

UNIVERSITY OF ZAGREB SCHOOL OF MEDICINE

Plan of the course

Environmental and Occupational Health

Academic year **2018/2019**

prof. dr. sc. Ksenija Vitale

I. COURSE AIMS

1. COURSE AIMS:

The undergraduate course in Environmental and Occupational Health aims at the following:

- introducing the students to the principles, rationales and basic approaches exercised within Environmental and Occupational Health frame
- introducing the students to a variety of environmental and occupational health hazards, and to the particulars of their global, local and individual impact, as well as to the methods of their recognition and both qualitative and quantitative characterisation
- introducing the students to preventive, curative and educational/health-promoting activities undertaken to the goal of ALARA (i.e. to the goal of keeping hazardous exposures **As Low As Reasonable Achievable**)
- introducing the students to the methods of risk identification, risk assessment, and successful risk management along with risk communication, shedding some light also on major economic, socio-political, and regulatory issues relevant for the context

In line with the foregoing, the course attendants are expected to be familiar with the basics of human anatomy, physiology and patho-physiology, as well as clinical medicine disciplines.

II. COURSE STRUCTURE

Course hours:

Lectures: 12

Seminar: 45

Clinical practicals: 18

Total hours: 75

Lectures (L) : 12

Seminars (S) : 45

Practical (P) : 18

Total: : 75

III. PLAN OF THE COURSE AND COURSE SCHEDULE

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	28.1.2019	15.2.2019

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	28.1.2019	15.2.2019

BLOCKS OF THE COURSE SCHEME

Block 1

Date	Time	Group	Course hours type	Theme	Teaching staff
Monday 28.1.2019.	08:30-10:00; ŠNZ O	E,O	Lectures	Introduction	prof. dr. sc. Ksenija Vitale
	10:00-10:45; ŠNZ O	E,O	Lectures	Social aspects of environmental and occupational health	izv. prof. dr. sc. Iskra Alexandra Nola
	10:45-12:15; ŠNZ O	E,O	Seminar	Epidemiology of occupational disease	doc. dr. sc. Milan Milošević
Tuesday 29.1.2019.	08:30-09:15; ŠNZ O	E,O	Seminar	Professional dermatosis	doc. dr. sc. Milan Milošević
	09:15-10:00; ŠNZ O	E,O	Seminar	Psychology of work and exercise	doc. dr. sc. Milan Milošević
	10:00-11:30; ŠNZ O	E,O	Seminar	Physiology of work and exercise	doc. dr. sc. Milan Milošević
	11:30-12:15; ŠNZ O	E,O	Seminar	Physiology and doping	doc. dr. sc. Milan Milošević
Wednesday 30.1.2019.	08:30-10:00; ŠNZ O	E,O	Seminar	Physical aspects of the environment: noise, vibration	doc. dr. sc. Milan Milošević
	10:00-11:30; ŠNZ O	E,O	Seminar	Electric energy, electromagnetic fields, dysbaric conditions	doc. dr. sc. Milan Milošević
	11:30-12:15; ŠNZ O	E,O	Seminar	Asbestos, aerosols	doc. dr. sc. Milan Milošević
Thursday 31.1.2019.	08:30-10:00; ŠNZ O	E,O	Lectures	Housing and health: what do we know	prof. dr. sc. Ksenija Vitale
	10:00-11:30; ŠNZ O	E,O	Seminar	How to take environmental disease history and home inventory	prof. dr. sc. Ksenija Vitale
Friday 1.2.2019.	08:30-12:15; ŠNZ O	E,O	Clinical practicals	Physiology of work and exercise	doc. dr. sc. Milan Milošević
Monday 4.2.2019.	08:30-12:15; ŠNZ O	E,O	Clinical practicals	Landfill, waste water plant	prof. dr. sc. Ksenija Vitale
Tuesday 5.2.2019.	08:30-09:15; ŠNZ O	E,O	Clinical practicals	Tools for measuring personal/population environmental exposure	izv. prof. dr. sc. Iskra Alexandra Nola
	09:15-10:45; ŠNZ O	E,O	Seminar	Air pollution	izv. prof. dr. sc. Iskra Alexandra Nola
	10:45-11:30; ŠNZ O	E,O	Seminar	UV light pollution	izv. prof. dr. sc. Iskra Alexandra Nola
	11:30-12:15; ŠNZ O	E,O	Seminar	Tools for measuring personal/population environmental exposure	izv. prof. dr. sc. Iskra Alexandra Nola
Wednesday 6.2.2019.	08:30-12:15; ŠNZ O	E,O	Clinical practicals	Physiology of work and exercise	doc. dr. sc. Milan Milošević
Thursday 7.2.2019.	08:30-10:00; ŠNZ O	E,O	Lectures	Public health impact of micronutrient deficiency-disease risk	prof. dr. sc. Ksenija Vitale
	10:00-12:15; ŠNZ O	E,O	Seminar	Male and female reproductive toxicology and hazards	doc. dr. sc. Milan Milošević
Friday 8.2.2019.	08:30-11:30; ŠNZ O	E,O	Seminar	Heavy metals and metalloides: Pb,Hg,Cd,Mn,Ni,Cr, As	prof. dr. sc. Ksenija Vitale
	11:30-12:15; ŠNZ O	E,O	Seminar	Principles of risk assessment	prof. dr. sc. Ksenija Vitale
Monday 11.2.2019.	08:30-10:00; ŠNZ O	E,O	Seminar	Pesticides	izv. prof. dr. sc. Iskra Alexandra Nola
	10:00-10:45; ŠNZ O	E,O	Seminar	What is the "good food" today	izv. prof. dr. sc. Iskra Alexandra Nola
	10:45-11:30; ŠNZ O	E,O	Seminar	Genes and environment	izv. prof. dr. sc. Iskra Alexandra Nola
	11:30-12:15; ŠNZ O	E,O	Seminar	Risk of medical tourism and wellness programs	izv. prof. dr. sc. Iskra Alexandra Nola
Tuesday 12.2.2019.	08:30-09:15; ŠNZ O	E,O	Lectures	Waste management and health	prof. dr. sc. Ksenija Vitale

