Introduction:
Design is one of the most complex cognitive behaviors and has attracted a lot of research attention. In this field, researchers use various theoretical and empirical approaches to study how human (designers) process information in design. As a result, design cognition has become a well-defined research domain since 1970s. This course will cover major theories and methodologies in design cognition. In addition, we are going to practice conducting a cognitive behavior research as a term project for this course.

Objectives:
The goal of this course is to get students familiar with design cognition theories and major research methodologies. Through readings and the term project, students are expected to learn how to define a research problem and then carry it out.

Schedule:

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<th>Week</th>
<th>Date</th>
<th>Outline</th>
<th>Assignment</th>
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<td>09/18/09</td>
<td>Introduction</td>
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<td>3</td>
<td>10/02/09</td>
<td>Quantitative Researches</td>
<td>Design Knowing and Learning Ch2 (Craig)</td>
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<td>10/09/09</td>
<td>Qualitative Researches</td>
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<td>10/16/09</td>
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<td>Design Knowing and Learning Ch5 (Cross)</td>
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<td>10/23/09</td>
<td>Design Cognition &amp; Project Announcement</td>
<td>Design of Everyday Things CH1 &amp; CH6</td>
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<td>11/20/09</td>
<td>Computer Simulation</td>
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<td>Visual Analogy</td>
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<td>Presentation 2: Preliminary Results</td>
<td>Design Knowing and Learning CH13 (Bucciarelli)</td>
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<td>12/25/09</td>
<td>Design as a Social Process</td>
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<td>Happy New Year! YA!</td>
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<td>Final Presentation</td>
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<td>18</td>
<td>01/15/10</td>
<td>Final Presentation</td>
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Textbook:
- "Design of Everyday Things" by Donald Norman
- "Design Knowing and Learning: Cognition in Design Education" Edited by Charles Eastman, Mike McCracken, and Wendy Newstetter

Requirements:
Ten articles are assigned as readings, and you need to keep up with the reading in order to learn well in the course. In addition, you will take turns to lead discussion about the reading in the class. The lectures will supplement the readings and will sometimes cover material not contained in them, so attendance at lectures will also be necessary.

Evaluations:
- Leading Discussion: 30%
- Paper: 50%
- Class Participation: 20%