University of Gdańsk

Subject card

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| Subject name and code | Geomorphology of Sea Coast - laboratory , PG_00205006 | | |
| Field of study | Oceanography | | |
| Date of commencement of studies | October 2026 | Academic year of realisation of subject | 2026/2027 |
| Education level | