

SCICOGN202, Psycholinguistics
Spring 2021



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Classroom Online (as soon as we can move back to physical classes you will be informed about the classroom nr.)

Class times: Mo 11.00- 12.45 Th 11.00-12.45

Instructor: Dr. Gerda Andringa

Email: g.andringa@ucr.nl,

Tel: 655 529

Office no. & location: Online

Office hours: all weekdays on appointment. All appointments will be scheduled online until further notice. If you are a student with special needs and you would benefit from an occasional physical meeting, this can be accommodated. Please let me know.

Track information:

- a) Prerequisites for this course: AHLING101 or SSCPSYC101 or SCICOGN101. This course may serve as prerequisite for: Language and Society. This course could serve as the science requirement for non-science majors.
- b) Other courses which are relevant to this course: Introduction to Cognitive Science, Advanced Cognitive Science), Statistics and Topics in Linguistics.
The course is part of the Cognitive Science track. For further information about the track, please see the track document available on the UCR intranet.

II. Course description

Psycholinguistics is the study of the neurobiological and psychological factors that enable us to acquire, use, and understand language. Modern research makes use of cognitive psychology, neuroscience and computer science to study how we process language. The course focuses on but is not restricted to the neuroscience of language. Students will be familiarized with a variety of topics ranging from theoretical and experimental issues in speech production and comprehension to the newest insights in language impairments and the relationship between thought and language. The evolution as well as the acquisition of language will be discussed in depth. Students will also learn, hands on, about experimental approaches to the study of language and they are expected to become capable of understanding human linguistic capacity as the focus of multidisciplinary research.

Overview of the course

1. What is language, evolutionary aspects of language, animal communication
2. Language and thought
3. Aphasia
4. Language acquisition
5. Bilingualism
6. Speech comprehension

7. Semantics
8. Reading and Dyslexia
9. Speech production

III. Study Load

This course earns students four credits (equivalent to 7.5 ECTS). The class meets twice a week for two hours. Preparation time is approximately 10 hours per week.

IV. Course materials

- a) Required books and literature: The psychology of Language by Trevor Harley, **fourth** edition and David Kemmerer, Cognitive Neuroscience of Language, first edition.
- b) Recommended books and literature: these will be posted on Moodle
- c) Other materials: Website of the McGill University <http://thebrain.mcgill.ca>

Students are responsible for acquiring all assigned reading individually. All of the course's assigned journal articles are available through Utrecht University's Omega electronic journal subscription. In accessing readings, students should also make use of Picarta's inter-library loans system and other online services (e.g. Google Books).

V. Course organization and requirements

1. Class meetings will consist of short discussion sessions, in which we discuss the material of that week based on the questions and muddy point you have. We will also do experiments, student poster presentations, discussion of group/individual work and in class assignments.
2. Most classes will be split up in halve, meaning that halve of you will have class from 10.45 to 11.30 and halve of you from 11.45 to 12.30.
3. **It is essential that you prepare for class:** read the assigned chapter(s) and perform the homework assignments (graded; HW) and muddy point and quizzes. Deadlines for individual or group work are to be met. Although in class participation is not graded directly, active participation is of course expected from you as it will improve your learning.
4. Repeated lateness may affect your grade. Missing classes affects your grade as follows: missing 4 classes may lead to minor grade deduction, depending on your reasons for absence and whether or not I was informed on time. Missing 5 classes: 5 % grade deduction (of final grade). Missing 6 classes 10 % grade deduction. If you miss 7 or more classes you fail the course. Absenteeism needs to be communicated in advance.
5. Absenteeism needs to be communicated in advance whenever possible.
6. Missing an exam without proper reason and prior communication means scoring 0%. If you miss an exam with a proper reason that has been communicated in advance, you will be offered the opportunity to do the exam in week 16. As this date is beyond the last day of class, you have to file an extension form well in advance (see article 6.5.4 in student handbook).
7. All material will be provided via Moodle.
8. Use Moodle for submitting work. Submit all your work in Word or PowerPoint format (not PDF).

9. Special needs: students with documented learning disabilities or special needs should make their needs known to the instructor at the start of the course using the letter they received from the Board of Examiners.
10. Plagiarism is a serious academic offence which carries heavy sanctions. Acquaint yourself with the UCR Plagiarism Policy (see Student Handbook).
11. You are expected to speak English at all times.

This course is subject to UCR academic rules and procedures. Both students and instructors are required to know and follow these rules and procedures.

