

**OSTİM TECHNICAL UNIVERSITY  
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES  
MANAGEMENT INFORMATION SYSTEMS  
DEPARTMENT  
COURSE SYLLABUS FORM**

<b>MIS 491 Behavioral and Neuro Economics</b>							
<b>Course Name</b>	<b>Course Code</b>	<b>Period</b>	<b>Hours</b>	<b>Application</b>	<b>Laboratory</b>	<b>Credit</b>	<b>ECTS</b>
Behavioral and Neuro Economics	MIS 491	7	3	0	0	3	3

<b>Language of Instruction</b>	English
<b>Course Status</b>	Elective
<b>Course Level</b>	Bachelor
<b>Learning and Teaching Techniques of the Course</b>	Lecture, Question-Answer, Case Study

<b>Course Objective</b>	
<p>The aim of the lesson; examining the assumptions of neoclassical economic theory on consumer behavior; to examine how much consumer behavior deviates from the theoretical approach in real life and to focus on the reasons for these deviations. In this context; another aim is to reveal the systematic improper decisions of individuals arising from intuition and prejudices while making economic decisions.</p>	

<b>Learning Outcomes</b>	
<p>Upon successfully completing of this course, all students are supposed to have some gains as follows:</p> <ol style="list-style-type: none"> <li>1. They will try to understand the homo-economicus assumption, rational decision-making, deviations in the decision-making process, risk avoidance, risk-taking under uncertainty, behavioral approaches in public policies, utility, happiness, and will contribute when necessary.</li> <li>2. The sense of awareness that will develop in students' perception levels and the contributions they will make will increase their sense of responsibility towards both themselves and society in daily life.</li> <li>3. It is aimed to increase the experience of project planning, implementation, monitoring, and teamwork on a specific subject with the activities they will do and the reports they will prepare during the course activities.</li> </ol>	

### Course Outline

This course covers topics such as introduction to the basic principles and theories of behavioral economics, analysis when classical economic assumptions are not valid, theory of decision behavior, choice preference, time inconsistency, social preferences, and equity. Within this scope, students will be introduced to the concepts of behavioral and neuro-economics in finance and economics.

### Weekly Topics and Related Preparation Studies

Weeks	Topics	Preparation Studies
1	<ul style="list-style-type: none"> <li>• Historical Development of Psychological Science and Behavioral Economics-I               <ul style="list-style-type: none"> <li>➤ Overview of the Development of Psychological Science</li> </ul> </li> </ul>	<p>Before coming to the course, the relevant sections from the books will be read. The subjects that are not understood during the readings will be asked interactively in the lesson.</p> <p>The course will be taught at the level of knowledge and also put in practice, and the topics will be fed with examples from daily life.</p> <p>Students' interactive participation will be graded as lecturers and converted into passing grades.</p> <p>Each student is expected to prepare a short presentation on at least one subject. This presentation will also be converted to a passing grade.</p>
2	<ul style="list-style-type: none"> <li>• Historical Development of Psychological Science and Behavioral Economics-II               <ul style="list-style-type: none"> <li>➤ Historical Development of Behavioral Economics</li> </ul> </li> </ul>	
3	<ul style="list-style-type: none"> <li>• Psychological Foundations of Our Economic Behaviors-I               <ul style="list-style-type: none"> <li>➤ Mental Shortcuts and Biases in Decision Making</li> </ul> </li> </ul>	
4	<ul style="list-style-type: none"> <li>• Psychological Foundations of Our Economic Behaviors-II               <ul style="list-style-type: none"> <li>➤ Expectation Theory</li> </ul> </li> </ul>	
5	<ul style="list-style-type: none"> <li>• Psychological Foundations of Our Economic Behaviors-III               <ul style="list-style-type: none"> <li>➤ Framing Effect and Mental Accounting</li> </ul> </li> </ul>	
6	<ul style="list-style-type: none"> <li>• Psychological Foundations of Our Economic Behaviors-IV               <ul style="list-style-type: none"> <li>➤ Anomalies</li> </ul> </li> </ul>	
7	<b>MIDTERM EXAM</b>	
8	<ul style="list-style-type: none"> <li>• Psychological Foundations of Our Economic Behaviors-V               <ul style="list-style-type: none"> <li>➤ Poking</li> </ul> </li> </ul>	

