

**Karta opisu zajęć (syllabus)**

Nazwa kierunku studiów	Biocosmetology
Nazwa modułu, także nazwa w języku angielskim	Skin cancer
Język wykładowy	English language
Rodzaj modułu	Optional
Poziom studiów	Bachelor's
Forma studiów	Extramural
Rok studiów dla kierunku	IV
Semestr dla kierunku	8
Liczba punktów ECTS z podziałem na kontaktowe/niekontaktowe	3 (1.32/1.68)
Tytuł naukowy/stopień naukowy, imię i nazwisko osoby odpowiedzialnej za moduł	Beata Horecka, PhD
Jednostka oferująca moduł	Institute of Biological Bases of Animal Production
Cel modułu	Getting acquainted with theories of aging and the factors influencing the aging of the organism, especially the skin, as well as with internal and external factors that delay the aging process. Acquainting with the carcinogenesis process and methods of diagnostics, mainly in relation to skin neoplasms.
Efekty uczenia się dla modułu to opis zasobu wiedzy, umiejętności i kompetencji społecznych, które student osiągnie po zrealizowaniu zajęć.	Knowledge:
	1. knows the basic theories of aging
	2. knows the course of the carcinogenesis process
	Skills:
	1. is able to list internal and external factors influencing the aging process
	2. can characterize the methods of skin cancer diagnosis
	3. is able to prepare and present a short statement on a given topic, using the available multimedia tools
Social competences:	
1. takes part in the discussion by presenting essential arguments	
Wymagania wstępne i dodatkowe	-
Treści programowe modułu	Basic concepts - definitions and features of aging. Evolutionary aging. Aging at the cellular level. Proliferation, aging and cell death. Theories of the aging process: protein glycation, mitochondrial and

	free radical theory of aging. Dietary restriction and life expectancy and aging. Genetic basis of the aging process. Telomeric aging theory. Skin aging. Factors accelerating and inhibiting the aging process of the organism. The influence of physical activity on the aging process. Genetic basis of carcinogenesis. Clonal evolution. Proto-oncogenes and oncogenic viruses. Principles of inheritance of cancer predisposition. Genetic background and molecular diagnostics of neoplasms. Characteristics of skin neoplasms.																								
Wykaz literatury podstawowej i uzupełniającej	<b>Basic literature:</b> 1. McDonald R.B.: Biology of Aging. Garland Science 2013. <b>Supplementary literature:</b> 1. Dwivedi, A., Agarwal, N., Ray, L., Tripathi, A.K. (Eds.): Skin Aging & Cancer. Springer 2019.																								
Planowane formy/działania/metody dydaktyczne	Lecture - multimedia presentation, laboratory practicals - group experiments, auditorium practicals - preparation and presentation of the project, discussion																								
Sposoby weryfikacji oraz formy dokumentowania osiągniętych efektów uczenia się	<u>Ways of verifying the achieved learning outcomes:</u> W1, W2: Written exam. Obtaining the appropriate percentage of the sum of points assessing the level of required knowledge/skills: 2.0 <51% 3.0 - 51-60% 3.5 - 61-70% 4.0 - 71-80% 4.5 - 81-90% 5.0 > 91-100% U1, U2, U3: Preparation and presentation of a multimedia presentation. K1: Group work, participation in the discussion. <u>Forms of documentation of the achieved learning outcomes:</u> archiving of final exams, reports from practicals, presentations, lecturer's notes.																								
Bilans punktów ECTS	<p style="text-align: center;"><b>CONTACT</b></p> <table border="1"> <thead> <tr> <th>Form of classes</th> <th>Number of hour</th> <th>ECTS credits</th> </tr> </thead> <tbody> <tr> <td>Lecture</td> <td>10 h</td> <td>0,40 ECTS</td> </tr> <tr> <td>Practicals</td> <td>15 h</td> <td>0,60 ECTS</td> </tr> <tr> <td>Consultations</td> <td>6 h</td> <td>0,24 ECTS</td> </tr> <tr> <td>Final exam</td> <td>2 h</td> <td>0,08 ECTS</td> </tr> <tr> <td><b>Total contact</b></td> <td><b>33 h</b></td> <td><b>1,32 ECTS</b></td> </tr> </tbody> </table> <p style="text-align: center;"><b>NON-CONTACT</b></p> <table border="1"> <tbody> <tr> <td>Preparation of presentation</td> <td>6 h</td> <td>0,24 ECTS</td> </tr> <tr> <td>Literature</td> <td></td> <td></td> </tr> </tbody> </table>	Form of classes	Number of hour	ECTS credits	Lecture	10 h	0,40 ECTS	Practicals	15 h	0,60 ECTS	Consultations	6 h	0,24 ECTS	Final exam	2 h	0,08 ECTS	<b>Total contact</b>	<b>33 h</b>	<b>1,32 ECTS</b>	Preparation of presentation	6 h	0,24 ECTS	Literature		
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	studying 10 h 0,40 ECTS Preparation to final exam 10 h 0,40 ECTS Preparation of reports 16 h 0,64 ECTS <b>Total non-contact 42 h 1,68 ECTS</b>
	<b>The total student's workload is 75 hours, which corresponds to 3 ECTS points</b>
Nakład pracy związany z zajęciami wymagającymi bezpośredniego udziału nauczyciela akademickiego	Participation in lectures - 10 hours Participation in exercises - 15 hours Participation in consultations - 6 hours Participation in the final exam - 2 hours <b>A total of 33 hours, which corresponds to 1.32 ECTS points</b>
Odniesienie modułowych efektów uczenia się do kierunkowych efektów uczenia się	W1 – BK_W01 W2 – BK_W02 U1 – BK_U04 U2 – BK_U01 U3 - BK_U10 K1 – BK_K03