Course Syllabus

Code - Course Title	**OSE516 - Autism Spectrum Disorder and Artificial Intelligence**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DOÇ. DR. SUNAGÜL SANİ BOZKURT

Mode of Delivery	This course will be conducted face-to-face.
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	There are no prerequisites.
Courses Recomended	There are no recommended courses.
Recommended Resources	Sağdıç, Z. A., & Sani-bozkurt, S. (2020). Otizm spektrum bozukluğu ve yapay zekâ uygulamaları. Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6(3), 92-111.Bozkurt, A., Karadeniz, A., Baneres, D., Guerrero-Roldán, A. E., & Rodríguez, M. E. (2021). Artificial intelligence and reflections from educational landscape: A review of AI Studies in half a century. Sustainability, 13(2), 800.
Work Placement	None.
Aims of the Course	The aim of this course is to provide fundamental knowledge and skills regarding the use of artificial intelligence technologies in the education of individuals with autism spectrum disorder; to examine the possibilities of AI-supported applications in supporting instruction, communication, social interaction, and independent living skills; and to develop awareness concerning the ethical, safe, and effective use of these technologies.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Artificial Intelligence: Definition and history of artificial intelligence	
Week - 2		Basic concepts;	
Week - 3		Types of Artificial Intelligence: Machine learning, deep learning, generative artificial intelligence	
Week - 4		Types of Artificial Intelligence: Machine learning, deep learning, generative artificial intelligence	
Week - 5		Artificial Intelligence and Autism Spectrum Disorder: Artificial intelligence-supported applications in the diagnosis and monitoring process of autism spectrum disorder	
Week - 6		Artificial Intelligence and Autism Spectrum Disorder: Artificial intelligence-supported applications in the diagnosis and monitoring process of autism spectrum disorder	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 7		Artificial intelligence-supported technology applications used in the education of individuals with autism spectrum disorder	
Week - 8		Artificial intelligence-supported technology applications used in the education of individuals with autism spectrum disorder	
Week - 9		Advantages and risks of artificial intelligence	
Week - 10		Advantages and risks of artificial intelligence	
Week - 11		Artificial Intelligence and Ethics: Ethical issues of using artificial intelligence	
Week - 12		Ethics of artificial intelligence regarding autism spectrum disorder	
Week - 13		Trends on artificial intelligence and autism spectrum disorder	
Week - 14		Trends on artificial intelligence and autism spectrum disorder	

Learning Outcomes

#	Learning Outcome
1	Explains the definition and history of artificial intelligence.
2	Explains the basic concepts of artificial intelligence.
3	Explains the types of artificial intelligence.
4	Discusses the diagnostic and monitoring processes in artificial intelligence and autism spectrum disorder.
5	Explains artificial intelligence-supported technology applications used in the education of individuals with autism spectrum disorders.
6	Discusses the advantages and risks of artificial intelligence.
7	Discusses ethical issues of using artificial intelligence.
8	Discusses the ethics of artificial intelligence regarding autism spectrum disorder.
9	Explains research and current trends on artificial intelligence and autism spectrum disorder.

Sustainable Development Goals

✓ Quality Education ✓ Reducing Inequalities

Course Theme

✓ Educational Sciences and Educational Technologies ✓ Artificial Intelligence

AKTS Workload

Activity	Duration (Hour)	Count	Workload

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	3.00	14	42
Ödevler	10.00	2	20
Proje - Rapor - Sunum Hazırlama	10.00	1	10
Ara Sınav Hazırlığı (sınav süresi dahil)	15.00	1	15
Final Sınavı Hazırlığı (sınav süresi dahil)	25.00	1	25
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Homework ✓ Presentation