

COURSE APPROVAL DOCUMENT
Southeast Missouri State University

Department: ___Psychology_____

Course No. ___PD523_____

Title of Course: ___Cognitive Psychology_____

Date: ___August 1, 2015_

Please check: New
 Revision

I. Catalog Description (Credit Hours of Course): This course involves the study of sensation, perception, cognition, psycholinguistics, and information processing, including attention and problem solving. (3)

II. Co- or Prerequisite(s):

III. Purposes or Objectives of the Course (optional):

- 1) Understand basic cognitive processes (e.g., attention, language, perception, and memory).
- 2) Understand theoretical and neuropathological aspects of cognitive impairments, including those of language and memory.
- 3) Understand how components of memory manifest in everyday life and in clinical settings.

Add additional Objectives as needed

IV. Student Learning Outcomes (Minimum of 3):

- 1) The student will describe specific examples of ways that his or her own cognitive proficiency and performance could be enhanced using techniques based on understanding of cognitive processes.
- 2) The student will describe a multidisciplinary approach to the assessment, treatment, and rehabilitation of a client with a specific neurological disorder.
- 3) The student will identify theoretical and neuropathological aspects of cognitive impairments, including impairments of language and memory.

Add additional SLOs as needed

V. Optional departmental/college requirements:

- A.
- B.

VI. Course Content or Outline (Indicate number of class hours per unit or section):

- A. See syllabus attached.
- B.
- C.

Please Attach copy of class syllabus and schedule as an example

Signature: _____
Chair

Date: _____

Signature: _____
Dean

Date: _____

**PONCE HEALTH SCIENCES UNIVERSITY
CLINICAL PSYCHOLOGY PSY.D. PROGRAM**

SYLLABUS

COURSE TITLE	Cognitive Psychology
CODING	PSY 523
CREDIT HOURS	3 credits
CONTACT HOURS	45
PREREQUISITE	None
PROFESSOR	
TEACHING ASSISTANT	
OFFICE HOURS	
EMAIL ADDRESS	
SEMESTER	

COURSE DESCRIPTION

The study of the diverse psychological systems that allows the human being to gather information/knowledge from his/her internal and external world is the main focus of this course. The psychology of sensation, perception, cognition, psycholinguistic and information processing provide the experimental and theoretical background to the study of the following topics: attention, thinking, problem solving, language and memory. The student is exposed to the main concepts of each area, to the main research methods utilized to examine hypothesis and to the practical application for clinical practice of such body of knowledge.

GENERAL OBJECTIVE

Provide student with a clear conceptual structure of the cognitive functions, and the neural based of them

SPECIFIC OBJECTIVES

By the end of the course the student will:

Overview of different aspects of neuropsychology, including basic neuroanatomy and neuropsychological assessment.

Differentiate of the various psychological processes studied by Cognitive Psychologist, including attention, language, perception and memory.

Presentate and discuss of different neuropsychological disorder including a theoretical and neuropathological aspects of cognitive impairments, including language and memory.

Identify the different component of memory and how these manifest in everyday life and in clinical setting.

Explorer of the effect of cognitive impairments and neurological disorders in everyday life.

Knowledge Based Objective

Acquaintance with the traditional and modern models of cognitive processing

Recognition of the theoretical and neuropathological aspects of cognitive impairments, including language and memory.

Understanding the neuropsychological disorder including a multidisciplinary approach in the assessment, treatment and rehabilitation of the patient.

Skills Based Objective

Identify which memory processes are activated under different circumstances.

Acquire a broad understanding of the effect of the cognitive impairments and neurological disorders in every day life.

Identify the theoretical and neuropathological aspects of cognitives impairments, including language and memory.

Attitude Based Objective

Apply the information acquired about the different cognitive process to the person life of the student to achieve higher levels of cognitive proficiency and performance.

Awareness of how the knowledge base of Cognitive Psychology is applicable to the assessment of clinical cases.

