A COURSE SYLLABUS – DOCTORAL SCHOOL
REGARDING THE QUALIFICATION CYCLE FROM 2020 TO 2024
AND FROM 2021 TO 2025

GENERAL INFORMATION ABOUT COURSE	
Course title	Innovative methods of treating chronic wounds, including cancer
Name of the unit running the course	**DOCTORAL SCHOOL of the University of Rzeszow**
Type of course *(obligatory, optional)*	Optional
Year and semester of studies	II and III, sem. IV and VI
Discipline	Health Sciences
Language of Course	Polish
Name of Course coordinator	Dr hab. prof. UR Dariusz Bazaliński
Name of Course lecturer	Dr hab. prof. UR Dariusz Bazaliński
Prerequisites	Knowledge of human nutrition. Knowledge in the field of immunology.

BRIEF DESCRIPTION OF COURSE
(100-200 words)

The incidence of damage to the skin and subcutaneous tissue in the lower limbs in the course of vascular diseases (DFU diabetes food ulcer, PAD peripheral arterosclerosis diseases, CVI chronic venous insufficiency) is a global problem and concerns an increasing group of chronically ill patients. Ineffectively implemented therapeutic strategies and difficulties in maintaining continuity of patient care are the main problems faced by health care systems. The still low self-awareness of prophylaxis and prehabilitation in this group of patients contributes to prolonged treatment time and the risk of secondary infections. Huge financial outlays are allocated to supply this group of patients. The cost of treating chronic wounds is high, accounting for approximately 1-3% of total healthcare expenditure in developed countries. Data from the United States indicate that more than 2% of the population or nearly 5.7 million people with chronic wounds represent a financial burden of USD 20 million. Chronic wounds contribute to a decline in productivity, occuring in a group of patients who are professionally active, predispose to absenteeism and social isolation. It is necessary to strive for the shortest possible wound treatment time, minimizing the causes that interfere with this process.

COURSE LEARNING OUTCOMES AND METHODS OF EVALUATING LEARNING OUTCOMES

LEARNING OUTCOME	The description of the learning outcome defined for the course	Relation to the degree programme outcomes (symbol)	Learning Format (Lectures, classes,...)	Method of assessment of learning outcomes (e.g. test, oral exam, written exam, project,...)
Knowledge (no.)	**Knows and understands**			
1.	To the extent that allows the revision of existing paradigms - world achievements, including theoretical foundations as well as general issues and selected specific issues in the treatment of chronic wounds.	**P8S-WG/1**	Lecture	Written exam
2.	The main trends in the development of health	**P8S-WG/2**	Lecture	Written exam

	sciences in the treatment of chronic wounds.			
3.	Methodology of scientific research in the field of prevention and treatment of chronic wounds	**P8S-WG/3**	Lecture	Written exam
Skills (no.)	**Potrafi**			
1.	Use knowledge from various fields of science to identify and innovatively solve complex issues in the treatment of chronic wounds	**P8S-UW/1**	classes	Project
2.	Make a critical analysis and evaluation of the results of scientific research on the subject of the treatment of chronic wounds	**P8S-UW/2**	classes	Project
3.	Communicate on specialist topics and initiate debate.	**P8S-UK/1** **P8S-UK/3**	classes	Supervisor observation, self-assessment
4.	Disseminate the results of scientific activity, also in popular forms	**P8S-UK/2**	classes	Supervisor observation, self-assessment
5.	Participate in scientific discourse	**P8S-UK/4**	classes	Supervisor observation, self-assessment
Social competence (no.)	**Is ready to**			
1.	Recognize the importance of knowledge in solving cognitive and practical problems.	**P8S-KK/3**	classes	Supervisor observation, group assessment, self-assessment
2.	A critical assessment of achievements within the discipline of health science	**P8S-KK/1**	classes	Supervisor observation, group assessment, self-assessment
3.	Act for public interest	**P8S-KO/2**	classes	Supervisor observation, group assessment, self-assessment
LEARNING FORMAT – NUMBER OF HOURS				

Semester (no.)	Lectures	Seminars	Lab classes	Internships	others	ECTS
IV and VI	5	10	——	———	—	0

METHODS OF INSTRUCTION

Lecture: lecture with multimedia presentation in contact form
Classes: analysis of texts with discussion, project method, group work (solving tasks, discussion) - classes conducted using the traditional method

