LT5422: NEUROCOGNITION OF LANGUAGE

Effective Term
Semester B 2024/25

Part I Course Overview

Course Title
Neurocognition of Language

Subject Code
LT - Linguistics and Translation
Course Number
5422

Academic Unit
Linguistics and Translation (LT)

College/School
College of Liberal Arts and Social Sciences (CH)

Course Duration
One Semester

Credit Units
3

Level
P5, P6 - Postgraduate Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
Nil

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
Nil

Part II Course Details

Abstract
This course aims to encourage students to engage with current issues/trends and cutting-edge research in the neurocognition of language. It covers the basic principles in cognitive neuroscience with state-of-the-art reviews of major

language functions from psycholinguistics and how they are supported by the human brain. It is designed to enable the students to gain a better appreciation of and better understanding about language function in the brain for the purpose of developing the desirable analytical and intellectual rigour essential to academic inquiry.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe the cognitive and psychological process of language comprehension and production.		x	x	
2	Introduce the neuropsychological and neuroimaging approaches to study language and human cognition.		x	x	
3	Explain the cognitive and cultural underpinnings of language on the one hand and of the multifaceted linguistic representations of cognition on the other.		x	x	
4	Conduct and critique linguistic analysis of data in relation to the complex relation among language, cognition and brain.		x	x	x
5	Hypothesize and formulate generalizations regarding the cognitive and neural bases of language.		x	x	x

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	1. Readings	Students will develop an in-depth understanding of the key ideas, methods, and concepts in the neurocognition of language through reading academic books, chapters, and journal articles.	1, 2, 3, 4, 5	

| 2 | 2. Lectures | Students will engage with basic concepts, models, and theories in the neurocognition of language through explanation and illustration by the lecturer. | 1, 2, 3, 4, 5 | |
| 3 | 3. Class Discussions | Students will discuss and debate key issues and theories in the field of neurocognition of language, and attempt to apply their new knowledge to produce neurocognitive models that encapsulate those ideas and theoretical insights. | 1, 2, 3, 4, 5 | |

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Mid-term quiz	1, 2, 3, 4, 5	30	
2	Oral presentation	1, 2, 3, 4, 5	20	
3	One written assignment	1, 2, 3, 4, 5	20	
4	Term paper	1, 2, 3, 4, 5	30	

Continuous Assessment (%)

100

Assessment Rubrics (AR)

Assessment Task

1. Mid-term quiz (30%) (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Interpreting cognition and language phenomenon with specialized terms and concepts.
Developing critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Excellent

(A+, A, A-) Excellent interpretation of cognition and language phenomenon with specialized terms and concepts.
Excellent development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Good

(B+, B, B-) Good interpretation of cognition and language phenomenon with specialized terms and concepts.
Good development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Fair

(C+, C, C-) Satisfactory interpretation of cognition and language phenomenon with specialized terms and concepts.

Satisfactory development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Marginal

(D) Unsatisfactory interpretation of cognition and language phenomenon with specialized terms and concepts. Unsatisfactory development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Failure

(F) Poor interpretation of cognition and language phenomenon with specialized terms and concepts. Poor development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Assessment Task

2. Oral presentation (20%) (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Demonstration of understanding basic concepts
Demonstration of ability to apply basic concepts

Excellent

(A+, A, A-)
1) comprehensive understanding of the course contents and being able to critique the contents;

2) Demonstrating accurate and critique analysis on linguistic instances and on the relationship between language, cognition and brain;

3) writing format is appropriate in an academic style and standard;

Good

(B+, B, B-)
1) comprehensive understanding of the course contents;

2) demonstrating accurate analysis on linguistic instances and on the relationship between language, cognition and brain;

3) writing format is appropriate in an academic style and standard;

Fair

(C+, C, C-)
1) moderate or limited understanding on topics and contents of the course;

2) demonstrating basic ability to analyze the relationship between language, cognition and brain;

3) appropriate format in the writing, but writing content merely shows some understanding of the differences between academic and non-academic style of writing and put that understanding to practice;

Marginal

(D)
1) little understanding on topics and contents of the course;

2) insufficient knowledge on course contents;

3) inappropriate writing style and format for academic paper;

Failure
(F)
1) no understanding on topics and contents of the course;

2) incorrect knowledge on course contents;

3) inappropriate writing style and format for academic paper;

Assessment Task
3. Written assignment (20%) (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion
Demonstration of understanding basic concepts
Demonstration of ability to apply basic concepts

Excellent
(A+, A, A-)
1) comprehensive understanding of the course contents and being able to critique the contents;

2) Demonstrating accurate and critique analysis on linguistic instances and on the relationship between language, cognition and brain

3) writing format is appropriate in an academic style and standard;

Good
(B+, B, B-)
1) comprehensive understanding of the course contents;

2) demonstrating accurate analysis on linguistic instances and on the relationship between language, cognition and brain;

3) writing format is appropriate in an academic style and standard;

Fair
(C+, C, C-)
1) moderate or limited understanding on topics and contents of the course;

2) demonstrating basic ability to analyze the relationship between language, cognition and brain;

3) appropriate format in the writing, but writing content merely shows some understanding of the differences between academic and non-academic style of writing and put that understanding to practice;

Marginal
(D)
1) little understanding on topics and contents of the course;

2) insufficient knowledge on course contents;

3) inappropriate writing style and format for academic paper;

Failure
(F)
1) no understanding on topics and contents of the course;

2) incorrect knowledge on course contents;

3) inappropriate writing style and format for academic paper;

Assessment Task
4. Term paper (30%) (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion
Design of the study

Written presentation

Knowledge application and critical thinking

Excellent
(A+, A, A-)
1) Excellent design of the study;

2) Excellent written presentation;

3) Excellent application of the concepts, theories or models taught in class;

4) Demonstration of excellent abilities of critical thinking.

