

Univerzita Pavla Jozefa Šafárika v Košiciach, Lekárska fakulta
Department of Public Health and Hygiene

Course: Hygiene

Study program: General Medicine

Form of study: daily

Category of object: compulsory subject

Period: 4th year summer term

Form of teaching: lecture / seminars and practical exercise hours: 1 lecture hrs. / 2 practical hrs. per week

Form completion: written exam computerized

Credits: 3

Room: ŠP3, ŠP4

Teachers: Prof. MUDr. Kvetoslava Rimárová, CSc.

Prof. MVDr. Tatiana Kimáková, PhD.

MVDr. Zlatana Sulínová, PhD.

Week	Lecture
	Trieda SNP 1, P1 13,30 -15,00
1. 14.2.2025	Environmental health, hygiene, basic definition of prevention. Environmental factors and modifying factors. Prof. MVDr. Tatiana Kimáková, PhD.
3. 28.2.2025	Water quality – risk of chemical and infectious factors, communicable diseases related to water, water supplies, the sources of drinking water. Division of WHO of all diseases related to the water. Division of waterborne diseases, epidemiology of water related diseases. Prof. MUDr. Kvetoslava Rimárová, CSc.
5. 14.3.2025	CINDI program, priorities. Primary, secondary and tertiary prevention. Examples of measures in primary, secondary and tertiary prevention. Disease categorization, old diseases – old problem, old diseases – new problem, new diseases – new problems. Prof. MUDr. Kvetoslava Rimárová, CSc.
7. 28.3.2025	Risk assessment steps, Risk assessment and risk management Principles of exposure assessment. NOAEL and LOAEL Overview of human exposure to chemicals, routes, magnitude, duration, frequency. Prof. MUDr. Kvetoslava Rimárová, CSc.
9. 11.4.2025	Air pollutants – SO ₂ , NO _x , VOC, ozone, heavy metals, PAH. Air pollutants – PAH, CFC, CO, CO ₂ Aluminum, asbestos, radioactive metals, arsenic, PCB, PBB, PCDD, pesticides. Smog, categorization of smog. Prof. MUDr. Kvetoslava Rimárová, CSc.
11. 25.4.2025	Energetic and biologic values of food. Proteins, fats, saccharides, recommended daily allowances. Vitamins, minerals, recommended daily allowances. Prof. MVDr. Tatiana Kimáková, PhD.
13. 9.5.2025	Study design. Ecological studies, advantages and limitations, examples, solving the real situation. Cross-sectional studies, advantages and limitations, examples, solving the real situation. Case – control, advantages and limitations, examples, solving the real situation. Cohort studies–prospective and retrospective, advantages and limitations, examples, solving the real situation. Prof. MUDr. Kvetoslava Rimárová, CSc.

Week	Practical Department of Public Health and Hygiene, Šrobárova 2, Košice					
1. 10.2. – 14.2. 2025	Introduction to the subject. Possible field visit. Organization of the semester. Demands for exam. Environmental health. Hygiene and preventive medicine, strategies for primary prevention, population and high risk strategy, prevention paradox.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab	prof. Rimárová	
				12,00-13,30		
				16ab	MVDr. Sulinová	
		8,00-9,30	9,45-11,15	11,30-13,00	13,30 – 15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	MVDr. Sulinová	
	8,00-9,30	9,45-11,15	11,30-13,00			
Friday	11ab	1ab	14ab	MVDr. Sulinová		
2. 17.2. – 21.2. 2025	Physical factors in environmental and occupational health, Noise, occupational and environmental aspects, decibels. Hertz frequency, Lehman s classification. Noise, aural effect, extraaural effect, psychological effect of the noise. Hospital hygiene, ecology of hospital facilities, six basic areas /infectious, radiation, chemical, psychological, physiology of work, accidents. Model situation in the physical factors of occupation. Possible field visit.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab		
		prof. Rimárová	prof. Rimárová	prof. Kimáková		
				12,00-13,30		
				16ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00		
Thursday	2ab	6ab	12ab	prof. Rimárová		
	8,00-9,30	9,45-11,15	11,30-13,00			
Friday	11ab	1ab	14ab	prof. Rimárová		
3. 24.2. – 28.2. 2025	Occupational health in context with environmental health. Health impairment in the work environment. Chemical factors, criteria for health impairment, selected suspect carcinogens. Asbestos exposure in occupational setting, in buildings, asbestos – related diseases.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab		
		prof. Rimárová	prof. Rimárová	prof. Kimáková		
				12,00-13,30		
				16ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00		
Thursday	2ab	6ab	12ab	prof. Rimárová		
	8,00-9,30	9,45-11,15	11,30-13,00			
Friday	11ab	1ab	14ab	prof. Rimárová		

