

OCCUPATIONAL HELATH AND SAFETY

MFKHT740025 Environmental Engineering MSc

2022/23 II. félév

TANTÁRGYI KOMMUNIKÁCIÓS DOSSZIÉ

Miskolci Egyetem Műszaki Föld- Környezettudományi Kar Víz- és környezetgazdálkodási Intézet

Tartalomjegyzék

- Tantárgyleírás, tárgyjegyző, óraszám, kreditérték
 Tantárgytematika (órára lebontva)
 Projekt feladat kiírás
 Vizsga tételsor

1. Tantárgyleírás, tárgyjegyző, óraszám, kreditérték

Course Title: Occupational Health and Safety	Credits: 2
Type of course: compulsory	

The degree of theoretical or practical nature of the course, " course's character "3: 60 (kredit%)

Type (lec. / sem. / lab. / consult.) and Number of Contact Hours per Week: 2 lec.

Type of Assessment (exam. / pr. mark. / other): exam.

Participation on the courses and preparation of an advancement documentation based on the topic discussed. Project work in a chosen topic. Oral Exam.

Assessment: based on the advancement doc.

Assesment according to a five grade scale:

- 1. Structure and clearness of the work. (max. 10 points)
- 2. Aims and goals are clear: (max. 10 points)
- 3. Literature study: (max. 15 points)
- 4. Methodology: (max. 15 points)
- 5. Results and discussion: (max. 25 points)
- 6. Rate of independent work: (max 25 points)

Grading Limits:

> 88%: excellent, 75-87%: good, 63-74%: medium, 51-62%: satisfactory, < 50%: unsatisfactory.

Position in Curriculum (which semester): 4th

Pre-requisites (if any): -

Course Description:

Acquired store of learning:

<u>Study goals:</u> This course covers recognition, control, and regulation of safety hazards in the workplace. <u>Course content:</u> Topics include accident investigation, Workers Compensation, record keeping, training, machine guarding, facilities, personal protection, and fire protection. Upon completion, students should be able to recognize safety hazards and recommend strategies for remediation and compliance.

Week1: General Induction

Week2: Basics of Law

Week3: Building Safety/Construction safety

Week4: Workplace safety-general requirements

Week5: Emergency and Fire Safety

Week6: Accidents and First Aid

Week7: Ergonomics

Week8: Biosafety

Week9: Chemical safety

Week10: Noise Vibration and Radiation Safety

Week11: Electrical Safety, Safety of Machines

Week12: Office/screen workplace, Stress

Week13: OHS Management System, Risk Management and Safe Work Instructions Audits, Inspections and Monitoring

Week14: Task report (students)

The 3-5 most important compulsory, or recommended **literature** (textbook, book) **resources**:

- OSHA Handbook, Sixth EditionSep 3, 2014 by Steven D. High and President
- Health and Safety at Work: An Essential Guide for Managers Paperback 3 May 2016 by Jeremy Stranks
- Safety Professional's Reference and Study Guide, Second Edition 2nd Edition by W. David Yates
- Introduction to Health and Safety at Work, 2002. Phil Hughes, Ed Ferrett
- Introduction to Health and Safety in Construction, 2004. Ed Ferrett, Phil Hughes
- International Health and Safety at Work Revision Guide, 2012. Ed Ferrett

Competencies to evolve (see Appendix 1):

- T5 Knows and applies the rules of environmental impact assessment and preparation of environmental technical documentation.
- T8 Knows the basics, boundaries, and requirements of the fields of work, as well as fire protection, safety technology, information technology, law, economics and management related to environmental engineering.
- K3 Able to perform environmental management tasks.
- K11 Able to model, operate and control environmental technology systems and processes.
- A5 Strives to improve the knowledge of both him/herself and subordinated employees through continuous training.
- A6 Committed to high-quality work and strives to communicate this approach to subordinated employees.
- A7 Shares experiences with co-workers, thus helping their development.
- F2 In making decisions, takes into account the basic requirements of occupational health and safety, technical, economic and legal regulations, and engineering ethics.
- F5 Evaluates the work of subordinated employees, promotes their professional development by sharing critical remarks, educates employees and subordinates on responsible and moral professional practice.
- F6 Monitors legislative, technical, technological and administrative changes in the field of profession.

Responsible Instructor (name, position, scientific degree):

Renáta Mészáros Dr. Zákányiné Dr., AFKI, research fellow, PhD

Other Faculty Member(s) Involved in Teaching, if any (name, position, scientific degree):

2. TANTÁRGYTEMATIKA

Week	Lecture
1.	General Induction
2.	Basics of Law
3.	Building Safety/Construction safety
4.	Workplace safety-general requirements
5.	Emergency and Fire Safety
6.	Accidents and First Aid
7.	Ergonomics
8.	Electrical Safety, Safety of Machines
9.	Noise Vibration and Radiation Safety
10.	Biosafety, Chemical safety
11.	Office/screen workplace, Stress
12.	Risk assesment
13.	OHS Management System, Risk Management and Safe Work Instructions Audits, Inspections and Monitoring
14.	Task report (students)

3) PROJEKT FELADAT KIÍRÁS

Project work (maximun 2 students in one group):

Write 5-10 pages about the Health and Safety Requirements for the Protection of Workers from Risks resulting from Exposures Regulations in Your Country. Make a ppt, about 6-8 slides, and show it ont he last lecture in 10 minutes.

4) VIZSGA TÉTELSOR

FINAL EXAM QUESTIONS:

- 1. Basic legal requirements of Occupational Health and safety
- 2. Safety Requirements in a Building
- 3. Construction safety, safety in a construction workplace
- 4. General Safety requirements of a Workplace
- 5. Emergency exits and workplace traffic
- 6. General requirements of Fire Safety in a workplace
- 7. First Aid and Accident investigation
- 8. Main rules of Ergonomics
- 9. Electrical Safety
- 10. Safety of Machines
- 11. Noise and Vibration Safety
- 12. Radiation Safety
- 13. Biosafety
- 14. Chemical safety
- 15. Safety in Office/screen workplace
- 16. Stress and psichosocial load
- 17. Main rules of Risk assesment
- 18. Main features of OHS Management System

5. EGYÉB KÖVETELMÉNYEK

A vizsga dolgozat írása közben a mobiltelefon használata tilos! While writing the exam thesis, the use of a mobile phone is forbidden!