Preliminary Syllabus

Course Title: G4270 - Cognitive Processes: METACOGNITION
Fall 2010
Instructor: Lisa Son
Email: lson@barnard.edu
Office 415F Milbank
Phone: 854-0114
Meeting Room: 405 Schermerhorn
Meeting Time: Tuesdays 2:10-4

Course description:
Metacognition is one of the latest psychological buzz words, but what exactly is metacognition? Metacognition enables us to be successful learners, problem solvers, and decision makers, and as often been used synonymously with words such as language, awareness, and consciousness. In this seminar, we will examine various components of metacognition, including its role in learning and memory, and its existence in various non-human populations. In addition, we will explore the fragility of metacognition, including illusions of confidence and harmful control strategies that people use. Readings will include classic and important recent papers in the field, looking at metacognition as a higher-level cognitive process, and as knowledge individuals use to guide behavior.

Assignments:
Reading assignments will be the basis for the in-class discussion each class period. Thus, it is crucial that they be read carefully before each class meeting. For each week, students will be assigned as "discussion leaders" for the discussions, and will be responsible to briefly summarizing the hypotheses, methods, and results for that week's readings. Participation in class will count as 20% of your final course grade. There will also be 2 take-home paper assignments, one due mid-semester (worth 30%), and one due at the end of the semester (worth 50%).

What you will take away from this course:
1. An improved awareness for how to read and analyze scientific articles on a specific topic -- in this case, how to think about one's own thinking.
2. An understanding of metacognitive theories and mechanisms, and an improved understanding of scientific theory more generally, which includes facility in evaluating and debating about metacognitive theories.
3. Appreciation for the many components of metacognition, and an ability to bring knowledge from separate research themes to provide a big picture appreciation for why metacognition exists.
4. An improved awareness of one's own mental processes and how that awareness can lead to becoming a more effective learner and decision-maker.

Required Readings:
There will be one required textbook for this seminar: "Metacognition" by John Dunlosky and Janet Metcalfe, published in 2009. The book will be available at The Book Culture, located on
112th St. between Broadway and Amsterdam. Each week, specific pages from this textbook will be assigned in addition to the various scientific articles listed below under each theme.

These reading assignments are subject to revision.

**Theme 1: Definitions - What is Metacognition?**

**Theme 2: Foundations - What is Metacognition good for?**

**Theme 3: Introspection - Can verbal reports be used as data?**

**Theme 4: Measurement - How are verbal reports analyzed?**

**Theme 5: Mechanisms - How does Metacognition work?**

**Theme 6: Monitoring - Can Metacognitive Knowledge Break down?**


**Theme 7: Control - What are the consequences of metacognitive break down?**


**Theme 8: Implicit Metacognition - Metacognition's relation to Non-verbal species**


**Theme 9: Development - Who has it?**


**Theme 10: Applications - Does good metacognition help performance?**


Theme 11: **Self-awareness** - What does it mean to have privileged access?

