Class Meetings
W 4:00-7:00 pm, conference room
(Excepton: T, March 17)

Office Hours
By appointment.

Course Description/Goals
In this course we will look at epistemological issues raised by psychology, cognitive neuroscience, and neuropsychology. The possible topics of discussion include the role of dissociations in neuropsychology, the practice of reverse inference from brain data to psychological hypotheses in cognitive neuroscience, controversies about fMRI, and null hypothesis significance testing.

Texts
Readings will be available in a shared dropbox folder (you will receive a link to this folder by e-mail).

Assignments
(1) Readings and participation;
(2) One seminar presentation;
(3) A research paper due at the end of the term.

The seminar presentation includes a presentation. Your presentation should first identify the topics that are worth discussing in the papers you are looking at. You should then identify the relevant claims, arguments, and empirical findings. Importantly, do not summarize the readings: Everybody is supposed to have read the assigned readings. Your job is really to distinguish what is important and should be discussed from what is not. Second, you should have thought about these theses, arguments, and findings, and you should have developed criticisms and objections about these at some length. Students should meet with me during the week before their presentation. You should have developed a hand-out before meeting with me.

The research paper may be on any subject of relevance to the seminar. To assist you in commencing work, you should submit a brief essay proposal by 03/25. It should contain a page-long description of the topic to be investigated and give a brief indication of the sources you intend to use. It may, but need not, be based on your seminar presentation. You are advised to talk to me about possible topics as soon as possible. The paper should have the form and length of a short journal article (no less than 4000 and no more than 7000 words). The deadline is 04/22, 7:00 pm (send it by e-mail). I do NOT issue
incomplete grades, save in extraordinary circumstances. **Late papers will not be accepted.**

**Assessment**
Your grade will be based on the quality of your research paper due at the end of the term.

**Class Organization**
This course will be based on the discussion of the readings. Participation in class discussion is expected. Reading the articles is of course mandatory. You are expected to attend every class.

**COURSE SCHEDULE**
*(Subject to revision as the semester proceeds)*

**Wednesday 01/14**
*Topic: Syllabus*

**NEUROPSYCHOLOGY**

**Wednesday 01/21**
*Topic: The Foundations of Neuropsychology*
*Readings:*

**Wednesday 01/28**
*Topic: What is a Dissociation and What is the Epistemology of Inferences from Dissociation?*
*Readings:*

**Wednesday 02/04**
*Topic: Critiques of the Inference from Dissociations*
*Readings:*

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**Cognitive Psychology**

**Wednesday 02/11**

*Topic: What Statistics for the Behavioral Sciences?*

*Readings:*


**Wednesday 02/18**

*Topic: Power and Negative Results*

*Readings:*


Dienes, Z. (2014). Using Bayes to get the most out of non-significant results. *Frontiers in psychology, 5*.


**Wednesday 02/25**

*Topic: Replication*

*Readings:*


**Wednesday 03/04**
*Topic: Metaanalysis*
*Readings:*

**COGNITIVE NEUROSCIENCE & NEUROIMAGING**

**Tuesday 03/17 (to be confirmed)**
*Topic: Null Hypothesis Testing and fMRI*
*Readings:*

**Wednesday 03/25 NO CLASS**
**DEADLINE FOR ESSAY PROPOSAL**

**Wednesday 04/01**
*Topic: Reverse Inference*
*Readings:*
Hutzler, F. (2014). Reverse inference is not a fallacy per se: Cognitive processes can be inferred from functional imaging data. NeuroImage, 84, 1061-1069.

**Wednesday 04/08**
*Topic: Forward Inference*
*Readings:*

**Wednesday 04/15**
*Topic: Regions of Interest*
*Readings:*

**Wednesday 04/22**
*Topic: Cognitive Ontologies*
*Readings:*