COURSE CONTENT

Lectures:
Selected methods of supporting wound treatment in practice and world literature

Lab classes:
Preparation of a literature review in the selected scope of controlled therapy
negative pressure, thermal imaging, medical maggots, hirudotherapy , the use of Manuka honey, oxygen hyperbaric therapy

COURSE ASSESSMENT CRITERIA

Assessment criteria:

Classes:
1. full participation and activity of the student during classes,
2. assessment of preparation for classes,
3. discussion during classes,
4. checking knowledge during classes,
5. analysis of professional literature,
6. preparation of projects,

Knowledge Assessment:
Written test

5.0 - demonstrates knowledge of each of the content of education at the level of 92%-100%
4.5 - demonstrates knowledge of each of the content of education at the level of 84%-91%
4.0 - demonstrates knowledge of each of the content of education at the level of 76%-83%
3.5 - demonstrates knowledge of each of the content of education at the level of 68%-75%
3.0 - demonstrates knowledge of each of the content of education at the level of 60%-67%
2.0 - demonstrates knowledge of each of the content of education below 60%

Methods of verification of learning outcomes in the field of skills:

Skill assessment
5.0 - PhD student actively participates in classes, is well prepared, knows issues related to immunomodulatory nutrition very well.
4.5 - PhD student actively participates in classes, knows the issues related to immunomodulatory nutrition well.
4.0 - PhD student actively participates in classes, is corrected, knows issues related to immunomodulatory nutrition well.
3.5 - PhD student participates in classes, his/her scope of preparation does not allow for a comprehensive presentation of the discussed problem, he/she is sufficiently familiar with issues related to immunomodulatory nutrition, he/she is often corrected.
3.0 - PhD student participates in classes, knows issues related to immunomodulatory nutrition, but often makes mistakes.
2.0 - PhD student passively participates in classes, statements are factually incorrect, does not know

issues related to immunomodulatory nutrition, is often corrected.

TOTAL PhD STUDENT WORKLOAD REQUIRED TO ACHIEVE THE INTENDED LEARNING OUTCOMES – NUMBER OF HOURS AND ECTS CREDITS	
Activity	Number of hours
Scheduled course contact hours	15
Other contact hours involving the teacher (consultation hours, examinations)	-
Non-contact hours – student`s own work (preparation for classes or examinations, project, etc.)	-
Total number of hours	15
Total number of ECTS credits	0

INSTRUCTIONAL MATERIALS	
COMPULSORY LITERATURE:	1. Szewczyk MT, Jawień A. (red.): Leczenie ran przewlekłych. PZWL. Warszawa 2019 2. Frank Stadler (ed.), A Complete Guide to Maggot Therapy: Clinical Practice, Therapeutic Principles, Production, Distribution, and Ethics. Cambridge, UK: Open Book Publishers, 2022, https://doi.org/10.11647/OBP.0300 3. Martin Grassberger (Editor), Ronald A. Sherman (Editor), Olga S. Gileva (Editor): Biotherapy - History, Principles and Practice: A Practical Guide to the Diagnosis and Treatment of Disease using Living Organisms. Springer; Softcover reprint of the original 1st ed. 2013 edition
COMPLEMENTARY LITERATURE:	1. Cai F, Jiang X, Hou X, Wang D, Wang Y, Deng H, Guo H, Wang H, Li X. Application of infrared thermography in the early warning of pressure injury: A prospective observational study. J Clin Nurs. 2021; 30(3-4):559-571. 2. Jiang X, Wang Y, Wang Y, Zhou M, Huang P, Yang Y, Peng F, Wang H, Li X, Zhang L, Cai F. Application of an infrared thermography-based model to detect pressure injuries: a prospective cohort study. Br J Dermatol. 2022;187(4):571-579 3. Ali Hussain M. Life can't be any easier than this – introduction of the portable and disposable VAC machines. Mod Plast Surg 2012; 02: 24-27. 4. Lim X, Zhang L, Hong Q i wsp. Novel home use of mechanical nega-tive pressure wound therapy in diabetic foot ulcers. J Wound Care 2021; 30: 1006-1010

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Date and signature of the Course lecturer

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Approved by the Head of the Department or an authorised person