Course Description
In this graduate course you will develop a deeper and detailed understanding of human cognition, learning, and memory. That is, you will become well informed about how humans learn and remember. All of human experience involves learning and memory in various forms, so what you learn in this course will be related to your academic life.

This course will help you to understand the field of cognitive science and the critical methods used in this field of study. Cognitive science is the study of how people perceive, learn, remember, and think about information. Many important topics and issues will be covered in the course: sensation, perception, attention, memory, language, decision making, and among other higher-order processes. In particular, we will learn about individual and cultural differences in human cognition and learning. The course will also cover different experimental techniques as well as different cognitive neuroscience research methods (e.g., eye-tracking, mouse-tracking, and fNIRS) and techniques used to study human cognitive activities.

Course Objectives
Here is a list of what you will be able to do upon successful completion of this course
• You will be able to understand the major topics of human cognition, learning, and memory.
• You will be able to describe the critical terms and research methodologies used in the field of human cognition, learning, and memory.
• You will be able to hone critical thinking and communication skills through class participation and discussion.

Course Format and Organization
Each week we’ll tackle one aspect of cognition in two parts. The first half of each meeting will contain a mix of short lecture and classroom discussion about the background in a specific subfield, often on the basis of various important concepts and ideas that are related to human cognition, learning, memory, decision making, and language. The second half of each meeting will center on student ‘journal club’ presentations of weekly papers and paper discussions.

1 Although the instructor will respond to students’ questions and emails as soon as possible, the students should generally expect to receive a reply to an email within 24 hours on weekdays and at least 48 hours on the weekends or holidays.
**Course Evaluation**

Weekly Discussion Questions for Journal Club Papers 10 %  
Journal Club Paper (Individual) Presentation 30 % (10 % x 3 times)  
Final (Individual) Project Presentation 30 %  
Final Project 30 %  
**Total** 100 %

**Grading**
The percentage-score-to-letter-grade conversion for this course is as follows:

- A = 90% or higher
- B = 80 - 89.9%
- C = 70 - 79.9%
- D = 60 - 69.9%
- F = below 60%

**Attendance**
Students having valid reasons for being absent from a class (illness, death in the family, etc.) shall provide the instructor with appropriate evidence to support the reasons given.

**Journal Club Paper Presentation & Discussion Leader (30%)**
Presenting your work and others people’s work is a crucial part of your academic life as a graduate student and researcher at the UTRGV. To practice this difficult task, each week we will assign one person to present one journal club paper. You will be tasked with preparing a well-designed slide presentation (PowerPoint, Keynote, etc.) that: summarizes the motivation (research background), methods, results, and interpretation in the paper (you can use their figures); evaluates the experimental logic and methods; considers whether the conclusions are supported by the data; and highlights open questions and future directions. Your presentation should last approximately 20 minutes and, hopefully, you will be interrupted with questions so that the presentation lasts between 30–40 minutes. You will be graded based on the following criteria: design and visual interest of slides; clarity and accuracy of summary; critiques, novel interpretations, future directions (i.e. some original and creative contribution). You are expected to give THREE presentations during the semester. [Note: Each student will be responsible for presenting a paper to the class. You can log into the Blackboard to sign up for your presentation topic via a “Sign UP” wiki page. It is important to note that one slot for one person only and is taken on a first-come-first serve basis. Choose a new presentation topic which is not the same or very similar to others.]

Presentations should make use of power point and be designed to summarize the journal club paper and facilitate class discussion. The content covered in your presentations should relate to what will provide valuable information to audience. This is an individual presentation aimed at professionals, so your comments should be critical as well as celebratory. This is your chance to investigate in detail an empirical paper of your own interest, and tell your colleagues why they should have knowledge of the paper. See below for the Rubrics that will be used for grading. I would also like you to upload your power-point file to Blackboard’s Presentation before your presentation. If you need help to access the Blackboard and upload your file, you can call IT help desk at 956-665-2020 or visit the IT Service Desk Academic Service Building 1.102. For the technical issues, please submit an online help request form at: [www.utrgv.edu/IT-Help](http://www.utrgv.edu/IT-Help). This is
best done before your presentation. After your presentation, you will lead the class discussion of that paper that lasts between 10–15 minutes. As a discussion leader, you should provide a framework or activity for class discussion and should include at least ten in-depth discussion questions for the class. Each discussion leader is free to make use of any questions that are proposed by other classmates on the Blackboard.

