PSYC 4315-060
Spring 2025

Online (Zoom)

# Cognitive Psychology

Dr. Lauren Kirby

UTTyler
THE UNIVERSITY OF TEXAS AT TYLER

**CONTACTING YOUR TEAM**

**Dr. Kirby | she/her**

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334-703-5635

**Virtual Office Hours**
Mon 3-5pm, Wed 2-3 pm, Fri by appointment

**Graduate Teaching Assistant**

Jake Hardin | he/him

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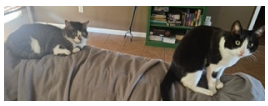
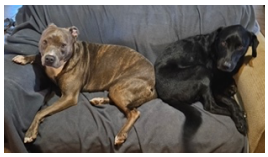
**Course catalog description:** An examination of the cognitive processes involved in human mentation. Includes the study of attention, perceptual processes, memory, knowledge representation, language, decision making and problem solving. Recommended: Prior completion of PSYC 1301 or equivalent.

**Course meeting information:** This course meets on MWF 10:10-11:05am on Zoom. Assignments for each module may be submitted any time after they become available and before their posted due/closure dates. There are no timed exams or quizzes, only "take-home" projects. This course requires on average 6-9 hours of work per week.

**Visual metaphor:** This course focuses on a theories and evidence about how people process information in different steps until behavior happens. The different steps of making sense of the world mirrors the process of assembling a product one step at a time, such as shown in the photo below.







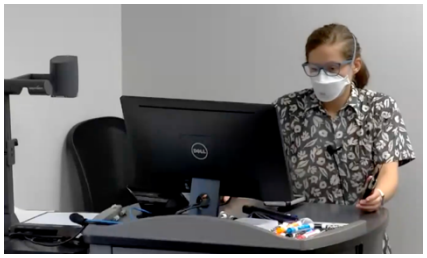
## Instructor Introduction – Dr. Kirby

Hello! I am Dr. Kirby, your instructor for Cognitive Psychology. My educational background is in the biological and brain-based foundations of thoughts, feelings, and behaviors.

These days, when I take off my "Dr. Kirby" hat and am just "Lauren" at home, I enjoy hiking, lifting weights, animal fostering and rescue, reading (and listening to) novels (mostly fantasy, sci-fi, and mystery) and non-fiction books (histories, biographies, science), writing short stories, and spending too much time on *X* (Twitter). I enjoy working from home where at any given time I am likely to be spending time with any combination of my husband, two cats, two dogs, plus any foster animals we have at the time.

I am looking forward to similarly getting to know you better as we establish this learning community together for the term of this course!

## My Teaching Approach



**Positive reinforcement:** Behaviors happen more frequently when they have been rewarded. Punishments are less effective teaching tools, so this course avoids them.

**Intrinsic motivation:** The types of rewards we work for matter. Working toward an internal feeling of reward is associated with longer-lasting learning than working toward external rewards. Traditional grades encourage extrinsic motivation. In my courses, attendance, grading, and makeup policies in this course are carefully designed to encourage all of us to focus on the learning instead of the points.

**Growth mindset:** Students who believe their abilities are fixed give up easily and learn less. Students who are comfortable with trying, making mistakes, and persevering, learn more, so I allow re-attempts on assignments.

**Diversity, equity, and inclusion:** All learners belong in this course and are capable of reaching the learning outcomes.

**Community:** We learn together: we are not in competition with one another.

**Transferable skills:** You can learn skills in this course that will transfer to any workplace, regardless of your future career.

## Big Ideas

**Universals:** There are important mental similarities between people and even across other species.

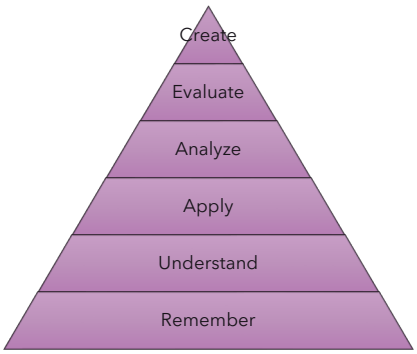
**Individual differences:** Diversity among individual mental processes is important to study.

**Information processing:** People and animals go through invisible mental steps between receiving information from their senses and choosing behaviors.

**Cognitive science:** Psychologists and other professionals study mental events using the scientific method and careful definitions.

**Mental limits:** Everyone has limits to what mental operations they can do. We can have reasonable and safe expectations of each other if we design our employment and technology around known cognitive limits.

**Cognitive levels** indicate the complexity of thinking required for the course outcome or learning objective.




### Course Outcomes (Student Learning Outcomes)

These are things you should know or be able to do by the end of this course. They will consist of smaller goals, called learning objectives.

**CO1: Break down** the background, method, results, and limitations of a cognitive psychology research article for a lay audience. **(Analyze)**

**CO2: Explain** how cognitive psychologists investigate the mind. (**Understand)**

**CO3: Understand** the major findings and theories in the classic content areas of cognitive psychology. **(Understand)**

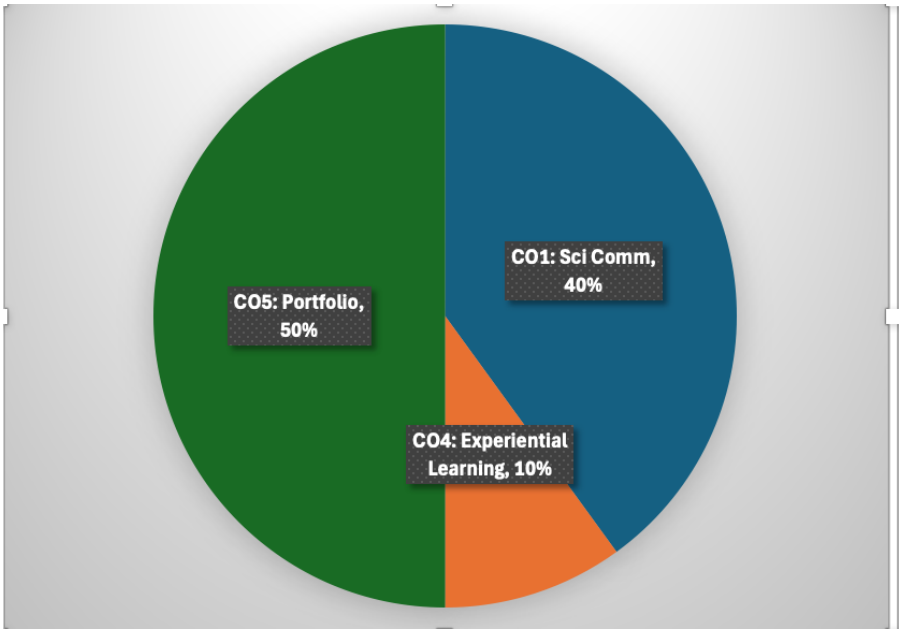
**CO4: Develop** first-hand knowledge of psychology research and/or practice. **(Apply)**

**CO5: Create** a portfolio showing improvement on learning outcomes and reflecting on your achievement of course outcomes and learning objectives. **(Create)**

# Grading Policy

Your final grade is broken down by course outcomes and assignments that are weighted as shown in the pie chart below. Assignments are graded by letter instead of percentages.

**Grading Breakdown by Course Outcome Figure**




COs 2 and 3 are assessed using ungraded assignments, such as embedded practice quizzing and in-class participation activities.

Each course outcome will be assessed multiple times and scored using a letter grade scale, as well as comments left by your instructional team. When you re-attempt an assignment or outcome, the highest score takes the place of previous attempts.

**Makeups, Late Work, Re-attempts, and Attendance**

There is no such thing as a grade of "zero" for any assessment in this course, whether it is on time, late, or missing. You can request assignment extensions for any reason at any time before the due date. I do not request documentation for excuses or extension requests. When you ask for an extension, it is good professional practice to propose your own modified due date in your first request email. If you do not request an extension ahead of the due date, but the work is still missing, I will reach out to you to create a plan for late submission and request a short reflection narrative about the consequences of late work and failing to notify the instructor. Your number of re-attempts in this course or on a given assignment is unlimited: I want you to be successful, even if it takes multiple tries.

Please note that for financial aid purposes, I am required to report to the Registrar whether you attended class at all within the first 2 weeks of class: this is a binary measurement (has attended or has not attended). If you have not attended at all within the first 2 weeks of the course, your financial aid may be adjusted accordingly. **For these purposes, in this course, "attendance" will mean having completed any assignments or activities at all (graded or ungraded)**.

