UNIWERSYTET MEDYCZNY
IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU

Appendix
to Resolution No. 2186
of Senate of Wroclaw Medical University
of 1 July 2020

| Syllabus for academic year: 2020/2021<br>Training cycle: 2017/2018 – 2020/2021 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Description of the course | | | | | | | | | | | | | | |
| **Module/Course** | Food additives and genetically modified food – facts and myths | | | | | | | | | | | | | |
| | **Group of detailed education results** | | | | | | | | | | | | | |
| | **Group code** C, D, B | **Group name** C-Preclinical sciences; D-Behavioral and social sciences with elements of professionalism; B – Introduction to medical sciences | | | | | | | | | | | | |
| **Faculty** | Medicine | | | | | | | | | | | | | |
| **Major** | medicine | | | | | | | | | | | | | |
| **Unit realizing the subject** | Department of Social Medicine | | | | | | | | | | | | | |
| **Specialties** | not applicable | | | | | | | | | | | | | |
| **Level of studies** | Uniform magister studies X*<br>1st degree studies ☐<br>2nd degree studies ☐<br>3rd degree studies ☐<br>postgraduate studies ☐ | | | | | | | | | | | | | |
| **Form of studies** | X full-time X part-time | | | | | | | | | | | | | |
| **Year of studies** | I-IV | | | | | | | **Semester** | X Winter<br>X Summer | | | | | |
| **Type of course** | ☐ obligatory<br>☐ limited choice<br>X free choice / elective | | | | | | | | | | | | | |
| **Course** | ☐ major X basic | | | | | | | | | | | | | |
| **Language of instruction** | ☐ Polish **X** English ☐ other | | | | | | | | | | | | | |
| * mark ☐ with an X | | | | | | | | | | | | | | |
| **Number of hours** | | | | | | | | | | | | | | |
| Form of education | | | | | | | | | | | | | | |
| | Lectures (L) | Seminars (SE) | Auditorium classes (AC) | Major Classes – not clinical (MC) | Clinical Classes (CC) | Laboratory Classes (LC) | Classes in Simulated Conditions (CSC) | Practical Classes with Patient (PCP) | Specialist Classes – magister studies (SCM) | Foreign language Course (FLC) | Physical Education obligatory (PE) | Vocational Practice (VP) | Self-Study (Student's own work) | E-learning (EL) |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Winter Semester | | | | | | | | | | | | | | |
| Direct (contact) education | | | | | | | | | | | | | | |
| Online learning (synchronous) | | 10 | | | | | | | | | | | | |
| Distance learning (asynchronous) | | | | | | | | | | | | | | |
| Summer Semester | | | | | | | | | | | | | | |
| Direct (contact) education | | | | | | | | | | | | | | |
| Online learning (synchronous) | | 10 | | | | | | | | | | | | |
| Online learning (asynchronous) | | | | | | | | | | | | | | |
| TOTAL per year: | | | | | | | | | | | | | | |
| Direct (contact) education | | | | | | | | | | | | | | |
| Online learning (synchronous) | | 10 | | | | | | | | | | | | |
| Online learning (asynchronous) | | | | | | | | | | | | | | |

**Educational objectives** (max. 6 items)

C1. Gaining the knowledge of benefits and threats of using a genetically modified food

C2. Characteristics of technics of obtaining genetically modified food and examples of modified nutritional products.

C3. Characteristics of food additives used in food industry

C4. Characteristics of threats of using genetically modified food and food additives – discussion based on Evidence Based Medicine

**Education result matrix for module/course in relation to verification methods of the intended education result and the type of class**

| Number of course education result | Number of major education result | Student who completes the module/course knows/is able to | Methods of verification of intended education results (forming and summarising) | Form of didactic class ***enter the abbreviation* |
|---|---|---|---|---|
| K 01 | C. W 1. | Student knows basic definitions of the scope of genetics. Student knows the technics of obtaining genetically modified food | Discussion | SE |
| K 02 | C. W 10. | Student identifies the benefits and risks associated with the presence of genetically modified organisms (GMO) in the ecosystem | Discussion | SE |
| K 03 | B. W 19. | Student know the consequences of improper nutrition, especially the consumption of processed | Discussion | SE |

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| | | foods; Student knows possible health effects of consumption of some of the food additives | | |
| K 04 | | Student knows basic division and characteristics of food additives. | Discussion | SE |
| S 01 | D. U 17. | Student critically analyzes medical literature in order to verify the knowledge regarding genetically modified food and food additives. | Discussion | SE |
| S 02 | B. U 13. | Student explains the differences between prospective and retrospective studies, randomized and clinically-controlled studies, case studies, experimental studies and is able to categorize them regarding to their scientific relevance and quality in the view of scientific data related to health effects of food additives and GMO consumption | Discussion | SE |
| K 01 | | The student works in a group and presents the effects of work in front of the class. | Discussion | SE |

** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:
Knowledge:5
Skills: 4
Social competences: 3

| **Student's amount of work (balance of ECTS points)** | |
|---|---|
| **Student's workload** (class participation, activity, preparation, etc.) | **Student Workload (h)** |
| 1. Contact hours: | |
| 2. Online learning hours (e-learning): | 10 |
| 3. Student's own work (self-study): | 3 |
| Total student's workload | 13 |
| **ECTS points for module/course** | 0,5 |
| Comments | |

**Content of classes** (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

**Lectures – not applicable**

| |
|---|
| Seminars<br>1. Introduction to genetically modified food – genetics, history, genetical engineering, biotechnology – 2h<br>2. Genetically Modified Organisms (GMO)- 2h<br>3. Benefits and threats of using genetically modified food – 2h<br>4. Characteristics and division of food additives used in food industry – 2h<br>5. Food Safety legislation. Review of available scientific evidence of influence of consumption of food additives and genetically modified food – 2h |
| Practical classes – not applicable |
| Other – not applicable |
| **Basic literature** (list according to importance, no more than 3 items)<br>1. Mahan L. „Krause's Food and Nutrition Therapy" Saunders Elsevier, 2008<br>2. Victor Tutelyan "Genetically Modified Food Sources 1st Edition" Elsevier 2013<br>**Additional literature and other materials** (no more than 3 items)<br>1. Yasmine Motarjemi "Encyclopedia of Food Safety" Elsevier 2013 |
| **Didactic resources requirements** (e.g. laboratory, multimedia projector, other...)<br>Laptop, projector |
| **Preliminary conditions** (minimum requirements to be met by the student before starting the module/course)<br>Basics of physiology, genetics and public health |
| **Conditions to receive credit for the course** (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be med by the student to pass it and criteria for specific grades)<br>Presence and active attendance in the classes, preparation of presentation on chosen topic. Each absence must be made up, including rector's days or dean's hours. |

| **Grade:** | **Criteria** (only for courses/modules ending with an examination) |
|---|---|
| Very Good (5.0) | Student knows basic definitions of the scope of genetics. Student can explain by herself/himself the technics of obtaining genetically modified food. Student can explain by herself/himself potential benefits and threats of using genetically modified food. Student know the consequences of improper nutrition, especially the consumption of processed foods; Student knows possible health effects of consumption of some of the food additives. Student knows basic division and characteristics of food additives. |
| Good Plus (4.5) | Student knows basic definitions of the scope of genetics. Student can explain, with help of the teacher, the technics of obtaining genetically modified food. Student can explain with help of the teacher, potential benefits and threats of using genetically modified food. Student know the consequences of improper nutrition, especially the consumption of processed foods; Student knows possible health effects of consumption of some of the food additives. Student knows basic division and characteristics of food additives. |
| Good (4.0) | Student can name the technics of obtaining genetically modified food. Student can name potential benefits and threats of using genetically modified food. Student knows basic division and characteristics of food additives. |
| Satisfactory Plus (3.5) | Student can name potential benefits and threats of using genetically modified food. Student knows basic division and characteristics of food additives. |

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|---|---|
| Satisfactory (3.0) | Student can name potential benefits and threats of using genetically modified food. Student knows basic division of food additives. |
| | **Criteria** (only for courses/modules ending with e credit) |
| Credit | Does not apply to the Faculty of Medicine |

| **Grade:** | **Criteria** (examination evaluation criteria) |
|---|---|
| Very Good (5.0) | |
| Good Plus (4.5) | |
| Good (4.0) | |
| Satisfactory Plus (3.5) | |
| Satisfactory (3.0) | |
| Unit realizing the subject | Katedra i Zakład Medycyny Społecznej (Department of Social Medicine) |
| Unit address | Bujwida 44, 50-345 Wrocław |
| Telephone | 71 3282145 |
| E-Mail | agnieszka.cieslak@umed.wroc.pl |

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|---|---|
| Person responsible for module | mgr Alicja Basiak-Rasała |
| Coordinator | mgr Alicja Basiak-Rasała |
| Telephone | **71 328 21 43** |
| E-Mail | alicja.basiak-rasala@umed.wroc.pl |

| **List of persons conducting specific classes** | | | | |
|---|---|---|---|---|
| **Full name** | **Degree/scientific or professional title** | **Discipline** | **Performed profession** | **Form of classes** |
| Alicja Basiak-Rasała | mgr | Health Sciences | Assistant | seminars |
| | | | | |
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**Date of Syllabus development**

30.09.2020

**Syllabus developed by**

Alicja Basiak-Rasała

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**Signature of Head of teaching unit**

Uniwersytet Medyczny we Wrocławiu
KATEDRA I ZAKŁAD
MEDYCYNY SPOŁECZNEJ
kierownik

dr hab. n. med. Katarzyna Zatońska, prof. nadzw.

Signature of Faculty Dean

Wrocław Medical University
Faculty of Medicine
Vice-Dean for Student Affairs

prof. Beata Sobieszczańska, PhD