

# Syllabus

## **CRCRTH 651L: Advanced Cognitive Psychology**

**Fall 2017, hybrid format (Class #7809 online, #7302 face-to-face);**

**Thursdays, 7:00-9:45pm ET, September 14 – December 14, 2017**

**Location: UMass Boston, Wheatley Hall 4<sup>th</sup> Floor, Room W04-170**

**Online: Zoom web conferencing at [tiny.cc/CCT651](https://tiny.cc/CCT651)**

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Office/phone call hours: schedule a meeting [here: https://jeremyszteitercct.youcanbook.me](https://jeremyszteitercct.youcanbook.me)

## **Course Format**

Instructor-led, hybrid course; weekly meetings on campus and online.

## **Official Catalog Description**

This course gives a survey of the field of cognitive psychology from an information-processing viewpoint. The course considers how people encode, organize, transform, and output information. Emphasis is given to such topics as concept formation, problem-solving, and creative thinking. CRCRTH 651L and PSYCH 550L are the same course.

## **Notes about Preparation Assumed for this Course**

This course has no formal prerequisites, and it is a core requirement for students in the MA program in Critical and Creative Thinking. Although the title of the course refers to “advanced” cognitive psychology, students need not have previously taken coursework specifically in the area of cognitive psychology, but some experience with general psychology may be helpful.

## **Course Overview and Extended Description**

This course introduces students to the contemporary field of cognitive psychology--its key questions, methods, findings, debates, and proposed models and theories. How is the mind designed that allows it to function so well in the everyday world? What might be the advantages and disadvantages of this form of design? How is information represented in the different components, and how does form of representation affect inference, thinking, and problem solving? What changes occur in thinking and problem solving with the development of expertise? Several topics will be considered: perception, attention, consciousness, memory, meaning-based mental representations, language, thinking and reasoning, problem solving, and the nature of expertise. Throughout, we will pay special attention to identifying important general principles of how the mind functions, the evidence for those principles, and the applicability of the theories and findings to issues of improving our practices.

Class meetings will involve two main types of activities: 1) discussion and activities to reinforce and extend readings, and 2) small-team problem-based learning projects, where each student will be part of a small group that develops activities to explore and test questions about cognitive psychology over multiple weeks at a time. Through the readings, students will come to see what psychology research has been done to help reveal how the mind works and what ongoing questions remain. Discussions around the readings will help to bridge theories and models to practice and seek to extend our understanding and make further connections to critical and creative thinking. In the small-team problem-based learning activities, students will collaborate to identify and test their own theories through direct experience and develop additional understanding about how cognitive psychology informs our everyday lives.

## Texts and Materials

- Reisberg, D. (2016). *Cognition: Exploring the science of the mind*, 6th ed. ISBN-13 number: 978-0393938678 (hardcover) or 978-0393293289 (paperback)  
It is permitted for students to use the 5<sup>th</sup> edition instead. Please note that weekly assigned readings may be different chapter numbers depending upon edition.
- Supplementary readings will be provided or placed on eReserves as needed.
- A technology setup for online meetings (microphone and speakers/headphone, and webcam; reliable Internet connection for web conferences). Students in the face-to-face section are requested to bring a personal laptop if possible.

## Key Links

**Course wiki (central source for all course materials; requires login with your umb.edu account):**  
<http://crcrth651-szteiter.wikispaces.umb.edu> (accessible once the course begins).

**Academic Calendar** (please note registration, Add, Drop, and Withdraw deadlines):  
<http://www.umb.edu/academics/caps/credit/fall/calendar>

## Learning Objectives

By the end of the semester, you will have:

1. Learned about key concepts in cognitive psychology, including how research findings have led to current models and explanations of topics such as perception and attention, memory, knowledge, and problem-solving, as well as some of the challenges to current models.
2. Developed a set of general principles that strengthen your understanding of ways that real-life experience reflects and informs what we can understand about cognitive psychology.
3. Identified theories and questions that extend what you learn from the readings, develop ways to test them and observe the results, and consider how to use the results to continue supporting critical and creative thinking in yourself and others.
4. Developed a final project where you have researched a topic of personal interest and given an educational interview in order to help others appreciate what you've learned.

