

PSY 201A: RESEARCH METHODS

MW 11-12:20; Hopkins 310

F 11-12:20; Moody 116

Instructor:

Ian MacFarlane, Ph.D.

Hopkins 329; 903-813-2347

imacfarlane@austincollege.edu (best way to contact me)**Office Hours:**

T 9-10, 3-4; Th 10-11, 2-3; or by appointment

Course Description:

The purpose of this course is to provide an overview of research methods and presentation of results used in the field of psychology. Students will gain first-hand experience conducting research by developing research questions, designing a study, collecting data, analyzing results, writing a research report, and presenting their results during a poster session. The course will focus on issues such as searching for empirical literature, critiquing published research, principals of measurement, ethical research, and improving academic writing skills. Some students see this course as a necessary evil to get through the major, but this may be the most important course you take even if you never conduct another research project again. We are constantly bombarded with claims about products, behaviors, and lifestyles. Knowing how to judge the credibility of the claims will make you a more informed consumer of information and less susceptible to manipulation.

The format of this course is lecture/discussion and lab. Class sessions are designed to expand upon and enrich the content in the textbook, not simply present the same information in an alternative format. The course is designed to help students reach the following learning objectives:

- Explain why psychology is a science based on common methodologies.
- Critically evaluate claims made about psychology and human nature as well as research in other fields.
- Evaluate research on the basis of its reliability, validity, usefulness, and conformity to APA's ethical principles.
- Distinguish between experimental designs (including between and within participant designs and single participant designs), quasi experiments, and observational research.
- Apply knowledge of measurement to critically evaluate scales and surveys.
- Conduct original research and communicate the findings via an APA-style report and a research presentation.

Required Materials (*You may purchase electronic copies if you prefer*):

Morling, B. (2015). *Research methods in psychology: Evaluating a world of information* (2nd ed.). New York, NY: W.W. Norton & Company.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, D.C.: Author.

Additional readings will be posted via Moodle.

Assignments:*Exams (150 points)*

There will be two noncumulative exams given throughout the semester, each worth 75 points. Exams will consist of multiple choice and short answer items, typically focusing on definitions of important terms, development of critical thinking skills, application of course concepts to real life situations, and interpreting SPSS outputs. Exam items will cover material from lecture, assigned readings, and in-class activities.

Writing Labs (80 points)

There will be four writing labs during the semester, each worth 20 points. These assignments will provide students with technical writing skills used in psychology along with practice using the APA Style Manual and improving editing skills. Complete details will be provided in class and posted to Moodle.

Lab	Topic
1	Writing Concisely
2	Finding and Citing Literature
3	Editing for APA Style
4	Synthesizing Research

Data Analysis Labs (100 points)

There will be five data analysis labs during the semester, each worth 20 points. For each lab, students will be given a dataset to work with in class to practice and another dataset to use independently to complete the assignment. Assignments will focus equally on conducting analyses and writing up results. All SPSS outputs must be turned in with the assignment. Complete details will be provided in class and posted to Moodle.

Lab	Topic
1	Descriptive Statistics
2	Reliability
3	Inferential Tests for 1 or 2 Groups
4	Inferential Tests for 3+ Groups
5	Regression

Quantitative Research Project (375 points)

The seminal experience of this course is designing and conducting a research study, culminating in written and oral presentations of the results. Students will work on portions of the final paper throughout the semester to allow for detailed feedback before the final assignment is due. Students may work in groups of up to three on this project, but each student will complete individual assignments unless otherwise noted on the syllabus. If working as a group, be VERY careful about plagiarism and make sure ALL WRITING is done individually unless explicitly told to turn in one assignment for the group. Sharing important articles for the literature review or deciding what statistical analyses to use is encouraged, but sharing the criticisms of a specific article or providing a copy of a graph of the results would be plagiarism.

Students will meet with me either individually or in groups several times throughout the semester. Attendance at these meetings is mandatory and failure to attend a meeting will result in the student's final grade being lowered one full letter grade (e.g., B+ to C+). Groups will sign up

for times either in class or via email. Also note all raw data (electronic and/or physical copies) will be turned in to me at the end of the project. Failure to do so will result in students' final grade being lowered one full letter grade.