VI. Assessment

Midterm exam (online): 20%

Final exam: 25%

Experiment: 30 % (Experiment 15%, Poster 10 %, Presentation 5 %)

Assignments: 25 %

Exams. These will consist of open questions. Scoring will take into account correctness /completeness of requested facts and conclusions/clarity of answers. Detailed SLO's will be posted on Moodle.

Experiment

Within a group of 6 people, you will conduct an experiment. The experiment will be presented using a poster format. Instructions on how to prepare an effective poster can be found on Moodle. Upload your poster 48 hour before class on Moodle (directory posters under general). Finally you will present your poster in class in a PowerPoint / Prezi presentation of your poster. Detailed instructions on the experiment and the presentation are provided on Moodle (document "experiment").

Assignments: all weeks you will do at home assignments. Only larger homework assignment (called HW...) will be graded. Muddy points and quizzes are not. However if you miss out on more than two muddy points or quizzes you will receive grade reduction on your homework grade (5% per missed quiz or muddy point).

You may use whatever scholarly material you want for this. It is also possible (and advisable) to work on the assignments together with other students but, naturally, each student is responsible for handing in his/her own work. Your answers to the homework assignments should be **assigned via Moodle** to me on the **night before class (midnight)**; no paper copy is required. Most homework assignments will be discussed in class and will thus enable you to participate in class discussions in a more fruitful manner. Failing to hand in an assignment will result in an F score for that particular assignment (= 0 %). After all assignments have been completed, I will leave out your lowest grade of all grades you scored for the various assignments. This means that you are excused from handing in your homework copy 1 time without repercussions.

Homework will be graded as follows: F: homework was not handed in. D = does not meet length or task **and** exploration is too superficial. C= does not meet length or task **or** exploration is too superficial. B = meets or exceeds length or task, reasonable quality exploration. A/ A+= meets or exceeds length or task, high quality exploration. Sometimes we will do in class assignments which will count towards your assignments grade as well. In order to do well, you might need the information from the assigned reading. The assignments entitled HW ling, HW psych and HW sci are performed by students who have taken AHLING101, SSCPSYC101 or SCICOGN101/301 respectively. Hence you will only do one of these three assignments. I have allocated you to one of these assignments by looking at your background. **Please see document “Assignments” on Moodle, for all the details.**

VII. Course schedule (may be subject to minor changes)

	Topic	Activities	Preparation prior to class and assignments
1a Mo 01/02	Defining language	Course instructions Discussion defining language Quiz on key terms Making groups for experiment	Read Harley Ch. 1: page 1-9. Study key terms on page 5
1b Th 04/02	Animal communication	Discuss animal communication In class assignment on design features	Read Harley chapter 3: pp 54-67 (do animals have language) Watch: Ted talk Prof Rumbaugh Send your muddy points
2a Mo 08/02	The basics of linguistics	Discussion muddy points Peer led instruction	Read Harley Ch. 2: page 27-41 See extra resources on Moodle Send your muddy points HW ling “linguistics” students: prepare for assignment (see homework file) Other students: prepare questions
2b Th 11/02	Methods to study language behaviour, neuro-psychology structural MRI	Discussion muddy points Quiz	Read from Moodle: “behavioural methods” Read Harley Ch. 1: the methods of modern psycholinguistics and language and the brain Read Kemmerer Ch. 2: section introduction and neuropsychology Send your muddy points
3a Mo 15/02	Experiment	Discuss experiment topics; peer feedback sessions	Upload experiment outline on Moodle (by Sunday 1402 midnight)

