

Title of the course: Public Health	NEPTUN-code: RKXKU1ABNE	Weekly teaching hours: 2+0+0	Credit: 2 Exam type: e
Course leader: Hosam Bayoumi, Dr.	Position: university private professor, associate professor	Required preliminary knowledge: RKXBI1EBNE	
Curriculum:			
<p>The science of public health and environmental hygiene tasks and methods. The concept of health and disease. History and outstanding personalities of Public Health. Organizational structure and system of national and international public health. Demographic Fundamentals, demographic characteristics of Hungarian and international situation. Demography and epidemiology basics, risk assessment and testing methods. Domestic and international epidemiological situation report. The main tasks of our education and health sectors. The structure of public health, including health care. The levels of prevention and levels. The health care and public health systems in Hungary. Non-communicable disease epidemiology, prevention. The impact of globalization on health. Health care and health promotion. Mental Health. City health study. Air, soil and water hygiene. Infection Control. Ionizing and non-ionizing radiation. Structure of immune system functioning. Antibodies. Immunity and vaccines. Transplantation, transfusion. Antibiotics. Allergy, AIDS, autoimmune disease. The skin organ system, the respiratory system and the movement of the body and the metabolic processes of environmental health problems. Diet and Health Study. The Hungarian diet features. Nutrition environmental health aspects. Alternative forms of the nutrition. Environmental health: consequences of globalization. Epigenetics. Climate change. Occupational hygiene and health care. Non-infectious diseases: Heart vascular- and cancer epidemiology. Mental health promotion. Old- and new addictive diseases. Protection current tasks for mother, child and youth. The aging societies and public health challenges of old age. Wastes caused health problems. Pollution effects. The basic terms of toxicology. The presence of environmental toxicants in food. The metals and their compounds and toxicology of pesticides. Toxicological tests and their characteristics, measurement options. Genotoxicity and the expected effects. Epidemiology and epidemiological tasks of infectious disease and the environment. Hospital hygiene, prevention of nosocomial infections. Acquisition of Health and public health knowledge. Environmental and health-conscious lifestyle education. The weather and the human's body adaptation. The recognition of the relationship between environment and health. The expected health effects due to climate change</p>			
Professional competencies:			
<p>Knowledge of general and specific mathematical, natural and social scientific principles, rules, relations, and procedures as required to pursue activities in the special field of environment protection.</p> <p>Knowledge of the learning, knowledge acquisition, and data collection methods of the special fields of environment protection, their ethical limitations and problem solving techniques.</p> <p>Comprehensive knowledge of the basic features and interrelations of environmental elements and systems, as well as of the environmentally harmful substances affecting them. Able to cooperate with engineers involved in the development and application of production and other technologies to develop the given technology in terms of environment protection.</p> <p>Able to participate creatively in engineering work based on their multidisciplinary skills, as well as to adapt to continuously changing circumstances.</p> <p>Collaboration with civil organizations engaged in environment protection, but willing to argue in order to develop optimal solutions.</p>			

Constantly upgrading their knowledge of environment protection by attending organized professional development training courses.
Sharing experiences with colleagues, thus promoting their development.
Taking responsibility towards society for their decisions made in the scope of environment protection.

Literature:

Lecture's notice and PPT

V. Rozanov (2016): Stress and Epigenetics in Suicide, 1st Edition, Academic Press, Print Book ISBN: 9780128051993

Emerging Infectious Diseases www.cdc.gov/eid Vol. 22, No.10, October 2016

International travel and health (2013): Information on health risks for travellers. ISBN: 9789240686434

Merck and the Merck Manuals (2011): Infectious Diseases, in: Merck Manual Merck Sharp & Dohme Corp.

Michael Stuart Bronze, Burke A Cunha, Ronald A Greenfield, et al. (2011): Infectious Diseases Medscape Reference WebMD

- Victorian State Government, Australia (2009): Blue Book. Guidelines for the control of infectious diseases Victorian State Government

Paget Stanfield et al. (2008): Diseases of Children in the Subtropics and Tropics. 4th edition ISBN: 9780340506332

David Coggon, David Barker, Geoffrey Rose (2008): Epidemiology for the Uninitiated. BMJ Publishing Group

- Comment: Attendance of lectures is compulsory! Examination requirements: It is not allowed to be absence more than 4 lectures. 2 midterms with at least a pass grade (50-64 = 2%).
Requirements to pass the course: Two written exams. Solve the Homework and write an essay and to pass the oral examination.