Meeting Time & Room: TR 3:40-5 in Lago W162
Instructor: Veronica J. Dark Email: vjdark@iastate.edu Phone: 294-1688
Office: Science I Room 374 Office Hours: Tues, Thurs 2:10-3:00, Wed 11:00-11:50

No appointment is needed during office hours. Feel free to drop by at other times. If I'm busy when you come by, we'll set up an appointment. I have another class at noon on Wednesday.

Text: None. A selection of readings will be posted on WebCT.

Course Objectives: My goal as an instructor is to help students to learn the many different ways that psychologists have conceptualized the topics comprising cognitive psychology. We will consider some older approaches and some newer approaches. Because there is no one approach (old or new) that can capture ALL the phenomena that have been identified as “cognition”, it is my belief that students should be exposed to a variety of different approaches. This gives students the tools that are needed to think critically in the future about cognition and how it relates to behavior.

Students successfully completing this course will be able:
1. to describe the historical and philosophical background of cognitive psychology
2. to describe current knowledge about human cognition derived from research findings in a variety of domains within cognitive psychology (e.g., attention, consciousness, memory, language, thinking, and reasoning)
3. to describe different theoretical approaches to human cognition
4. to develop an empirical study intended to investigate some aspect of human cognition and to effectively describe this study in a written proposal

Course format: This is a "core" survey course designed for graduate students in all areas of psychology (and related fields). The course will consist of lecture and class discussion. Because you are all graduate students, I am assuming that you have spent a lot of time thinking. Thus, you have a lot of experience engaging in cognition. In this course, we will consider theories of what it is you are doing when you are engaging in cognition (i.e., perceiving, attending, remembering, reasoning, deciding). Because you are expert practitioners of cognition, I expect that you to be able to understand and critically discuss the ideas that the experts have devised.

Attendance: This is a graduate class and I expect you to participate in the discussion. You can't do that if you are not there. If you have more than two "unexcused" absences, your course grade will be lowered by one unit. (Talking to me before an absence is the optimal behavior!)

Reading assignments: Tentative reading assignments are included at the end of this syllabus. Additions to or (more likely) deletions of material on the lists will be announced in class and on WebCT. For each list, I will provide a handout containing an outline of the accompanying lecture and some study questions for each of the articles on the reading list.
Quizzes: Generally, there will be a 10-point "quiz" each week over the reading list and the lecture and discussion of the material on the list. The quizzes will be short; they usually will consist of a couple of short-answer questions derived from the lecture outline or the discussion questions. The quiz will be designed to take about 10 minutes to complete. The questions will be designed to tap factual knowledge that you are likely to have learned if you read the material and paid attention in class! The quizzes will be handed out (or perhaps posted on WebCT) at the end of a class and will be due at an announced time before the next class. If we keep on schedule, then there will be a quiz after each Thursday class that will be due in my mailbox in Lago W113 by noon on the following Monday.

The quizzes are NOT open note/open book quizzes. You are on your honor to do all your studying for the quiz BEFORE you actually take it! You are on your honor to complete the quiz on your own, without notes or references. I have used this system successfully in the past. It gives you some flexibility in studying and it allows those individuals who take quizzes more slowly than others to have as much time as they need. I have found that the use of many short tests encourages students to keep up in the class. In addition, it breaks the to-be-learned material into manageable chunks.

Quiz performance will comprise 25% of your grade in the course. I will toss the lowest two quizzes before figuring grades.

Research critique: One way of evaluating your understanding of the facts that you have learned will be evaluated is via a critique of a recent (say, since 2000) cognition-related empirical article from one of the primary journals in your discipline. You will need to: a) find an article, b) get it approved by me, and c) write a 3-5 page critique using APA style for citations, references, and general formatting. The critique should contain: a) a description of the research (hypothesis, method, results), b) an elaboration of the cognition-related component of the research, especially as it relates to the discipline-related issue being examined, and c) your evaluation of the strengths/weaknesses of the conclusions drawn. These need not be separate sections, but all three components should be addressed in the critique. You should feel free to discuss any of the components with me before turning in the critique. The critique is due Thursday, March 13, the last class before spring break. It is worth 10% of your grade in the course. The critiqued article may be used in your research proposal, but it need not be.

Research proposal: The primary way of assessing your understanding of the facts that you have learned will be via a research proposal. The proposal should outline an experiment that would address the impact and/or importance of some aspect of cognition applied to your field of graduate study. (An experiment means that there is a real independent variable, something that you manipulate. There may be descriptive or correlational aspects to the experiment, but there must be at least one independent variable.) Sample topics include the role of attention, context effects, the role of working memory, levels of processing effects, practice effects, storage vs. retrieval of information, testing effects, implicit vs. explicit memory, declarative vs. procedural knowledge, automatic versus controlled processing, and so on. You are strongly encouraged to talk to me about possible proposal topics early in the semester, but the deadline for getting topic approval is Friday, April 4.
The proposal should be between 10-20 double-spaced pages of text (excluding references) and should be written in APA style (but without an abstract). A typical proposal will include a review of the relevant literature in both your area and in the relevant area of cognition, a statement of the problem, a description of the method, a description of how the data will be analyzed, and a discussion of how the different possible outcomes would be interpreted (that is, what the research might tell us). In evaluating the proposal, I will consider the conceptual soundness/relevance of the question, the methodological soundness of the proposed study and proposed analysis, the extent to which you have developed concepts from the class within the domain of your area of expertise, and the clarity of writing. The proposal will comprise 40% of your grade in the course. The proposal is due in class on Tuesday, April 29.