Further explanations of the requirements for each section of the project will be discussed throughout the semester and posted to Moodle. The point breakdown for each component of the research project is as follows:

Article Critiques 1-5	20
Article Critiques 6-10	20
Introduction	40
Method (Group)	40
IRB Draft (Group)	25
Human Subjects Training	20
Final IRB Application (Group)	15
Results (Group)	40
Discussion	40
Abstract	10
Final Paper	70
<u>Presentation (Group)</u>	<u>35</u>
Total	375

Grading:

There are 705 possible points in this course. Grades will be assigned on a scale no more stringent than the following percentages:

Letter	%	Letter	%
A	> 93%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	< 60%

Tentative Course Schedule

Date		Class Topic	Readings/Assignments
Week 1			
8/26	F	Purpose & Value of Research	M Chpt. 1, APA Chpt. 1
Week 2			
8/29	M	Developing Research Questions	
8/31	W	Scientific Method	Lilienfeld (2009)
9/2	F	Anatomy of a Research Article	M Chpt. 2; APA Chpt. 2; Group Selection
Week 3			
9/5	M	Writing Lab 1	APA Chpt. 3
9/7	W	APA Style	APA Chpt. 4-5
9/9	F	Writing Lab 2	APA Chpt. 6-7

Date		Class Topic	Readings/Assignments
Week 4			
9/12	M	Research Ethics	M Chpt. 4; APA Ethics Code Sections 4, 6, 8; Writing Lab 1 Due
9/14	W	Variables	M Chpt. 3; Writing Lab 2 Due
9/16	F	Writing Lab 3	
Week 5			
9/19	M	Sampling I	M Chpt. 7; Article Summaries 1-5 Due
9/21	W	Sampling II	Writing Lab 3 Due
9/23	F	Writing Lab 4	
Week 6			
9/26	M	IRB Applications	Article Summaries 6-10 Due
9/28	W	<i>No Class</i>	Writing Lab 4 Due
9/30	F	Exam 1	
Week 7			
10/3	M	Survey Design I	M Chpt. 6; Human Subjects Training Due
10/5	W	Survey Design II	IRB Draft Application Due
10/7	F	<i>No Class – Fall Break</i>	
Week 8			
10/10	M	Reliability	Chpt. 5
10/12	W	Validity	Final IRB Application Due
10/14	F	Data Analysis Lab 1	M Statistics Review: Descriptives
Week 9			
10/17	M	Experimental Design I	M Chpt. 10, 13
10/19	W	Experimental Design II	M Chpt. 11; Data Analysis Lab 1 Due
10/21	F	Data Analysis Lab 2	Introduction Due
Week 10			
10/24	M	Correlational Designs I	M Chpt. 8
10/26	W	Correlational Designs II	M Chpt. 9; Data Analysis Lab 2 Due
10/28	F	Data Analysis Lab 3	M Statistics Review: Inferential
Week 11			
10/31	M	Experimental Designs III	M Chpt. 12
11/2	W	Qualitative Research	Creswell et al. (2005), Hanson et al. (2005), Haverkamp (2005), Morrow (2005), Polkinghorne (2005); Data Analysis Lab 3 Due
11/4	F	Data Analysis Lab 4	Method Due
Week 12			
11/7	M	Exam II	
11/9	W	<i>No Class – Run Data</i>	Data Analysis Lab 4 Due
11/11	F	Data Analysis Lab 5	
Week 13			
11/14	M	<i>No Class – Run Data</i>	
11/16	W	<i>No Class – Run Data</i>	Data Analysis Lab 5 Due
11/18	F	<i>No Class – Run Data</i>	Results Due

Date		Class Topic	Readings/Assignments
Week 14			
11/21-25		<i>No Class – Thanksgiving Break</i>	
Week 15			
11/28	M	Disseminating Research	APA Chpt. 8; Discussion Due
11/30	W	<i>No Class – Work on Project</i>	
12/2	F	<i>No Class – Work on Project</i>	Abstract Due
Finals			
12/5	M	Research Project Presentations (9-11am)	
12/7	W	Final Research Paper Due (11am)	

