



| Educational objectives (max. 6 items) | | | | |
|---|----------------------------------|--|---|---|
| C1. The basic knowledge of neoplastic pathology with selected elements of cytogenetic and molecular mechanisms | | | | |
| C2. The basic knowledge of cancer immunology | | | | |
| C3. Elementary information on cellular results of chemotherapy and radiotherapy | | | | |
| 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 <i>**enter the abbreviation</i> |
| K 01 | B.W17 | A student knows the definition of genes expression in cancer pathology, defines intra- and extracellular conditions of cancerogenesis, describes the most significant cellular signal paths and metabolic differences of cancer cells. A student can define the most important techniques in molecular and cytogenetic cancer diagnostics. | Presentation, oral response | SE |
| S 01 | C.U3. | A student is able to make reasonable decisions on cytogenetic and molecular diagnostic, particularly in cancer conditions | Oral response | 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 | | | | |
| Student's amount of work (balance of ECTS points) | | | | |
| Student's workload (class participation, activity, preparation, etc.) | | | Student Workload (h) | |
| 1. Contact hours: | | | 10 | |
| 2. 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) | | | | |
| Seminars | | | | |
| 1. Cancer molecular basics, intracellular signal paths. Specificities of cancer cells metabolism, the significance of immunological surveillance in cancerogenesis; molecular differences of leukemias and lymphomas | | | | |
| 2. Basic molecular and cytogenetic techniques in cancer diagnostics | | | | |
| Basic literature (list according to importance, no more than 3 items) | | | | |
| 1. Christoph Wagoner et al. Cancer Signaling, Enhanced Edition: From Molecular Biology to Targeted Therapy. 2016 | | | | |
| 2. Rita Fior et al. Molecular and Cell Biology of Cancer. 2019 | | | | |
| Didactic resources requirements (e.g. laboratory, multimedia projector, other...) Multimedia projector, laptop | | | | |
| Preliminary conditions (minimum requirements to be met by the student before starting the module/course) | | | | |
| Elementary knowledge of cells biology: DNA replication and repair, transcription, point mutations | | | | |
| Conditions to receive credit for the course (specify the form, criteria 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 met by the student to | | | | |



pass it and criteria for specific grades).

Each absence must be made up, including rector's days or dean's hours.

Presence in classes, oral response:

| Grade: | Criteria for course |
|-------------------------|--|
| Very Good (5.0) | achieving targeted education in all aspects, exceeding the topic coverage delivered by primary seminars; ability to fluently and creatively apply the acquired knowledge to explain complicated problems |
| Good Plus (4.5) | achieving targeted education in all important aspects, within the topic coverage delivered by primary seminars; ability to apply the acquired knowledge to explain complicated problems |
| Good (4.0) | achieving targeted education in all important aspects, within the topic coverage delivered by primary seminars; ability to apply the acquired knowledge to explain typical problems |
| Satisfactory Plus (3.5) | achieving targeted education in most important aspects, within the topic coverage delivered by primary seminars; ability to apply the core elements of acquired knowledge to explain typical problems |
| Satisfactory (3.0) | achieving targeted education in all basic aspects, with omission of important but not critical part of topics; ability to apply basic elements of acquired knowledge to explain simple problems |

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| Name of unit teaching course: | Department of Cancer Prevention and Therapy |
| Address | 50-556 Wrocław, ul. Borowska 213 |
| Phone | 71 734 40 00 |
| E-mail | |

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|---------------------------------------|--|
| Person responsible for course: | Aleksandra Butrym, MD, PhD, Assist. Prof. |
| Phone | 71 736 40 00 |
| E-mail | aleksandra.butrym@umed.wroc.pl |

| List of persons conducting specific classes: | degree/scientific or professional title | Discipline | Performer profession | Form of classes |
|--|---|----------------|----------------------|-----------------|
| Aleksandra Butrym | MD, PhD, assist. Prof. | hematooncology | MD, academic | SE |
| Jarosław Dybko | MD, PhD | hematooncology | MD, academic | SE |
| Siddarth Agrawal | MD | | MD, academic | SE |

Date of Syllabus development

23. 09. 2019

Syllabus developed by
Uniwersytet Medyczny we Wrocławiu
ZAKŁAD PROFILAKTYKI I LECZENIA
CHOROÓB NOWOTWOROWYCH
adiunkt dydaktyczny
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Signature of Head of teaching unit

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Signature of Faculty Dean
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