**😃 PSY 4431 Lab Syllabus 😀**

Advanced Topics in Cognitive Science:

Cognitive Processes Lab

**Instructor Information**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**TA**: Derek Mangino Sirvent

**Email**: [djm8434@mavs.uta.edu](mailto:djm8434@mavs.uta.edu) -*Use this email to contact me!*

**Office**: LS 411

**Office Hours: Tuesday 11:00 AM-12:00 PM, Thursday 4:00-5:30 PM**

**Course Information**

**Section Information**: PSYC 4431-002 (Class # 27083)

*Time*: Thursdays 2:00-3:50pm

*Location*: Online via Teams and LS 420

**Course Description**

The main objectives of this course are to provide you with the necessary tools to conduct scientific research. You will learn the basic methodology behind scientific writing and also gain valuable insight into the research process. Through class discussions and short in-class assignments, you will be able to thoroughly synthesize and integrate the information you receive in this class.

* There are 15 weeks in our semester.
* Each of the three-week periods will be devoted to one of the following five subjects:
  + Getting started and idea for proposal
  + Introduction
  + Methods
  + Results
  + Discussion
* At the end of each tri-week, your group will submit the respective section of your Group Proposal (G)
* Usually in the second week of each tri-week, Individual Assignments (I) are due.

**Course objectives**

* By providing you with a hands-on approach (demonstrations, group discussions, presentations, etc.) to understanding the background, methods, and analysis techniques that are utilized in psychological research, you will:
  + understand the scientific method and the process of conducting scientific research in psychology
  + develop skills to think critically about cognitive psychology principles and learn to be a critical consumer of information
  + promote the development of career applicable skills such as productive and cooperative group work and effective public speaking (Objective 3).
* By the end of this class, you will be able to do a literature review, design, execute, and analyze an experiment and write an APA style manuscript!

**Required Tools**

* *Kahoot App*
* *Publication Manual of the American Psychological Association*, 7th Edition

Although, if you like free stuff: <https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html> 😉

**Canvas**

Obviously **😝**

# Early Work Encouraged!

In both academic and professional settings, being able to successfully manage your time is important. Take pride of turning in work early! I will take note of your diligence…

No late work accepted.

**Grading**

**Maximum points for this lab: 250 points.**

Lab Attendance 45 points

I: Individual Assignments 75 points: 5 x 15pts each

G Oral Presentation of Research Project 20 pts

G Final Manuscript 10 pts

G: Group Written Manuscript

of Research Project 100 pts:

Outline Draft 20 points

Introduction Draft 20 points

Methods Draft 20 points

Results Draft 20 points

Discussion Draft 20 points

**Attendance**

Attendance is worth 45 pts ( 3 pts / day). Attendance and participation points will be taken in middle and end of class by Kahoot quizzes (pay attention in class!).

If for some reason you cannot attend class (illness, school sponsored activity, etc), it is your responsibility to arrange with another student to get notes for material discussed. Please also contact me as early as possible before the missed class.

**Plagarism Quiz (5 pts)**

[**https://library.uta.edu/plagiarism/index.php**](https://library.uta.edu/plagiarism/index.php)

**Human subjects certification (5 pts)**

In this course, you will be the principal investigator in your research studies. Federal, state, and institution guidelines require that all scientific researchers be certified in proper research practices and ethical considerations in testing on human (or animal) subjects. As such, for this assignment, you will go to the UTA Human Subjects Certification website and complete the certification: <https://about.citiprogram.org/series/human-subjects-research-hsr/>. When you log in, there will be lots of different modules listed – the only thing you need to do is go through the Human Subjects Projection section.

Individual Assignments (I)

* For these assignments, you will practice identifying and comparing key components of journal articles (Should be **more** than one page, since there are **plenty** of things to talk about):
  + explain the technique used in each article in your own words.
  + Compare and contrast between the articles
  + critically analyze by noting limitations and strongpoints (how you would improve it and what you could learn from it).

**Group Proposal sections (G)**

Each group will submit one copy of the respective manuscript section for the given week.

**Final Manuscript**

All scientists must be able to write about their research studies. In addition, effective writing skills are necessary in many careers. Thus, there will be a full manuscript based on experiments conducted in laboratory. The manuscript should contain the following sections: title page, abstract, introduction, methods, results, discussion, conclusion and references.

The manuscript will be completed in teams of three. The topic will be up to the discretion of each student group, with approval from the lab instructor. You will decide upon a research question, develop hypotheses, conduct a literature search (minimum 10 references cited in your paper). Full APA style manuscript (title page, reference section etc).

**G Oral Presentation of Research Project**

Basically, put your Final manuscript into a presentation, by combining all the sections that you worked on throughout the semester!

**Writing Workshop (peer-review)**

Bring TWO printed copies of your draft manuscript you will be asked to critique the rough draft manuscript for two of your fellow students. Everyone will make edits on their own devices and track changes, so the edits are clear to the document’s author. Your fellow students will provide you with comments and suggestions you can use in doing your revisions. This simulates the process of review used by scientific journals. This will hopefully provide you, as well as your classmates, with valuable information when they revise their paper before their final submission.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Tentative Lab Schedule – SUBJECT TO REVISION AS INSTRUCTOR SEES FIT | | | | | |
| Week | Date | Lecture Topic | Lab Topic | Lab Assignment |
| Week 1 | 1/19 |  | Syllabus  How to read an article  Assign groups |  |
| Week 2 | 1/26 |  | How to decide on a research topic.  Writing succinctly  Last chance to pick groups | I: Purpose and inspiration  Human subject’s training due  Plagiarism quiz due |
| Week 3 |  |  | APA format rules  work on project ideas | G: Final idea for proposal |
| Week 4 |  |  | Introduction sections |  |
| Week 5 | 2/16 |  | How to write testable H0 | I: Introductions |
| Week 6 |  |  | How to do a lit rev. | G: Introduction draft |
| Week 7 |  |  | Types of measures, choosing scale and measure equipment |  |
| Week 8 |  |  | Learning to program in QuestionPro and  Programming your own experiment | I: Methods |
| Week 9 |  |  | Uploading exp to QuestionPro, Data Cleaning and Analysis in SPSS | G: Methods draft |
| Week 10 | 3/23 |  | Spring Break | Participate in experiments |
| Week 11 |  |  | APA results section what to include | I: Results |
| Week 12 |  |  |  | G: Results draft |
| Week 13 |  |  | What to include in a discussion. | I: Discussion |
| Week 14 | 4/20 |  |  | G: Discussion draft |
| Week 15 |  |  | Writing workshop |  |
| Week 16 |  |  | Oral Presentation of Research Project |  |
| Finals | 5/4 |  | No lab | Final manuscript due (see lecture syllabus) |

**Disability, Counseling, and Health Accommodations**

Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD).** Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

**The Office for Students with Disabilities, (OSD)** [www.uta.edu/disability](http://www.uta.edu/disability) or 817-272-3364(T).

**Counseling and Psychological Services, (CAPS)** [www.uta.edu/caps/](http://www.uta.edu/caps/) or 817-272-3671(T).