

**SPRING 2020****RESEARCH METHODS IN PSYCHOLOGY—PSYC 302  
Sections 906-910 and 912-915****SECTIONS 906-910****Lectures:** TR 11:10 am -12:25 pm**Room:** PSYC 106**SECTIONS 912-915****Lectures:** TR 12:45 pm -2:00 pm**Room:** PSYC 106**Instructor:** Winfred Arthur, Jr. PhD**Office:** Psychology 272**Phone:** 845-2502**Email:** w-arthur@tamu.edu**Office Hrs:** TR 2:00 pm-4:00 pm. I am also available by appointment as well.

This syllabus can be found online in the Howdy schedule of classes.

**REQUIRED TEXT**

White, T. L., & McBurney, D. H. (2013). *Research methods* (9<sup>th</sup> ed.). Belmont, CA: Cengage.

→ NOTE. The 8<sup>th</sup>, 7<sup>th</sup>, and 6<sup>th</sup> editions will also be acceptable; just make sure you are referencing the correct chapters and corresponding sections. And the author list for these previous editions is "McBurney, D. H., & White, T. L."

**RECOMMENDED TEXT AND MATERIAL**

Arthur, W. Jr. (2020). *PSYC 302 Research Methods in Psychology lecture notes*. [These lecture notes can be obtained at

<http://people.tamu.edu/~w-arthur/302/> ]

APA. (2009). *Publication manual of the American Psychological Association* (6<sup>th</sup> ed.). Washington DC: APA.

<https://apastyle.apa.org/products/4200067>

**PREREQUISITES**

Majors only; PSYC 107 and PSYC 301

**COURSE DESCRIPTION**

Research techniques in psychology. Laboratory exercises applied to specified research-related problems in psychology.

**LAB SECTIONS 906-910**

Section	Lab Day/Time	Room	TA	Office
906	M 8:00-10:00	MILN 201	Tristin Nyman & Astin Cornwall	TBA/TBA
907	M 10:00-12:00	MILN 201	Brandon Boring	TBA
908	M 12:00-2:00	MILN 201	Whitney Howie	TBA
909	M 2:00-4:00	MILN 201	Robert Tirso & Jonathan Bailey	TBA/TBA
910	M 4:00-6:00	MILN 201	Andreea Hrehorciuc-Caragea	TBA

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### LAB SECTIONS 912-915

Section	Lab Day/Time	Room	TA	Office
912	W 10:00-12:00	MILN 201	Zsolt Beda	TBA
913	W 12:00-2:00	MILN 201	Anton Leontyev	TBA
914	W 2:00-4:00	MILN 201	Moein Razavi	TBA
915	W 4:00-6:00	MILN 201	Colin Shanahan	TBA

### UNDERGRADUATE TEACHING SCHOLARS

Each course has an Undergraduate Teaching Scholar who, amongst others, will be serving as a teaching assistant for the course. They are:

Leslie Garcia (lesliebritney@tamu.edu) => PSYC 302 906-910

Bailey Clark (bailey.clark20@tamu.edu) => PSYC 302 912-915

Their availability and what you should expect of them as a resource for the course, will be discussed at a later date.

### WITHDRAWAL FROM THE COURSE

Policy governing withdrawal from the course is in accordance with current University regulations (see Student Rule 17 for details <http://student-rules.tamu.edu/rule17>).

### LEARNING OUTCOMES

The objectives of this course are to provide you with an introduction to the scientific research process, the research designs and methods commonly used in psychological research, and an understanding of how to communicate in the writing style of the discipline. At the end of this course, successful students will be able to:

- Demonstrate a basic understanding of the methods, techniques, and procedures essential to good research design. In short, by the end of the term, you should have a reasonable working knowledge of **basic research methods and design concepts and principles**.
- Demonstrate research skills developed through a combination of lecture and "hands-on" experiences in the lab.
- Understand and apply each step in the research process including the literature search, generating hypotheses, operationalizing variables, choosing the most appropriate research design, collecting and analyzing data, drawing conclusions, and writing the research report.
- Apply these skills to become more informed consumers of research studies presented to the public in the media and other outlets.
- Apply these skills to enhance understanding of material covered in advanced courses (i.e., 300-400 level courses) in psychology and other disciplines that use the scientific approach and empirical research methods.
- Be better prepared to conduct research as part of a future job if warranted.
- Apply these skills as a solid foundation for graduate study in psychology and other scientific fields.

### COURSE STRUCTURE

The course consists of lectures and one 2-hour lab each week. Both are required. Class lectures will focus on basic principles of research design, drawing on examples from various research areas in psychology and other disciplines. Although the material covered in the lectures may parallel the topics covered in the textbook, it will **not** necessarily duplicate the textbook word-for-word or topic-for-topic. In other words, the lectures and textbook will supplement each other to produce a more complete coverage of the material than either would by itself.