COURSE OUTLINE

Session I

1. Introduction to the course, didactic approaches, requirements and its perspectives
2. The history of Cognitive Psychology and the main players in the field
3. The different cognitive functions
 - a. motor processes
 - b. object recognition
 - c. spatial processing
 - d. attention
 - e. language

Session II

1. Conclusion of cognitive functions
 - a. memory
 - b. executive function
 - c. goal oriented behavior
 - d. emotion
 - e. artistry
2. Clinical neuropsychology and others disciplines
 - a. Physical and nurses
 - b. Speech therapists
 - c. Occupational therapists
 - d. Physical therapists
 - e. others
2. Neuropsychological terminology
 - a. Agnosias
 - i. autotopagnosia
 - ii. prosopagnosia
 - b. aphasia

Readings:. *Cognitive Neurosciences and Neuropsychology, pp. 3-112*
Fracture Minds pp. 3-40

Session III

1. Conclusion of neuropsychological terminology
 - a. amnesia
 - b. hemineglect
 - c. split brain syndrome
 - d. right hemispheric disorders
 - e. left – hemispheric disorders
2. Assessment process
 - a. Quantitative Method
 - b. Qualitative Method

- c. flexible Assessment Method
- 2. Neuropsychological Assessment Process

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 3-112*
Fracture Minds, pp 232-251
(First presentation, Split Brain, Split Mind?)

Session IV

- 1. Overview of the CNS
 - a. peripheral nervous
 - b. cerebrospinal fluid
 - c. spinal cord
 - d. brain
- 2. Structures of the brain
 - a. medulla
 - b cerebellum
 - c. pons
 - d .midbrain
 - e. diencephalons
 - f. cerebral cortex

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 3-112*
Pp252

Session V

- 1.Cerebrovascular system
- 2. Cerebral cortex
 - a.cerebral hemispheres
 - b.Primary sensory cortex
 - c.Primary motor cortex
 - d.Association areas

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 3-112*
Fracture Minds pp185-198
(Explosion in the Mind, a Case od Subarachnoid Hemorrhage)

Session VI

- 1.Theories of attention & concentration
- 2. Basic categories of attention
 - a. alertness
 - b. arousal
 - c. vigilance
 - d. selective attention
- 3. The neural system and attention

Readings: *Cognitive Neurosciences and Neuropsychology, pp.252-285*
Frcature Minds, pp. 92
(A body in the mind: A case of autopagnosia)

Session VII

- 1.Theories of concentration
- 2. Models of attentional control by a cortical network
- 3. Autotopagnosia
- 4. Hemineglet
 - a. description of Hemineglect
 - b. treatment of Heminiglect
 - c. understanding the brain – behavior relationship

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 252-285*
 Fracture Minds: pp 106-124
 (Out of mind, out of sight: A case of hemineglected)

Session VIII

Mid term examination

Session IX

1. Historical understanding of perceptual process
 - a. The ventral visual system
 - b. neurophysiological perspectives
2. Object recognition
 - a. global versus local processing
3. Spatial processing
4. Apperceptive Agnosia
5. Associative Agnosia
6. Student Presentation

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 184-251*
 Fracture Minds: pp. 125-141
 (Vision without knowledge: Visual object agnosia and prosopagnosia)

Session X

1. Neuropsychological bases of motor control
2. Brain structures involved in motor control
3. Subcortical motor disorders
 1. Cortical motor disorder
 2. Student Presentation

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 145-183*

Session XI

1. Types and theories of memory
 - a. multiple memory systems
 - b. explicit and implicit memory
 - c. declarative and procedural memory
 - d. other multiple system viewpoints
2. Hypocampal role in memory operations
3. Prefrontal Cortex and Working Memory
4. Causes of amnesia
5. A case of global amnesia
 - a. Epilepsy

Readings: *Cognitive Neurosciences and Neuropsychology, pp. 322-264*
 Fracture Minds pp 41-58
 (Marooned in the moment: HM, A case of global amnesia)

