

YAŞAR UNIVERSITY
FACULTY OF SCIENCE AND LETTERS
SCIENCE CULTURE DEPARTMENT
COURSE SYLLABUS

Course Title	Course Code	Semester	Course Hour/Week		Yaşar Credit	ECTS
Neuroscience and Neurophilosophy	UFND 3410	FALL/SPRING	Theory 2	Practice 0	2	2
Course Type						
1. Compulsory Courses						
1.1. Programme Compulsory Courses						
1.2. University Compulsory Courses (UFND)						x
1.3. YÖK (Higher Education Council) Compulsory Courses						
2. Elective Courses						
2.1. Program Elective Courses						
2.2. University Elective Courses						
3. Prerequisites Courses						
3.1. Compulsory Prerequisites Courses						
3.2. Elective Prerequisites Courses						

Language of Instruction	Turkish
Level of Course	Associate Degree (Short Cycle) X Undergraduate (First Cycle) Graduate (Second Cycle) Doctoral Course (Third Cycle)
(compulsory)	
Special Pre-Conditions of the Course (recommended)	NA

Course Coordinator		Mail: Web page:
Course Instructors		
Course Assistant(s)/Tutor (s)		
Aim(s) of the Course	The aim of this course is to explore key concepts in neuroscience and evaluate current scientific findings about brain function from a philosophical perspective. The course seeks to equip students with the ability to critically assess topics such as consciousness, free will, self, and decision-making through both scientific and philosophical lenses.	
Learning Outcomes of the Course	Upon successful completion of this course, the enrolled students will be gaining the following knowledge, skills, and competences: 1. Define the basic structure and functions of the nervous system. 2. Explain the concepts of consciousness and self from both philosophical and scientific perspectives. 3. Compare different views on the mind-body relationship. 4. Analyze free will and decision-making through neurophilosophical approaches. 5. Relate current neuroscientific findings to philosophical debates.	
Course Content	The course covers the structure and function of the nervous system, cognitive processes, consciousness and self, the mind-body problem, free will, and decision-making. It focuses on the intersection of neuroscience and philosophy, addressing themes such as moral decision-making, subjective experience (qualia), and neuroethics. Scientific data and philosophical inquiry are integrated throughout the course.	

COURSE OUTLINE/SCHEDULE (Weekly)			
Week	Topics	Preliminary Preparation (Readings)	Methodology and Implementation (Theory, practice, assignment etc)
1	MODULE 1: Orientation Course Introduction, Objective and Expectations	Reading the recommended resources and monitoring of the suggested videos	Theory
2	MODULE 1: What does neurophilosophy mean at the intersection of neuroscience and philosophy? According to the reductionist theory in neuroscience, what is the relationship between the brain and consciousness? - Brain and consciousness dualism - Eliminative materialism - Relationship between neuroscience and psychology	Reading the recommended resources and monitoring of the suggested videos	Theory
3	MODULE 1: What are the non-reductive approaches in neurophilosophy? - Hard Problem: Consciousness - Critique of the reductionist approach between the brain and consciousness - Interaction between the environment and the development of the brain	Reading the recommended resources and monitoring of the suggested videos	Theory
4	MODULE 1: What are the non-reductive approaches in neurophilosophy? - First and third-person singular distinction - Fundamental distinctions in neuroscience and cognitive sciences	Reading the recommended resources and monitoring of the suggested videos	Theory
5	MODULE 2: The Brain and the Problem of Free Will - Concept of free will - Interaction between the brain and consciousness - Correlation between the brain, consciousness and behaviour	Reading the recommended resources and monitoring of the suggested videos	Theory
6	MODULE 2: The Brain and the Problem of Free Will - Concept of the brain and plasticity - Impact of consciousness and environmental interactions on the brain - Debate on whether the brain or consciousness is the cause of behavior	Reading the recommended resources and monitoring of the suggested videos	Theory
7	MODULE 3: Neuroscience and Law - Decision-making mechanisms in the brain - Concept of free will and crime - Decision-making in crime and judgment	Reading the recommended resources and monitoring of the suggested videos	Theory
8	MODULE 3: Neuroscience and Law - Neuroimaging and the mechanism of lying - Can neuroimaging be evidence? - The relevance of the brain's past, personal history, and societal history in court	Reading the recommended resources and monitoring of the suggested videos	Theory
9	MODULE 4: Neuroscience and Ethics (Delgado) - Concept of neuroethics - Ethical issues arising from developments in neuroscience	Reading the recommended resources and monitoring of the suggested videos	Assignment
10	MODULE 4: Neuroscience and Ethics - Brain and personality - Privacy issues	Reading the recommended resources and monitoring of the suggested videos	Theory
11	MODULE 4: Neuroscience and Ethics - Neural foundations of ethical behavior and decision-making mechanisms - Brain responses to ethical dilemmas	Reading the recommended resources and monitoring of the suggested videos	Theory
12	MODULE 5: Neuroscience and Epistemology - Does knowledge come only from the senses? - Relationship between the brain and senses	Reading the recommended resources and monitoring of the suggested videos	Theory
13	MODULE 5: Neuroscience and Epistemology - Limits of the brain - Neuroscience and the problem of consciousness	Reading the recommended resources and monitoring of the suggested videos	Theory