It is expected that students would have read and reviewed the pertinent material in both the textbook and any associated lecture notes **before** the topic is covered in class.

**Lab.** The lab is integral to your learning experience in this course; attendance is therefore mandatory. Labs will be taught by your lab instructor and will meet in Rm. 201 in Milner Hall. The lab section of the course will consist of computer modules/exercises and multiple writing assignments which will comprise disciplinary-specific scientific reports. Your lab instructor will provide a lab syllabus along with further information on these assignments, which are intended to provide you with opportunities to apply and communicate basic research methods and design in the style of the discipline. Papers are expected to be the product of the person submitting them and no one else. In other words, although students may jointly work on some parts of the paper such as the literature review, the written text must be the student's own work with no collaboration by others. Cases in which papers appear to be similar will be treated as possible instances of plagiarism and will be handled according to university regulations (see <http://aggiehonor.tamu.edu/>). Papers and assignments should be submitted on the scheduled due dates. Your lab instructor will establish penalties for late assignments and papers in accordance with University regulations (see <http://student-rules.tamu.edu/rule07>).

### EXAMINATION AND GRADING POLICIES

Final course grades will be based on performance on the following:

1. **Exams (75%)**

There will be four (4) exams covering material from the lectures, textbook, and handouts. The fourth exam will be a comprehensive final that will be administered on the University-scheduled finals date. The other three exams will be non-cumulative and the specific exam dates are noted below. Although the exams will use a predominantly multiple-choice format, there may be some write-in and fill-in items as well.

2. **Lab (25%)**

Details pertaining to the lab requirements, computer modules/exercises, writing assignments, and grading criteria will be provided by your lab instructor in class and in the Lab Syllabus your lab instructor will distribute.

**IMPORTANT: BECAUSE THIS IS A WRITING INTENSIVE COURSE, YOU CANNOT PASS THIS COURSE (PER UNIVERSITY RULES ABOUT W COURSES) WITHOUT EARNING A PASSING GRADE (60%) ON THE WRITING COMPONENTS. In other words, if you fail the writing lab component of this course, you will fail the entire course, irrespective of your final grade in the lecture component.**

**FINAL COURSE GRADE.** The distribution of scores across the various course components in terms of their contribution to the final course grade will be as follows:

Exam 1	= 17%	Final Exam	= 24%
Exam 2	= 17%	Lab	= 25%
Exam 3	= 17%		

To assist you in gauging how well you are doing in the course as we progress through the various exams, you can download a grade calculator here. You just need to enter your actual and/or hypothetical scores into **Column C** to help estimate how well you need to do on the various course-grade components to achieve your desired grade. I strongly encourage you to make use of this tool after each exam.

The assignment of final course letter grades will be based on the scale presented below. I use standard rounding rules to round to whole numbers (i.e., .5 or higher rounds to the next whole number).

A = 90-100    B = 80-89    C = 70-79    D = 60-69    F = below 60

Although this is not necessarily a difficult course per se, to do well in this course requires that you engage the material in a meaningful way. Specifically, develop the habit of reviewing your notes, the posted lecture notes, and the specified sections in the text book **before** class and then take the responsibility of asking questions in class for clarifications and expectations. The unique thing about education—particularly higher education—is that it is not just a service (me) or a good (this course); it is a process, and the learner (YOU!!) takes an active role in creating its value.

In short, YOU are responsible and control what you get out of this course, and any other course that you take in this university!! Related to that, here are **four really good articles on strategies to maximize your learning and subsequently success in this and other courses in college**; (1) **Putnam et al. (2016)**, (2) **Mueller & Oppenheimer (2014)**, (3) **Payne et al. (2017)**, and (4) **Miyatsu et al. (2018)**. So, once again, if you are "lost" and/or do not understand or grasp what is being covered, ASK QUESTIONS. Do not assume that because no one else is asking questions, they all understand the material and therefore, you will be "slowing the class down." Far be from it!! Answering questions and clarifying material is one of the reasons why I am here.

PLEASE NOTE THAT THE ASSIGNMENT OF COURSE GRADES WILL BE AS STATED IN THIS SYLLABUS. I DO NOT AND WILL NOT ALTER THESE POLICIES ON A CASE-BY-CASE BASIS. CONSEQUENTLY, PLEASE **DO NOT** APPROACH ME AFTER GRADES HAVE BEEN POSTED TO EITHER ALTER YOUR GRADE OR GIVE YOU ADDITIONAL OPPORTUNITIES/ACTIVITIES TO CHANGE YOUR COURSE GRADE.