Session XII

1. The neural basis of language
2. Expressive Language
3. Receptive Language
4. Components of the linguistic process
5. Role of the right hemisphere
 - a. language processing
 - i. prosody
 - ii. inference
 - iii. narrative
1. Major Aphasia classifications

2. Student Presentation

Readings:. *Cognitive Neurosciences and Neuropsychology, pp. 285-321*
Fracture Minds pp 76-91
(The breakdown of language: Case studies of aphasia)

Session XIII

1. Complex integrative skills
 - a. comprehension
2. Problem Solving
 - a. Decision Making
3. Frontal –Lobe dysfunction
 - a. alcoholism
 - b. depression
 - c. Huntington
3. Psychological & neuropsychological outcome of frontal lobe syndrome
4. Student Presentation

Readings:. *Cognitive Neurosciences and Neuropsychology, pp. 365-392*
Fracture Minds 142-153
(The impaired executive: A case of frontal lobe disfunction)

Session XIV

1. Head Injury and Diffuse Brain Damage
2. Neuropathology of severe head injury
3. Neuropsychological, Psychiatric & Psychosocial outcome of head injury
 - a. Minor closed head injury
4. Student Presentation

Readings:. *Cognitive Neurosciences and Neuropsychology, pp. 477*
Fracture Minds pp. pp. 174-184 and 214-231
(The unseen injury: Minor close head injury -
Dementia: A family tragedy)

Session XV

Final Test

STUDENT'S EVALUATION CRITERIA AND GRADING SYSTEM

1. A mid term examination equivalent to 33 % of grade
2. A final examination equivalent to 33% of the grade
3. One case presentation which will yield 33 % of the grade

TEACHING STRATEGIES AND ACTIVITIES

1. Lectures
2. Audiovisual resources
3. Class discussion of readings
4. The students will conduct various research and practical projects through which they will become more familiarized with the different theories and cognitive processes discussed in class

RESOURCES

1. Library: journals, books and other relevant material
2. Assigned readings from journals
3. Audiovisual aids
4. Textbook and other suggested readings

OTHER IMPORTANT INFORMATION

Diversity Statement

Diversity relates to the acknowledgement of the human condition in all manifestations; its similarities and differences. Diversity seeks to understand different biopsychosocial experiences. It strives towards the human values of equality, respect, and acceptance, within a multicultural world whose boundaries have been overshadowed by technology and globalization. Diversity is the antithesis to oppression in all its manifestations (e.g. sexism, racism, exploitation) and to discrimination in any form, including discrimination due to sexual orientation, physical (dis) Abilities, socioeconomic status, worldviews, places of origin, cultural orientation, primary language, or to any other human characteristic, preference or state.

The notion of diversity is central to the study of human behavior. It requires the development of self-awareness of prejudiced attitudes. It includes understanding of differences in worldviews associated to the psycho-cultural and psycho-economic background of recipients of psychological services. Our training program promotes the awareness of subtle and “invisible” prejudice (e.g. homophobia) acquired during formative years.

Request for Reasonable Accommodations

Students in need of accommodation based on the impact of a disability should contact the professor privately to discuss the specific need. Students with documented disabilities should contact the Academic Deanship Office to coordinate reasonable accommodations.

Attendance Policy

After three absences for a 3 credit course, or 2 absences for a 2 credit course, the student will automatically be dropped from the class unless the professor recommends otherwise. The complete institutional attendance policy is included in the Appendix.

Honor Code Reminder

Any violation of the ethical dispositions of our institution or program will be automatically referred to the corresponding authorities. For the present course, plagiarism may lead to obtaining a grade of “0” on the plagiarized work and this would most probably lead to a failing grade in the course. Students found to violate this policy may be referred to the institutional Promotions Committee with a recommendation of dismissal from the program. The complete plagiarism policy is included in the Appendix.

Note

This syllabus is a guide and is subject to change according to circumstances that may arise during the semester. Students are responsible for all announced changes in the syllabus.

