WELCOME TO RESEARCH DESIGN!

Psychology is a science. This course is designed to help you *think like a scientist* and become a critical consumer and producer of psychological research. I truly believe that Research Design can be one of the most useful, rewarding, and enjoyable courses of your college career!

COURSE DESCRIPTION

Research methods emphasizing use of experimental control and analysis of data for reporting experimental results in the psychological study of human and non-human behavior.

PREREQUISITES

PSYC 3330 with a grade of C or higher and consent of instructor.

REQUIRED READING


ISBN-10: 1319107362  

PROGRAM LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Program Learning Outcomes (PLOs)</th>
<th>Proficiency Level</th>
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<tbody>
<tr>
<td>The student will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.</td>
<td>Advanced</td>
</tr>
<tr>
<td>The student will understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.</td>
<td>Mastery</td>
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<tr>
<td>The student will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.</td>
<td>Mastery</td>
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Kyle Conlon, Ph.D.  
E-mail: conlonke@sfasu.edu  
Phone: (936) 468-1572  
Website: [www.kyleconlon.com](http://www.kyleconlon.com)
The student will understand and apply psychological principles to personal, social, and organizational issues.  

The student will value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.  

<table>
<thead>
<tr>
<th>STUDENT LEARNING OUTCOMES</th>
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<tbody>
<tr>
<td>By the end of this course, students should be able to:</td>
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<tr>
<td>1. Understand the major concepts involved in designing and conducting research;</td>
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<tr>
<td>2. Articulate how psychological research is conducted and how it informs our understanding of human behavior;</td>
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<tr>
<td>3. Critically evaluate empirical findings in the psychological literature; and</td>
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<tr>
<td>4. Apply the designs and concepts learned in class to real world experiences and your own life.</td>
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<tr>
<th>COURSE/LAB FORMAT</th>
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<tr>
<td>This class is divided into 2 parts: lecture and lab. Both parts are vital to your development as a psychology student and your final grade. During the lecture portion of the course, we will discuss multiple topics relating to research design. The lab is designed for you to practice reading and writing journal articles, analyze raw data (using Jamovi, a statistical analysis program), and design an experiment from start to finish based on the information you learn during lecture. There is not a separate grade for the lab; your lab grade is incorporated into your final grade for the course. This is a writing enhanced course. This means that you must write a minimum of 3000 words or 10 pages throughout the semester. The course will include instruction in discipline-based writing among its objectives. You will be required to revise and resubmit at least one writing assignment during the semester. Out-of-class writing assignments will count for a minimum of 20% of the course grade.</td>
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<tr>
<th>COURSE REQUIREMENTS</th>
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<tbody>
<tr>
<td>1. Attendance: Attendance (i.e., logging into the course Brightspace site) is mandatory, because you need to be active participants in this course. Discussions and class exercises may be the most valuable part of your learning.</td>
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<tr>
<td>2. Assigned Reading and Viewing: You are responsible for reading or viewing the assigned materials, in their entirety, prior to the completion of the quiz for which they are assigned. For each module, come to class ready to teach us something you’ve learned from the readings, and with at least a couple sentences or passages that you’d like to discuss. If everyone is prepared it will be easier for you to participate actively and comfortably in class, which will affect your participation grade. Read the assigned readings very carefully and aim for a good conceptual and practical understanding.</td>
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<tr>
<td>3. Class Participation: Discussions will take place throughout the semester and will form your class participation grade. Class participation includes sharing your reactions to the readings and discussion prompts, asking questions, and formulating concerns or reflecting on issues</td>
</tr>
</tbody>
</table>
that you find important given your own identity. Regardless of what professional role(s) you adopt in the future, it will be important for you to communicate your ideas and knowledge (and confusions) to others. Participation is a skill set that you can learn and develop, whether you come by it naturally or not. In this course we all share the responsibility for making discussions and exercises useful. Although grading class participation is subjective, it is not arbitrary. Please refer to the grading rubric (posted on Brightspace) to examine the kinds of things I will be considering when assigning participation grades. Note: Discussion posts may be graded automatically by Brightspace or en masse and then adjusted manually by the instructor according to the grading rubric. Thus, an initial grade may be different from (i.e., higher than) the adjusted, final grade.

