

Subject card

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|---|---|--|--|------------|--|---------|-----|
| Subject name and code | Biomolecules - lecture, PG_00199612 | | | | | | |
| Field of study | Oceanography | | | | | | |
| Date of commencement of studies | October 2026 | Academic year of realisation of subject | | | 2027/2028 | | |
| Education level | Bachelor's studies | Subject group | | | Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study | | |
| Mode of study | full-time studies | Mode of delivery | | | at the university | | |
| Year of study | 2 | Language of instruction | | | Polish | | |
| Semester of study | 4 | ECTS credits | | | 2.0 | | |
| Learning profile | academic | Assessment form | | | exam | | |
| Conducting unit | Laboratory of Marine Biotechnology -> Department of Marine Biology and Biotechnology -> Faculty of Oceanography and Geography -> Rector | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | prof. dr hab. Hanna Mazur-Marzec | | | | | |
| | Teachers | | | | | | |
| Lesson types | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30 |
| | E-learning hours included: 0.0 | | | | | | |
| Learning activity and number of study hours | Learning activity | Participation in didactic classes included in study plan | Participation in consultation hours | | Self-study | SUM | |
| | Number of study hours | 30 | 2.0 | | 18.0 | 50 | |
| Subject objectives | Students acquire basic knowledge about marine biomolecules, their sources, structure, properties, biosynthetic pathways and significance in the functioning of marine organisms and the environment. Students will understand the role and application of marine biomolecules in environmental studies and human life. | | | | | | |
| Learning outcomes | Course outcome | | Subject outcome | | Method of verification | | |
| | [OCEANL3-W02] has a broad knowledge and understanding of physical, biological, chemical, and geological processes and phenomena occurring in aquatic environments, with particular emphasis on the marine environment | | Student knows and understands basic biological processes related to the synthesis, properties and significance of biomolecules occurring in marine environment | | [SW4] test/exam - oral or written | | |
| Subject contents | Chemical evolution and their role in evolution of life on Earth, chemical bonds in organic molecules, hydrocarbons - classification, structure, properties, isomerism and its biological significance, amino acids, peptides, proteins (enzymes, hemoglobins and other oxygen transporting proteins, collagen), nucleic acids, carbohydrates, lipids, fatty acids - structure, function, environmental significance; principles of immunology, application of antibodies in natural sciences. | | | | | | |
| Prerequisites and co-requisites | | | | | | | |
| Assessment methods and criteria | Subject passing criteria | | Passing threshold | | Percentage of the final grade | | |
| | Exam | | 51.0% | | 100.0% | | |
| Recommended reading | Basic literature | | Bańkowski E., 2020, Biochemia Wyd.: Edra Urban&Partner; John McMurry. PWN, Ferrer D.R., 2021, Biochemia, Wyd. Edra Urban & Partner. | | | | |
| | Supplementary literature | | Tymoczko J.L., Berg J.M., Stryer L., 2018. Biochemia. Wydawnictwo Naukowe PWN. | | | | |

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| | eResources addresses | |
| Example issues/ example questions/ tasks being completed | | |
| Work placement | Not applicable | |

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