



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Ingegneria
ACADEMIC YEAR	2023/2024
MASTER'S DEGREE (MSC)	CIVIL ENGINEERING
SUBJECT	YARD SAFETY
TYPE OF EDUCATIONAL ACTIVITY	D
AMBIT	20558-A scelta dello studente
CODE	19487
SCIENTIFIC SECTOR(S)	ICAR/11
HEAD PROFESSOR(S)	PENNISI SILVIA Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	6
INDIVIDUAL STUDY (Hrs)	90
COURSE ACTIVITY (Hrs)	60
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	1
TERM (SEMESTER)	1° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	PENNISI SILVIA Monday 10:00 13:00 Edificio 8 Piano Terra, Geotecnica, stanza n. 4. Inviare prima mail all'indirizzo silvia.pennisi@unipa.it

DOCENTE: Prof.ssa SILVIA PENNISI

PREREQUISITES	The student will have to know the basic notions of mathematics, geometry, chemistry and drawing in order to understand and profitably apply the concepts relating to safety on construction sites that will be the subject of the course
LEARNING OUTCOMES	Knowledge and understanding - Knowing and understanding the fundamental institutions of legislation on the subject of safety in the workplace and the procedures to be implemented to ensure that they are respected. - Have in-depth knowledge of the interpretative skills, of case study analysis addressed in lessons of understanding, representation, evaluation and awareness to deal with interpretative and application problems relating to safety in the workplace. Ability to apply knowledge and understanding - Apply the object of the study to concrete cases. - Understand the mechanisms and methods suitable for guaranteeing safety on construction sites. Independent judgment - Understanding the complexity of the matter and the variety of approaches to concrete problems in the field of safety on construction sites. - Critically evaluate the procedures to be implemented on site. Communication skills - Communicate acquired knowledge clearly.
ASSESSMENT METHODS	The oral exam, during which the student will be invited to answer questions relating to the program carried out and practical cases relating to the topics covered, will be aimed at assessing the level achieved with regard to: knowledge of the topics covered, competence in the application practice in specific cases of these concepts, expression and technical language skills, synthesis, analysis and data processing skills. In addition, the student will also be evaluated on the exercises conducted during the course, both for the final achievement and for the quality of participation and the knowledge path carried out. The exercises will be evaluated on the basis of the design choices made on the basis of the topics studied during the course, correctness, independent judgment, critical spirit and skills achieved on the issues addressed. The overall evaluation, out of thirty, will be provided by the weighted average between the two evaluation components of the two teaching modules. FINAL ORAL EXAM WITH VOTE IN THIRTIES The exam consists of an interview to ascertain the level of knowledge of the topics in the program, the level of mastery of the specialist language and the ability of the candidate to develop critical reasoning based on the knowledge learned. The evaluation will take place in accordance with the evaluation grid: - Excellent result 30-30 cum laude: excellent knowledge of the topics, excellent language properties, excellent analytical skills; - Very good result 26-29: good knowledge of the topics, good language skills, good analytical skills; -Good outcome 24-25: basic knowledge of the main topics, good language properties; -Satisfactory result 21-23: the student does not show full mastery of the topics of the fundamental teaching, although possessing the fundamental knowledge; in any case shows sufficient knowledge of the subject; - Sufficient outcome 18-20: minimal knowledge of the main topics of teaching and technical language; - insufficient result: the student does not have an authorized knowledge of the contents of the various topics on the program.
EDUCATIONAL OBJECTIVES	At the end of the course students will be expected to have acquired and implemented the capacity of identification of the problems and resolution of the same with suitable solutions. This will implicate the development of the capacity of analysis of data and informations. Besides students will be expected to have acquired competences regarding the thematic faced and the capacities of synthesis of the data.
TEACHING METHODS	Lectures . Classroom exercises
SUGGESTED BIBLIOGRAPHY	Sanfilippo M., Muzzolan A. Sicurezza nei cantieri , Edizioni Legislazione Tecnica 2008, ISBN: 8888131426 De Filippo Danilo, Il coordinatore per la sicurezza in cantiere, Maggioli editore, Milano 2017, ISBN : 978-8891622808 Semeraro G., Laverello L., La normativa di sicurezza e salute nei cantieri, EPC editore, 2016, ISBN: 978-8863107326 Lenzi L., Moretti C., Loro F., Guida ai piani di sicurezza 2.0, Maggioli, Sant'Arcangelo di Romagna, RM, 2016, ISBN8891637888. Qualunque edizione dei testi.

SYLLABUS

Hrs	Frontal teaching
2	Safe organization of the construction site.
2	The documentary obligations of clients, companies, security coordinators
4	Occupational diseases and first aid
2	The risks in the building site
2	Risks of falling from above.
2	Scaffolding and temporary works

SYLLABUS

Hrs	Frontal teaching
2	The risk in excavations, demolitions, underground works and in tunnels
2	Risks related to the use of machinery and work equipment with particular reference to lifting and transport equipment
2	Chemical risks at the construction site
4	Physical risks
2	Risks related to asbestos remediation
2	Biological risks
4	The risks from manual handling of loads
2	The risks of fire and explosion
2	Risks in the assembly and dismantling of prefabricated elements
4	Personal protective equipment and safety signs.
Hrs	Practice
5	Methodologies for the identification, analysis and assessment of risks The minimum content of the safety and coordination plan, the replacement safety plan and the operational safety plan.
5	Examples of Safety and Coordination Plan: presentation of projects, discussion on the analysis of risks related to the area, the organization of the site, the work and their interference
10	Drafting of Safety and Coordination Plans, with particular reference to risks related to the area, the organization of the site, the work and their interference