Technology

This course will be web-enhanced through the use of Moodle. Readings, lecture slides, some handouts, and links to other resources will be provided through this system. Unless otherwise specified, you will turn your assignments in via Moodle. You can access Moodle through the following link: <https://moodle.austincollege.edu/login/index.php>. Questions concerning content/postings should be directed to the instructor, while questions regarding access/technical issues should be directed to the Austin College IT Help Desk (903-813-2063; helpdesk@austincollege.edu). A PDF viewer is required to view the content posted to the Moodle site. Free Adobe software is available for download via <http://get.adobe.com/reader/>.

Policies:

Academic Integrity

Scholastic misconduct is broadly defined as any act that violates the rights of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes (but is not limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as you own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned (including papers you have submitted in previous semesters); providing others with copies of your assignments; depriving another student of necessary course materials; or interfering with another student's work.

Plagiarism is a serious offense which will not be tolerated. Most of the time, however, plagiarism happens because students are rushing through assignments and do not leave themselves with sufficient time to properly attribute information taken from other sources. For this class you must cite your sources using APA style. If you plan to be a psychology major or minor, I encourage you to get used to APA style, as you will be using this throughout your coursework. Note that for either style, you need to include citations each time you use information from a source. It is incorrect to use information throughout a paragraph and only include a citation at the end. Also, if you use 5 or more consecutive words from a source, you must include quotation marks and include the page number (or paragraph number if you are using an online source) in your citation.

You will be required to submit an electronic copy of all major assignments which will be compared with the TurnItIn database. Penalties for scholastic misconduct in any portion of the academic work for a course shall be made at the discretion of the instructor and may range from

point deductions on the assignment to failing the class. All academic misconduct (no matter how small) will be reported to the Academic Integrity Council, which may impose sanctions up to and including expulsion. Austin College's full academic integrity policy is available in the *Environment* (Austin College Student Handbook; the most recent edition is posted on Moodle) in the Student Conduct section. If you have any questions about whether something is plagiarism or not, please talk with me about it BEFORE you turn in an assignment.

Accommodations

Austin College seeks to provide reasonable accommodations for all individuals with disabilities and will comply with all applicable federal, state, and local laws, regulations, and guidelines. If you have a documented disability for which you would like accommodations, please inform me by the second week of class. It is your responsibility to remind me of your accommodations at least a week before I distribute each assignment or exam. To arrange for accommodations, you will need to register as soon as possible at the Academic Skills Center with Laura Márquez Ramsey, the Director of the Academic Skills Center, (903-813-2454, Suite 211 of the Wright Campus Center). For information on this process, go to <http://www.austincollege.edu/campus-life/academic-skills-center/>. This syllabus is available in alternative formats upon request.

Attendance

Attendance is required and critically important to your success in this class. Topics not covered in the textbook will be discussed in class and some exam questions will come directly from classroom learning activities. Students who miss more than three classes without documentation may be dropped from the course at the instructor's discretion. If you know you are going to miss class for a medical, religious, or Austin College sanctioned academic/athletic reason, let me know in advance and potential alternative assignments may be given at the discretion of the instructor. PowerPoint slides will be posted to the Moodle site, but will be outlines which require additional information from lectures or activities. If you miss class it is your responsibility to get notes from a classmate. Full lecture slides will not be distributed, so make sure to get contact information from a few classmates. If you must arrive late or leave early, please sit near the door and do so in the least disruptive manner possible.

Changes to the Syllabus

All aspects of this syllabus are subject to change at the discretion of the instructor. Students will be informed in writing of any changes to the syllabus.

Communication

Outside of class, I will communicate with you most frequently via your *Austin College email address*. **It is your responsibility to monitor this address and you are responsible for the information delivered to this address.** I highly recommend you check your email at least daily. I will also post messages to Moodle, so you are encouraged to check Moodle regularly. The best way to contact me is through email. I will always attempt to respond to email promptly, which means within 24 hours. **I typically do not check my email after 8pm**, so if you email me at night, do not expect a response until the next morning. I check Moodle daily and will respond to questions posted in the forum within 24 hours.

