PSYC 315H: Cognitive Psychology

Class Number 68574  MoWeFr  10:10-11:00  Machmer Hall W-24

This syllabus is available at: http://people.umass.edu/dehuber/PSYCH315H.html and on Moodle.

Professor: David Huber  Office Hours:  Thurs. 10-11  Tobin 425

E-mail*: dehuber@psych.umass.edu

*E-mail should be used ONLY for emergencies (e.g. illness) or for arranging appointments. The instructor cannot answer questions on course material by email. Instead, these questions should be brought to office hours or discussed in class.

Course Description (3 credits):
Cognitive psychology is the scientific study of fundamental mental processes such as perception, attention, memory, knowledge, language, problem solving, reasoning, and decision-making. In short, cognitive psychology takes an engineering approach to understand the mind. Course requirements include textbook and article readings, midterm exams, in-class presentations, an in-class writing exercise, and a research proposal paper. Class participation is essential as the course is heavily designed around interaction.

umass.amazon.com/dp/0393938670/ref=umass_coursecatalog
http://books.wwnorton.com/books/webad.aspx?id=4294990251

Grading:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>&gt;=93%</td>
<td>A</td>
</tr>
<tr>
<td>87-89%</td>
<td>B+</td>
</tr>
<tr>
<td>83-86%</td>
<td>B</td>
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<tr>
<td>77-79%</td>
<td>C+</td>
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<tr>
<td>73-76%</td>
<td>C</td>
</tr>
<tr>
<td>67-69%</td>
<td>D+</td>
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<tr>
<td>60-66%</td>
<td>D</td>
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<tr>
<td>&lt;60%</td>
<td>F</td>
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</tbody>
</table>

Grades will be rounded to the nearest whole percent.

Requirements:

Exams (60% = 3 x 20%)
BEST 3 SCORES OUT OF 4 EXAMS. A total of 4 examinations will be given during the semester. Each exam will consist of true-false, multiple-choice, or matching questions. Each exam will cover 3 chapters as well as additional lecture material related to these chapters that is not included in the book.

Research proposal paper (20%)
A research proposal paper is due by 10:00am Monday May 2nd through Moodle (Turnitin). This paper should be similar to the abstract, introduction, and method sections of a published research article (including figures, if necessary). The proposed experiment should concern study techniques for enhancing learning. Papers should be written in 'APA style' with an appropriately formatted reference section. These papers should be approximately 6 pages (~1,500 words). The proposed experiment should be an original experiment and the paper should motivate the experiment based on a literature review of journal articles.
Rough draft of Introduction (5%)  
Bring 2 copies of the introduction of your research proposal paper to the final class (Wednesday April 27). These should be double-spaced. In class, you will take turns reading the introductions that other students have written, while they read your introduction. When reading the introductions that others have written, you should make notes in the margin with suggested improvements, and then you can discuss with each other these notes. Time permitting, you will do this paper-swapping with 2 other students.

In-class PowerPoint presentation (5%)  
During the last 2 weeks of the course, each student will give a 5 minute PowerPoint presentation based on their research proposal. There will be time for questions after each presentation. This feedback may help you to modify your experimental design. Similar to the research proposal papers, these presentations should set up the hypothesis under investigation by reviewing the literature and they should provide enough detail about the experimental methods to demonstrate that the design can test the chosen hypothesis. PowerPoint slides should not include excessive amounts of text. Figures are often better than words. Presentations should use no more than 5 or 6 PowerPoint slides. These PowerPoint presentations must be e-mailed to Professor Huber by 9am of the day that you present.

Journal article discussion questions (5%)  
You are responsible for finding 5 different research articles using the UMass library resources. These articles should be read prior to the assigned class. Prior to the start of class in which each journal article is discussed, you should submit to Moodle a specific question in relation to the article, which is worth 1% of your total grade. These question can either be a critical comment about the article (e.g., a reason why the conclusion drawn from the experiment might not be valid) or a description of one specific part of the article that was confusing. These questions should make it clear that you read the article thoroughly and carefully. Each student will be asked to read aloud their discussion question. All of the articles concern techniques for enhancing learning, and these will help you develop your research proposal paper. The 5 articles are:


Class participation (5%)  
The advantage of a small class is the opportunity to engage in discussion and ask questions. Students are expected to show up to all classes and you will be called on in class.

Experiment participation (up to 5% extra credit)  
You may participate in experiments being conducted within the Psychology Department for extra credit. Your participation will help advance the field and give you first-hand research experience.

- You can sign up to participate in experiments using SONA. Instructions for SONA are here: [http://psych.umass.edu/undergraduate/sona-humansubjects/](http://psych.umass.edu/undergraduate/sona-humansubjects/)
- You will receive one credit for each half-hour of experimental participation (up to 8 credits). Each credit will add half of one percent to your final grade (adding up to 4% to your final grade).
SONA offers an optional, online 'Pre-screen' to facilitate the matching of experimental participants with particular experiments. This Pre-screen option is available from January 19 through February 16, for which **2 extra credits** can be earned (adding a further 1%).

