

**FALL 2015****EXPERIMENTAL PSYCHOLOGY—PSYC 204  
Sections 911-915**

**Lectures:** TR 9:35 am-10:50 am  
**Room:** PSYC 106  
**Instructor:** Winfred Arthur, Jr. PhD  
**Office:** Psychology 272  
**Phone:** 845-2502  
**Email:** w-arthur@tamu.edu  
**Office Hrs:** TR 11:00 am-1:00 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. (2015). *PSYC 204 Experimental Psychology lecture notes*. [These lecture notes can be obtained at <http://people.tamu.edu/~w-arthur/204/> ]

APA. (2009). *Publication manual of the American Psychological Association* (6<sup>th</sup> ed.). Washington DC: APA.  
<http://www.apastyle.org/manual/index.aspx>

**PREREQUISITES**

Majors only; PSYC 107 and PSYC 203

**COURSE DESCRIPTION**

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

**LAB SECTIONS**

Section	Lab Day/Time	Room	TA	Office
911	W 8:00-10:00	<u>STCH 207</u>	Hans Linsenbardt	PETR 314
912	W 10:00-12:00	<u>STCH 207</u>	Tatiana Ungredda	ACAD 402B
913	W 12:00-2:00	<u>STCH 207</u>	Jarid Goodman	ILSB 3151
914	W 2:00-4:00	<u>STCH 207</u>	Jocelyn Seeman	PSYC 224
915	W 4:00-6:00	<u>STCH 207</u>	Michael Emery	TBA

**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 written 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 everyday life. 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. 207, State Chemistry Building** (adjacent to the Psychology Building, between Butler and Biological Sciences; the sign outside this building reads "Analytical Services") unless you are otherwise notified. 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://aggiehonors.tamu.edu/>). Papers should be handed in on the scheduled due date. Your lab instructor will establish penalties for late 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 (66%)**

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 will be administered after the specified block of material for that exam has been covered in class. Although the exams will use a predominantly multiple-choice format, there may be some write-in and fill-in items as well.

2. **Lab (34%)**

Details on 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. **[NOTE. Because this is a writing {W} course, students must pass {D or higher} the writing section {i.e., lab} to pass this course and receive {W} credit. 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	= 15%	Final Exam	= 21%
Exam 2	= 15%	Lab	= 34%
Exam 3	= 15%		

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. 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 what I am here for.

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 meant to give you 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 DATES AND CONTENT**

You will need to bring a Gray Scantron and a #2 pencil to class on each exam day. Dates for the Exams 1, 2, and 3 will be set at a later date. However, they will be administered **no later** than 2 class meetings after the completion of the specified block of material. The content domain for each of the three exams is noted in the "**Course Outline**" section below.

The Final Exam will be on the University-scheduled finals date; please consult the Spring 2015 Final Exam Schedule at [http://registrar.tamu.edu/General/FinalSchedule.aspx#\\_Spring\\_2015](http://registrar.tamu.edu/General/FinalSchedule.aspx#_Spring_2015). 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. 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 a 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/204/>

Finally, if you bring a cell phone to class, please make sure it does not disrupt class; turn it off or set it to vibrate.

**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. There are no labs the first week of classes.

**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) POLICY 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 Services in Cain Hall, Room B118, call 845-1637, or email [disability@tamu.edu](mailto:disability@tamu.edu). For additional information visit <http://disability.tamu.edu>".

**ACADEMIC INTEGRITY STATEMENT AND POLICY**

"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'."