# Assignments

The **Science Communication Project** is a summary of a research article you choose from a provided list. You have two formatting choices—oral presentation (video) or written article—and a few choices of topics. You are invited to write an article or record yourself giving an oral presentation explaining the purpose, methods, results, and implications of a single research article. Your successful project will considered understandable by a general, non-expert audience (such as junior students, family members, coworkers, etc.).

**Portfolio:** The portfolio is a collection of artifacts from the course that you have improved and/or reflected upon. It includes your revised Science Communication project based on feedback, and a reflective essay (response to provided reflection questions). Portfolio components will be creatively bundled into one document, presentation, or personal website (such as on Wix.com or Google Sites).

**Experiential Learning—Research Participation, Counseling Hours, and Other Opportunities:** Earn 6 SONA credits or 3 counseling hours (or mix and match). Alternatives include research article summaries and/or psychology podcast summaries (which count for 2 SONA credit equivalents each).

**Resources**

**Check the course Canvas page and your UT Tyler email daily** on weekdays. Your TA and I will communicate with you through Canvas announcements, UT-Tyler email, and pages and documents linked in the "Modules" and "Assignments" tabs. Pay special attention to the Course Calendar and the Assignments and Activities descriptions. Go to Canvas settings and set up your notifications to "subscribe" to such announcements and comments from us so you will not miss anything. I give feedback on some assignments through the comments feature when you check your assignments through the "Grades" tab. You will find those in the same place you submitted an online assignment on the right-hand side reading "comments." I also may attach drafts of documents (.docx) with tracked changes and comments; make sure you know how to view tracked changes and comments in Word if they are not automatically visible for you when you first open the document.

**You will need to use Microsoft Office products** (Word, PowerPoint, and Excel) for some assignments. Do not use alternative programs such as Apple's Pages, Google Drive documents, or any other formats. If you do not have Microsoft Office, please visit the following page for instructions for how to download it for free: https://www.uttyler.edu/it/office365/365-proplus-students.php. You also need a webcam, microphone, and familiarity with using Zoom. Webcams and microphones are built into some computers already, but not all. Please test your devices as soon as possible to make sure your work. I can set up a test Zoom call with you to help you. Even inexpensive earbuds have microphones on them, so please procure one. Please let me know if you cannot access a webcam, microphone, or any other technology for this class. This request needs to be made as early in the semester as possible so that shipping or any other logistics could be achieved on time.

**Required Textbook**

Pilegard, C. (2020). *Cognitive Foundations, Edition 2*. GitHub. PDF or Website (no ISBN). Creative commons license: CC-BY-NC-SA Retrieved from https://pilegard.github.io/cogfoundations/

**This textbook is FREE, but I am required to put this note here in the syllabus anyway by the University.** Note: A student at UT-Tyler is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**Recommended Website:**

Purdue University Writing Lab. APA formatting and style guide (7th Edition). *Purdue online writing lab (OWL).* https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

## Gen AI Policy

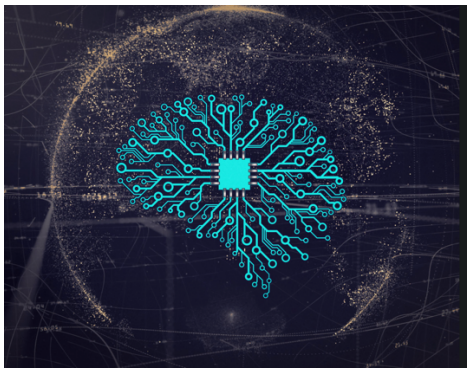


Image credit: "Machine Learning & Artificial Intelligence" by mikemacmarketing is licensed under CC BY 2.0.

**Generative artificial intelligence (GenAI)** tools include software that creates or remixes images or text, with popular examples such as ChatGPT—a large language model (LLM)—or DALL-E image generator. Their use is discouraged in this course.

**All assignments** are designed to support your learning, which GenAI assistance would undermine.

**Inaccuracies** are common in GenAI text output. GenAI tools do not know, remember, or reason.

The **environmental and human impact** of GenAI is costly. Some tools have even been trained using child sex abuse material!

