HIGHER COGNITIVE FUNCTIONS

Course period: November, 2014.
Location: Department of Psychology, Stockholm University.
Registration: Please contact Monika Karlsson (monika.karlsson@psychology.su.se).

Instructors:
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Course Description
This is a master and postgraduate course on higher cognitive functions. The main focus of the course is on executive control functions and their relation to other higher cognitive functions, including working memory, intelligence, decision making and metacognition. Each week, students will read and discuss empirical and review articles germane to understanding higher cognitive functions.

Course Objectives
After completing the course:
  o Students should have increased understanding of executive functions and their neural mechanisms.
  o Students should be able to describe, analyze and critically reflect on similarities and differences among higher cognitive functions.
  o Students should have better understanding of methodological challenges associated with the assessment of executive functioning and related cognitive abilities.
  o Students should be able to describe, analyze and critically reflect on individual and developmental differences in higher cognitive functions.

Examination
To reach the course objectives, students need to attend and participate in all seminars. Student tasks related to the seminars are described below.

1. Contribution to seminars. Contribution to the seminars is worth 70% of your final grade. This part of your grade will be based on the instructor’s assessment of the extent and quality of your participation in group discussions. Each student, except the Discussants (see below) is expected to generate 3-5 questions prior to each seminar and submit them to the responsible instructor. You should specify the reading(s) that inspired the questions, and motivate why the chosen issue merits discussion. The purpose of these questions is to ensure that you have actually read the papers that have been assigned, and to help raise issues for the discussion. Your questions are due by noon the day before the class, and should be turned in whether or not you will be able to attend the seminar.
2. **Leading the discussion.** At each seminar, 2-3 students have the role of Discussants by organizing and leading the group discussion, altogether worth 30% of your final grade. Discussants will primarily summarize the key points to be extracted from the seminar articles and chair the session by presenting central issues raised the members of the group. Note that Discussants will lead the seminar, but everyone in the group is responsible for contributing to the seminar. Discussants do not need to submit questions for their seminars.

**Readings**

Readings and other course materials are based on empirical research articles and overviews (see below). The articles are available at [http://fastreg.psychology.su.se/KursWeb/Description.aspx?MomentID=236](http://fastreg.psychology.su.se/KursWeb/Description.aspx?MomentID=236).

### Seminar 1: Dual-Process Theories of Higher Cognition


### Seminar 2: Frontal lobe functions


### Seminar 3: Executive functions


**Seminar 4: Relating higher cognitive functions**


**Seminar 5: Developmental perspectives on higher cognitive functions**


**Seminar 6: Training and transfer effects in HCF**


