

DISCIPLINE RECORD

Academic year 2026/2027

1. Information about the program

University	Constanta Maritime University
Faculty	Navigation and Maritime Transport
Department	Management in Transport
Domain of study	Engineering and Management
Academic level	Master
Study programme/ qualification	Business Administration in Transport

2. Information about discipline

Course title	Integrated Management Systems in Transport				
Lecture tenured	Professor Costel STANCA EngD				
Application tenured	Senior Lecturer Viorela STÎNGĂ PhD				
Year of study	VI	Semester	I	Type of examination	E
Conditions of discipline	Course category: DF – Fundamental subjects, DS – Specialization subjects, DC – Complementary subjects				DS
	Course type: DOB – compulsory subjects; DOP – elective subjects; DFA – optional subjects				DOB

3. The total time estimated

I a) Number of hours per week	4	Course	2	Seminar	2	Laboratory		Project	
I b) Total hours per semester from the curriculum	56	Course	28	Seminar	28	Laboratory		Project	

II Time distribution for the semester:	ore
II a) Study after manual, course support, bibliography and notes	36
II b) Additional documentation in library, specialized electronic platforms	22
II c) Training seminars / labs, homework, essays, portfolios and essays	11
III Tutorial	
IV Examinations	2
V Other activities:	

Total hours of individual study II (a+b+c)	69
Total hours per semester (Ib+II+III+IV+V)	127
Number of credits	5

4. Prerequisites (if necessary)

Curriculum	<ul style="list-style-type: none"> Management
Expected learning outcomes	<ul style="list-style-type: none"> Understanding the notions of general management

5. Conditions (if necessary)

Progress of the course	<ul style="list-style-type: none"> Video projector room, PPT presentation 	
Progress of application	Seminar	<ul style="list-style-type: none"> Video projector room
	Laboratory	<ul style="list-style-type: none">
	Project	<ul style="list-style-type: none">

6. Objectives of discipline (based on the grid of specific skills acquired – no7)

The overall objective of discipline	<ul style="list-style-type: none"> The discipline aims to clarify the main concepts regarding the design and implementation of integrated management systems in transport, forming the necessary skills for participating in a team in the definition and development of system documents, as well as for the effective operation of an integrated
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	management system, which meets the requirements of quality, environmental, occupational health and safety standards and other similar applicable ones.
The specific objectives of discipline	<ul style="list-style-type: none"> Developing the skills necessary to apply management techniques specific to change management. The discipline aims to establish the necessary foundations for understanding risks and applying cost-benefit performance evaluation methods specific to integrated transport systems.

7. Expected learning outcomes:

No.	Knowledge	Skills	Responsibility and autonomy
1	The student understands techniques for financial risk assessment.	The student analyzes internal organizational processes.	The graduate independently proposes risk mitigation strategies.
2	The student comprehends organizational behavior and needs analysis.	The student builds and maintains effective business relationships.	The graduate identifies and reports previously undetected organizational needs.
3	The student knows the principles of financial performance evaluation.	The student accurately interprets complex financial statements.	The graduate manages financial risk with autonomy.
4	The student analyzes external factors impacting the business environment.	The student performs SWOT and PESTEL analyses.	The graduate recommends innovations in current business practices.
5	The student understands quality assurance standards in transport services.	The student ensures compliance with quality and safety metrics.	The graduate is responsible for continuous service quality improvement.
6	The student is knowledgeable about ethical principles in engineering management.	The student communicates technical information clearly to diverse audiences.	The graduate promotes ethical and social responsibility in professional practice.
7	The student masters techniques for data acquisition and processing.	The student evaluates business performance through financial indicators.	The graduate takes responsibility for continuous professional development.