4. **Module Quizzes:** Quizzes will take place at the end of each corresponding module. Each quiz will be worth 20 points (10 items per quiz * 2 points per item) and will be comprised of material from weekly readings and modules. You will have an opportunity to complete each module quiz twice, with the highest score counting toward your grade. You will be given 10 minutes per attempt (with a 1-minute grace period), after which the quiz will lock and no further progress can be made. Quizzes must be completed before the end date and time of the associated module; **there is no opportunity to make up a missed quiz without approved documentation** (see “Course Policies” below). Remember that there are many points to be earned in the course, and missing a single quiz is unlikely to drastically affect your grade. Each quiz appears at the end of the module, so be sure to leave enough time to review the content and take the quiz before the module closes.

5. **Final Exam:** There will be a cumulative final exam that will assess your comprehensive knowledge of content from the course. The exam is worth 200 points (100 items * 2 points per item), will consist primarily of multiple-choice and true/false questions, and will be based on material from the weekly readings and modules. The final exam must be taken during the scheduled class period. Information on missed exams can be found under “Course Policies.”

6. **Research Proposal:** You will write an individual research proposal that could be carried out during a semester-long research seminar class (e.g., PSYC 4397). The purpose of the proposal is to give you practice developing a hypothesis, designing an experiment, outlining your data analysis plan, and presenting your anticipated results. The proposal must be written in APA style and follow standard APA formatting rules. Specific instructions for the research proposal will be provided on Brightspace.

7. **Extra Credit:** You will start the class with 3 extra credit points. Each time you e-mail me with a question that can be found and answered in the syllabus, you will lose points. This is intended to cut down on the number of e-mails I receive in which students ask questions I have already answered here. You can lose up to but no more than all 3 extra credit points. You should feel free to ask questions if you have them. However, my time is a valuable resource, and the more time I spend re-answering questions, the less time I can devote to assisting students outside class, responding to discussion posts, etc. If you have questions, please ask—just be sure to check the syllabus first!
GRADING POLICY

Class Participation = 50 points
Module Quizzes = 200 points
Cumulative Final Exam = 200 points
Research Proposal = 150 points

Your grade (as a percentage) = \( \frac{\text{All Assignments} + \text{Extra Credit}}{600} \)

Except in cases in which your final grade has been calculated in error, do not e-mail me asking me to change your final grade or to provide you with opportunities for additional work to raise your grade. You receive the grade you ultimately earn. Standard rounding rules apply (.5 and above).

DOING WELL IN THIS COURSE

Doing well in this course requires hard work, patience, and self-discipline. I strongly suggest you spend time each day reviewing and practicing this material. Cramming is ineffective because it exposes you to information at a shallow, superficial level. Research in cognitive psychology shows that deep processing—processing information in a meaningful way and linking concepts to previous knowledge—increases learning (Chew, 2008). Learning this material will be difficult if you cram and process it at a shallow level. To steadily reinforce your knowledge, you should read the readings closely, connect concepts in meaningful ways (either to class examples or to your own life), and space out your studying. Allow yourself enough time for this process (i.e., don’t begin studying for a quiz the day of the quiz!). If you are having difficulty understanding a concept, try not to get frustrated or defensive. Relax, take a deep breath, and be persistent. If you put in the work, you will likely reward yourself with a good grade and foundational knowledge of research design.

COURSE POLICIES

E-mail/Course Website: E-mail is the best way to contact me. Send e-mails through the course Brightspace website. In case of an emergency, please send e-mails to conlonke@sfasu.edu and include “Research Design, Section 001” in the subject line.

