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This course explores the cognitive and neural processes that underlie perception, attention, language, motor control, executive function, and memory. The emphasis of this course is the relationship between cognition and the nervous system in both healthy and disordered/diseased states (e.g., Alzheimer's disease, autism spectrum disorders, depression, Parkinson's disease, and schizophrenia). In examining this relationship, it also introduces technologies and methodologies used by cognitive neuroscientists to answer research questions relating to the interface of brain, behaviour and cognition.

Learning Objectives

Discuss critical concepts and theories that are important in the field of cognitive neuroscience

Critically assess scientific literature relating to cognitive neuroscience

Synthesize information across diverse areas of cognitive neuroscience; think about topics in novel ways

Discuss the advantages and disadvantages to the current technologies and methodologies used in cognitive neuroscience

Required Readings

Gazzaniga, M., Ivry, R., & Mangun, G. (2013). Cognitive Neuroscience: The biology of the mind 4th Edition, W.W. Norton and Company, NY

Readings for Assignments 1 and 2 (see assignments for details)

Materials

1. Moodle: Lecture power points and supplementary course readings; course information

2. Turnitin.com: submission of Assignments 1, 2 and 3

Course Schedule

Week	Date	Торіс	Readings (Gazzaniga)
		Introduction and Course Information	
1	Jan 5	Introduction to Assignment 1 & Assignment 3	No readings
1	Jan 8	General Overview of Cognitive Neuroscience	Chapter 1 and 2
2	Jan 12	Methods of Cognitive Neuroscience	Chapter 3
2	Jan 15	Methods of Cognitive Neuroscience	Chapter 3
3	Jan 19	Sensation & Perception	Chapter 5
3	Jan 22	Sensation & Perception	Chapter 5
4	Jan 26	Introduction to Assignment 2 Object Recognition	Chapter 6
4	Jan 29	Object Recognition	Chapter 6
5	Feb 2	Attention	Chapter 7
5	Feb 5	Attention	Chapter 7
6	Feb 9	Action	Chapter 8
6	Feb 12	Action	Chapter 8
7	Feb 16-20	Reading Week: No class	
8	Feb 23	Emotion	Chapter 10 Pages:438-449,455-465
8	Feb 26	Mid-term Exam	

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