## EYE TRACKING FOR LANGUAGE RESEARCH

Prof. Linda Wheeldon & Allison Wetterlin

Institutt for fremmedspråk og oversetting,

Universitetet i Agder

**COURSE CONTENT**

PhD programme at the Faculty of Humanities and Education, specialization in linguistics.

Number of students: maximum 12

**Prerequisites**

Students must have completed a Master´s degree in a relevant discipline.

**Contents**

The aim of this course is to provide students with an introduction to eye-tracking methodologies in language research. The course introduces students to the use of eye-tracking technology and experimental design for methodologies examining eye movements during the reading of text and during the spoken descriptions of visual scenes. The course will deal with all aspects of eye-tracking as an experimental methodology. Participants will be trained in the use of an Eyelink 1000, will build and run mini experiments, and perform data preprocessing and analysis.

**Day 1: 10-17.00** *A theoretical and practical introduction to eyetracking with the*

*Eyelink 100.* Dr. Steven Frisson

**Day 2: 9.00-17.00** *Buidling and analyzing a text based experiment.*

Dr. Steven Frisson

**Day 3: 9.00-17.00**  *An introduction to visual world paradigms*

Dr. Agnieszka Konopka

**Day 4: 9.00-16.30** *Buidling and analyzing a visual world experiment*

Dr. Agnieszka Konopka

**Teaching methods**

This course will consist of lectures, discussions and hands-on practical work with the eye-tracker and with data sets. Lectures will provide a theoretical introduction to eye-tracking methodology as well as to critical research in the fields of text reading and visual world studies of language production. Participants will work in small groups to learn to use the eye-tracker, build mini experiments, and analayse data sets.

**Learning outcomes**

After completing the course, the students will have gained basic knowledge of eye-tracking reseach and techniques. They will have understanding of how eye-movements can be measured and what they can tell us about aspects of language processing. They will be introduced to software used to build eye-tracking experiments and analyses eye-tracking data. Furthermore, the students will have acquired practical skills in using the Eyelink 1000, as the course is specifically targeted to hands-on experience in the use of this tool for research.

**Assessment methods and criteria**

Students will be assessed by their work on the practical assignments set during the course course.

**Examination requirement**

The course will award 5 ECTS to participants who

* Read the required literature prior to the course,
* Complete the required preparation (approx. 4-6 hours)
* Participate in all lectures and practical sessions
* Complete the assessed course assignment.

Students will also complete a course evalution on completion.

**Offered as a free-standing course**

Yes

**Responsible faculty**

Faculty of Humanities and Education

**Contact person**

Linda Wheeldon (linda.r.wheeldon@uia.no)

**COURSE INSTRUCTORS**

Dr. Steven Frisson is an experimental psycholinguist at the University of Birmingham in the U.K. His research focuses on how people comprehend language. He has approached this question at several different levels of processing in reading, going from low-level visual input to high-level pragmatics. The majority of his research employs eye-tracking methodology which he has used to investigate a issues including orthographic and phonological processes, semantic and pragmatic processing, predictability in sentence processing, coercion processes, and the processing of figurative language. (More information about Steven’s research can be found at https://www.birmingham.ac.uk/staff/profiles/psychology/frisson-steven.aspx)

Dr. Agnieszka Konopka, is an experimental psycholinguistics at the University of Aberdeen in the U.K. Her research addresses questions in language production and memory for language. Her work on language production flexibility in sentence formulation, and asks how speakers plan what to say and how to say it. Her work on memory for language examines native and non-native speakers' memory for simple sentences. Dr. Konopka uses eye-tracking methodologies to record eye-movement while speakers describe visual scenes, in order to investigate the relationship between the up-take of visual information, speech production, and memory. (More information about Agnieszka’s research can be found at https://www.abdn.ac.uk/people/agnieszka.konopka)

**VENUE**

Universitetet i Agder

**SCHEDULE**

15-18 of September, 2020