Term Information

Effective Term   Autumn 2012

General Information

Course Bulletin Listing/Subject Area   Linguistics
Fiscal Unit/Academic Org   Linguistics - D0566
College/Academic Group   Arts and Sciences
Level/Career   Graduate, Undergraduate
Course Number/Catalog   5703
Course Title   Eye tracking methods for psycholinguistics
Transcript Abbreviation   Eye Tracking
Course Description   This is a hands-on laboratory course focusing on current techniques for monitoring eye movements as a measure of language processing. We will discuss preparation of auditory and screen-based/real world visual stimuli, and methods for aggregating and analyzing eye movement data. Students will have access to Tobii and ASL Mobile eye trackers.
Semester Credit Hours/Units   Fixed: 3

Offering Information

Length Of Course   14 Week, 7 Week, 4 Week (May Session), 12 Week (May + Summer)
Flexibly Scheduled Course   Never
Does any section of this course have a distance education component?   No
Grading Basis   Letter Grade
Repeatable   No
Course Components   Laboratory, Lecture
Grade Roster Component   Lecture
Credit Available by Exam   No
Admission Condition Course   No
Off Campus   Never
Campus of Offering   Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites   H3701 (H371) or 5701 (615)
Exclusions

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code   16.0102
Subsidy Level   Doctoral Course
Intended Rank   Junior, Senior, Masters, Doctoral

Quarters to Semesters

Quarters to Semesters	New course
Give a rationale statement explaining the purpose of the new course	To provide students with practical and theoretical knowledge of eye movement monitoring methods, hands-on practice with relevant equipment and basic understanding of relevant software for experimentation and manipulation of resulting data.
Sought concurrence from the following Fiscal Units or College	NA

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

Content Topic List
- Current techniques and apparatus for monitoring eye movements as a measure of language comprehension and production
- Hands-on research with eye tracking models currently in use in OSU laboratories
- Preparation of auditory language materials and visual stimuli appropriate for eye movement monitoring studies
- Methods for aggregating and analyzing eye movement data

Attachments
- EyeTrackingSyllabusSemester.pdf: modified syllabus

  (Syllabus. Owner: McGory,Julia Tevis)

Comments
- Instructor believes the syllabus to include the information requested on 5/7/12. Dr. Ito's comments are: "The syllabus says that all the articles are going to be available on Carmen, and the presenter's names are unknown thus are left as "TBA". Once we know who leads a discussion when, these TBAs will be replaced by the students' names, and that's when their presentation duties are due. Also, the syllabus says that each student is responsible for uploading questions about the article BEFORE the discussion (so the assigned discussion dates are the due date for questions). The grades will be based on the presentations, overall contributions to the projects (which cannot have specific due dates), and the final report, which is due Dec 4." *(by McGory,Julia Tevis on 07/10/2012 03:17 PM)*
- Syllabus is lacking dates when specific assignments are due, what is required for each assignment and where readings may bbe found. Please ask instructor to review syllabus according to OAA guidelines. *(by Heysel,Garett Robert on 06/19/2012 09:03 PM)*
- See 5-7 e-mail to J. McGory. *(by Vankeerbergen,Bernadette Chantal on 05/07/2012 09:36 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	McGory,Julia Tevis	04/24/2012 03:29 PM	Submitted for Approval
Approved	McGory,Julia Tevis	04/24/2012 03:30 PM	Unit Approval
Approved	Heysel,Garett Robert	04/24/2012 07:34 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	05/07/2012 09:36 AM	ASCCAO Approval
Submitted	McGory,Julia Tevis	05/31/2012 10:53 AM	Submitted for Approval
Approved	McGory,Julia Tevis	05/31/2012 10:53 AM	Unit Approval
Revision Requested	Heysel,Garett Robert	06/19/2012 09:03 PM	College Approval
Submitted	McGory,Julia Tevis	07/10/2012 03:17 PM	Submitted for Approval
Approved	McGory,Julia Tevis	07/10/2012 03:18 PM	Unit Approval
Approved	Heysel,Garett Robert	07/16/2012 05:45 PM	College Approval
Pending Approval	Hanlin,Deborah Kay Hogle,Danielle Nicole Vankeerbergen,Bernadette Chantal Meyers,Catherine Anne Jenkins,Mary Ellen Bigler Nolen,Dawn	07/16/2012 05:45 PM	ASCCAO Approval

Eye-tracking Methods for Psycholinguistics
Ling 5703, Autumn Semester 2012

Instructor: Kiwako Ito, Ph.D.
                212 Pomerene Hall   Phone: 614-292-1841
                Office Hours: by appointment
                Email: ito@ling.ohio-state.edu

Reading materials will be available through **Carmen**

COURSE DESCRIPTION:

This course introduces eye-tracking techniques for investigating psycholinguistic phenomena such as consonant/vowel perception, lexical access, speaker/dialect adaptation, sentence parsing, and discourse processing. In one of the two weekly meetings, we will discuss eye-tracking methodologies and data analyses of recently published studies. In the other meeting, we will make experimental materials, set up the tracker for specific projects, practice eye calibration, and discuss project-specific data analysis strategies in small groups.