3b Th 18/02	Biological basis of language: neuroanatomy and physiology	Interactive discussion Peer led instruction	Read: Kemmerer CH. 1 and Kemmerer Ch. 2: section "functional neuroimaging". HW science "science" students: prepare for in class assignment (see homework file) Other students: prepare questions
4a Mo 22/02	Biological basis of language: brain imaging	Discussion Quiz and questions students	Read Kemmerer Ch. 2 ("electrophysiology and TMS") Do Quiz/questions
4b Th 25/02	Classic Aphasia Syndromes 1	Discuss muddy points Discuss set-up with group 1 and 2	Read Kemmerer Ch. 3 Upload experimental setup an hypothesis group 1 and 2
5a Mo 01/03	Primary Progressive Aphasia Syndromes	Discussion Quiz and questions students Discuss set-up with group 3 and 4	Read Kemmerer Ch. 4 Do Quiz Upload experimental setup an hypothesis group 3 and 4
5b Th 04/03	Language and thought 1	Discuss muddy points	Read Harley Ch 3: pp 88-99 (what is the relationship between language and thought?) Muddy point
6a Mo 08/03	Language and thought 2 Language acquisition 1 Theories Critical period	Discuss Paper Dehaene Peer led instruction	Read Article from S. DeHaene et al 2006 HW class 6a Read Harley Ch. 3 pp 72-88 HW Psych "psychology" students: prepare for in class assignment (see homework file) Other students: prepare questions
6b Th 11/03	Language acquisition 2 Driving forces	Interactive discussion	Read Harley Ch. 4: pp 103-119 Watch Ted talk Steven Pinker HW class 7a: Ask critical questions/ comment
7a Mo 15/03	Language acquisition 3 How children develop language	Discuss muddy points	Read Harley Ch. 4: pp 119-136 (early syntactic) Read Paper on Moodle by Kuhl et al Watch Ted talk Deb Roy Watch Ted talk Patricia Kuhl Muddy points
7b Th 18/03	Bilingualism and 2 nd	Discuss Quiz	Read Harley Ch. 5 Do quiz/ questions

	Language acquisition Language		
8a Mo 22/03		Exam revision	
8b Th 25/03		Online MIDTERM exam	
29/03–05/04		Break	
9a Mo 05/04		Easter	
9b Th 08/04	Speech perception 1: Complicating factors		Reread Harley Ch. 5 Read Harley Ch 9: pp 257-267 (models..) Read from Moodle: “audition” and “speech perception” Deadline execution experiments All groups submit data file and proposal for analysis
10a Mo 12/04	Speech perception 2: Audition Neuroscience		Read Kemmerer Ch. 5
10b Th 15/04	Semantics 1: Meaning, memory and models		Read Harley Ch 11: pp 319-325 introduction and classic approaches to semantics Read Kemmerer Ch 10 (273-286 not: domains of object concepts)
11a Mo 19/04	Semantics 2 Neuroscience		Read Kemmerer Ch 10 (286-end not: domains of object concepts) HW class 11a: Ask critical questions/ comment
11b Th 22/04	Reading		Read Harley Ch 6: is there a dedicated visual word form area? (pp 183 -185) Read Harley Ch 7: pp 209-227 (models..) Read Kemmerer Ch 8 (pp 215-236)
12a Mo 26/04	Learning to read and dyslexia		Read Harley Ch 8 HW class 12a: Ask critical questions/ comment

12b Th 29/04	Language Production 1		Read Harley Ch 13: Introduction, speech errors (397-402). First part on syntactic planning (404-405), first part on lexicalization (only page 410-416, not problems with lemma model) Read Ch 13: phonological encoding 426-428
13a Mo 03/05	Language Production 2 Neural models for language production Course evaluation		Read Kemmerer Ch. 6 speech production (145-168 and box 6.4) read: https://www.nidcd.nih.gov/health/stuttering
13b Th 06/05	in class Q and A session (presence is not obligatory)	Revision time	
14a Mo 10/05		ENDTERM EXAM	
14b Th 13/05	Ascension day		
15a Mo 17/05		Poster presentations Group 3 and 4	Hand in poster by 1505 HW class 15a Group 1 and 2 provide feedback
15b Th 20/05		Poster presentations Group 1 and 2	Hand in poster by 1505 HW class 15b Group 3 and 4 provide feedback

VIII. Course learning objectives:

Measurable program outcomes	
1. Acquire knowledge/perspectives in relevant domains	X
2. Grasp relevant objectives, assumptions and values	X
3. Understand state-of-the-art knowledge	X
4. Critically review results, arguments, problem formulations	X
5. Adopt and exercise relevant academic attitudes.	X
6. Understand/apply domain knowledge in other contexts	X
7. Grasp interdisciplinary issues within specialization	X
8. Develop and apply new knowledge, methods, skills and expertise.	+/-
9. Communicate at scholarly level	
10. Reflect on personal/academic growth and development	x

11. Master with autonomy a range of specialist topics in preparation for further academic or professional training .	
12. Function effectively in team-based projects or exercises (or individual 'command' decision exercises).	X

IX. Student learning objectives

SLO's will be provided to student in a separate file, which will be posted on Moodle.

X. Appendices

All course materials (except for the book) will be put on Moodle or handed out during class.