<b>9</b>	<ul style="list-style-type: none"> <li>• Concepts of Utility, Measurability of Benefit and Subjective Well-being-I               <ul style="list-style-type: none"> <li>➤ Expected Utility Theory</li> </ul> </li> </ul>
<b>10</b>	<ul style="list-style-type: none"> <li>• Concepts of Utility, Measurability of Benefit and Subjective Well-being-II               <ul style="list-style-type: none"> <li>➤ Measurability of Utility: Experienced Utility and Remembered Utility</li> </ul> </li> </ul>
<b>11</b>	<ul style="list-style-type: none"> <li>• Concepts of Utility, Measurability of Benefit and Subjective Well-being-III               <ul style="list-style-type: none"> <li>➤ Subjective Well-Being and Measuring Subjective Well-Being</li> </ul> </li> </ul>
<b>12</b>	<ul style="list-style-type: none"> <li>• Games in Behavioral Economics and Neuroeconomics-I               <ul style="list-style-type: none"> <li>➤ Behavioral Game Theory, Justice and Trust Games</li> </ul> </li> </ul>
<b>13</b>	<ul style="list-style-type: none"> <li>• Games in Behavioral Economics and Neuroeconomics-II               <ul style="list-style-type: none"> <li>➤ Development of Neuroeconomics and Methods Used in Neuroeconomics</li> </ul> </li> </ul>
<b>14</b>	<ul style="list-style-type: none"> <li>• Games in Behavioral Economics and Neuroeconomics-III               <ul style="list-style-type: none"> <li>➤ Areas of the Brain Related to Economics and Experiments Related to Neuroeconomics</li> </ul> </li> </ul>
<b>15</b>	<ul style="list-style-type: none"> <li>• An Overview of the Topics</li> </ul>
<b>16</b>	<b>FINAL EXAM</b>

**Textbook(s)/References/Materials:**

**Textbook:**

1. Behavioral Economics and Its Applications, Peter Diamond and Hannu Vartiainen, Princeton University Press, 2007.
2. Behavioral Economics, Adward Cartwrite, Routledge, 2018
3. Advances in Behavioral Economics, Colin Camerer, George Lowenstein and Matthew Rabin, Princeton University Press; First Edition, Sixth Printing, 2003.

**Supplementary References:**

1. Irrational but Predictable, Dan Ariely, Harper Perennial; Revised and Expanded Ed., 2020.
2. Thinking Fast and Slow, Daniel Kahneman, Penguin Books, 2014.

**Other Materials:**

1. Nudge, Improving Decisions About Health, Wealth, and Happiness [Expanded Edition], Richard H. Thaler, Cass R. Sunstein, Gildan Media Corp, 2009.

Assessment			
Studies	Number	Contribution margin (%)	
Attendance			
Lab			
Class participation and performance			
Field Study			
Course-Specific Internship (if any)			
Quizzes / Studio / Critical			
Homework			
Presentation			
Projects	1		20
Report			
Seminar			
<b>Midterm Exam/Midterm Jury</b>	1		30
<b>General Exam / Final Jury</b>	1		50
<b>Total</b>			100
<b>Success Grade Contribution of Semester Studies</b>			50
<b>Success Grade Contribution of End of Term</b>			50
<b>Total</b>			<b>100</b>
ECTS / Workload Table			
Activities	Number	Duration (Hours)	Total Workload
<b>Course hours (Including the exam week): 16 x total course hours)</b>	14	2	28
Laboratory			
Application			
Course-Specific Internship (if any)			
Field Study			
<b>Study Time Out of Class</b>	16	2	32
Presentation / Seminar Preparation			
Projects	1	10	10
Reports			
Homework			
Quizzes / Studio Review			
Preparation Time for Midterm Exams / Midterm Jury	1	10	10
Preparation Period for the Final Exam / General Jury	1	20	20
<b>Total Workload</b>		<b>(100/30 = 3.3)</b>	<b>100</b>