**Weekly Discussion Questions for Journal Club (10%)**

You will need to turn in one discussion question for each of the journal club papers via Blackboard, including the week that you are presenting. The questions can take on many forms including, but not limited to: what you thought was interesting, uninteresting, confusing, wrong, open questions, insightful connections to other papers or fields, what you think is out-of-date or has been forgotten. This is not intended to be a lot of work, but rather to encourage you to read the papers and provide some form of evidence that you actually read the weekly journal club paper. The easiest way to generate such responses is to make inline notes as you read the paper about passages that seem interesting or confusing. Each student is required to post one meaningful discussion question on each of the given journal club papers on Blackboard’s wiki page. These two discussion questions will be due “MONDAYS AFTERNOON 6 PM”. You can modify your questions before the due time, ONLY the last submission of your questions for Reading 9 (week 6) to Reading 27 (week 13) will be graded. You are advised not to modify your question after the due time. This will allow each presenter and peers have ample time to prepare for their discussion beforehand. It is also important to express your ideas logically, concisely and explicitly. Lengthy questions have proven to be ineffective and should be avoided.

**Late Discussion Questions Policy:** The late discussion questions will not be accepted. If you think you will miss the date the questions are due, please e-mail me in advance. If you forget to post your questions or directly duplicate other questions on the wiki page, then you will receive a zero on that question and will not be able to make them up.

**Final Project Presentation (30%)**: You will do a 20-minute presentation on your final project. The presentation topic should relate to the topic of interest for this course and should have primary research questions and hypotheses. In your presentation, please summarize your final project (~20 mins) and lead a discussion (~5 mins). Please sign up for your presentation topic via a “Sign UP” wiki page on the Blackboard. It is important to note that one slot for one person only and is taken on a first-come-first serve basis.

**Individual Final Paper (30%)**

Each student will complete a research paper on a topic that is directly relevant to at least one topic discussed in class (see Course Schedule). Your written report needs to include:

1. a description of the selected topic (e.g., title, purposes, 1-2 research questions),
2. a literature review of peer-reviewed journal articles and books on your topic,
3. a discussion and conclusion based on the literature review, and
4. conform to the formatting guideline listed below.

**Paper Formatting Requirements**

The final written paper should adhere to the following formatting requirements:
• Maximum 10 double-spaced pages, not including references
• Times New Roman, 12 Point, 1” margin
• Name on top right corner
• Complies with APA referencing guidelines
• Submit an electronic copy online (a word document is preferred) by the due date: **Wednesday May, 1, 4:40 PM**

**Late Final Paper Policy:**
Without any special circumstance subject to instructor’s approval, late assignments will not be accepted. Exceptions to this late policy will be made only with advance approval from the instructor. The late final paper submission will not be accepted. If you forget to submit your final paper or directly duplicate other work, then you will receive a **zero** on that paper.

**Cell-phone policy**
When you are in class, you are here to learn. Talking or texting on your phone is not only discourteous, it is disturbing to me and to other students. Therefore, when class begins you must turn off your cell phone and put it away. If you are caught talking or texting on your phone, you will be asked to put your phone away immediately or leave class.

**Blackboard**
I will use the course blackboard website to post a version of my lecture slides to help you study more efficiently. These are not meant to be complete or to serve as a substitute for attending class. Instead, they should be used as a study guide and to provide structure for taking and interpreting your own notes.

https://mycourses.utrgv.edu/
Once you log in to the “my UTRGV” website you should be able to navigate to the course blackboard site: PSYC-6344-01-Spring2019

**Mandatory Course Evaluation Period**
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Online evaluations will be announced in the class or blackboard. Students who complete their evaluations will have priority access to their grades.

**Scholastic Integrity**
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.
**Sexual Harassment, Discrimination, and Violence**
In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

**Course Drops**
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

**Accommodations For Students With Disabilities**
The UTRGV disability accommodation, mandatory course evaluation statement and sexual harassment statement are required on all syllabi. Additional policy statements are optional, such as those covering attendance, academic integrity, and course drop policies. If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time.
Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu.
Edinburg Campus: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.
Psychology 6344: Learning, Memory & Cognition  
Spring Semester 2019  
Tentative Course Schedule

Note: The course schedule and other details may be modified during the semester. You are advised to check the Blackboard for the updates.