I will send e-mails periodically with announcements about the class. It is imperative that you check your Brightspace e-mail account regularly. I will post class materials on Brightspace; I advise you to check it at least once a day. If you are unfamiliar with Brightspace or are having difficulty accessing Brightspace, please contact the SFA Brightspace Helpdesk immediately at https://www.sfasu.edu/life-at-sfa/health-safety/health-clinic/coronavirus/students/student-guide-for-brightspace or call (936) 468-1919.

Late/Missed Assignments Policy: All work must be submitted via Brightspace by the due date and time indicated in Brightspace. When submitting an assignment to the course dropbox, it is your
Responsibility to upload the correct, uncorrupted file. If I cannot open the file you submitted to Brightspace or you submit the wrong file, a late penalty may be assessed, or you may not receive credit at all. If you turn in assignments late, you run the risk of not getting feedback in addition to losing points.

**Missed Quizzes/Exam(s) Policy:** Do not miss a quiz or an exam unless it is unavoidable and for a legitimate reason (e.g., observance of religious holidays, documented medical excuses, or other documented crises). If you must miss a quiz or exam, inform me as far in advance as possible or, if it is not possible to tell me in advance (e.g., last-minute illness or medical emergency), contact me as soon as you can after the quiz/exam. I may ask for documentation that I can keep for my records to show that your missing the quiz/exam was for a legitimate reason, but contact me in any case whether the reason for missing was legitimate or not. I reserve the right to determine what constitutes a valid and acceptable excuse.

I provide make-up quizzes and exams only to students who can document their reason(s) for missing a quiz/exam. This policy applies to all students, regardless of circumstance, and ensures that make-up quizzes/exams are given in a fair and consistent manner. If allowed to make up a quiz/exam, you will be expected to do so as soon as possible. In most cases this will be no later than during my next office hour following the day of the quiz/exam, but absolutely no later than one week following the original due date (except in extreme circumstances). This is to ensure that you do not fall too far “behind” in the course. If allowed a make-up exam, you will be given a different version from what is given during the regular exam period.

If you need to reschedule an exam due to travel, you must provide documentation that travel plans were arranged before the start of the semester (May 17, 2021) and notify me of your travel plans by May 19, 2021. Do not schedule personal travel during the final week of the semester and hope or expect that I will reschedule your exam around your travel plans; I will not. Make-up final exams may not be an option due to the immediacy of the grade deadline.

**Responsibility Statement and Disclaimer:** You are responsible for all information presented in this syllabus and for course-related information in announcements or messages provided throughout the semester during class meetings (even if you miss that class), on the course Brightspace page, and/or via e-mail. It is also your responsibility to secure the appropriate technological means (i.e., a reliable computer and stable internet connection) to complete this course. I am not responsible for, nor will I be expected to accommodate missed, late, or incomplete work as a result of technological issues you experience. Please ensure that you possess the technological capability to complete this course. If you disagree with the policies described in this syllabus, you should drop the course. By remaining in this course, you acknowledge and accept the policies as stated herein and accept the policies as stated or amended during the course of the semester.

**Classroom Etiquette:** I expect students to act civilly at all times. This means respecting yourself, other students, and me. Uncivil behavior will not be tolerated. Examples of uncivil behavior include, but are not limited to, disrespectful communication (i.e., rude or aggressive tone in discussion posts or e-mail), using the course website and materials for non-class related purposes, tardiness to Zoom
meetings, talking while another student is talking or while I am lecturing during Zoom meetings, or breaking the Student Conduct Code. Students engaging in uncivil or disruptive behavior may be removed from the class. Students who do not attend class regularly or who perform poorly on coursework may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Copyright Statement: Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act.

Statement of Usage: Some of the materials and information provided in this course represent the instructor’s intellectual property and are shared with you for instructional purposes only. Any attempt to use, reuse, amend, share, sell, profit from, or distribute the information provided in this course for any other purpose is strictly prohibited and may be prosecuted under applicable policies or laws. By enrolling in this course, you agree to uphold the integrity of the course materials and assignments by agreeing not to screen-capture, take pictures, or (electronically) copy and/or share quiz/test items with others. Further, you agree not to share, alter, or distort any original video recordings by the instructor for any purpose. Any violation of this policy may result in disciplinary action including, but not limited to, failing individual assignments and/or the course.

