Course Syllabus

Code - Course Title	**TRZ439 - Artificial Intelligence Applications in Tourism**
Course Type	VII. SEMESTER
Laboratory + Practice	2+2
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Area Elective Courses
Course Instructor(s)	ÖĞR. GÖR. SERKAN OLGAÇ

Mode of Delivery	Face to face
Prerequisites	None
Courses Recomended	-
Recommended Resources	Russell, S. J., & Norvig, P. (2021). Yapay zeka: Modern bir yaklaşım (M. Erkan & N. Ç. Göksel, Çev.; 4. bs.). Nobel Akademik Yayıncılık.Dülgaroğlu, O. (2024). Turizmde yapay zekâ teknolojileri ve robotlaşma. Uluslararası Turizm, Ekonomi ve İşletme Bilimleri Dergisi (IJTEBS), 8(2), 82–95. https://doi.org/10.1007/978-3-030-48652-5_110Avcı, M., Sungur Avcı, S., & Darı, A. B. (2025). Turizm işletmelerinde ChatGPT ve diğer üretken yapay zekâ uygulamalarının kullanımı: Potansiyeller, riskler ve uygulama önerileri. Journal of Gastronomy, Hospitality and Travel (JOTAGS), 13(4), 4148-4176. https://doi.org/10.21325/jotags.2025.1755Say, C. (2025). 50 soruda yapay zekâ (25. Baskı). İstanbul: Bilim ve Gelecek Kitaplığı.-Buhalis, D., & Leung, R. (2018). Smart hospitality – Interconnectivity and interoperability towards an ecosystem. International Journal of Hospitality Management.-Mariani, M., Baggio, R., Fuchs, M., & Höepken, W. (2018). Business Intelligence and Big Data in Hospitality and Tourism. Routledge.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Course Introduction and Setup of Application Environments	
Week - 2		Analysis of Tourism Problems from an Artificial Intelligence Perspective	
Week - 3		Text and Content Generation with Artificial Intelligence	
Week - 4		Tourism Chatbot Design and Scenario Development	
Week - 5		Sentiment Analysis of Customer Reviews	
Week - 6		Demand Forecasting and Occupancy Scenarios	
Week - 7		Dynamic Pricing Simulation	
Week - 8		Midterm Project Development and Presentations	
Week - 9		Personalized Tour and Hotel Recommendation Systems	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 10		Visual Generation and Digital Marketing Applications with Artificial Intelligence	
Week - 11		Process Automation with No-code/Low-code Tools	
Week - 12		Menu and Experience Design with Artificial Intelligence	
Week - 13		Final Project Development and Testing	
Week - 14		Final Project Presentations and Evaluation	

Learning Outcomes

#	Learning Outcome
1	Explain the concept of artificial intelligence and its fundamental characteristics.
2	Identifies appropriate AI solutions for tourism-related problems.
3	Creates digital content and menu designs using generative AI tools.
4	Develops smart chatbot scenarios for tourism businesses.
5	Analyzes customer reviews using sentiment analysis methods.
6	Applies demand forecasting and dynamic pricing models.
7	Plans process automation for tourism operations.
8	Designs an AI-focused tourism project.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.