**SYLLABUS**

**regarding the qualification cycle FROM 2023 TO 2024**

1. Basic Course/Module Information

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| --- | --- |
| 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  | second-degree studies |
| Profile |  |
| Study mode | stationary |
| Year and semester of studies | 2023/2024 |
| 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 | Colloquia | Lab classes | 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

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| 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, behavioral, 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

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| 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

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/test | lectures |
| LO-o2 | written exam/test | lectures |
| LO-o3 | written exam/test | lectures |

4.2 Course assessment criteria

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| --- |
| The grade of the subject is determined by the total points of the exam. Passing > 50% of the maximum number of points: satisfactory 51-60%, satisfactory plus 61-70%, good 71-80%, good plus 81-90%, very good> 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 |
| Scheduled course contact 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