As a courtesy, Zoom-recorded (lecture) videos automatically produce audio transcripts (Otter.ai™) that attempt to capture and translate the speaker’s exact words into readable text. However, because this text is translated by non-human AI, discrepancies may exist between what is said and what the audio transcription service records as being said. Except in certain circumstances, Dr. Conlon has not corrected and/or aligned the wording between the lecture videos and the transcribed recordings. Thus, any discrepancies, especially those that deviate from professional or conversational decorum, are unintentional and coincidental. Dr. Conlon is not responsible for any transcription errors or misinterpretations by the user.

Academic Integrity (A-9.1): Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. All forms of academic dishonesty will be dealt with seriously and immediately. Please respect SFASU, yourself, and me enough not to participate in academic dishonesty.

Definition of Academic Dishonesty: Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to: (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) falsification or invention of any information, including citations, on an assignment; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism include, but are not limited to: (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that
has been purchased or otherwise obtained from the Internet or another source; and (3) incorporating
the words or ideas of an author into one's paper or presentation without giving the author due credit.
Please read the complete policy and the appeals process at:
http://www.sfasu.edu/policies/student-academic-dishonesty-4.1.pdf

Disputes About Course Grades: Please contact me if you have any questions about your grade or the
conduct of this course. If you wish to formally dispute a grade, please refer to the University policy:
http://www.sfasu.edu/policies/final-course-grade-appeals-by-students-6.3.pdf

Withheld Grades Semester Grades Policy (A-54): At the discretion of the instructor of record and
with the approval of the academic chair/director, a grade of WH will be assigned only if the student
cannot complete the course work because of unavoidable circumstances. Students must complete
the work within one calendar year from the end of the semester in which they receive a WH, or the
grade automatically becomes an F. If students register for the same course in future semesters, the
WH will automatically become an F and will be counted as a repeated course for the purpose of
computing the grade point average.

Students With Disabilities: To obtain disability related accommodations, alternate formats and/or
auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human
Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the
semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or
auxiliary aids to be provided. Failure to request services in a timely manner may delay your
accommodations. For additional information, go to: http://www.sfasu.edu/disabilityservices/

F-1 Visa Holders: There are important federal regulations pertaining to distance education activity for
F-1 Visa holders. All students with an F-1 Visa should follow the instructions at the following link to
make sure they are in compliance: http://sfaonline.sfasu.edu/f1visaholders.html

COVID-19 Mask Policy*: Masks (cloth face coverings) must be worn over the nose and mouth at all
times in this class and appropriate physical distancing must be observed. Students not wearing a
mask and/or not observing appropriate physical distancing will be asked to leave the class. All
incidents of not wearing a mask and/or not observing appropriate physical distancing will be reported
to the Office of Student Rights and Responsibilities. Students who are reported for multiple
infractions of not wearing a mask and/or not observing appropriate physical distancing may be
subject to disciplinary actions.


*Although this class is a hybrid online/livestream format and doesn’t include face-to-face instruction,
you are expected to adhere to this policy in the (unlikely) event of an individual face-to-face meeting
with Dr. Conlon.
SYLLABUS CHANGE POLICY

This syllabus is a guide for the course and is subject to change with advance notice. I reserve the right to make changes to the syllabus, course schedule, and readings as necessary. I will announce any changes on Brightspace.

