



**Jordan University of Science and Technology**  
**Faculty of Science & Arts**  
**English Language & Linguistics Department**

ENG796 Neurolinguistics

First Semester 2024-2025

**Course Catalog**

3 Credit Hours. This course introduces the key principles and goals of modern neurolinguistics as a science that incorporates methods and paradigms of linguistics and neuroscience. This course discusses the main units and organizational principles of the human nervous system that underlie our language capacity. Students will learn about the neurophysiological aspects of first and second language learning, clinical research in speech, reading and writing disorders, and speech disorders accompanying various psychiatric conditions. The course includes information on the history of neurolinguistics, modern techniques and methods of neurolinguistic research, and provides detailed examples of recent studies in the field.

**Teaching Method:** On Campus

**Text Book**

<b>Title</b>	The Student's Guide to Cognitive Neuroscience
<b>Author(s)</b>	Ward, Jamie
<b>Edition</b>	4th Edition
<b>Short Name</b>	Ref. 1
<b>Other Information</b>	Chapter 2: The Structure and Function of the Brain.

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
Ref. 2	Linguistics and Aphasia: Psycholinguistic and Pragmatic Aspects of Intervention.	Lesser, Ruth & Milroy, Lesley	2nd Edition	
Re3f. 3	Introduction to Neurolinguistics	Ahlsen	3rd Edition	
Ref. 4	Neurolinguistics: An Introduction to Spoken Language Processing and its Disorders	John Ingram	3rd Edition	

**Instructor**

Name	<b>Dr. Samir Jarbou</b>
Office Location	D1 L0
Office Hours	
Email	samerjar@just.edu.jo

<b>Class Schedule &amp; Room</b>
Section 1: Lecture Time: Sun, Tue : 15:00 - 16:30 Room: M1303

<b>Tentative List of Topics Covered</b>		
<b>Weeks</b>	<b>Topic</b>	<b>References</b>
Week 1	What is Neurolinguistics and a brief history of the field?	
Weeks 2, 3	Introducing the Brain	
Week 4	Evolution of Brain and Language	
Week 5	Broca's Area, Wernicke's Area, and the Arcuate Fasciculus	
Weeks 6, 7	The Speaking Brain	
Weeks 8, 9	Reading and writing from a neurolinguistic perspective.	
Weeks 10, 11	Gestures and Language Production and Reception	
Week 12	11. Introduction to Bilingualism in the Brain	
Weeks 13, 14	Bilingualism and Cognitive Reserve	
Week 15	Language Disorders in the Brain	

<b>Mapping of Course Outcomes to Program Outcomes</b>	<b>Course Outcome Weight (Out of 100%)</b>	<b>Assessment method</b>
Students will be able to identify key principles of neurolinguistics, including its relationship with both neuroscience and linguistics.	25%	
Students will explain the organizational principles of the nervous system that support human language capacity, differentiating between various components, such as the brain's structure and functions.	25%	
Students will apply knowledge of neurophysiological mechanisms to analyze case studies on language learning and language disorders (e.g., aphasia, dyslexia).	25%	
Students will compare and contrast different methods and modern techniques in neurolinguistics research, evaluating their effectiveness in studying language disorders, the effect of bilingualism on cognitive reserve, and the effect of gestures on language production and reception.	25%	

Relationship to Program Student Outcomes (Out of 100%)					
PLO 1-K1	PLO 2-S1	PLO 3- S2	PLO 4- S3	PLO 5-C1/2	PLO 6- C3/4

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