TEXTBOOK

Banich, M. (2004). *Cognitive Neurosciences and Neuropsychology*.
Houghton: Mifflin Com.

Ogden, J.A. (2005) *Fracture Minds: A case-study approach to clinical neuropsychology*. (2nd ed). Oxford University Press: New York.

BIBLIOGRAPHY

Ashcraft, M.H. (1994). *Human Memory and Cognition. Second Edition*. New York: Harper Collins College Publishers.

Cohen, R.A. (1993). *The Neuropsychology of Attention*. New York: Plenum Press.

Crosson, B. (1992). *Subcortical Functions in Language and Memory*. New York: The Guilford Press.

Darby, D. & Walsh, K. (2005). *Neuropsychology*. (5th ed). Churchill Livingstone.

Kandel, E.R, Schwartz, J.H. y Jessell, T.J. (1995). *Essentials of Neural Science and*

Behavior. Appletom and Lange. Stamford, Connecticut.

Levy, Y. (1999). *Metalinguistic competence, speech monitoring and repair behavior*.
Developmental Psychology (pp.822.834)

Lickliter, R.(2000) *The developmental of Intersensory perception*. Psychollogical
Bulletin, 126, pp. 260.280.

Matlin, M.W., Foley, H.J. (1992). *Sensation and Perception*. Third Edition. Boston:
Allyn and Bacon.

Massaro,D.W. (1998). *Perceiving talking faces*. (Cambridge, MA: MIT Press)

Sternberg, R. (2002) *Cognitive Psychology*. (3 ed) Wadsworth Publishing.

[Solso](#), R.L., [MacLin](#), M.K., MacLin, O.H. (2004)*Cognitive Psychology*. (7th Ed)
Allyn & Bacon.

Sternberg, R.J. (2002). *Cognitive Psychology*. (3rd. ed.). Wadsworrth Publishing.

Whishaw, I.Q. and Kolb, B. (2003). *Fundamentals of Human Neuropsychology* .(5th.
Ed). W.H. Freeman.

APPENDIX

INSTITUTIONAL ATTENDANCE POLICY

Attendance at lectures and laboratory exercises is mandatory unless excused because of illness or by previous authorization of the professor in charge of the course. Each department will decide the relative weight to be given to the attendance in calculating the final grade.

Attendance to clinical activities involving patients, patient models, and similar types of activities is considered part of the students' professional responsibility and is mandatory. Absence may be excused after the student consults with the respective department chairperson. Three unexcused absences may adversely affect the final grade for a course.

Incomplete work due to illness or other serious circumstances during the course will be handled according to departmental policies, which must be provided to the students in writing at the beginning of each term. Faculty are not obligated to repeat lecture/laboratory topics that were presented at scheduled times and dates.

PROGRAM POLICY ON ACADEMIC HONESTY AND PLAGIARISM

There are different ways in which a student may incur in one of the various forms of academic dishonesty. Lack of knowledge does not justify academic dishonesty as common sense usually helps to prevent potentially problematic situations. In case of doubt, the standards of academic honesty call for the student to ask the professor or advisor. The most frequent form of academic dishonesty is plagiarism. According to the Random House Webster's college Dictionary plagiarism is: *"the unauthorized use of the language and thoughts of another author and the representation of them as one's own. 2. something used and represented in this manner"*.

Our faculty recognizes that plagiarism in any of its forms and/or manifestation is a serious offense both in the academic and the professional world. Some of the acts that constitute plagiarism are:

- a. Using words or thoughts of authors without giving due credit.
- b. Presenting work done for one course to fulfill the requirements of another course (self-plagiarism).
- c. Taking credit for phrases or ideas of other authors to produce a collage of ideas that have not been created by the student.
- d. Not using quotation marks to identify the exact words of an author.
- e. Taking information from Internet without citing the source.
- f. Buying papers from the Internet or from other sources.
- g. Using another student's paper or clinical report to satisfy course requirements.

Each professor will evaluate alleged cases of academic dishonesty and will proceed to deal with each case according to institutional policies and procedures.