Course Syllabus

Code - Course Title	**TRZ443 - Data Analytics in Tourism**
Course Type	VII. SEMESTER
Laboratory + Practice	2+0
ECTS	**3.0**
Language of Instruction	Türkçe
Course Type	Area Elective Courses
Course Instructor(s)	PROF. DR. DENİZ KARAGÖZ

Mode of Delivery	Face to face
Prerequisites	none
Courses Recomended	none
Recommended Resources	Xiang, Z. (2017). Analytics in smart tourism design. Springer.Chen, L. P. (2021). Practical Statistics for Data Scientists: 50+ Essential Concepts Using R and Python: by Peter Bruce, Andrew Bruce, and Peter Gedeck, O'Reilly Media Inc., Boston, United States
Work Placement	none

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Data Analytics in Tourism: Concept of data analytics, digital transformation in tourism, data-driven decision making, tourism data sources	
Week - 2		Types of Tourism Data and Data Collection Methods: Primary and secondary data, surveys, online reviews, social media data, sensor and mobile data	
Week - 3		Data Cleaning and Preparation: Missing data, outliers, data transformation, data quality	
Week - 4		Descriptive Analytics in Tourism: Basic statistics, data summarization	
Week - 5		Data Visualization Techniques: Charts, maps, destination visualizations, storytelling with data	
Week - 6		Tourist Behavior Analytics: Customer segmentation, behavioral patterns, experience analytics	
Week - 7		Social Media and Online Review Analytics: Sentiment analysis, TripAdvisor/Booking reviews, electronic word-of-mouth (e-WOM)	
Week - 8		Text Mining and Natural Language Processing Applications: Topic modeling, word clouds, Word2Vec, NLP in tourism research	
Week - 9		Text Mining and Natural Language Processing Applications: Topic modeling, word clouds, Word2Vec, NLP in tourism research	
Week - 10		Artificial Intelligence and Big Data Analytics in Tourism: AI applications, recommender systems, chatbots, personalization	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 11		Artificial Intelligence and Big Data Analytics in Tourism: AI applications, recommender systems, chatbots, personalization	
Week - 12		Sustainable Tourism and Data Analytics: Environmental data, overtourism analytics, sustainability indicators	
Week - 13		Student Project Presentations and Final Evaluation: Presentation and discussion of data analytics projects	
Week - 14		Student Project Presentations and Final Evaluation: Presentation and discussion of data analytics projects	

Learning Outcomes

#	Learning Outcome
1	Explain different types of tourism data, data sources, and data collection methods used in the tourism industry
2	Apply data cleaning, analysis, visualization, and interpretation processes using basic analytical tools in tourism research.
3	Analyze tourist behaviors and experiences using digital data sources such as social media, online reviews, and customer data
4	Develop data-driven strategic recommendations for tourism businesses and destination management based on analytical findings

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.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**