14	MODULE 6: Neuroscience and Artificial Intelligence - Distinction between artificial intelligence and natural intelligence - Collaboration between neuroscience and artificial intelligence	Reading the recommended resources and monitoring of the suggested videos	Theory
15	MODULE 6: Neuroscience and Artificial Intelligence - Artificial brains - The future of neuroscience and artificial intelligence - Future assessments	Reading the recommended resources and monitoring of the suggested videos	Theory
16	Final Project Presentation	Assignment	Project

Recommended (additional) Course Material (s)/Reading(s)/Other The major course materials will be uploaded to the Sakai platform in the module sections. However, if you would like to make further readings, you may find a list of the recommended materials here in this list:	
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ASSESSMENT		
Semester Activities/ Studies	NUMBER	WEIGHT in %
Mid – Term Exam (Test)		
Attendance		
Quiz		
Assignment (s)	1	40
Project	1	60
Laboratory		
Field Studies (Technical Visits)		
Presentation/ Seminar		
Practice (Laboratory, Virtual Court, Studio Studies etc.)		
Final Examination (Test)		
Other (Placement/Internship etc.)		
TOTAL		100
Contribution of Semester Activities/Studies to the Final Grade		40
Contribution of Final Examination/Final Project/ Dissertation to the Final Grade		60
TOTAL		100

CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME OUTCOMES						
No	Programme Outcomes	Level of Contribution (1- lowest/ 5- highest)				
		1	2	3	4	5
1	To identify changes in the surrounding world and compare, question and interpret data during the formation and advocacy of thought and decisions.				X	
2	To demonstrate skills in learning, critical thinking and reasoning about human behaviour and experiences.					X
3	To show ability of gathering information from many sources to present a conclusive argument.					X
4	To demonstrate competence in reading and evaluating original scientific papers				X	
5	To recognize the significance of lifelong learning and use the learning skills and competences that developed in this program in other areas of life				X	
6	To demonstrate informational competence and the ability to use computers and other information technologies for many purposes				X	
7	To conduct a study/project independently or take charge in a teamwork and to take responsibility to formulate solutions for unpredictable, complex problems in the study/project				X	

8	To conduct efficient communication in oral and written forms within multi-cultural business environments	X
9	To formulate distinctive strategies through project management and innovative problem-solving skills	X
10	To be sensitive to social and individual problems with high consciousness of social responsibility	X

ECTS /STUDENT WORKLOAD				
ACTIVITIES	NUMBER	UNIT	HOUR	TOTAL (WORKLOAD)
Course Teaching Hour (14 weeks* total course hours)	14	Week	2	28
Preliminary Preparation and finalizing of course notes, further self- study		Week		
Assignment (s)		Number		
Presentation/ Seminars		Number		
Quiz and Preparation for the Quiz		Number		
Mid- Term(s)		Number		
Project (s)	1	Number	10	10
Field Studies (Technical Visits, Investigate Visit etc.)		Number		
Practice (Laboratory, Virtual Court, Studio Studies etc.)		Number		
Final Examination/ Final Project/ Dissertation and Preparation	1	Number	12	12
Other (Placement/Internship etc.)		Number		
Total Workload				50
Total Workload/ 25				2
ECTS				2

STUDENT WITH DISABILITIES OR SPECIAL NEEDS
Students with disabilities or special needs are encouraged to contact the instructor and the Unit for Student with Disabilities (http://eob.yasar.edu.tr/) for academic adaptations.

ASSESSMENT and EVALUATION METHODS:	
Final Grades will be determined according to the Yaşar University Associate Degree, Bachelor's Degree and Graduate Degree Education and Examination Regulation.	
PREPARED BY	
UPDATED	
APPROVED	