## Weekly Schedule

<b>Week</b>	<b>Meeting Date (Thursdays, 7:00-9:45pm ET)</b>	<b>Summary of Topic/Themes</b>
<b>1</b>	<b>September 14</b>	Course orientation and introduction to cognitive psychology <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 1</i></li> </ul>
<b>2</b>	<b>September 21</b>	Perception and Attention <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 4, Additional article on reading research</i></li> </ul>
<b>3</b>	<b>September 28</b>	Perception and Attention <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 5, Strayer &amp; Drews, Additional article on PBL</i></li> <li>• <i>Team PBL Project 1: Phase A</i></li> </ul>
<b>4</b>	<b>October 5</b>	Memory: Working Memory <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 6, Baddeley</i></li> <li>• <i>Team PBL Project 1: Phase B</i></li> </ul>
<b>5</b>	<b>October 12</b>	Memory: Long-term Memory <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 7, Geiselman (optional: Butler &amp; Berry)</i></li> <li>• <i>Team PBL Project 1: Phase C</i></li> </ul>
<b>6</b>	<b>October 19</b>	Memory: Memory errors <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 8, Loftus (optional: Bartlett)</i></li> <li>• <i>Team PBL Project 2: Phase A</i></li> </ul>
<b>7</b>	<b>October 26</b>	Knowledge: Expertise <ul style="list-style-type: none"> <li>• <i>Readings: Bransford; Ericsson (optional: Ericsson &amp; Charness)</i></li> <li>• <i>Team PBL Project 2: Phase B</i></li> </ul>
<b>8</b>	<b>November 2</b>	Knowledge: Representing Concepts <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 9</i></li> <li>• <i>Team PBL Project 2: Phase C</i></li> </ul>
<b>9</b>	<b>November 9</b>	Knowledge: Visual and Linguistic Knowledge <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 10 &amp; 11</i></li> <li>• <i>Team PBL Project 3: Phase A</i></li> </ul>
<b>10</b>	<b>November 16</b>	Problem-solving and Decision-making <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 12, Kahnemann &amp; Tversky (optional: Wineburg)</i></li> <li>• <i>Team PBL Project 3: Phase B</i></li> </ul>
	<b>November 23</b>	No class – Thanksgiving Holiday break
<b>11</b>	<b>November 30</b>	Problem-solving and Decision-making: Creativity <ul style="list-style-type: none"> <li>• <i>Readings: Reisberg Ch. 13; Additional creativity article (optional: Bechara et al.)</i></li> <li>• <i>Team PBL Project 3: Phase C</i></li> </ul>
<b>12</b>	<b>December 7</b>	Additional Perspectives in Cognitive Psychology: Neurodiversity <ul style="list-style-type: none"> <li>• <i>Readings: Selected articles</i></li> </ul>
<b>13</b>	<b>December 14</b>	Additional Perspectives in Cognitive Psychology: Mindfulness <ul style="list-style-type: none"> <li>• <i>Readings: Brown; Mason</i></li> </ul>

Some readings may be revised throughout the semester based on need and interests of the class.

## Assessment and Requirements

### SUBMITTING ASSIGNMENTS:

All assignments must be submitted electronically as **.pdf** or **.doc/x** files, unless prior arrangement has been made with the instructor. Documents submitted in other formats may be returned to you to be converted before submitted. Please see the course wiki for specific submission procedures.

**GRADED REQUIREMENTS:**

1. Weekly General Principles Journal (complete these any 10 weeks of the course, submitted on time and based on current readings) (30%).
2. Process Reviews related to Team PBL processes (3 times throughout course) (20%).
3. Final Project (including proposal, annotated bibliography, written reflection, educational interview with committee selected from class) (25%).
4. Class participation (20%) (includes prepared attendance at 13 class meetings, active participation during discussions and team projects).
5. Rubric (5%) See below.

**RUBRIC**

Beyond the points achieved for items above, additional points come from the following rubric, to be completed by the instructor at the end of the course.

- 1 = generally met or exceeded the minimum expectation
- 0 = not a particular strength of mine for this course

Quality Statement	0	1
1. Timely submission of written assignments (where total days late across all submissions is <= 10).		
2. General Principles Journal entries that fulfill the stated requirements, provide relevant examples and a thoughtful reflection.		
3. Initiative taken in keeping up with the course, making up for missed sessions, and asking for help or guidance in a timely way and communicating quickly to inform the instructor about any issues that affect your full participation in the course. (Includes being proactive about addressing any technology-related problems that arise.)		
4. Final project reflects a process of building your understanding about your topic over several weeks of time and establishes a clear basis for practical extensions beyond the course.		
5. Written work is almost entirely free from mechanical, grammatical, formatting, and spelling errors, uses consistent academic standards, and is presented professionally.		

**LATE SUBMISSION POLICY**

Formally, there are no extensions given on written work. Weekly General Principles Journal entries must be received on time and correspond to the readings assigned for the current week to be given credit for grading purposes. Entries received late will not be given credit but will still be returned with instructor feedback as soon as possible and will be considered in the case of a borderline grade at the end of the

course. All other written items can be accepted late but will be given no more than half credit if received more than a week late.

## **GRADING**

Overall points are converted to letter grades as follows: The minimum grade for A is 93 points, for A- is 87, for B+ is 81, for B is 74; for B- is 68; for C+ is 61; and for C is 50 points.

## **Reflective Practice Portfolio**

*This only applies to students in the Critical and Creative Thinking MA Program:* any of the reflection papers from the team PBL projects or the individual final project are appropriate for inclusion in the program's required Reflective Practice Portfolio.

## **Course Evaluation**

At the end of the course, you will be asked to complete an anonymous, online course evaluation (<http://bit.ly/CCTEval>) as required by the Critical and Creative Thinking program. Note that the question in the evaluation referring to a statement of synthesis about the course as a whole may be shared widely, so that the instructor, the program, and other parties may appreciate the course's strengths and weaknesses and contribute more effectively to continued development.

## **Accommodation Statement**

Sections 504 and the Americans with Disabilities Act of 1990 offer guidelines for curriculum modifications and adaptations for students with documented disabilities. If applicable, students may obtain adaptation recommendations from the Ross Center (617-287-7430). The student must present these recommendations to each professor within a reasonable period, preferably by the end of the Drop/Add period.

## **Syllabus Version**

September 2017; This syllabus is subject to change and updated versions may be distributed after the course begins, but the workload expectations will not be increased after the semester starts.