Good
(B+, B, B-)
1) Good design of the study;

2) Good written presentation;

3) Good application of the concepts, theories or models taught in class;

4) Demonstration of good abilities of critical thinking.

Fair
(C+, C, C-)
1) Satisfactory design of the study;

2) Satisfactory written presentation;

3) Satisfactory application of the concepts, theories or models taught in class;

4) Demonstration of average abilities of critical thinking.

Marginal
(D)

1) Unsatisfactory design of the study;

2) Unsatisfactory written presentation;

3) Unsatisfactory application of the concepts, theories or models taught in class;

4) Demonstration of below-average abilities of critical thinking.

Failure
(F)
1) Poor design of the study;

2) Poor written presentation;

3) Incorrect application of the concepts, theories or models taught in class ;

4) Demonstration of low abilities of critical thinking.

Assessment Task

1. Mid-term quiz (30%) (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Interpreting cognition and language phenomenon with specialized terms and concepts.
Developing critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Excellent

(A+, A, A-) Excellent interpretation of cognition and language phenomenon with specialized terms and concepts.
Excellent development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Good

(B+, B) Good interpretation of cognition and language phenomenon with specialized terms and concepts.
Good development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Marginal

(B-, C+, C) Satisfactory interpretation of cognition and language phenomenon with specialized terms and concepts.
Satisfactory development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Failure

(F) Unsatisfactory interpretation of cognition and language phenomenon with specialized terms and concepts.
Unsatisfactory development of critical thinking via recognizing and identifying similarities/differences among key concepts, models and theories.

Assessment Task

2. Oral presentation (20%) (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Demonstration of understanding basic concepts

Demonstration of ability to apply basic concepts

Excellent
(A+, A, A-)
1) comprehensive understanding of the course contents and being able to critique the contents;

2) Demonstrating accurate and critique analysis on linguistic instances and on the relationship between language, cognition and brain;

3) writing format is appropriate in an academic style and standard;

Good
(B+, B)
1) comprehensive understanding of the course contents;

2) demonstrating accurate analysis on linguistic instances and on the relationship between language, cognition and brain;

3) writing format is appropriate in an academic style and standard;

Marginal
(B-, C+, C)
1) moderate or limited understanding on topics and contents of the course;

2) demonstrating basic ability to analyze the relationship between language, cognition and brain;

3) appropriate format in the writing, but writing content merely shows some understanding of the differences between academic and non-academic style of writing and put that understanding to practice;

Failure
(F)
1) little understanding on topics and contents of the course;

2) insufficient knowledge on course contents;

3) inappropriate writing style and format for academic paper;

Assessment Task
3. Written assignment (20%) for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion
Demonstration of understanding basic concepts
Demonstration of ability to apply basic concepts

Excellent
(A+, A, A-)
1) comprehensive understanding of the course contents and being able to critique the contents;

2) Demonstrating accurate and critique analysis on linguistic instances and on the relationship between language, cognition and brain

3) writing format is appropriate in an academic style and standard;

Good

(B+, B)

1) comprehensive understanding of the course contents;

2) demonstrating accurate analysis on linguistic instances and on the relationship between language, cognition and brain;

3) writing format is appropriate in an academic style and standard;

Marginal

(B-, C+, C)

1) moderate or limited understanding on topics and contents of the course;

2) demonstrating basic ability to analyze the relationship between language, cognition and brain;

3) appropriate format in the writing, but writing content merely shows some understanding of the differences between academic and non-academic style of writing and put that understanding to practice;

Failure

(F)

1) little understanding on topics and contents of the course;

2) insufficient knowledge on course contents;

3) inappropriate writing style and format for academic paper;

Assessment Task

4. Term paper (30%) (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Design of the study

Written presentation

Knowledge application and critical thinking

Excellent

(A+, A, A-)

1) Excellent design of the study;

2) Excellent written presentation;

3) Excellent application of the concepts, theories or models taught in class;

4) Demonstration of excellent abilities of critical thinking.

Good

(B+, B)

1) Good design of the study;

2) Good written presentation;

3) Good application of the concepts, theories or models taught in class;

4) Demonstration of good abilities of critical thinking.

Marginal

(B-, C+, C)
1) Satisfactory design of the study;

2) Satisfactory written presentation;

3) Satisfactory application of the concepts, theories or models taught in class;

4) Demonstration of average abilities of critical thinking.

Failure

(F)
1) Unsatisfactory design of the study;

2) Unsatisfactory written presentation;

3) Unsatisfactory application of the concepts, theories or models taught in class;

4) Demonstration of below-average abilities of critical thinking.

Part III Other Information

Keyword Syllabus

Language and Cognition
Meaning organization;
Language and conceptualization;
Brain imaging

Reading List

Compulsory Readings

	Title
1	Kemmerer, D. (2022). Cognitive Neuroscience of Language, 2nd Edition. Routledge.
2	Friederici, A.D. & Chomsky N. (2017). Language in Our Brain: The Origins of a Uniquely Human Capacity. MIT Press.

Additional Readings

	Title
1	Gazzanica, M.S., Ivry, R. B., Mangun, G.R. (2014). Cognitive Neuroscience: The Biology of the Mind, 4th Edition. W. W. Norton & Company.
2	Steve J. Luck (2005) An Introduction to the Event-related Potential Technique. MIT press
3	Brown, C. D. & Hagroot, P. (2000). The Neurocognition of Language. Oxford: Oxford University Press.
4	Journals:
5	Brain and Language

6	Journal of Psycholinguistic Research
7	Journal of Memory and Language
8	Journal of Experimental Psychology
9	Cognition