Dropping the Class

All drops must take place by the 10th week of class. If you drop the class before October 14th, no record of the course will show up on your transcript. Dropping between October 15th and November 4th will result in a "W" on your transcript. You may not drop the course after

November 4th. The exception is medical withdrawals. If you have a medical situation which prevents you from completing the semester, you need to talk to Tim Millerick in Student Affairs about this process, as this is done through his office and I have no role in those decisions.

Extra Credit

Extra credit opportunities may be given at the discretion of the instructor. Possible examples of extra credit opportunities include: participation in psychological research, attendance at events, or further research into a topic of interest. The maximum amount of extra credit possible for this class is 10.5 points (~1.5% of your final grade).

- Students can earn extra credit points by participating in research authorized by the psychology department. These research opportunities are current studies being conducted by your peers and/or the psychology faculty, and are opportunities to contribute to the knowledge of the field as well as your classmates' education. Participation is a serious commitment that requires honest and thoughtful responses. If you give false, misleading, or thoughtless (i.e., choosing "4" on every item on the scale) data, it not only compromises the work of your peers and faculty but can potentially cripple research that took months or years to set up. The researchers can see how much time it took you to complete the study (even the online surveys) and have to throw out data that is clearly carelessly entered. If you do not have enough time to complete the research appropriately (as described in the informed consent statement), do it at another time.

All students will be added to the email list to receive notifications of research opportunities for extra credit. If you do not want to receive these emails, you will be given the opportunity to opt out. For every 30 minutes of research participation, students will receive 1 point of extra credit. **MAKE SURE to keep a list of the studies you participate in** so you can be sure you have received all your extra credit slips. At a minimum, write down the name of the study, date of participation, and contact information for the researcher. If you write a 2 page (double-spaced, 12 pt., Times New Roman) reflection paper about your experience participating in the study, you will earn 1 additional point.

- Research Participation Response Paper Requirements:
 - Describe the study you participated in as well as you can. In other words, what were you asked to do?
 - Describe how you felt during the study. Was it fun? Uncomfortable? Confusing? Surprising?
 - Tie the research to something we discussed in class or is discussed in your readings. If you're not sure what the research was investigating, say so but try to guess what it was about.
 - How would you improve the study? Evaluate the research design to the extent possible (i.e., you may not know the reliability of the instruments being used but you can say you thought the questions were worded poorly).
- Additional extra credit assignments may arise during the semester as opportunities to attend campus or community events become available. The amount of points received for attending such events will vary by the time commitment (the points will be posted along with the information about the event). The length of the response paper required will also vary, but will be a minimum of 2 pages.

- Event Attendance Response Paper Requirements:
 - Describe the event (e.g., where, when, why)
 - Who was the target audience?
 - What did you learn?
 - How does this relate to something we have discussed in class or some other aspect of psychology?
 - If you had been in charge of the event, what would you do plan next as a follow-up? How might the event coordinators continue to build momentum, conduct additional research, etc.?
- Students can also write a 4 page paper on an approved psychology topic for 2 points of extra credit. These papers must be proposed no later than 11/4 and turned in no later than 11/18.

Incompletes

An “incomplete” only may be given as a grade for the course when a student has a **passing grade the course** and has an unforeseen and uncontrollable event occur that prevents him or her from earning a significant number of points in the course. Thus, incompletes are rarely given and each situation will be considered on a case-by-case basis. To have an incomplete changed to a different grade all missing work must be completed by the end of the following term.

Late Work

Assignments are due at the beginning of class on the date listed in the syllabus. Assignments turned in after class but on the same day will be penalized 5%, with 10% additional penalty for every additional calendar day the assignment is late (thus if the assignment is due on Tuesday but turned in on Thursday the maximum score you could receive is 75%). Assignments will typically not be accepted more than 7 days after the original due date. Extensions may be given at the discretion of the instructor, but **extensions will rarely be given during the 24 hours before an assignment is due**. It is your responsibility to budget your time so you are not working on assignments at the last minute.

