Appendix No. 1.5 to the Resolution No. 7/2023

of the Rector of the University of Rzeszów

**SYLLABUS**

**regarding the qualification cycle FROM 2024 TO 2025**

**Academic year 2024/2025**

1. Basic Course/Module Information

|  |  |
| --- | --- |
| Course/Module title | Nutrition, Aging and Health |
| Course/Module code \* |  |
| Faculty (name of the unit offering the field of study) | Collegium of Natural Science |
| Name of the unit running the course | Institute of Food Technology and Nutrition |
| Field of study | Food Technology and Human Nutrition |
| Qualification level | first-degree studies / second-degree studies |
| Profile |  |
| Study mode | stationary |
| Year and semester of studies | 2024/2025 |
| Course type | lecture |
| Language of instruction | English |
| Coordinator | Dr inż. Katarzyna Rolf |
| Course instructor | Dr inż. Katarzyna Rolf |

\* - as agreed at the faculty

1.1.Learning format – number of hours and ECTS credits

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Semester  (n0.) | Lectures | Classes | Laboratories | Seminars | Practical classes | Internships | others | **ECTS credits** |
|  | 30 |  |  |  |  |  |  | 5 |

1.2. Course delivery methods

- conducted in a traditional way

1.3. Course/Module assessment (exam, pass with a grade, pass without a grade)

pass with a grade

2. Prerequisites

|  |
| --- |
| Human nutrition |

3. Objectives, Learning Outcomes, Course Content, and Instructional Methods

3.1. Course/Module objectives

|  |  |
| --- | --- |
| O1 | Description of the relationships among nutrition, aging and health including the current and projected aged European population. |
| O2 | Description of the nutritional needs, limitations (economic, physical, behavioural, etc) to meeting those needs. |
| O3 | Description of aged disease prevention by diet. |

3.2. Course/Module Learning Outcomes (to be completed by the coordinator)

|  |  |  |
| --- | --- | --- |
| Learning Outcome | The description of the learning outcome  defined for the course/module | Relation to the degree programme outcomes |
| LO\_01 | students will be known trends related to human nutrition, the principles of rational nutrition in a holistic approach and understands the operation of selected diets, especially in the context of aging | K\_W02 |
| LO\_02 | students will be able to describe and apply methods of nutrition screening and assessment for older adults | K\_U08 |
| LO\_03 | student will be able to assess which products available on the market should be used in everyday nutrition, depending on the needs of the body | K\_K05 |

**3.3. Course content (to be completed by the coordinator)**

1. Lectures

|  |
| --- |
| Content outline |
| Physiology of aging |
| Nutrition of elderly, nutrients and energy requirement |
| Anti-inflammatory components of diet |
| Physical and mental activity of the elderly |
| Assessment of nutritional status |
| Malnutrition |
| Frailty syndrome and sarcopenia |

3.4. Methods of Instruction

e.g.

*Lecture: a problem-solving lecture/a lecture supported by a multimedia presentation/ distance learning*

*Classes: text analysis and discussion/project work (research project, implementation project, practical project)/ group work (problem solving, case study, discussion)/didactic games/ distance learning*

*Laboratory classes: designing and conducting experiments*

Lecture: a lecture supported by a multimedia presentation, group work

4. Assessment techniques and criteria

4.1 Methods of evaluating learning outcomes

|  |  |  |
| --- | --- | --- |
| Learning outcome | Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes) | Learning format (lectures, classes,…) |
| LO-01 | written exam | lectures |
| LO-o2 | written exam, individual work | lectures |
| LO-o3 | written exam, individual work | lectures |

4.2 Course assessment criteria

|  |
| --- |
| The grade of the subject is the average of the grades for the exam and individual work.  The grade of exam is determined by the total points of the exam. Passing > 50% of the maximum number of points: satisfactory (3) 51-60%, satisfactory plus (3+) 61-70%, good (4) 71-80%, good plus (4+) 81-90%, very good (5) > 90%.  Requirement is to reach all learning outcomes. |

5. Total student workload needed to achieve the intended learning outcomes

– number of hours and ECTS credits

|  |  |
| --- | --- |
| Activity | Number of hours |
| Course hours | 30 |
| Other contact hours involving the teacher (consultation hours, examinations) | 40 |
| Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.) | 55 |
| Total number of hours | 125 |
| Total number of ECTS credits | 5 |

\* One ECTS point corresponds to 25-30 hours of total student workload

6. Internships related to the course/module

|  |  |
| --- | --- |
| Number of hours | *-* |
| Internship regulations and procedures | *-* |

7. Instructional materials

|  |
| --- |
| Compulsory literature:   * + - 1. ONZ. World Population Aging 2017. Department of Economic and Social Affairs Population Division, United Unions: New York, NY, USA, 2017; ISBN 978-92-1-151551-0.       2. Eurostat: Ageing Europe, Looking at the lives of older people in the EU – 2020 edition. Publications Office of the European Union, Luxembourg 2019, ISBN 978‑92‑76‑09814‑0.       3. Eurostat: Active ageing and solidarity between generations - A statistical portrait of the European Union – 2012 edition. Publications Office of the European Union, Luxembourg 2011. ISBN 978-92-79-21507-0       4. Noel, M.; Reddy, M. Nutrition and aging. Prim Care 2005, 32, 659–669.       5. Remond, D.; Shahar, D.R.; Gille, D.; Pinto, P.; Kachal, J.; Peyron, M.-A.; dos Santos, C.N.;Walther, B.; Bordoni, A.; Dupont, D.; et al. Understanding the gastrointestinal tract of the elderly to develop dietary solutions that prevent malnutrition. Oncotarget 2015, 6, 13858–13898. |
| Complementary literature:  BarberiL., Scicchitano B.M., De Rossi M. et al. Age-dependent alteration in muscle regeneration: the critical role of tissue niche. Biogerontology 2013, 14, 273-292.  Arabi A., Baddoura R., El-Rassi R., El-Hajj Fuleihan G. PTH level but not 25 (OH) vitamin D level predicts bone loss rates in the elderly. Osteoporos Int, 2012, 23 (3), 971-980. Chen X., Mao G., Leng S.X. Frailty syndrome: an overview. [Clin Interv Aging](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3964027/) 2014, 9, 433-441. |

Approved by the Head of the Department or an authorised person