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<thead>
<tr>
<th>Week</th>
<th>Class Date</th>
<th>Topic</th>
<th>Journal Club Paper</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Wednesday, January 16</td>
<td>Intro to the course and syllabus</td>
<td>None</td>
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</table>
| 2    | Wednesday, January 23 | From the Cognitive Revolution to Cognitive Science of Learning | Reading 1  
Reading 2  
Reading 3 |                             |
| 3    | Wednesday, January 30 | Intro to Cognitive Neuroscience                   | Reading 4           |                             |
| 4    | Wednesday, February 6 | Research Methods and Tools                        | Reading 5  
(mouse-tracking method)  
Reading 6  
(eye-tracking method) | Eye-tracking Lab Tour |
| 5    | Wednesday, February 13 | Research Methods and Tools                        | Reading 7  
(E-prime)  
Reading 8  
(fnirs & fMRI) |                             |
| 6    | Wednesday, February 20 | Sensation & Perception                           | Reading 9  
Reading 10  
Reading 11 | Individual Presentations |
| 7    | Wednesday, February 27 | Memory                                         | Reading 12  
Reading 13  
Reading 14 | Individual Presentations |
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Other</th>
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<tr>
<td>8</td>
<td>Wednesday, March 6</td>
<td>Attention</td>
<td>Reading 15</td>
<td>Individual Presentations</td>
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<td>Reading 16</td>
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<td>Reading 17</td>
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<td>9</td>
<td>Wednesday, March 13</td>
<td>Spring Break</td>
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<td>No Class</td>
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<td>10</td>
<td>Wednesday, March 20</td>
<td>Emotion</td>
<td>Reading 18</td>
<td>Individual Presentations</td>
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<td>Reading 19</td>
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<td>Reading 20</td>
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<td>11</td>
<td>Wednesday, March 27</td>
<td>Embodied Cognition</td>
<td>Reading 21</td>
<td>Individual Presentations</td>
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<td>Reading 22</td>
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<td>Reading 23</td>
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<td>12</td>
<td>Wednesday, April 3</td>
<td>Cultural Cognition</td>
<td>Reading 24</td>
<td>Individual Presentations</td>
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<td>Reading 25</td>
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<td>13</td>
<td>Wednesday, April 10</td>
<td>Decision Making</td>
<td>Reading 26</td>
<td>Individual Presentations</td>
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<td>Reading 27</td>
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<td>14</td>
<td>Wednesday, April 17</td>
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<td>Final project presentations</td>
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<td>15</td>
<td>Wednesday, April 24</td>
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<td>Final project presentations</td>
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<tr>
<td>16</td>
<td>Wednesday, May 1</td>
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<td>Final Paper Due Date (No Class)</td>
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### Journal Club Papers

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<tr>
<td>Reading 27</td>
<td>Horwitz, Rachel, Sarah Brockhaus, Felix Henninger, Pascal J. Kieslich, Malte Schierholz, Florian Keusch and Frauke Kreuter (2017): Learning from mouse movements: Improving questionnaire and respondents' user experience through passive data collection.</td>
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Rubrics: Evaluation Criteria

90% - 100% Exceptional
A superior performance with consistent strong evidence of:
- a comprehensive, incisive grasp of the subject matter
- an ability to make insightful critical evaluation of the material given
- an exceptional capacity for original, creative and/or logical thinking
- an exceptional ability to organize, to analyze, to synthesize, to integrate ideas and to express thoughts fluently
- a tremendous contribution to the group assignment

80% - 89% Excellent
An excellent performance with strong evidence of:
- a comprehensive grasp of the subject matter
- an ability to make sound critical evaluation of the material given
- a very good capacity for original, creative and/or logical thinking
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas and to express thoughts fluently
- an excellent contribution to the group assignment

70% - 79% Good
A good performance with evidence of:
- a substantial grasp of the subject matter
- a good understanding of the relevant issues and a good familiarity with the relevant literature and techniques
- some capacity for original, creative and/or logical thinking
- a good ability to organize, to analyze and to examine the subject material in a critical and constructive manner
- a good contribution to the group assignment

60% - 69% Satisfactory
A generally satisfactory and intellectually adequate performance with evidence of:
- an acceptable basic grasp of the subject material
- a fair understanding of the relevant issues
- a general familiarity with the relevant literature and techniques
- an ability to develop solutions to moderately difficult problems related to the subject material
- a moderate ability to examine the material in a critical and analytical manner
- a limited contribution to the group assignment

50% - 59% Minimal Pass
A barely acceptable performance with evidence of:
- a familiarity with the subject material
- some evidence that analytical skills have been developed
- some understanding of relevant issues
- some familiarity with the relevant literature and techniques
- attempts to solve moderately difficult problems related to the subject material and to examine the material in a critical and analytical manner are only partially successful
- few or none contribution to the group assignment

Less than 50% Failure
An unacceptable performance