**Final exam:** There will be a comprehensive final exam during the regularly scheduled final exam period. It will consist of short essay questions concerning major points discussed throughout the semester. The final exam will comprise 25% of your grade. Our tentative final exam time is Monday, May 5, 2:15-4:15.

**Plagiarism.** All written assignments are to be composed and written by you. Assignments should be in your own words. Plagiarism will be reported to the Graduate College.

**Disability Accommodations**
If you have a disability and require accommodations, please contact me early in the semester so that your learning needs may be appropriately met. You will need to contact the Disability Resources (DR) office, located on the main floor of the Student Services Building, Room 1076, 515-294-6624 to obtain a Student Academic Accommodation Request (SAAR) that describes the needed accommodations.

**Course Grades:** Course letter grades will be assigned according to the scale below.

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<tr>
<th>PERCENT</th>
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<th>Grade</th>
<th>PERCENT</th>
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<tbody>
<tr>
<td>94.0-100</td>
<td>A</td>
<td>77.0-80.9</td>
<td>B-</td>
<td>60.0-63.9</td>
<td>D+</td>
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<tr>
<td>90.0-93.9</td>
<td>A-</td>
<td>73.0-76.9</td>
<td>C+</td>
<td>55.0-59.9</td>
<td>D</td>
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<td>86.0-89.9</td>
<td>B+</td>
<td>68.0-72.9</td>
<td>C</td>
<td>50.0-54.9</td>
<td>D-</td>
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<tr>
<td>81.0-85.9</td>
<td>B</td>
<td>64.0-67.9</td>
<td>C-</td>
<td>0.0-49.9</td>
<td>F</td>
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The topic schedule and reading assignments are tentative, so check WebCT regularly for actual assignments.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Tentative Topic and Reading List</th>
<th>Other dates</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 15, 17</td>
<td><strong>List #1</strong>: The Cognitive Revolution, Part 1 (History; Overview of VJD's Biases)</td>
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<td>2</td>
<td>Jan 22, 24</td>
<td><strong>List #2</strong>: The Cognitive Revolution, Part 2 (Philosophical issues; Information processing)</td>
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<td>3</td>
<td>Jan 29, 31</td>
<td><strong>List #3</strong>: Early Information Processing Models</td>
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<td>4</td>
<td>Feb 5, 7</td>
<td><strong>List #4</strong>: Working Memory &amp; Consciousness</td>
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<td>5</td>
<td>Feb 12, 14</td>
<td><strong>List #5</strong>: Attention, Part 1 (Review of different approaches)</td>
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<td>6</td>
<td>Feb 19, 21</td>
<td><strong>List #6</strong>: Attention, Part 2 (Automaticity; Attention odds &amp; ends)</td>
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<td>7</td>
<td>Feb 26, 28</td>
<td><strong>List #7</strong>: Unconscious Cognition (Cognition without Awareness)</td>
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<td>8</td>
<td>Mar 4, 5</td>
<td><strong>List #8</strong>: Explicit &amp; Episodic Memory</td>
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<td>9</td>
<td>Mar 11, 13</td>
<td><strong>List #9</strong>: Implicit Memory</td>
<td>Paper critique due in class, March 13</td>
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<td>Mar 18, 20</td>
<td>Spring Break</td>
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<td>10</td>
<td>Mar 25, 27</td>
<td><strong>List #10</strong>: Memory Accuracy</td>
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<td>11</td>
<td>Apr 1, 3</td>
<td><strong>List #11</strong>: Nonverbal Memory</td>
<td>Proposal topic approval by Friday, April 4</td>
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<td>12</td>
<td>Apr 8, 10</td>
<td><strong>List #12</strong>: Semantic Memory (Knowledge) &amp; Concepts</td>
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<tr>
<td>13</td>
<td>Apr 15, 17</td>
<td><strong>List #13</strong>: Language</td>
<td></td>
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<tr>
<td>14</td>
<td>Apr 22, 24</td>
<td><strong>List #14</strong>: Thinking &amp; Reasoning</td>
<td></td>
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<tr>
<td>15</td>
<td>Apr 29, May 1</td>
<td><strong>List #15</strong>: Judgment &amp; Decision Making</td>
<td>Proposal due in class, April 29</td>
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<tr>
<td>16</td>
<td>Final Exam Week</td>
<td>Comprehensive Final Exam Tentative time: Monday, May 5, 2:15-4:15</td>
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Note: There is a quiz every week.

The fine print—I intend to conduct the class as described in the syllabus, but I reserve the right to change the assignments and their due dates if I determine it is necessary in order to reach my instructional goals.
Psych 516, Advanced Cognitive Psychology, Spring 2008
Tentative Reading Lists

Reading List #1: The Cognitive Revolution, Part 1 (History; Overview of VJD's Biases)


Reading List #2: The Cognitive Revolution, Part 2 (Philosophical issues & Information processing)


Reading List #3: Early Information Processing Models


Reading List # 4: Working Memory & Consciousness

Reading List #5: Attention, Part 1 (Review of different approaches)


Reading List #6: Attention, Part 2 (Automaticity; Attention odds & ends)


Reading List #7: Unconscious Cognition (Cognition without Awareness)

**Reading List #8:** Explicit & Episodic Memory


**Reading List #9:** Implicit Memory


**Reading List #10:** Memory Accuracy


**Reading List #11:** Nonverbal Memory


Reading List #12: Semantic Memory (Knowledge) & Concepts


Reading List #13: Language


Reading List #14: Thinking & Reasoning


Reading List #15: Judgment & Decision Making