### EXTRA CREDIT QUIZZES AND EXERCISES

There **may** occasionally be both unannounced and announced quizzes and/or exercises. These will be **optional**. These exercises and quizzes are used primarily for course pedagogical purposes to gauge students' grasp of the materials, and incidentally, also give students an opportunity to earn extra credit; there will be no penalty for not doing them. However, because extra credit activities are not part of the course requirements, **there will be no make-ups on these activities**.

### EXAM CONTENT AND DATES

The content domain for each of the three exams is noted in the "**Course Outline**" section below. You will need to bring a Gray Scantron and a #2 pencil to class on each exam day. The dates for Exams 1, 2, and 3 are as follows:

Exam 1 = February 18<sup>th</sup>

Exam 2 = March 24<sup>th</sup>

Exam 3 = April 21<sup>st</sup>

The Final Exam will be on the University-scheduled finals date; please consult the Spring 2019 Final Exam Schedule at <http://registrar.tamu.edu/Courses.-Registration.-Scheduling/Final-Examination-Schedules#0-Spring2020>

The Final Exam will be comprehensive, encompassing all the material covered in the course.

### MAKE-UP EXAMS

Attendance at exams is **mandatory**. Illness, death in the family, or other traumatic events unfortunately are part of life. However, to help manage the course and maintain some level of fairness across all students in the class, the policy concerning make-up exams is in strict accordance with University policy (see <http://student-rules.tamu.edu/rule07>). So, if you have an excused absence per this policy, then I will make arrangements for you to take the missed exam during office hours; however **you must contact me no later than one class period after the missed exam**. If you do not have an excused absence, the comprehensive final exam may be counted double (i.e., for one, and only one missed exam), if **you inform me no later than one class period after the missed exam** that you would like to do so.

### CLASS ATTENDANCE

Because the vast portion of the material covered by each exam will come from the lectures, class attendance is mandatory. However, attendance will not be directly monitored and there will be no direct penalty for absences. That being said, if you miss class, please do NOT send me an email asking "Did you do anything important today?" or "What did we cover today?" It is YOUR responsibility to obtain lecture notes from a classmate if you miss class. So, identify a friend and exchange contact information on the first day! In addition, as previously noted, outlines for the lectures can be found at <http://people.tamu.edu/~w-arthur/302/>

Please ensure that your cell phone (and its usage) does not disrupt class. If your phone has to be on during class for emergency reasons, then please ensure that it is set to a silent mode.

Finally you do **not** have my permission to electronically record (either audio and/or video) my lectures.

### LAB ATTENDANCE

Lab attendance is **mandatory** and will be monitored by your lab instructor in accordance with Student Rule 7 (see <http://student-rules.tamu.edu/rule07>). Again, your lab instructor will distribute a lab syllabus that provides more detailed information about the lab attendance policy.

### COURSE OUTLINE

TOPIC	CHAPTER	Additional Reading
<b>Exam 1</b>		<i>Note.</i> Chapters 2, 4, 14, and 15 should be read for your labs. This block of material will be part of the Final Exam.  <b>In addition, Chapters 14 and 15 are a good review source for material and concepts that were covered in PSYC 203. Consequently, you are very strongly encouraged to continuously review this material for ALL the TOPICS and EXAMS.</b>
1. Psychology and the Scientific Method	1	
2. Research Validity	6	
3. Variables and Measurement	5	
<b>Exam 2</b>		
4. Control	7	
5. Experimental Research Designs	10, 11, 12	
<b>Exam 3</b>		
6. Quasi-Experimental Designs	13	
7. Observational Designs	8	
8. Correlational Designs	8	
9. Survey Research	9	
10. Longitudinal and Cross-Sectional Designs	13	
11. Meta-Analysis	13	
12. Ethics in Research	3	
<b>Final Exam</b>	Comprehensive	

### AMERICANS WITH DISABILITIES ACT (ADA) STATEMENT

"The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Disability Resources at 471 Houston Street or call 979-845-1637. For additional information, visit < <http://disability.tamu.edu> >".

### ACADEMIC INTEGRITY STATEMENT

"AGGIE HONOR CODE

'An Aggie does not lie, cheat, or steal or tolerate those who do.'

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information, please visit <http://student-rules.tamu.edu/aggiecode>".

**PLAGIARISM—FACULTY SENATE ADDENDUM**

"The handouts used in this course are copyrighted. By 'handouts', I mean all material generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission to do so.

As commonly defined, plagiarism consists of passing off as one's own ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section 'Scholastic Dishonesty'."

**TITLE IX AND STATEMENT ON LIMITS TO CONFIDENTIALITY**

"Texas A&M University and the College of Liberal Arts are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees - including instructors - cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared:

Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Student Counseling Service (<https://scs.tamu.edu/>).

Students and faculty can report non-emergency behavior that causes them to be concerned at <http://tellsomebody.tamu.edu>