8. Competences covered by the discipline, according to the diploma supplement

Professional competences	<ul style="list-style-type: none"> Provides advice on efficiency improvements Analyzes external factors affecting companies <ul style="list-style-type: none"> Adapts to changing situations Performs quality control Ensures continuous training for audits Focuses on innovation in current practices <ul style="list-style-type: none"> Manage contracts
Transversal competences	<ul style="list-style-type: none"> Create risk reports Seek innovation in current practices

9. Contents

Course	Nr. hours	Teaching methods	Obs.
CHAPTER 1 – General features of an integrated management system 1.1 Principles of an integrated management system 1.2 Basic concepts of integrated management systems	2	Power-point presentation	- Free discussions. - Case studies
CHAPTER 2 – Analysis regarding the context of a organization 2.1 Internal and external factors of influence of organizations 2.2 Methods of analysis (SWOT, PEST)	2		
CHAPTER 3 – Leadership within a management system 3.1 Strategic Planning Elements 3.2 Allocation of responsibilities and authorities	2		

CHAPTER 4 – Risk and opportunity management	2		
4.1 Risk concepts			
4.2 Determination, evaluation and treatment of risks			
4.3 Elements of change management			
CHAPTER 5 – Environmental aspects in transport	2		
5.1 Determination and assessment of environmental aspects			
5.2 Environmental issues			
5.3 Energy management in transport			
CHAPTER 6 – Occupational health and safety risk	2		
6.1 Risk assessment			
6.2 Risk control			
6.3 Specific requirements of the ISM Code			
CHAPTER 7 – Other risks specific to transport	2		
7.1 Security of the supply chain, ship and port facilities			
7.2 Specific aspects of food safety			
7.3 Cyber security aspects			
CHAPTER 8 – Support processes in transport	2		
6.1 Human resources management			
6.2 Material resources in transport			
CHAPTER 9 – The documented information of the management system	2		
7.1 Elaboration and updating of management system documentation			
7.2 Control of documented information			
CHAPTER 10 – Operational processes in transport	2		
8.1 Planning and operational control			
8.2 Process and Service Control			
CHAPTER 11 – The audit of integrated management systems	4		
9.1 Preparation and planning of audits			
9.2 Performing the audit and reporting the results			
CHAPTER 12 – Evaluating the performance of the management system	2		
10.1 Monitoring and measurement of processes and services			
10.2 Management analysis			
CHAPTER 13 – Improvement processes	2		
11.1 Determination and treatment of nonconformities			
11.2 Tools for continuous improvement of the management system			
Bibliography			
<ul style="list-style-type: none"> • ISO 14001:2015 Environmental management systems -- Requirements with guidance for use • ISO 14004: 2016, Environmental management systems -- General guidelines on implementation • ISO 14031: 2021, Environmental management -- Environmental performance evaluation -- Guidelines • ISO 9000:2015 Quality management systems - Fundamentals and vocabulary • ISO 9001:2015 Quality management systems – Requirements • ISO 9004:2018 Quality management - Quality of an organization - Guidance to achieve sustained success • ISO 19011:2018, Guidelines for auditing management systems • ISO 27000:2023 Information technology -- Security techniques -- Information security management systems -- Overview and vocabulary • Stanca, C., <i>Quality management in transports</i>, Publishing house Nautica, 2012 • Olaru, M., <i>Quality Management</i>, Publishing house Economică, 1999 • ISO 31000: 2018, Risk management -- Guidelines • ISO 31010: 2010, Risk management -- Risk assessment techniques • ISO 45000:2023, Occupational health and safety management systems 01 ISO 22000:28, Food safety management systems. Requirements for any organization in the food chain • ISO 28000:2022 Specification for security management systems for the supply chain • EN 13816:2003, Transportation - Logistics and services - Public passenger transport - Service quality definition, targeting and measurement 			

- EN 12798:2007, Transport Quality Management System - Road, Rail and Inland navigation transport - Quality management system requirements to supplement EN ISO 9001 for the transport of dangerous goods with regard to safety
- EN 12507:2006 Transportation services - Guidance notes on the application of EN ISO 9001:2000 to the road transportation, storage, distribution and railway goods industries

Selective bibliography

- ISO 14001:2015 Environmental management systems -- Requirements with guidance for use
- ISO 9001:2015 Quality management systems – Requirements
- ISO 19011:2018, Guidelines for auditing management systems
- ISO 27000:2023 Information technology -- Security techniques -- Information security management systems -- Overview and vocabulary
- ISO 31000: 2018, Risk management -- Guidelines
- ISO 31010: 2010, Risk management -- Risk assessment techniques
- ISO 45000:2023, Occupational health and safety management systems 01 ISO 22000:28, Food safety management systems. Requirements for any organization in the food chain
- ISO 28000:2022 Specification for security management systems for the supply chain
- Course notes available on the platform campus.cmu-edu.eu

