday, February 15, 2016	Exam 1	Ch 1- 4	
Wednesday, February 17, 2016	Activity 3		
Monday, February 22, 2016	Activity 3 (Present)		
Wednesday, February 24, 2016	Activity 4		
Monday, February 29, 2016	Activity 4 (Present)		
Wednesday, March 02, 2016	Free Day - Work on Final Projects!		
Monday, March 07, 2016	Revel Day - Work on Revel In Class		Section 2 Revel Assignments Due
Wednesday, March 09, 2016	Exam 2	Ch 5 - 7	Final Project Proposals Due
Monday, March 14, 2016	No class - Spring Break		
Wednesday, March 16, 2016	No class - Spring Break		
Monday, March 21, 2016	Activity 5		
Wednesday, March 23, 2016	Activity 5 (Present)		
Monday, March 28, 2016	Ask Me Anything / Grad School Help Day		
Wednesday, March 30, 2016	Free Day - Work on Final Projects!		
Monday, April 04, 2016	Revel Day - Work on Revel In Class		Section 3 Revel Assignments Due
Wednesday, April 06, 2016	Exam 3	Ch 8- 11	
Monday, April 11, 2016	Activity 6		
Wednesday, April 13, 2016	Activity 6 (Present)		
Monday, April 18, 2016	Free Day - Work on Final Projects!		
Wednesday, April 20, 2016	Revel Day - Work on Revel In Class		
Monday, April 25, 2016	Free Day - Work on Final Projects!		Final Projects Due (via email) by Midnight
Wednesday, April 27, 2016	Listening Party #1		
Monday, May 02, 2016	Listening Party #2		Section 4 Revel Assignments Due
Wednesday, May 04, 2016	Exam 4	Ch 12 - 14	
Monday, May 09, 2016	Final Exam: 1-3pm		

\*\*\* Please note: This schedule is subject to change, according to class demands! \*\*\*