4. 3.3. – 7.3. 2025	Lipids and fats in nutrition. Saccharides, rec. daily allowances Proteins and malnutrition, marasmus and kwashiorkor. Vegetarian diet. Advantages and disadvantages. Limited amino acids. Nutrition and oral health, nutritional status of population and methods for assessment. Possible field visit.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab	MVDr. Sulínová	
				12,00-13,30		
				16ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	MVDr. Sulínová
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	MVDr. Sulínová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	MVDr. Sulínová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Friday	11ab	1ab	14ab	MVDr. Sulínová	
5. 10.3. – 14.3. 2025	Evaluation of child’s growth, BMI, Rohrer’s index, Brugh’s index. Biological age, bone age, tooth age, primary and secondary sexual signs. Hygienic requirements on the organization and equipment on child’s collective facilities, day nurseries, kindergartens, hygienic requirements, organization of educational process, Healthy schools. Visiting kindergarten or school.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab	MVDr. Sulínová	
				12,00-13,30		
				16ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	MVDr. Sulínová
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	MVDr. Sulínová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	MVDr. Sulínová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Friday	11ab	1ab	14ab	MVDr. Sulínová	
6. 17.3. – 21.3. 2025	Water quality – chemical health, water pollution sources, nitrates. Laboratory methods for determination of drinking water. Water quality – communicable diseases related to water, water supplies, the sources of drinking water. Division of WHO of all diseases related to the water. Division of waterborne diseases, epidemiology of water related diseases. Possible field visit.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab		
		prof. Kimáková	prof. Kimáková	MVDr. Sulínová		
				12,00-13,30		
				16ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Kimáková
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00		
Friday	11ab	1ab	14ab	prof. Kimáková		

7. 24.3. – 28.3. 2025	Ionizing radiation – human exposure, stochastic and non-stochastic effect. Ultraviolet radiation. Infrared radiation and radiofrequencies and microwaves, lasers. Vibration Biologic effect of ionizing radiation acute and chronic effects, cancer. Carcinogens, mutagens and teratogens, group A,B,C,D. Maximum allowable concentration Visiting public health institute.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab	prof. Rimárová	
				12,00-13,30		
				16ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	prof. Rimárová	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Friday	11ab	1ab	14ab	prof. Rimárová	
8. 31.3. – 4.4. 2025	Vitamins, water soluble, fat soluble vitamins A,D,E,K. Hypovitaminosis, avitaminosis, hyper – vitaminosis. Mineral substances in nutrition: phosphorus, calcium, magnesium, iron, iodine, flour, selenium, zinc. Chemical food contamination - mercury, lead, cadmium, pesticides. Possible field visit.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab	prof. Kimáková	
				12,00-13,30		
				16ab	MVDr. Sulínová	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Kimáková
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Friday	11ab	1ab	14ab	prof. Kimáková	
9. 7.4. – 11.4 2025	Climate factors, ais pollution, generally. Smog categorization, London smog, Los Angelos smog. Greenhouse effect, ozone whole. Global atmospheric issues. Indoor pollution – allergens, cooking gas, radon emissions, formaldehyde, ammonium passive smoking, bacteria, fungi. Possible field visit.					
		8,00-9,30	10,00-11,30	12,00-13,30		
	Monday	15ab	10ab	3ab	prof. Kimáková	
				12,00-13,30		
				16ab	MVDr. Sulínová	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00	
	Tuesday	9ab	5ab	8ab	only 5GM	prof. Kimáková
		8,00-9,30	10,00-11,30	11,45-13,15		
	Wednesday	7ab	13ab	4ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Thursday	2ab	6ab	12ab	prof. Kimáková	
		8,00-9,30	9,45-11,15	11,30-13,00		
	Friday	11ab	1ab	14ab	MVDr. Sulínová	