To sign up for experiments and to complete the Prescreen, go to: [http://umasspsych.sonasystems.com/](http://umasspsych.sonasystems.com/)

The last day for participating in experiments is **April 27**.

The last day to make changes to your credit record is **May 4**.

Alternatively, you can earn extra credit by turning in multiple-choice exam questions that test the content of each chapter. **These should be posted to Moodle for everyone to see, and potentially use as they study** (if you are under 18 years of age, this is the only form of allowable extra credit).

To receive 1 credit, for the content of one chapter write 5 multiple choice questions, with 4 choices per question.

A maximum of 10 chapters (up to 5%) are allowed.

**These must be posted to Moodle by 5pm the night before the exam that covers those chapters.**

You cannot mix-and-match by doing a combination of review questions and experiment participation. Before the first exam, you must choose a type of extra credit.

**Course Policies**

**Curving:** There will not be any curving of grades or other kinds of grade adjustments.

**Missed exams:** Students are expected to make every effort to take required exams. There will be no make-up exams. If are unable to attend class on more than one exam and you have a legitimate excuse for all missed exams, the remaining course material will be re-weighted. Legitimate excuses include a documented family emergency, or a documented severe illness making it impossible to take the exam. If you miss an exam due to severe illness, you must provide evidence of illness from your doctor. Contact Professor Huber as soon as you are aware of the schedule conflict and before the day of the exam. All documentation must be received within a week of each missed exam. Unexcused exams will be treated as a zero for that exam.

**Late assignments:** Except in the case of a documented emergency, late assignments will be marked down 10% per day. Appropriate documentation is required in all emergency situations. **Unless you have a documented emergency, NO EXTENSIONS WILL BE GIVEN.**

**Academic dishonesty and plagiarism:** Papers will be checked for plagiarism using Turnitin. All students are expected to adhere scrupulously to the University policy on academic honesty, found here: [http://www.umass.edu/honesty/](http://www.umass.edu/honesty/). Please read this policy. If you do not follow these rules, you could fail the class and be reported to the Academic Honesty Office. **The following website from Indiana University provides examples to help you understand how to avoid plagiarism:** [http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml](http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml)

**Disability:** If you need accommodations for a documented disability, please register with Disability Services and see the instructor at the start of the semester to arrange accommodations.
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<tr>
<th>Class</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
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<tbody>
<tr>
<td>1</td>
<td>W 20 Jan</td>
<td>Introduction</td>
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</tr>
<tr>
<td>2</td>
<td>Fr 22 Jan</td>
<td>History/Methods</td>
<td>Ch. 1</td>
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<tr>
<td>3</td>
<td>M 25 Jan</td>
<td>Cognitive Neuroscience</td>
<td>Ch. 2</td>
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<td>4</td>
<td>W 27 Jan</td>
<td>Visual Perception</td>
<td>Ch. 3</td>
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<td>5</td>
<td>Fr 29 Jan</td>
<td>Visual Perception</td>
<td>Ch. 3</td>
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<tr>
<td>6</td>
<td>M 1 Feb</td>
<td>Object Identification</td>
<td>Ch. 4</td>
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<tr>
<td>7</td>
<td>W 3 Feb</td>
<td>Attention</td>
<td>Ch. 5</td>
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<td>8</td>
<td>Fr 5 Feb</td>
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<td>M 8 Feb</td>
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<td>10</td>
<td>W 10 Feb</td>
<td>Attention</td>
<td>Ch. 5</td>
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<td>12</td>
<td>Tu 16 Feb</td>
<td>Working Memory</td>
<td>Ch. 6</td>
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<td>13</td>
<td>W 17 Feb</td>
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<td>14</td>
<td>Fr 19 Feb</td>
<td>‘Survival Processing’</td>
<td>Nairne et al. (2008)</td>
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<td>Long-Term Memory</td>
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<td>Long-Term Memory</td>
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<td>20</td>
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<td>‘The Spacing Effect’</td>
<td>Kornell &amp; Bjork (2008)</td>
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<td>Cepeda et al. (2008)</td>
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<td>Knowledge</td>
<td>Ch. 9</td>
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<tr>
<td>24</td>
<td>M 21 Mar</td>
<td>Language</td>
<td>Ch. 10</td>
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<td>Ch. 10</td>
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<td>28</td>
<td>W 30 Mar</td>
<td>‘Disfluency’</td>
<td>Diemand-Yauman et al. (2011)</td>
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<td>29</td>
<td>Fr 1 Apr</td>
<td>Imagery/Spatial</td>
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<td>30</td>
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<td>Fr 8 Apr</td>
<td>Decision Making</td>
<td>Ch. 12</td>
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<td>Decision Making</td>
<td>Ch. 12</td>
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<td>Presentations</td>
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<td>Fr 22 Apr</td>
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<td>39</td>
<td>W 27 Apr</td>
<td>Rough Draft of Introduction</td>
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<tr>
<td></td>
<td>M 2 May</td>
<td>Final Draft of Introduction</td>
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