**Syllabus**

**of the subject “HEALTH PROMOTION AND PROTECTION III. -6th year**

for the 6th year students (English speaking), branch General Medicine,

Faculty of Medicine in Pilsen, Charles University in Prague.

School year 2024/2025

Course guarantor: Prof. MUDr. Dana Müllerová, Ph.D.

Responsible person for teaching in part:

**- Public Health and Preventive Medicine: Prof. MUDr. Dana Müllerová, Ph.D.**

**- Social Medicine and Assessment medicine: Doc. MUDr. Libuše Čeledová, Ph.D.**

**- Occupational Medicine: MUDr. Vendulka Machartová, Ph.D.**

**Subject ends with a final state examination.**

**Objective:** The subject Health promotion and protection III builds upon the knowledge gained in Health promotion II and I, which students completed in previous years of study (4th and 5th years). Students acquired theoretical foundations of Epidemiology, Social Medicine, Occupational Medicine, Public Health, Hygiene, Preventive Medicine, Nutrition, Sports Medicine, and Balneology. In the course of Health promotion and protection III, students will further develop their knowledge and practical skills providing primary health care. During their studies, they have not yet encountered this basic element of health care.

**Subject content:**

**Place: Outpatient Clinic of GPs**

During the 2-week (10-day) internship with a general practitioner (GP, a general practitioner for adults or general practitioner for children/adolescents), students get acquainted with the management of general practitioner's office, including finding out the scope and form of cooperation of general practitioners with assessment medicine and occupational medicine services.

Students will learn to examine patients with a focus on primary and secondary prevention of chronic non-communicable diseases, to diagnose symptoms already present, to assess the risks of the diseases and their relationship to lifestyle, to design a personalized intervention and how to communicate it to the client/patient.

Students will prepare report on the internship (scope of work, typical patient profile, organization of work in the office, spectrum of medical procedures) and a case study of one of the patients examined during the internship.

The internship with a general practitioner may be completed in advance after the end of the fifth year during the summer holidays or any time during the sixth year, but it must be completed by the end of 3-week block.

**During the internship with GP, students should focus on:**

**General practitioner's office management, social and assessment medicine**

* management of medical practice, sources of financing, scope of activities, etc.
* issues of long-term health and social care, home care, nursing services

**Preventive medical examination**

* updating medical history, including work and social history, with the focus on its changes, risk factors and work risk factors; in the family history, special emphasis is placed on the incidence of cardiovascular and lung diseases, the incidence of hypertension, diabetes mellitus, disorders of fat metabolism and cancer, and the incidence of addictions
* **control of** **vaccination** also with regard to occupational exposure to risk factors
* **complete physical examination**, including measurement of blood pressure, determination of body mass index and basic examination of sight and hearing; part of the general preventive examination is the assessment of risks in terms of family, personal and occupational history, skin examination and in case of suspected increased risk also rectal examination, in men with a positive family history or in the presence of other risk factors clinical examination of the testicles, in women with a positive family history of hereditary or familial breast cancer or the presence of other risk factors clinical examination of the breast, together with instructions for self-examination
* **examination of urine-** a urine test strip
* **control and evaluation of the results** of other examinations

**Prevention**

* GP always assesses the individual risk of a serious illness of the patient, related to the problem the patient has, also focusing on work history
* GP has a limited but not insignificant opportunity to influence patients' lifestyles and intervene in the area of primary prevention
* Cardiovascular prevention and risk assessment programs
* Early detection of cancer
* Infectious diseases and preventive vaccinations
* Brief intervention

**In the case an internship with GP for children and adolescents, students will focus on the system of preventive health checks in children, breastfeeding support, psychomotor development of children, vaccination. For older children, during the internship, thy will also focus on the appropriateness of the considered future job classification with regard to the illnesses they have experienced.**

**Teaching Methods:**

* -Practical training in outpatient clinics
* -Case-based discussions
* -Study of recommended Public Health and Primary prevention literature
* -MOODLE – electronic learning database (videos, recorded lectures, etc.)

**Assessment:**

* - Participation in clinical practice
* - State exam

**INTERNSHIP OUTCOMES:**

Outcomes of study and clinical practice at the end of the 6th year (inclusive Health Promotion and protection I, II, and III)

**Knowledge:**

Understanding of Health and Public Health concepts. European Health policy and programmes.