10. 14.4. - 18.4. 2025	Food quality assessment. Principles of chemical and microbiological food quality Risk of communicable disease from food – biological contamination of food. Solid waste management. Possible field visit.				
		8,00-9,30	10,00-11,30	12,00-13,30	
	Monday	15ab	10ab	3ab	MVDr. Sulínová
				12,00-13,30	
				16ab	prof. Kimáková
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00
	Tuesday	9ab	5ab	8ab	only 5GM MVDr. Sulínová
		8,00-9,30	10,00-11,30	11,45-13,15	
	Wednesday	7ab	13ab	4ab	MVDr. Sulínová
		-	-	-	
	Thursday				
		-	-	-	
	Friday				
11. 21.4. - 25.4. 2025	Epidemiological studies – advantages and disadvantages. Cross-sectional study. Case-control study. Longitudinal study.				
		-	-	-	
	Monday			-	
		-	-	-	-
	Tuesday				
		8,00-9,30	10,00-11,30	11,45-13,15	
	Wednesday	7ab	13ab	4ab	prof. Kimáková
		8,00-9,30	9,45-11,15	11,30-13,00	
	Thursday	2ab	6ab	12ab	prof. Kimáková
		8,00-9,30	9,45-11,15	11,30-13,00	
	Friday	11ab	1ab	14ab	prof. Kimáková
12. 28.4 - 2.5 2025	Assessment of the nutritional status of population. BMI index standards and values, WHR index standards and values. Measuring body fat. Health and nutritional status of population, methods for assessment, energetic and biologic value of food.				
		8,00-9,30	10,00-11,30	12,00-13,30	
	Monday	15ab	10ab	3ab	
		prof. Rimárová	prof. Rimárová	MVDr. Kimáková	
				12,00-13,30	
				16ab	prof. Rimárová
		8,00-9,30	9,45-11,15	11,30-13,00	13.30- 15,00
	Tuesday	9ab	5ab	8ab	only 5GM
		prof. Kimáková	prof. Rimárová	prof. Rimárová	prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15	
	Wednesday	2ab	6ab	12ab	prof. Kimáková
		8,00-9,30	9,45-11,15	11,30-13,00	
	Thursday	-	-	-	
13. 5.5. - 9.5. 2025	Heavy metals – lead, mercury, cadmium, arsenic, chromium, nickel. Heavy metals, chromium, nickel, manganese, selenium, beryllium. Biologic agents in the workplace. Dust and fumes, silicosis, asbestosis, non fibrogenic agents, pneumoconiosis. Visible light effect. Possible field visit.				
		8,00-9,30	10,00-11,30	12,00-13,30	
	Monday	15ab	10ab	3ab	prof. Rimárová
				12,00-13,30	
				16ab	prof. Kimáková
		8,00-9,30	9,45-11,15	11,30-13,00	13.30 -15,00
	Tuesday	9ab	5ab	8ab	only 5GM prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15	
	Wednesday	7ab	13ab	4ab	prof. Rimárová
		8,00-9,30	9,45-11,15	11,30-13,00	
	Thursday	2ab	6ab	12ab	
		8,00-9,30	9,45-11,15	11,30-13,00	
	Friday	11ab	1ab	14ab	MVDr. Sulínová

14. 12.5. – 16.5. 2025	Summary credits, preterm tests preparation.				
		8,00-9,30	10,00-11,30	12,00-13,30	
	Monday	15ab	10ab	3ab	
		prof. Rimárová	prof. Rimárová	MVDr. Sulínová	
				12,00-13,30	prof. Rimárová
				16ab	
		8,00-9,30	9,45-11,15	11,30-13,00	13.30- 15,00
	Tuesday	9ab	5ab	8ab	only 5GM
					prof. Rimárová
		8,00-9,30	10,00-11,30	11,45-13,15	
	Wednesday	7ab	13ab	4ab	prof. Kimáková
		8,00-9,30	9,45-11,15	11,30-13,00	
	Thursday	2ab	6ab	12ab	prof. Rimárová
		8,00-9,30	9,45-11,15	11,30-13,00	
	Friday	11ab	1ab	14ab	MVDr. Sulínová

Conditions for exam: Active participation on practicals

Topics in selected weeks are subject of the change due organization management.

Form of exam: Written, computerized ROGO

Condition for exam: maximum 2 absences on practical exercises during semester including week 14th (means from week 1 to week 13 maximum 1 absences)

Replacement of practical: Withing the same week and same topic student can replace practical wit another group.

For preterm will be Selection test in the week 12 -13.

Literature: - compulsory

RIMÁROVÁ, K.: Environmental medicine – hygiene. Košice, Univerzita Pavla Jozefa Šafárika v Košiciach, 2006. - 148 s. ISBN 80-7097-646-2.

RIMÁROVÁ, K.: Compendium of Hygiene. Košice, 2014.

prof. MUDr. Kvetoslava Rimárová, CSc.
guarantee of the subject, chair of the Institute of Public Health and Hygiene