COURSE SCHEDULE

This schedule is intended as a course guide and is subject to change with advance notice if required by circumstances occurring during the semester. (Changes will be announced on Brightspace.)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Module</th>
<th>ZOOM MEETINGS*, ZOOM LAB MEETINGS, DISCUSSIONS, AND ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>May 17-22, 2021</td>
<td>Getting Started/Module 1: Thinking Like a Researcher</td>
<td>• Zoom Meeting (Monday, May 17, 4:00-5:05pm)</td>
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<td></td>
<td>• Introduce Yourself</td>
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<tr>
<td>Week 2</td>
<td>May 23-29</td>
<td>Module 2: The Research Process</td>
<td>• Zoom Lab Meeting (Monday, May 24, 5:10-6:00pm)</td>
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<tr>
<td>Week 3</td>
<td>May 30-June 5</td>
<td>Module 3: Ethics</td>
<td>• Zoom Meeting (Wednesday, June 2, 4:00-5:05pm)</td>
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<tr>
<td>Week 4</td>
<td>June 6-12</td>
<td>Module 4: The Psychologist’s Toolbox</td>
<td>• Discussion Topic/Post</td>
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<tr>
<td>Week 5</td>
<td>June 13-19</td>
<td>Module 5: Observational Research</td>
<td>• Zoom Lab Meeting (Monday, June 14, 5:10-6:00pm)</td>
</tr>
<tr>
<td>Week 6</td>
<td>June 20-26</td>
<td>Module 6: Survey Design and Scale Construction</td>
<td>• Zoom Meeting (Wednesday, June 23, 4:00-5:05pm)</td>
</tr>
<tr>
<td>Week 7</td>
<td>June 27-July 3</td>
<td>Module 7: Two-Group Design</td>
<td>• Zoom Meeting (Wednesday, June 30, 4:00-5:05pm)</td>
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<td>• Discussion Topic/Post</td>
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<td>• Research Proposal Introduction Draft</td>
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<tr>
<td>Weeks 8-9</td>
<td>July 4-17</td>
<td>Module 8: Multigroup Design</td>
<td>• Zoom Meeting (Wednesday, July 7, 4:00-5:05pm)</td>
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<td></td>
<td>• Zoom Lab Meeting (Monday, July 12, 5:10-6:00pm)</td>
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<td></td>
<td></td>
<td></td>
<td>• Zoom Meeting (Wednesday, July 14, 4:00-5:05pm)</td>
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<td></td>
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<td>• Research Proposal Method Draft</td>
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<tr>
<td>Week 10</td>
<td>July 18-24</td>
<td>Module 9: Factorial Design</td>
<td>• Zoom Lab Meeting (Monday, July 19, 5:10-6:00pm)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Discussion Topic/Post</td>
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</table>
*There is no in-person or face-to-face instruction in this course:* instead, the course is a hybrid of online (primarily) and livestream instruction. Synchronous Zoom meetings have been scheduled in lieu of some originally scheduled face-to-face class and lab sessions. In other words, the livestream aspect of the course involves meeting via Zoom on select days (see above) as we would have had the course proceeded in person. Zoom meetings may involve activities, discussions, group work, Q & A, etc. Attendance, though not required, is strongly encouraged. Topics discussed during Zoom meetings may appear on assessments such as quizzes and the final exam. If you are unable to attend a scheduled meeting, it is YOUR responsibility to contact a classmate to find out what you missed. If you miss a Zoom meeting, please DO NOT e-mail me and ask me for notes or for me to “catch you up” on missed material. Additional Zoom meetings may be added to the course calendar as needed.

**COURSE CREDIT HOUR JUSTIFICATION STATEMENT**

PSYC 3441 “Research Design” (4 credits) is a writing-intensive course which is designed to introduce students to research design in psychology by covering the application of research methods emphasizing use of experimental control and analysis of data for reporting experimental results in the psychological study of human and non-human behavior. The course typically meets 150 minutes a week in two 75-minute segments or three 50-minute segments for 15 weeks, and also meets for a 2-hour final examination period. The course lab typically meets an additional 75 minutes a week in one time segment in which students learn how to design experiments and write in APA style culminating in the development of an original empirical research paper. Students typically have significant weekly reading assignments, writing assignments, are expected to take regular tests, and a final examination. These activities average at a minimum 8 hours of work each week to prepare outside of classroom hours. Online course sections contain extensive written content that includes the same information students in a face-to-face lecture sections receive, requiring students to engage the online modules for at least four hours per week. For every hour a student spends engaging with the online content, he/she spends at least two hours completing associated activities and assessments.