**Thus, the most ethical and responsible choice for this course is to submit only your own work without GenAI assistance.**

## Other Policies

**Accessibility Statement**
This course is designed to be accessible to all students. However, you may still have access needs that require accommodations. Feel free to let me know of any disability or other access needs informally, and be aware of formal disability documentation (for uses in other courses as well as mine) processes through our Student Accessibility Resources: https://www.uttyler.edu/academics/success-services/disability-services/.

**Pregnancy and Parenting Statement**
Pregnant and parenting students have the legal rights in higher education as well (Texas Laws SB 412, SB 459, and SB 597/HB 1361), including excused absences and other resources. UT Tyler encourages you to document and opt into those resources by contacting parents@uttyler.edu and completing the Pregnant and Parenting Self-Reporting Form to go through the formal accommodations process. You may also informally inform me about your needs related to pregnancy or parenting and make use of the flexibility everyone has access to in my courses regarding attendance, make-ups, and re-attempts.

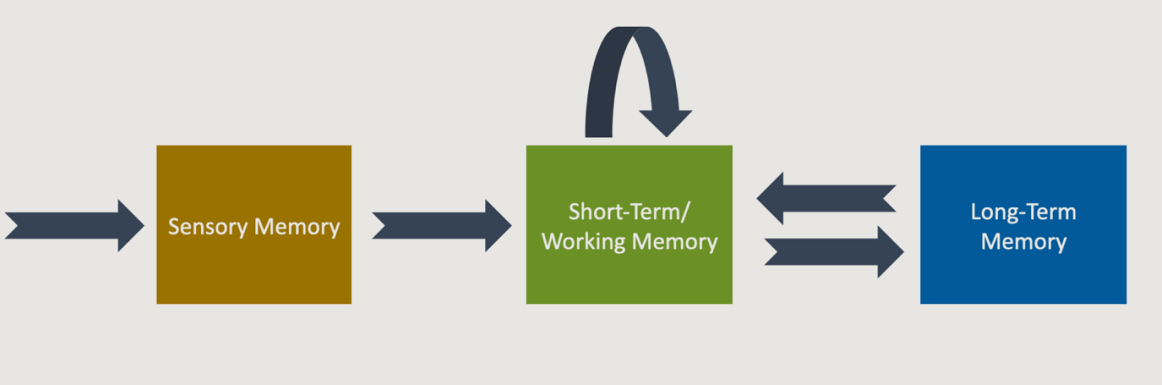
If you believe you have experienced discrimination, harassment, sexual harassment/sex-based misconduct, and/or related retaliation, please know that you can contact the Title IX office or file a complaint. You may also send questions and concerns to Blake Bumbard, Title IX Coordinator, at bbumbard@uttyler.edu or by phone at 903-565-5760.

Students have various needs that go beyond the scope of my class, but I am happy to connect you with anything you may need. Feel free to let me know about anything going on in your life that is a barrier to your learning. For additional resources, such as tutoring, financial aid, the food bank, housing assistance, etc. please see the syllabus module in our Canvas course.

You are subject to university policies beyond those in my course. Feel free to let me know of questions about them: if I don't know the answer, I know how to find it. For additional university policies, such as the official accommodations policies, AI policy, student conduct guidelines, campus carry policies, etc., please see the syllabus module in our Canvas course.

**Cognitive Psychology is about Mental Information Processing**

**Figure: Information Processing Model** we will learn about this term. Every topic we discuss in this course can be related to this diagram in some way. Information flows from our sensory organs into the brain, where it is briefly stored in our sensory memory system. The vast majority of this information gets lost. The small portion we pay attention to gets stored briefly in short-term memory, where we can perform various operations with it until we either forget it or store it in long-term memory. Various "hacks" allow us to keep information in short-term storage for longer periods of time and can help us move it into long-term storage. Information can also be recalled from long-term memory where it will temporarily be "opened" in short-term memory. We have units in this course about sensory memory, attention, pattern recognition, short-term memory, working memory, long-term memory (of many types), and about various ways we use information from long-term memory (e.g., language, reasoning, and decision-making).




