

PSYC 3766 - Cognitive Neuroscience

Fall 2026 Syllabus, Section 01, CRN 42805,

Credit hours: 3

Instructor

James Juergensen

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Public Instructor Information

Instructor Title: Associate Professor

Instructor Professional Qualifications:

Ph.D. in Experimental Psychology from Case Western Reserve University (2014)

Master's in Experimental Psychology from Case Western Reserve University (2012)

Bachelor's in Psychology from Youngstown State University (2009)

Instructor Office Location: Beeghly Hall 4104

Instructor Office Phone: 330 941-1522

Course Description

3766. Cognitive Neuroscience. This course is designed to provide students with a strong basic knowledge of the field of Cognitive Neuroscience. We will cover the foundations of the field and develop a thorough understanding of the neural bases of cognition, affect, and human behavior. Throughout this course, we will get a review of various areas of Cognitive Neuroscience, including neuroanatomy, hemispheric specialization, brain development, vision, audition, attention, language, executive functions, learning/memory, consciousness and emotion regulation, among a variety of other topics. This course will include a variety of sources including the required textbook, additional readings, and a series of podcasts/presentations. Prereq.: PSYC 2617. 3 s.h.

Professor's Additional Course Description:

This course is designed to provide students with a strong basic knowledge of the field of Cognitive Neuroscience. We will cover the foundations of the field and develop a thorough understanding of the neural bases of cognition, affect, and human behavior. Throughout this course, we will get a review of various areas of Cognitive Neuroscience, including neuroanatomy, hemispheric specialization, brain development, vision, audition, attention, language, executive functions, learning/memory, consciousness and emotion regulation, among a variety of other topics. This course will include a variety of sources including the required textbook, additional readings, and a series of podcasts/presentations.

Course Readings

Group	Title	Author	ISBN
Required	Phantoms in the Brain: Probing the Mysteries of the Human Mind	Ramachandran, V.S.	9780688172176
Optional	Cognitive Neuroscience 6e Courseware (Norton Illumine Ebook, Videos, ZAPS, and 3D Brain)	Gazzaniga et al.	8220147029685

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Tue	8/25		Syllabus, Class Information, Introduction	
Thu	8/27		Chapter 1 History of CN	

Tue	9/1		Chapter 2 Structure and Function of the Nervous System	
Thu	9/3		Chapter 2 Structure and Function of the Nervous System	
Tue	9/8	Phantoms in the Brain Chapter 1	Chapter 2 Structure and Function of the Nervous System	Group 1 Presentation
Thu	9/10		Chapter 3 Methods of CN	
Tue	9/15	Phantoms in the Brain Chapter 2	Podcast Group Share Unit 1	Group 2 Presentation; Podcast Group Share Unit 1
Thu	9/17		Exam #1	
Tue	9/22	Phantoms in the Brain Chapter 3	Chapter 4 Hemispheric Specialization	Group 3 Presentation
Thu	9/24		Chapter 4 Hemispheric Specialization	
Tue	9/29	Phantoms in the Brain Chapter 4	Chapter 4 Hemispheric Specialization	Group 4 Presentation
Thu	10/1		Chapter 5 Sensation and Perception	
Tue	10/6	Phantoms in the Brain Chapter 5	Chapter 5 Sensation and Perception	Group 5 Presentation
Thu	10/8		Chapter 5 Sensation and Perception	
Tue	10/13	Phantoms in the Brain Chapter 6	Podcast Group Share Unit 2	Group 6 Presentation; Podcast Group Share Unit 2
Thu	10/15		Exam #2	
Tue	10/20	Phantoms in the Brain Chapter 7	Chapter 7 Attention	Group 1 Presentation
Thu	10/22		Chapter 7 Attention	
Tue	10/27	Phantoms in the Brain Chapter 8	Chapter 9 Memory	Group 2 Presentation
Thu	10/29		Chapter 9 Memory	
Tue	11/3	Phantoms in the Brain Chapter 9	Chapter 10 Emotion	Group 3 Presentation
Thu	11/5		Chapter 10 Emotion	
Tue	11/10	Phantoms in the Brain Chapter 10	Podcast Group Share Unit 3	Group 4 Presentation; Podcast Group Share Unit 3
Thu	11/12		Exam #3	
Tue	11/17	Phantoms in the Brain Chapter 11	Addiction	Group 5 Presentation
Thu	11/19		Addiction	
Tue	11/24	Phantoms in the Brain Chapter 12	Addiction	Group 6 Presentation
Thu	11/26		Happy Thanksgiving! No Class	
Tue	12/1		Podcast Group Share Unit 4	Podcast Group Share Unit 4
Thu	12/3		Final Exam Review	
Tue	12/8		No Class; Finals week	
Thu	12/10		Final Exam Thursday December 10th 10:30AM -12:30 PM	

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.