1. Identification and description of basic determinants of health.
2. Understanding the mechanisms of public health regulation and control. Indicators of public health, including demographic indicators.
3. Understanding the main health risks and protective factors during prenatal life, infancy, childhood, and adolescence. Their prevention, control/support (psychological and social factors in family, physical (in)activity, (mal)nutrition, school-based environment, child (mal)treatment, CAN Syndrome, violence towards children, child and adolescence injuries, abuse risk and dependent behaviour, and (un)healthy sexual behaviour). Primary prevention and health care about optimal growth and development of children given by GPs for children and adolescents.
4. Knowledge of healthy life style in adulthood. Characteristics of health protective nutrition and recommended diets. Prescription of required physical activity. Psychosocial wellbeing.
5. Identification of leading causes of mortality and disability. Primary and secondary prevention of cardiovascular diseases, cancer, mental disorder, obesity and metabolic diseases, diseases of locomotor system.
6. Understanding of obesity pandemic. Obesity as chronic progressive disease. Risk factors and consequences of obesity. Prevention and management of obesity. Possibilities in management of obesogenic environment.
7. Public Health Intervention. Policies, Services, Activities, Initiatives. Community based intervention projects. Their methodology. System thinking and other approaches. Knowledge of various methods how to combat pandemics of chronic communicable or non-communicable diseases.
8. Understanding, identification and description of Nutrition in human health, three levels of dietary recommendation, Life Cycle nutrition, Food safety and security provision, issue of ultra-processed foods, novel foods, knowledge of Clinical nutrition
9. Understanding of health issue of the indoor environment of buildings, requirement for microclimatic conditions, air quality, issue of noise and incorrect lighting and the possibilities of their management. Issue of drinking water and hygienic requirements for water. Problematics of environmental pollution, waste management.
10. Knowledge of occupational medicine: can carry out preventive inspections of employees with regard to risks in the workplace. He knows the legislation and diagnostic procedures for preventive examinations of employees. He knows the legislation, diagnostic and treatment procedures for occupational diseases. He knows the possibilities of preventive measures in the work environment. He knows the issue of chemical substances in the workplace, especially substances irritant, carcinogenic, hepatotoxic, neurotoxic, nephrotoxic, and hematotoxin chemicals, substances blocking the transfer of oxygen. He knows the issue of ionizing and non-ionizing radiation, diseases caused by vibrations, by overload. He knows the issues of possible diseases from work in the field of neurology, orthopaedics, pulmonary medicine, ophthalmology, otorhinolaryngology, infectious medicine, oncology and from other areas of medicine.
11. Understanding of issue of Ageing and old age. Demographic aspects. Health, social and ethical problems of the elderly. Social gerontology. Heterogeneity of the elderly according to functional state. Frail senior. Ethics approach and communication with elderly patient. Long term care. Assistance services for seniors.
12. Knowledge of Social Medicine, medical ethics in medical practice and medical science. Current ethical problems in medical care.
13. Knowledge of management of medical practice, sources of financing, scope of activities, issues of long-term health and social care, home care, nursing services.

**Skills:**

1. Ability to take part in providing health care in the General practitioner's officeincluding the provision of occupational medicine services.
2. Ability to perform basic primary preventive medical examination
3. Ability to perform basic examinations of nutritional state, life style behaviour and detection of cardiovascular risk
4. Ability to interpret the results of laboratory and BIA diagnostic tests.
5. Ability to recommend personalised changes in life style based on results of preventive medical examination with modification and management of cardiovascular risks. Skill to provide preventive care and educate patients about healthy lifestyles and prevention of non-communicable disease
6. Communication skills in negotiating with patients about their mental health, using of tobacco, alcohol, and other addictive substances or behaviour.
7. Ability to work as part of a team of health care professionals and coordinate the care of patients with obesity.
8. Skills providing the right choice of clinical diet managing the patient`s disease or disorder
9. Ability to assess of medical fitness for the intended performance of work
10. Ability to perform examination of a patient with a diagnosed occupational disease
11. Ability to assess health fitness for work for all risks that come into consideration for the job
12. Ability to perform basic workplace inspection and assessment of risk factors
13. Basic skills in planning of public health intervention, including Community based projects.
14. Basic skills in management of medical practice, sources of financing, scope of activities, issues of long-term health and social care, home care, nursing services.

**Competencies:**

1. During primary prevention check out ability to identify and correctly handle non-communicable diseases risks, (particularly obesity, cardiovascular diseases, musculoskeletal disorders, cancer, and mental disorders).
2. Ability to develop a plan of required, personally based, changes in life style for children or adults with risky behaviour.
3. Competence in counselling patients on healthy life style, personalised, based on primary preventive check out results.
4. Competence in Occupational medicine to assess the health fitness for work
5. Competence in General practitioner's office management, social and assessment medicine
6. Competence in nutrition and diet therapy, physical activity therapy.
7. Ethical and professional conduct in accordance with the law and standards of patient care.
8. Competence to initiate and prepare public health interventions

These learning and clinical practice outcomes should enable students to successfully engage in the practice of general practitioner or general practitioner for children and adolescents, Public Health and Preventive Medicine, Social Medicine and Assessment medicine, Occupational Medicine. These learning outcomes also provide basic information for practicing the medical profession in other medical fields as well.

**Conditions for granting the credit:**

**Completion of a 10-day internship with a general practitioner and confirmation of this internship.**

**Submission of the report on the internship with GP and of a case study focusing on the intervention proposal. Both essays will be submitted to MOODLE according to the instructions received by email.**

**Instructions for creating the final report**

* Each essay must contain a title page with the author's name, the name of the university, department and subject, study group and date.
* Specify where the internship took place (GP or facility)
* Submission of a report on the internship (at least 2 pages of text, Times New Roman, size 12, line spacing 1.5) and a case report. Submit the essays in pdf or word format**.**

**Notes on the organization of the block**

* **Students have to arrange the internship themselves**
* A letter from the faculty requesting an internship will be provided to students by email. It is compulsory to provide a certificate of completion of this internship.
* The form “Confirmation of completing the pre-state examination practice” can be downloaded from SIS (subject EA0112119).

**Study resources:**

**Public Health and Preventive Medicine**

Textbook:

<https://www.bookport.cz/kniha/public-health-and-preventive-medicine-8495/>

(https://cuni.primo.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package\_service\_id=13563139030006986&institutionId=6986&customerId=6985&VE=true)

Moodle course: https://lms.lfp.cuni.cz/course/view.php?id=281

Moodle course for submission of reports and case studies: <https://lms.lfp.cuni.cz/mod/forum/discuss.php?d=1476>

**Social and Assessment Medicine**

Čeledová,L.,Holčík,J. Social Medicine. An Introduction to New Public Health. Praha: Karolinum. 2019

Moodle courses: https://lms.lfp.cuni.cz/course/index.php?categoryid=15

**Occupational Medicine**

Moodle: https://lms.lfp.cuni.cz/enrol/index.php?id=355