**Course Calendar**

| Target Due Dates | Module | Readings | Assignments |
|---|---|---|---|
| **01/13/25** | 0: Getting Started | Syllabus | |
| **01/26/25** | 1: History & Research Methods | Chapter 1 | |
| **02/02/25** | 2: Sensation & Perception | Chapter 2 | Sci Comm Planning |
| **02/09/25** | 3: Attention | Chapters 3 | Research Summary |
| **02/16/25** | 4: Short-Term Memory | Chapter 4 | |
| **02/23/25** | 5: Research and Science Communication | Project Assignment Guide | Sci Com Project |
| **03/02/25** | 6: Long-Term Memory | Chapter 5 | |
| **03/09/25** | 7: Memory in Context | Chapter 6 | |
| **03/16/25** | 8: Knowledge | Chapter 7 | |
| **03/30/25** | 9: Language | Chapter 8 | |
| **04/06/25** | 10: Problem-Solving | Chapter 10 | |
| **04/13/25** | 11: Reasoning | Chapter 9 | Revisions |
| **04/20/25** | 12: Decision-Making | | Revisions |
| **04/27/25** | Final Module: Reflective Portfolio Creation | | Final Portfolio |

Note: All due dates are suggested to help you keep on track. The modules are designed in sequence: newer modules will only open for you if you have completed the activities in the previous ones. It would be helpful to your learning for you to allow for the instructional team to provide feedback on some assignments before completing the next ones. You also have unlimited re-attempts on all assignments. The courses closes at 11:59 on 08/09/2025. If you have a passing grade at that time, I will put in an "I" letter grade, which represents "incomplete" and you can finish your assignments after the completion of the term. We will need to meet and do some paperwork to discuss revised due dates in that case. Additionally, this course calendar and syllabus are subject to changes, which will be announced by the instructor in a timely manner.

**CEP Mission and Vision Statements**

**CEP Mission**
The mission of the CEP is to prepare competent and passionate professionals in the fields of education, psychology, and counseling; to advance knowledge and expertise; and to impact these fields locally, regionally, nationally, and internationally.

**CEP Vision**
The CEP will be a global leader in responding to needs in the fields of education, psychology, and counseling, with a focus on the East Texas region, by creating innovative academic and scholarly pathways and partnerships.

# Grading Policy

The grading scale for this course is as follows:

A = Excellent, ≥ 99+%

B = Good, ≥ 80%, < 90%

C = Fair, ≥ 70%, < 80%

D = Poor, ≥ 60%, < 70%

F = Fail, < 60%

Artificial Intelligence (AI) Usage Policy
***UT Tyler's AI Policy***

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.
***Dr. Kirby's AI Policy***

Generative artificial intelligence (GenAI) tools—software that creates new text, images, computer code, audio, video, and other content—have become widely available. Well-known examples include ChatGPT for text and DALL•E for images. The learning opportunities in this course are useful only when you complete original work rather than using generative AI tools for any portions of any assignments. I encourage you to take advantage of the learning opportunities and submit only your own work, unless otherwise indicated. I have carefully designed all assignments and class activities to support your learning. Doing your own work, without human or artificial intelligence assistance, is best for your efforts in mastering course learning objectives. If you choose to use generative AI tools, please remember that they are typically trained on limited datasets that may be out of date. Additionally, generative AI datasets are trained on pre-existing material, including copyrighted material; therefore, relying on a generative AI tool may result in plagiarism or copyright violations. Further, LLMs (e.g., ChatGPT) do not know, remember, or reason: they are "fancy predictive text." They predict which words tend to be near other words. GenAI is also circular: its training data are being corrupted by AI products

themselves. Further, GenAI usage has a large environmental impact (stressing the power grids and using a lot of water), it involves hidden human costs (including exploiting low-wage labor), and GenAI image generation software has been trained on disturbing criminal material, including child sex abuse material. Finally, keep in mind that the goal of generative AI tools is to produce content that seems to have been produced by a human, not to produce accurate or reliable content; therefore, relying on a generative AI tool may result in your submission of inaccurate content. I invite you to take responsibility—instead of leaving it up to the tool—to assure the quality, integrity, and accuracy of work you submit in any college course. I am committing to the same expectations, as I am also refraining from using available AI tools in designing this course and evaluating your work. Deviations from these guidelines will be considered a violation of UT Tyler's Honor Code and academic honesty values. This policy was drafted using the UT Tyler Artificial Language for Syllabi document and Chris Heard's Generative AI Syllabus Statement Tool (which itself not an AI tool). You may find UT Tyler's general AI syllabus policy and other resources here: https://www.uttyler.edu/offices/digital-learning/ai/
Please note that Grammarly and word processing grammar suggestions are allowed; paraphrasing websites are not.