COURSE REQUIREMENTS/ GRADES:

Tuesdays: Article discussion
Each registered graduate student will be asked to lead a discussion on one of the selected articles (distributed through Carmen). Undergraduate students may be asked to co-present articles. Each student will be also asked to upload one question (to Carmen) about the content of the assigned article before each discussion (and this serves as the record of discussion preparation). Preparation (i.e., questions) for discussions, attendance and performance at the discussions together count for 30% of the grade.

Thursdays: COSI workshops
Each registered student will be asked to design materials for some eye-tracking experiment. According to the status of each project, each student will be asked to set a goal for the quarter. At each meeting, each student will make a progress report (and this serves as the record of attendance). We will also collect some pilot data with an ASL MobileEye XG tracker at the COSI lab and explore data analyses.
The attendance and performance at the workshops count for 30% of the grade.

In the final exam week, every registered student will be asked to submit the project summary that describes:
1. Research question (with a brief literature review)
2. Task
3. Materials
4. Predictions (with a specification of dependent/independent variables)
The final project summary counts for 40% of the grade.

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf).

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu

COURSE SCHEDULE

DATE	TOPIC	READING	ASSIGNMENT
			Presenter (TBA)
Week1			
Aug 23	Introduction to eye tracking Scheduling presentations	Henderson& Ferreira Tanenhaus & Trueswell	
	Tasks & independent/dependent variables in eye-tracking experiments		Research Q H&F, T&T
Week2			
Aug 28	Sub-phonemic variation and Lexical Access	McMurray et al. 02, 08	TBA
Aug 30	ASL tutorial How to calibrate the eyes		Calibration Practice
Week3			
Sep 4	Lexical Access Models	Magnuson et al. Creel et al. 03	TBA
Sep 6	ASL tutorial How to calibrate the scene		Calibration Practice

Week4			
Sep 11	Lexical Access & Effect of Lexical Prosody	Creel et al. 06	TBA
Sep 13	Speech Materials Using Praat to analyze speech materials		Example speech materials
Week5			
Sep 18	Incremental Sentence Processing	Altmann & Kamide	TBA
Sep 20	Controlling visual salience Example visual stimuli		Calibration with example slides
Week6			
Sep 25	Dialectal Adaptation	Trude & Brown-Schmidt 11 Dahan et al.	TBA
Sep 27	Using Photoshop to edit visual objects Practicing scene calibration		Discussion on visual stimuli
Week7			
Oct 2	Speaker's Privilege and Listener's Perspective	Brown-Schmidt 09	TBA
Oct 4	Defining Areas of Interest		Preparing Visual stimuli
Week8			
Oct 9	Prosody and Sentence Processing	Snedeker &Yuan, 08 Zhou et al. 11	TBA
Oct 11	Using Matlab to edit visual objects 1		Defining the size of AOIs
Week09			
Oct 16	Referential Resolution in Children	Borovsky et al. Ito et al. 12	TBA
Oct 18	Using Matlab to edit visual objects 2		Defining AOIs w/ MobileEye

<u>Week10</u>

Oct 23	Gesture and Metaphor	Thomas & Lleras Grant & Spivey	TBA
Oct 25	Using Matlab to edit visual objects 2 Making experimental slides		Counterbalancing across AOIs

<u>Week11</u>

Oct 30	Perceptual effort and pupillometry	Zekveld 2011	TBA
Nov 01	Using EPrime for presenting stimuli		EPrime lists

<u>Week12</u>

Nov 06	ANOVA vs. Mixed Effects Models	Barr, 08 Jaeger, 08	TBA
Nov 08	Using EPrime for presenting stimuli User-specific scripting		EPrime codes

<u>Week13</u>

Nov 13	What to include in the models?	Barr et al. Baayen, 08	TBA
Nov 15	Editing raw data Data reduction strategy		Data reduction R codes

<u>Week14</u>

Nov 20	Growth Curve Analysis	Mirman	TBA

<u>Week15</u>

Nov 27	Dependent measure and graphing		Example R codes for Graphing
Nov 29	Presentation		

<u>Week16</u>

Dec 4	**FINAL REPORT DUE**