| GENERAL INFORMATION | | | |
|-------------------------|---|--------------------|--|
| Course | Dietology 2 | | |
| Course coordinator | Assoc. Prof. Ines Bilić Ćurčić, MD, PhD | | |
| Assistant/Associate | Prof. Martina Smolić, MD, PhD Farah Khaznadar, MSc.pharm | | |
| Study Programme | Integrated undergraduate and graduate university study of Medicine in German language | | |
| Status of the course | Elective | | |
| Year of study, semester | 2 nd year, 4 th semester | | |
| Grading scale and ECTS | | 1 | |
| workload | Hours (L+S+E) | 15 (5+10+0) | |
| | | | |

COURSE DESCRIPTION

Course objectives

Principles and studies of nutritional epidemiology. Nutrition assessment methods used in epidemiological studies, and the association of inadequate food and nutrient intake with diseases and disorders in humans. Selection of functional food and functional ingredients for the health of the individual and society as a whole. The importance of functional products, as well as a critical attitude towards the consumption of nutritional supplements. The influence of different lifestyle habits and the environment on the health of the individual and the population, as well as their role in the emergence of a large number of chronic non-communicable diseases as the leading cause of morbidity and mortality in Croatia and the world. Acquiring the knowledge necessary to observe the health of the individual and the population in dependence on the totality of the influence of environmental factors and lifestyle habits with special emphasis on the factors most significant for the Croatian population. A multidisciplinary approach to the problem of lifestyle and health with the aim of preserving and improving the health of the population. Knowledge about the importance of macro and micronutrients in the nutrition of athletes.

Enrolment requirements and entry competencies

There are no special requirements for this course except those defined by the curriculum of the entire study program.

Learning outcomes at the Programme level

1.1., 2.1., 3.1., 3.2., 3.3., 3.5., 4.1., 4.2.

Learning outcomes (5-10)

Knowledge

1. Students will be trained to implement different methods for assessing nutrition that are used in epidemiological studies

2. Knowledge about the role of individual functional components, as well as the food that contains them

3. Basic knowledge of determining and assessing risks harmful to health arising from lifestyle habits and the immediate living environment of an individual

4. Specific nutritional needs in different types of sports

Skills

- 1. Assessment of nutritional status and nutritional status of different age groups
- 2. Creation of prevention programs for chronic non-communicable diseases
- 3. Planning the diet of athletes engaged in the specific sport

Course content

1. Principles of nutritional epidemiology; Studies in food epidemiology; Intake of food and nutrients and their connection with diseases; (P)

2. Diet assessment methods (24-hour recall, diet recording methods, diet frequency methods, diet history method, method of duplicate daily meals, recall of past diet); Reproducibility and validity of methods (food frequency questionnaire); Alternative sources of nutritional information (S)

3. Functional food and health (digestive tract, diseases of the heart and blood vessels, cancer, acute infections), Functional ingredients (antioxidant vitamins and minerals, dietary fiber, fatty acids, phytosterols, inulin, etc.)(P)

4. Overview and role of selected nutritional supplements (S)

5. The influence of lifestyle habits on the occurrence and prognosis of diseases of the respiratory system. The influence of lifestyle habits on the incidence and prognosis of cardiovascular system diseases. The influence of lifestyle habits on the occurrence and development of type II diabetes. The influence of lifestyle habits on the incidence and development of malignant diseases. (P)

6. Possibilities of prevention of chronic non-communicable diseases by changing life habits and the immediate living environment. (WITH)

7. Basic principles of nutrition for athletes. Energy needs of athletes (P)

8. Carbohydrate intake: proper choice of time of consumption and type of carbohydrates with regard to the type of sport. The effect of training on protein needs. The importance of fat as a source of energy. Minerals and vitamins in the diet of athletes. Fluid - dehydration and rehydration. Fluid - electrolyte loss and replacement. Supplements in the nutrition of athletes. Eating habits of athletes. (S)

| Mode of teaching | ➢ lectures ➢ seminars and workshops ☐ exercises ☐ distance education ☐ field teaching | ⊠independent tasks ⊠multimedia and network □laboratory □mentoring work □other |
|------------------|--|---|

Student obligations

Students are expected to attend all class sessions, as well as to take all the examinations. However, they are allowed for excused absences, totalling 30% of all classes.

Monitoring student work

| Attending classes | x | Class activity | х | Seminar work | х | Experimental work | |
|-------------------|---|---|---|--------------|---|-------------------|--|
| Written exam | Х | Oral exam | | Essay | | Research | |
| Project | | Continuous knowledge verification | | Paper | | Practical work | |
| Portfolio | | | | | | | |

Grading and evaluation of student work during classes and of the final examination

| Teaching | ECTS | Learning | Student | Assessment | Grade | points |
|------------------|------|----------|-----------------------------------|----------------------------------|-------|--------|
| activity | | outcome | activity | methods | Min. | Max. |
| Class attendance | 0,20 | 1-7 | Class attendance; exercises | Evidence sheet; evaluation | 2 | 20 |
| Written exam | 0,80 | 1-7 | Learning for the written exam | Grading of the written exam | 48 | 80 |
| Total | 1 | | | | 50 | 100 |

Evaluation/grading of the final written examination:

| Percentage of correct answers (%) | Grade points |
|--------------------------------------|--------------|
| 100%-95% | 80 |
| 94,99-90% | 76 |
| 89,99-85% | 71 |
| 84,99-80% | 66 |
| 79,99-75% | 61 |
| 74,99-70% | 57 |
| 69,99-65% | 52 |
| 64,99-60% | 48 |

Calculation of final grade:

Based on the total sum of the points awarded during the course and the final exam, the final grade is determined according to the following distribution:

A – excellent (5): 90-100 grade points; B – very good (4): 70-79,99 grade points; C – good (3): 60-69,99 grade points; D – sufficient (2): 50-59,99 grade points

Required reading

1.Hans Konrad Biesalski et al. Ernährungsmedizin: Nach dem Curriculum Ernährungsmedizin der Bundesärztekammer. 5., vollständig überarbeitete und aktualisierte Auflage –2017. Thieme.

Additional reading

1. S. Langley-Evans: Nutrition: A Lifespan Approach. Wiley-Blackwell, 2009.

2. L. K. Mahan, S. Escott-Stump: Krause's Food & Nutrition Therapy, Saunders, 2007

3. Kok F, Bouwman L, Desiere F: Personalized Nutrition, CRC Press, 2008.

4. McCabe BJ, Wolfe JJ, Frankel EH (ur.): Handbook of Food-Drug Interactions, CRC Press, 2003

Number of copies of required literature in relation to the number of students currently attending classes in the course

| Title | Number of copies | Number of students |
|-------|------------------|--------------------|
| | | |
| | | |

Course evaluation procedures

Anonymous, quantitative, standardized student survey providing feedback on the course as well as on the work of course coordinators and their assistants/associates is being conducted by the QA Office of the Faculty of medicine Osijek.