Date	Time	Group	Course hours type	Theme	Teaching staff
	09:15-10:00; ŠNZ O	E,O	Lectures	Medical waste	prof. dr. sc. Ksenija Vitale
	10:00-10:45; ŠNZ O	E,O	Seminar	Medical waste	prof. dr. sc. Ksenija Vitale
	10:45-12:15; ŠNZ O	E,O	Seminar	Pharmaceuticals in the environment	prof. dr. sc. Ksenija Vitale
	12:15-13:00; ŠNZ O	E,O	Seminar	Bottled water	prof. dr. sc. Ksenija Vitale
Wednesday 13.2.2019.	08:30-10:00; ŠNZ O	E,O	Seminar	Water disinfection	prof. dr. sc. Ksenija Vitale
	10:00-11:30; ŠNZ O	E,O	Lectures	Water and health	prof. dr. sc. Ksenija Vitale
	11:30-12:15; ŠNZ O	E,O	Seminar	Recreational waters	prof. dr. sc. Ksenija Vitale
Thursday 14.2.2019.	08:30-10:00; ŠNZ O	E,O	Clinical practicals	Public health intervention in disasters	izv. prof. dr. sc. Iskra Alexandra Nola
	10:00-12:15; ŠNZ O	E,O	Seminar	Health management in disasters	izv. prof. dr. sc. Iskra Alexandra Nola
Friday 15.2.2019.	08:30-09:15; ŠNZ O	E,O	Lectures	Food additives	prof. dr. sc. Ksenija Vitale
	09:15-10:45; ŠNZ O	E,O	Seminar	How sweet are the sweeteners	prof. dr. sc. Ksenija Vitale
	10:45-12:15; ŠNZ O	E,O	Seminar	Risks of complementary and alterantive medicine-detoxication magic of our era	prof. dr. sc. Ksenija Vitale

Lectures and seminars will take place in School of Public Health "A. Štampar"

Laboratory work and demonstrations will take place in the units of Department of environmental and occupational health:

- Laboratory for water and balneology,
- Center for promotion health at work and
- WHO collaborative center for occupational health.

all at School of Public Health "A. Štampar"

Practicals will take place at various primary health centers in Zagreb, and environmental hot spots.

IV. EXAMINATIONS

Types of examination and examination dates

During the course students are expected to complete seminars, case studies or essays depending on given topic, which will be graded. Without seminar completion students cannot accede to the written exam.

The exam is to be taken orally. The three exam components are going to be validated on an equity basis, so that the student will be graded based on written seminar, and oral exam.

Regular terms

Date

Summer

February 2016

V./I. LIST OF LECTURERS AND TEACHING STAFF

1. prof. dr. sc. Ksenija Vitale
2. izv. prof. dr. sc. Iskra Alexandra Nola
3. doc. dr. sc. Milan Milošević
4. dr. sc. Hana Brborović
5. Roko Žaja, dr. med.

V./II EXTERNAL ASSOCIATES:

V./III UNTENURED LECTURERS:

VI. LITERATURE

A. Obligatory

01. Textbook: selected topics from:

Rom WN, Markowitz S (eds). Environmental and Occupational Medicine. Lippincott Williams & Wilkins : 2006. Available at:
<http://www.snz.hr/~mmilosev/ENVOCCM.zip><<http://www.snz.hr/%7Emmilosev/ENVOCCM.zip>>

American Academy of Pediatrics: Pediatric Environmental Health – selected topics

B. Additional

Additional readings as suggested by lecturers

Handouts and exercise materials prepared by the lecturers