


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


| | | | |
|---|-----------------------|--|---|
| Course title | | ECTS code | |
| Principles of marine biotechnology - e-learning course | | 13.8.1107 | |
| Name of unit administrating study | | | |
| null | | | |
| Studies | | | |
| faculty | field of study | type | second tier studies (MA) |
| Faculty of Oceanography and Geography | Oceanography | form | full-time |
| | | specialty | Geological, Physical and Chemical Oceanography |
| | | specialization | all |
| Faculty of Oceanography and Geography | Oceanography | type | second tier studies (MA) |
| | | form | full-time |
| | | specialty | Biological Oceanography |
| | | specialization | , Marine biology, Protection and management of marine resources |
| Teaching staff | | | |
| prof. dr hab. Hanna Mazur Marzec; dr Anna Toruńska Sitarz; dr Agata Błaszczyk | | | |
| Forms of classes, the realization and number of hours | | ECTS credits | |
| Forms of classes | | 2 | |
| Auditorium classes | | Classes that require direct contribution of the academic teacher: | |
| The realization of activities | | Number of ECTS points: 1,25 | |
| online classes | | Total number of hours: 34 | |
| Number of hours | | Form of activity and number of hours: | |
| Auditorium classes: 30 hours | | - lectures: 30 | |
| | | - exam: 2 | |
| | | - consultations: 2 | |
| | | Students' unassisted work | |
| | | Number of ECTS points: 0.75 | |
| | | Total number of hours: 20 | |
| | | Form of activity and number of hours: | |
| | | - preparing for the exam / credit (studying literature): | |
| | | 20 | |
| The academic cycle | | | |
| 2022/2023 summer semester | | | |
| Type of course | | Language of instruction | |
| an elective course | | english | |
| Teaching methods | | Form and method of assessment and basic criteria for evaluation or examination requirements | |
| - seminar lecture | | Final evaluation | |
| - text analysis and discussion | | Graded credit | |
| | | Assessment methods | |
| | | - assignment work – project or presentation | |
| | | - written exam (long written answer/problem solving) | |
| | | The basic criteria for evaluation | |
| | | 51% of the total score, according to UG regulations | |
| Method of verifying required learning outcomes | | | |
| Required courses and introductory requirements | | | |
| A. Formal requirements | | | |

| | |
|--|--|
| a computer with a stable internet connection | |
| B. Prerequisites basic courses in biology and chemistry | |
| Aims of education Mastering knowledge about the possibilities of biotechnological application of marine organisms. | |
| Course contents B.1. Selected marine natural products used in different branches of human activity (e.g. as energy , biomaterials, pharmaceuticals, nutraceuticals, functional food, cosmetics) B.2. Methods applied to obtain natural products for commercial use B.3. Assessment of biotechnological potential of marine natural products B.4. Detection, isolation, and identification of natural products B.5. Implementation and use of marine natural products in biotechnology and pharmacology | |
| Bibliography of literature Se-Kwon Kim., 2015. Handbook of Marine Biotechnology. Springer Scheper., 2011. Marine biotechnology I and II. Springer Selected articles from the journals: Marine Drugs and Marine Biotechnology | |
| The learning outcomes (for the field of study and specialization) K_W04; K_U04; K_K04 | Knowledge K_Wo4: knows and understands advanced research problems and current research trends in marine biotechnology. |
| | Skills K_U04: Is capable to elaborate the results of the conducted experiments and draw correct conclusions. |
| | Social competence K_K04: Is able to critically assess his knowledge in the area of marine biotechnology. |
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