Make-Up Exams

If circumstances prevent you from being in class on the day of an exam, please notify me as soon as you can (BEFORE the exam) in order to arrange to complete a make-up exam. Make-up exams will be scheduled prior to the exam date if possible. Please note **I will require documentation** (e.g., a doctor’s note) explaining your absence from class in nearly all cases. Make-up exams may be different than the original exam and **must be completed within 1 week of the original exam date**.

Role of Instructor

I will provide learning opportunities designed to provide students with information about psychology and foster critical thinking. Every effort will be made to accommodate different learning styles and students will be encouraged to provide feedback both formally and informally. I pledge to carefully consider constructive feedback about teaching methods and incorporate suggestions to the extent feasible. I am responsible for treating students in a respectful, professional manner and creating a classroom atmosphere where students treat each other as such. I will be accessible outside of class and encourages you to meet with me either during office hours or individual appointments to discuss concerns (e.g., about the class, workload, assignments, etc.), conflicts or problems that affect course performance, concepts

which need further clarification, additional resources related to course material, or careers in psychology.

Role of Student

Students will come to class prepared to learn and open to new ideas. Assignments (including readings) will be completed before class begins and to the best of each student's ability. Classroom discussions will be conducted in a respectful manner, where all opinions are valued regardless of whether you agree or disagree with the content. Students who cannot maintain respectful communication will be asked to leave the classroom. Students will take responsibility for their own learning throughout the class. Students will consult available resources (e.g., the syllabus, Moodle, email messages) before asking administrative questions.

Statement on Classroom Conduct

All students have the right to a civil, productive, and stimulating learning environment. In turn, instructors have a responsibility to nurture and maintain such an environment. Lively, even heated, discussion is not disruptive behavior. Both instructors and students have a fundamental obligation to respect the rights of each other and an equally fundamental obligation to respect the instructional setting as a place for civil, courteous behavior.

Statement on Diversity

We will all bring unique perspectives to this course and I hope those who feel comfortable will share insights and alternative interpretations throughout the semester. Cultural perspectives will be explicitly included in many of our discussions and will likely come up in many others. I welcome feedback on ways to increase the diversity of perspectives being provided in class and methods for creating a more inclusive atmosphere through my teaching.

Writing Tips

Your ability to write will greatly impact your grades in this course. I expect you to make strides in your writing in terms of mechanics, style, and ability to write concisely. Writing skills make up a substantial portion of your grade on written materials, so make sure to take this seriously.

Professionalism

- You will turn in most assignments for this class electronically via Moodle. On the rare occasions where I ask for a hard copy, assignments must be printed in black ink on white paper. Pages must be clean (i.e., no coffee rings, dog drool, rips, etc.) and stapled together. I do not read anything that is not attached to the first page and your grade on the assignment will reflect this.
- Your name, the date, and the assignment title must be included on the first page.
- Pages must be numbered (if assignment is more than 1 page).
- Proofread your papers. Writing is about communicating to the reader so you need to make sure you are getting your point across. If you typically have issues with grammar and/or spelling, make sure you have your papers done early enough to have someone proof them for you. The Academic Skills Center has writing tutors available and I strongly encourage you to make use of them. These tutors will not proofread your paper for you, but can help you learn proper writing mechanics. For example, if I give you feedback about improper use of commas, you can make an appointment to discuss the rules for using commas.

Use of Quotes

- Quotes should be included **very infrequently**. You should not use more than 2 quotes in any paper you write for me. Most of your papers will likely not contain any quotes. This is both an APA style issue and a pedagogical issue. I want to see that you can paraphrase and explain what happened in your own words.
- If you do use quotes, you still have to explain what the authors are saying.
- Remember, if you use **5 or more consecutive words** from another source, you must use quotation marks and include the page number (or paragraph number if it is an online source) in your citation.