Application (Seminar / laboratory / project)	Nr. hours	Teaching methods	Obs.
1 – General features of an integrated management system	2	Power-point presentation	- Free discussions. - Case studies
2 – Analysis regarding the context of a organization	2		
3 – Leadership within a management system	2		
4 – Risk and opportunity management. Change management	2		
5 – Environmental aspects in transport	2		
6 – Occupational health and safety risk	2		
7 – Security of the supply chain, ship and port facilities. Food safety and cyber security	2		
8 – Human and material resources in transport	2		
9 – The documented information of the management system	2		
10 – Operational control	2		
11 – The audit of integrated management systems	4		
12 – Evaluating the performance of the management system	2		
13 – Improvement processes- treatment of nonconformities and tools for continuous improvement	2		

Bibliography

- ISO 14001:2015 Environmental management systems -- Requirements with guidance for use
- ISO 14004: 2016, Environmental management systems -- General guidelines on implementation
- ISO 14031: 2021, Environmental management -- Environmental performance evaluation -- Guidelines
- ISO 9000:2015 Quality management systems - Fundamentals and vocabulary
- ISO 9001:2015 Quality management systems – Requirements
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- EN 13816:2003, Transportation - Logistics and services - Public passenger transport - Service quality definition, targeting and measurement

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- ISO 31000: 2018, Risk management -- Guidelines
- ISO 31010: 2010, Risk management -- Risk assessment techniques
- ISO 45000:2023, Occupational health and safety management systems 01 ISO 22000:28, Food safety management systems. Requirements for any organization in the food chain
- ISO 28000:2022 Specification for security management systems for the supply chain
- Seminar notes available on the platform campus.cmu-edu.eu

Additional Notes

- Students may take photographs or make audio-video recordings in classrooms where teaching activities are conducted **only with the consent of the instructor and under the conditions established by the instructor.**
- Upon entering the classroom, students are kindly requested to **switch their mobile phones to silent mode and refrain from using them during classes.**
- All materials received by students, either directly or through postings on the platform campus.cmu-edu.eu, are subject to **national and international copyright legislation.** These materials may be used by students **solely for educational purposes.** Any other use or posting on publicly accessible websites without the consent of the copyright holder may be punished in accordance with **Law no. 8/1996 on copyright and related rights** and the **Berne Convention.**

10. The corroboration of contents of discipline with expectations epistemic community representatives, professional associations and representative employers in the corresponding program

- The content of the discipline takes into consideration the concerns of the professional institutions and organizations in the field, such as the International Standard Organization on the Implementation Practices of the New Edition of ISO Standards and how the audit of the management systems assesses the degree of compliance with the requirements of this edition. The opinions of third party auditors of accredited certification bodies were consulted and the content was updated accordingly.

11. Examination

Type of activity	Examination Criteria	Methods of examination	Percentage of final grade
Course		The exam is a multiple choice test. It consists of questions with 4 answer options, of which only one is correct.	100%
Seminar			
Laboratory			
Project			

Grading Requirements

Minimum score required: **50 points: 50-54->nota 5; 55-64-> nota 6; 65-74-> nota 7; 75-84-> nota 8; 85-94-> nota 9; 95-100-> nota 10**

Additional Notes

- A **midterm exam** may be organized during the semester.
- If a student participates in **conferences** (student, local, national, or international) or **competitions** (national or international) related to the subject of this course, they may receive **additional points or equivalence for certain assignments, papers, and/or attendance**, depending on the results obtained.
- During written examinations, students are **not allowed to use mobile phones or any other electronic devices, except for simple scientific calculators.**

Minimum performance standards

Grade 5

Date of completion	Signature of lecture tenured	Signature of application tenured
22.09.2025	Professor Costel STANCA EngD	Senior Lecturer Viorela STÎNGĂ PhD

Date of approval in the department	Signature of Director of Department
26.09.2025	Lecturer Ana Cornelia OLTEANU PhD

Date of approval in the faculty council	Signature of Dean
29.09.2025	Associated Professor Nicoleta ACOMI EngD