

# Course introduction

## PSMT54 Psychophysiology

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### course organizer

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### course aim

- provide a deeper understanding of psychophysiology and its focus on understanding the relationship between psychological and physiological processes.
- Psychophysiology examines the physiological correlates of human experience and behavior.
- Physiological measures are used to further our understanding of psychological processes and to test psychological theories.
- The course will cover measures that are typically used and accessible in Psychology.

### topics

- EEG/ERP: Stefan Wiens
- Neuropsychology: Eric Pakulak
- Psychoneuroimmunology: Julie Lasselin
- fMRI: Stefan Wiens and Rita Almeida
- TMS: Mominul Islam
- Olfaction: Maria Larsson

## **expected study outcomes**

To pass the course, the student should be able to:

- read and comprehend advanced scientific publications in psychophysiology
- describe and explain orally and in writing different methods within psychophysiology
- describe, analyze, integrate, and discuss the current literature on a topic within psychophysiology

## **language**

English (story about Swedish race driver)

## **schedule**

link is listed on Athena > resources > kursinformation

[direct link to schedule](#)

## **teaching**

- The course consists of lectures and seminars
- Course requirements
  - Active participation in the seminars
  - Lead role in presentation and discussion of seminar topics
- Seminar and lecture attendance is “mandatory”

## **modes of examination**

- The examination is based on active seminar participation and seminar presentations. This counts for a third of the grade.
- The examination also includes a term paper (review paper) and its oral presentation. The paper needs to be grounded in psychophysiological methods and theories. The term paper and its oral presentation count for two-thirds of the grade.
- The exam is in English.

## **discussion seminars**

- 3 articles per seminar
- one article per group
- EEG/ERP: Stefan Wiens
- Neuropsychology: Eric Pakulak
- Psychoneuroimmunology: Julie Lasselin
- fMRI: Stefan Wiens (and Rita Almeida)
- Olfaction: Maria Larsson

## **discussion seminar procedure**

- before the seminar
  - for each article, one group of 2 to 3 students as presenters
  - other students submit questions to discussion forum
- during the seminar
  - one article per hour
  - each group presents their article (with visual aids)
  - group prepares the questions from the forum
  - group moderates discussion

## **uploading files**

- do not upload links but documents (e.g., PDF)
- [how to upload a file in discussion forum](#)

## **evaluation of oral activity**

### Guidelines for instructors

- Only for those students who presented, rate their presentation (A-F).
- For all students, rate their activity (A-F). Note: For presenters, this is the activity that is NOT related to their own talk. So, if somebody gives an excellent presentation but says nothing in the rest of the seminar, they get a low grade here.

## types of term papers

- most papers are literature reviews
  - organize the content yourself and supply a few, meaningful headings
- very few are empirical papers (or proposals)
  - organize by IMRAD
  - focus on introduction and discussion
  - briefly describe methods and results (actual or hypothetical) to help readers understand the empirical nature of your proposal

## term paper instructions

- Your own work
  - no plagiarism! no AI!
- Scientific document (according to APA guidelines)
- Departmental template?
- Written in English
- Clearly grounded in psychophysiology (i.e., incorporates physiological measures to further our understanding of psychological processes).
- Topic should be approved by the instructor ahead of submission.

## term paper formalities (1)

- Every paper should have
  - title page (with an informative title, your name, and course name and year)
  - abstract (max 200 words, right before the main text)
  - main text (maximum of 6 pages single spaced, 12 point font)
  - reference section (at least 15 scientific references).

## term paper formalities (2)

- You may include figures in the main text. Try to make them small but readable. Use a figure caption and refer to the figure in the text (e.g., Figure 1). The space for the figure is not counted as part of the main text.
- In the main text, each reference should make an important and unique contribution to your reasoning. References should be handled according to APA guidelines.

## **final thoughts**

- You get introduced to various methods in psychophysiology. Useful even if you never work with them.
- You get an opportunity to delve into a subject that is of interest to you personally.
- You get to practice your writing skills.
- The course should be fun!

## **PSMT54-Psychophysiology**

### **Basic reading list (2023-08-11)**

More references will be added in discussion with current students. The pdfs to all references will be made available via Athena.

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McEwen, B. S. (1998). Stress, Adaptation, and Disease: Allostasis and Allostatic

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