



Universidade Estadual de Montes Claros - UNIMONTES  
Pró-Reitoria de Pesquisa - Coordenadoria de Pós-graduação  
Centro de Ciências Biológicas e da Saúde  
Programa de Pós Graduação *Stricto Sensu* em Ciências da Saúde

PLANO DE ENSINO	ANO	SEMESTRE <sup>1</sup>
	2018	1.º   x   2.º
DEPARTAMENTO <sup>2</sup>		CATEGORIA
Programa de Pós-Graduação <i>Stricto Sensu</i> em Ciências da Saúde		Optativa para Mestrado e Doutorado
CURSO		PERÍODO OU SÉRIE
Mestrado Acadêmico e Doutorado		Não se aplica

DISCIPLINA	CARGA HORÁRIA TOTAL		
<b>Special Topics in Neuroscience and Health</b>	75 h/aula		
REGIME ACADÊMICO	CARGA HORÁRIA SEMANAL	TEÓRICA	4h
X   Semestral     Anual		PRÁTICA	0h
PROFESSOR(A)	TURNO		
Prof. Renato Sobral Monteiro Junior, PhD Prof. Valeska F Gatica Rojas, PhD	Matutino	x   Vespertino	Noturno

EMENTA
Basics Neuroanatomy. Neurophysiology and neurobiology of aging. Neurophysiology, neurobiology, and functional impairments in neurodegenerative and mental diseases: Parkinson, Alzheimer, Anxiety and Depression. Relationship between cancer and brain. Effects of drug therapies on the brain. Effects of exercise on the brain.
OBJETIVOS
1. Introduce a familiarization with neuroscience terms in English. 2. Understand neurophysiological and neurobiological mechanisms of brain ageing. 3. Understand neurophysiological and neurobiological mechanisms of brain diseases. 4. Show the effects of drug-therapies and exercise on brain diseases.
CONTEÚDO PROGRAMÁTICO
1. Principles of neuroanatomy, neurophysiology, neurobiology, and neuropsychology. 2. Cognitive functions and its importance along life. 3. Effects of drug-therapies and exercise on the brain 4. Differences between children and older adults brain 5. Objective and subjective assessments of brain function 6. Parkinson' and Alzheimer's diseases 7. Anxiety and depression 8. Exercise and physical activity as prevention and treatment of brain diseases
METODOLOGIA/ATIVIDADES DIDÁTICAS
Expository classroom with online international interaction. Seminars and discussion. Problem-based learning.
ESTRUTURA(S) DE APOIO/RECURSOS DIDÁTICOS
Datashow, computer, câmera, audio device, and internet
AVALIAÇÃO

Aspectos a serem avaliados	Instrumentos de avaliação
<ul style="list-style-type: none"> <li>— Academic behavior</li> <li>— Final product (book)</li> </ul>	<p><b>Student performance:</b></p> <p>Seminars - 50</p> <p>Book – 50</p>

REFERÊNCIAS BIBLIOGRÁFICAS		
<b>Bibliografia Básica</b>		
KANDEL, E. Principles of Neural Science. McGraw-Hill Education / Medical; 5th edition, 2012		
PORTUGAL, E. M. M; et al. Neuroscience of Exercise: From Neurobiology Mechanisms to Mental Health. Neuropsychobiology 2013;68:1-14		
PURVES, D; et al. Neuroscience. Sunderland (MA): Sinauer Associates; 2 <sup>nd</sup> Edition, 2001		
<b>Bibliografia Complementar</b>		
CRONOGRAMA - CONTEÚDO		
DIA		
1	14h	Introduction to neuroscience
2	14h	TED Talks - What is so special about the human brain?
3	14h	Seminar and discussion
4	14h	Seminar and discussion
5	14h	Seminar and discussion
6	14h	Neuromotor control
7	14h	Seminar and discussion
8	14h	Seminar and discussion
9	14h	Seminar and discussion
10	14h	Neurotrophins
11	14h	Seminar and discussion
12	14h	Seminar and discussion
13	14h	Seminar and discussion
14	14h	Seminar and discussion
15	14h	Seminar and discussion
16	14h	Seminar and discussion
17	14h	Seminar and discussion
18	14h	Seminar and discussion
19	14h	Seminar and discussion
20	14h	Final task – book presentation