

DEREE COLLEGE SYLLABUS FOR: PS 3130 BIOPSYCHOLOGY		3/0/3						
(Revised Spring 2018)		LEVEL 5 UK CREDITS: 15						
PREREQUISITES:	BI 1000 Introduction to Biology I-Level 4							
CATALOG DESCRIPTION:	An introduction to the nature and role of the biological processes that underlie our thoughts, feelings, and behaviors. Topics covered will include function of the nervous system, neuroanatomy, and the physiological basis of learning, memory, language, senses, mood disorders, emotion and stress.							
RATIONALE:	This is a basic course in undergraduate program in psychology. Factual and conceptual knowledge is given in the biological aspects of human and animal behavior. The course is intended for psychology majors, but it should also be of interest to students in other social sciences.							
LEARNING OUTCOMES:	As a result of taking this course, the student should be able to: 1. Identify the divisions of the brain and nervous system and analyze their functions. 2. Identify and analyze the structure of neurons and how neural impulses are generated. Analyze the function of the major neurotransmitters and discuss the impact of each on behavior. 3. Demonstrate understanding of the research methods of Biopsychology. 4. Analyze and discuss the relationship of biology to basic processes (e.g. learning and memory, language, stress and emotion, sensation, mood disorders).							
METHOD OF TEACHING AND LEARNING:	In congruence with the teaching and learning strategy of the college, the following tools are used: ➤ Classes consisted of lectures and class discussions. ➤ Office hours ➤ Use of Blackboard site							
ASSESSMENT:	<div><div>Summative:</div><table><tr><td>1 hour in-class midterm examination: Short essay questions Multiple choices questions</td><td>40%</td></tr><tr><td>2 hour in-class final examination: Essay questions (choice: 3 out of 5)</td><td>60%</td></tr></table></div> <div><div>Formative:</div><table><tr><td>In class diagnostic test: Short answer questions (choice: 4 out of 6)</td><td>0%</td></tr></table></div> <p>The formative test aims to prepare students for the midterm and final examination. The midterm tests Learning Outcomes: 1 and 2.</p>		1 hour in-class midterm examination: Short essay questions Multiple choices questions	40%	2 hour in-class final examination: Essay questions (choice: 3 out of 5)	60%	In class diagnostic test: Short answer questions (choice: 4 out of 6)	0%
1 hour in-class midterm examination: Short essay questions Multiple choices questions	40%							
2 hour in-class final examination: Essay questions (choice: 3 out of 5)	60%							
In class diagnostic test: Short answer questions (choice: 4 out of 6)	0%							

	The final exam tests Learning Outcomes: 3 and 4
INDICATIVE READING:	<p>REQUIRED READING: Kalat, J. W. (2013) <i>Biological Psychology</i>, International Edition 12th e. Cengage</p> <p>S.M. Breedlove et.al., (2007) <i>Biological Psychology</i>. Fifth edition .Sinauer Associates.</p> <p>RECOMMENDED READING: Carlson N.R. (2010) <i>Physiology of Behavior</i>. Tenth Edition. Pearson International Edition.</p> <p>Damasio, A.R., (1999). <i>How the brain creates the mind</i>. Scientific American, 281, 112-117.</p> <p>Gazzaniga, M.S. (2005). Forty-five years of split-brain research and still going strong. <i>Nature Review Neuroscience</i>, 6, 653-659.</p> <p>Gazzaniga M. (2008). <i>Human Mind. The Science behind what makes us Unique</i>. Harper Collins.</p> <p>Kandel, E.R. (2001). The molecular biology of memory storage: a dialogue between genes and synapses. <i>Science</i>, 294, 1030-1038.</p> <p>Kandel, E.R. & Squire, L.R (2000). Neuroscience: Breaking the down barriers to the study of brain and mind. <i>Science</i>, 290, 1113-1120.</p> <p>Le Doux J. (2002). <i>The Synaptic Self</i>. Penguin Books.</p> <p>Ramachandran, VS & Blakelee S (1999). <i>Phantoms in the Brain</i>. Harper-Perennial.</p>
INDICATIVE MATERIAL: (e.g. audiovisual, digital material, etc.)	<p>REQUIRED MATERIAL: N/A</p> <p>RECOMMENDED MATERIAL: Science Nature Trends in Neurosciences Journal of Physiology</p>
COMMUNICATION REQUIREMENTS:	Academic use of English, both oral and written.
SOFTWARE REQUIREMENTS:	Microsoft Office: Word, Excel, PowerPoint.
WWW RESOURCES:	<p>American Psychological Association: www.apa.org British Psychological Society: www.bps.org Dana Brain Organization: www.dana.org</p>

	Federation of European Neuroscience Societies: www.fens.org
INDICATIVE CONTENT:	<ol style="list-style-type: none"> 1. Historical Background 2. What is Biopsychology 3. The Anatomy of the Nervous System 4. Neural Conduction and Synaptic transmission 5. Methods of studying the Nervous System 6. Learning, Memory and Amnesia 7. Vision 8. Lateralization, Language and Split Brain 9. Biopsychology of Emotion and Stress