APA Style tips

- The *Publication Manual* has more in it than just how to cite sources!
- The goal of scientific writing is to be concise and precise. You will not get bonus points for inserting “fluff” into your papers. In fact, your grades will suffer if you are including a bunch of filler instead of substance.
- Avoid sexist language. Do not refer to people generally or groups of mixed genders as masculine. You do not have to write “his or her” every time either. You can switch between he and she as long as they are approximately balanced throughout the paper as a whole. As a side note, many people identify outside the dichotomy of male and female, so genderless pronouns such as “ze/zir” or “zhe/hir” are likely to be more common in the future. There are a number of variations of these pronouns and there is no standard as of yet. In my classes these are acceptable and in fact encouraged, but you should check with other professors before using genderless pronouns. If you are discussing a person who prefers the pronoun “they” in your paper, respect that person’s wishes and use “they/their.” In this case, you need to include a statement in the paper that “their” is the preferred pronoun of this individual so I do not take points off.
- For longer papers (>3-4 pages) it is often helpful to include headings and subheadings to organize your writing.

Additional tips

- Never, ever use the word “prove” in your writing. Research studies do NOT prove anything. Research can support, suggest, indicate, demonstrate, corroborate, show, etc.
- The writing assignments you do for me are considered formal writing. Therefore, there should not be any contractions (e.g., you’re, can’t, don’t) in your papers. The exception is when I ask you to write reflection papers. These are less formal and may include contractions.
- I am not impressed by your vocabulary. I am impressed by your ability to communicate clearly. Do not use big words if you do not know what they mean.
- Know your target audience. Avoid jargon unless you are sure the entire audience will know what it means. Unless specifically told otherwise you can assume the target audience is me.
- If you are critiquing a research article, you need to be able to articulate why the issue you are pointing out is important. Do not just say they needed a bigger sample. What would be gained by having a bigger sample? How does a small sample limit the ability to interpret the results?

Common Writing Mistakes

- The word “that” is the most overused word in the English language, and is often included in sentences unnecessarily. When you come to a sentence which includes “that” while proofreading your paper, read the sentence again without “that.” You will often find it still makes sense. If so, remove the unnecessary “that.” Here is a non-exhaustive list of words commonly followed by “that” which typically do not need to be: state, say, mention, believe, feel, think, agree, found, indicate, conclude, imply, and realize.
- Do not start a sentence with the word “however.” Not only is it a conjunction (just like “and,” “but,” etc.) but in this context the word does not mean what you intend it to mean. At the start of a sentence, “however” means “in whatever manner,” not “nevertheless.” This is true even when there is a comma after the “however.” This can always be fixed by simply moving the “however” a few words into the sentence or using “nevertheless” to start the sentence. For example, “However, the research does not support this idea” becomes “The research, however, does not support this idea.”
- Periods and commas always belong inside quotation marks. Do not put the period after the quotation mark.
- Be aware of the verb tense you are using. Students often shift tenses back and forth throughout papers, paragraphs, and even sentences. Some tense shifts are appropriate, but many are due to sloppy editing. Make sure you are consistent and intentional with your tenses.
- Do not use “they” when you are referring to a single person. This is usually done in an effort to avoid choosing he versus she (see above).
- The word “pique” means interesting or stimulating. The word “peak” means comes to a point or summit. The word “peek” means a brief look. Attention is “piqued” not “peaked.”
- The word “feel” should only be used if you are describing an emotion or the sensation of touch. “Feel” should NOT be used to suggest intuition, judgment, agreement, or beliefs. These are examples of thoughts or cognitions. It is incorrect to write “I feel I deserve a better grade.” This is a judgment and should be stated “I think I deserve a better grade.” Be especially wary of using the phrase “I feel like...” as very rarely is followed by an emotion.
- The software used to create presentations is “PowerPoint” not “power point.”
- The word “therefor” is used to describe an exchange, such as “I traded my sandwich and received a salad therefor.” The word “therefore” refers to a statement based on the preceding information, such as “I did not like the salad, therefore I regretted the trade.”
- When you are referring to people, use the word “who” instead of the word “that.” For example, “the students who took this class last semester” instead of “the students that took this class last semester.”
- The word “everyday” means commonplace or usual. If you mean to say something happens each day, use the phrase “every day.”
- If you are a leader, you lead people. The past tense of this verb is “led.” For example, I led the meeting yesterday. The homophone “lead” is a type of metal. For example, I led the meeting yesterday about removing the lead paint from the building.