<b>Course' Contribution Level to Learning Outcomes</b>						
<b>Nu</b>	<b>Learning Outcomes</b>	<b>Contribution Level</b>				
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>LO1</b>	They will try to understand the homo-economicus assumption, rational decision-making, deviations in the decision-making process, risk avoidance, risk-taking under uncertainty, behavioral approaches in public policies, utility, happiness, and will contribute when necessary.					X
<b>LO2</b>	The sense of awareness that will develop in students' perception levels and the contributions they will make will increase their sense of responsibility towards both themselves and society in daily life.					X
<b>LO3</b>	It is aimed to increase the experience of project planning, implementation, monitoring, and teamwork on a specific subject with the activities they will do and the reports they will prepare during the course activities.					X
<b>Relationship Between Course Learning Outcomes and Program Competencies (Department of Management Information Systems)</b>						
<b>No</b>	<b>Program Competencies</b>	<b>Learning Outcomes</b>			<b>Total Effect (1-5)</b>	
		<b>LO1</b>	<b>LO2</b>	<b>LO3</b>		
<b>1</b>	Recognize and distinguish the basic concepts such as data, information, and knowledge in the field of Management Information Systems and know the processes to be followed for data acquisition, storage, updating, and security.					
<b>2</b>	Develop and manage databases suitable for collecting, storing, and updating data.					
<b>3</b>	As a result of his/her ability to think algorithmically, easily find solutions to the problems concerning the basic business functions.	X	X	X	4	
<b>4</b>	Learn programming logic, have information about current programming languages.					
<b>5</b>	Be able to use up-to-date programming languages.					
<b>6</b>	Be able to take part in teamwork or lead a team using knowledge of project management processes.					

7	Know ethical and legal rules, use professional field knowledge within the scope of ethical and legal rules.				
8	Have knowledge in the fundamental areas of business administration namely management and organization, production, finance, marketing, numerical methods, accounting, etc., and have the knowledge and skills to work in-depth in at least one of them.	X	X	X	5
9	Be able to solve the problems encountered in the field of internet programming by designing web applications.				
10	Develop and manage logistics and supply chain management activities				
11	Adapt his/her theoretical knowledge and the experience he/she will gain through practice at the departments of businesses such as information technologies, R&D, and management to real life.				
12	Be able to develop strategies that will provide a competitive advantage with his/her advanced knowledge of management strategies and management functions.	X	X	X	5
13	Develop a business idea, commercialize the business idea, and design and manage his/her own venture using entrepreneurial knowledge.	X	X	X	4
14	By using English effectively, they can follow, read, write, speak and communicate universal information in the field of management information systems in a foreign language with professional competence.				
<b>Total Effect</b>					<b>18</b>
<b>Policies and Procedures</b>					

**Web page:** <https://www.ostimteknik.edu.tr/management-information-systems-english-1241/915>

**Exams:** The exams aim at assessing various dimensions of learning: knowledge of concepts and theories and the ability to apply this knowledge to real-world phenomena, through analyzing the situation, distinguishing problems, and suggesting solutions. The written exams can be of two types, i.e. open-ended questions, which can also be in the form of problems or multiple-choice questions.

**Assignments:** Homework (Assignments) might be applicable. Scientific Research Ethics Rules are very important while preparing assignments. The students should be careful about citing any material used from outside sources and reference them appropriately.

**Missed exams:** Any student missing an exam needs to bring an official medical report to be able to take a make-up exam. The medical report must be from a state hospital.

**Projects:** Applicable.

**Attendance:** Attendance requirements are announced at the beginning of the term. Students are usually expected to attend at least 70% of the classes during each term.

**Objections:** If the student observes a material error in his/her grade, he/she has the right to place an objection to the Faculty or the Department. The claim is examined and the student is notified about its outcome.