Course Syllabus

Code - Course Title	**UTL205 - Transportation Systems**
Course Type	III. SEMESTER
Laboratory + Practice	3+0
ECTS	**5.0**
Language of Instruction	İngilizce
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ AYLİN KOCA GÜRSOY

Mode of Delivery	Face to face
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There are no other recommended courses associated with this course.
Recommended Resources	Görçün, Ö. F. (2018). Ulaştırma sistemleri ve yönetimi (K. Büyük, Ed.). Anadolu Üniversitesi Yayınları.Rodrigue, J.-P. (2024). The geography of transport systems (6th ed.). Routledge.Notteboom, T., Pallis, A., & Rodrigue, J.-P. (2026). Port economics, management and policy (2nd ed.). Routledge.
Work Placement	There is no internship or practical application for this course.
Aims of the Course	The aim of this course is to introduce the basic concepts, economic aspects, and modes of transport, and to provide basic knowledge of transport planning, operations and cost management, legal regulations, and special transport practices.

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Introduction to transportation systems and fundamental concepts	Lecture
Week - 2	**LO-1**	The economic role of transportation and its place in the supply chain	Lecture, Question & Answer, Document/Text/Data Analysis
Week - 3	**LO-1**	Selection of transport mode and transport operational models	Lecture
Week - 4	**LO-1**	Transport economics and transport demand	Lecture, Question & Answer
Week - 5	**LO-1**	Supply, pricing, and costs of transportation services	Lecture, Case Study
Week - 6	**LO-2**	Freight types and characteristics	Lecture
Week - 7	**LO-2**	Infrastructure, superstructure, and human resources in transportation	Lecture, Case Study

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 8	LO-4	Road transport	Lecture, Demonstration and Practice, Document/Text/Data Analysis
Week - 9	LO-4	Maritime and inland waterway transport	Lecture, Case Study, Demonstration and Practice, Document/Text/Data Analysis
Week - 10	LO-4	Railway and airway transport	Lecture, Case Study, Demonstration and Practice, Document/Text/Data Analysis
Week - 11	LO-3 LO-4	Multimodal Transport and Operations Management	Lecture, Case Study, Demonstration and Practice, Document/Text/Data Analysis
Week - 12	LO-3	Cost management in transportation	Lecture, Document/Text/Data Analysis
Week - 13	LO-5	Legal regulations in transportation systems	Lecture
Week - 14	LO-5	Special applications in transportation	Lecture, Case Study, Document/Text/Data Analysis

Learning Outcomes

#	Learning Outcome
1	The student understands the role of transportation within the economy and the supply chain.
2	Recognizes load types and the infrastructure, vehicles, and equipment used in transportation.
3	Students will learn the operational processes and fundamental cost elements in transportation.
4	Students will learn the fundamental characteristics of different modes of transport.
5	Students will acquire knowledge regarding legal regulations related to transportation and special transport practices.

Sustainable Development Goals

✓ Decent Work and Economic Growth ✓ Sustainable Cities and Communities

Course Theme

✓ Aviation and Space Technologies ✓ Logistics and Supply Chain ✓ Urban Planning, Transport and Smart Buildings

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	1.00	20	20
Ödevler	0.00	0	0
Proje - Rapor - Sunum Hazırlama	1.00	25	25
Ara Sınav Hazırlığı (sınav süresi dahil)	1.00	20	20
Final Sınavı Hazırlığı (sınav süresi dahil)	1.00	20	20
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**5.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Homework