

**COGNITIVE PSYCHOLOGY: ADVANCED METHODOLOGY (PSY: COG)
FALL 2018**

Mondays 1:30 p.m. – 3:30 p.m. in RKC 103

Moodle Password: Cognition

Instructor

Tom Hutcheon, Ph.D.

118 Preston Hall

thutcheo@bard.edu

Office Phone: 845-758-7380

Office hours: Tuesdays noon – 1:00 p.m. and Fridays 10:00 a.m. – 11:00 a.m., or by appointment

DESCRIPTION

The purpose of this course is to provide students experience evaluating and conducting research in cognitive psychology. The content of this course will be divided into classroom discussions on the current cognitive control literature and active participation in ongoing research in the lab. As part of this course, students will have the opportunity to participate in all phases of the research processing from experimental design to the presentation of results at regional or national conferences.

COURSE REQUIREMENTS AND POLICIES

Class Attendance

The success of this course ultimately depends on your attendance and participation. Therefore, attendance will be recorded at the start of each class meeting. Missing two or more classes will lead to a reduction in your final grade.

Lab Attendance and Participation

In addition to our Monday class meetings, you will be expected to spend a minimum of two hours per week working in the lab. During the first two weeks of the semester we will finalize the schedule for the semester. Over the course of the semester the work done during this dedicated lab time may differ, however failure to show up to your scheduled work time or failure to adhere to laboratory protocol will lead to a reduction in your final grade.

Article Presentations

We will typically read and discuss one empirical article per week (see schedule below for more specific information). Over the course of the semester you will be responsible for presenting one of these articles to the class. On that day, you should come to class ready to provide a brief (~5 minute) summary of your assigned article. In addition, you should be prepared to answer questions that both students and the instructor have about the article. You will be given your article assignments during the first week of class.

Protocol Design

Over the course of the semester we will be collecting data and building experiments that are part of ongoing research in the lab. As a final project, you will be asked to design your own novel research protocol. This protocol should be one that we could feasibly conduct in the lab during the Spring semester and is at least somewhat related to cognitive control. In this assignment, you will be asked to conduct a brief (~1-2 pages) literature review, describe in detail the methods and expected results, and write a conclusion based on the proposed results. This paper should be 6-8 pages in length and follow APA style.

Late Assignments

Assignments are due at the start of class on the day assigned. Late assignments will only be graded if they are accompanied by a note from the Dean of Students or a medical professional justifying the lateness.

Accessibility

I am committed to fostering an inclusive learning environment. If you have a disability that may affect your learning and/or participation, please speak to me as soon as possible so that I can make accommodations. You can access more information about Bard's disability services at: <http://www.bard.edu/dosa>. Whether or not you have a disability, you are also encouraged to take advantage of services from the Learning Commons at: <http://www.bard.edu/learningcommons>.

Academic Integrity

All students are assumed to have read the Bard College Handbook and are familiar with the school's policies regarding Plagiarism and Academic Dishonesty. Violations of these policies are taken extremely seriously and one violation will result in a failing grade for the course and a referral to the Dean of Students for further action.

COURSE SCHEDULE

Readings can be found on the course Moodle site

*indicates reading to be assigned for article presentation

Monday, September 3rd

No Reading

Monday, September 10th

*Logan, G. D., & Zbrodoff, N. J. (1979). When it helps to be misled: Facilitative effects of increasing the frequency of conflicting stimuli in a Stroop-like task. *Memory & Cognition*, 7, 166-174,

*Jacoby, L. L., Lindsay, D. S., & Hessels, S. (2003). Item-specific control of automatic processes: Stroop process dissociations. *Psychonomic Bulletin & Review*, 10, 638-644.

CITI TRAINING SHOULD BE COMPLETE

Monday, September 17th

*Crump, M. J. C., Gong, Z., & Milliken, B. (2006). The context-specific proportion congruent Stroop effect: Location as contextual cue. *Psychonomic Bulletin & Review*, 13, 316-321.

Monday, September 24th

*Crump, M. J. C., & Milliken, B. (2009). The flexibility of context-specific control: Evidence for context-driven generalization of item-specific control settings. *The Quarterly Journal of Experimental Psychology*, 62, 1523-1532.

Monday, October 1st

Schmidt, J. R., & Besner, D. (2008). The Stroop effect: Why proportion congruent has nothing to do with congruency and everything to do with contingency. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34, 514-523.

Verguts, T., & Notebaert, W. (2008). Hebbian learning of cognitive control: Dealing with specific and non-specific adaptation. *Psychological Review*, 115, 518-525.

Monday, October 8th: Fall Break, No Class

Monday, October 15th

Bugg, J. M. (2012). Dissociating levels of cognitive control: The case of Stroop interference. *Current Directions in Psychological Science*, 21, 302-309.

Monday, October 22nd

*Hutcheon, T. G. & Spieler, D. H. (2014). Contextual influences on the sequential congruency effect. *Psychonomic Bulletin & Review*, 21, 155-162.

*Hutcheon, T. G., Spieler, D. H., & Eldar, M. (2017). Properties of context-driven control revealed through the analysis of sequential congruency effects. *Acta Psychologica*, 178, 107-113.

Monday, October 29th

Schmidt, J. R., De Houwer, J., & Besner, D. (2010). Contingency learning and unlearning in the blink of an eye: A resource dependent process. *Consciousness and Cognition*, 19, 235-250.

Monday, November 5th

Hutcheon, T. G., & Spieler, D. H. (2017). Limits on the generalizability of context driven control. *The Quarterly Journal of Experimental Psychology*, 70, 1292-1304.

Crump, M. J. C., Brosowsky, N. P., & Milliken, B. (2017). Reproducing the location based context-specific proportion congruent effect for frequency unbiased items: A reply to Hutcheon and Spieler (2017). *The Quarterly Journal of Experimental Psychology*, 70, 1792-1807.

Monday, November 12th

Weidler, B. J., Dey, A., & Bugg, J. M. (in press). Attentional control transfers beyond the reference frame. *Psychological Research*

Deadline to Submit to Eastern Psychological Association Annual Meeting

Monday, November 19th

Hutcheon, T. G. & Fitzgerald, E. (in prep). Evidence for item-specific control under concurrent memory load.

Monday, November 26th

PROTOCOL MEETING

Monday, December 3rd
Reading TBA

Monday, December 10th
Reading TBA

Monday, December 17th
Protocol Submissions Due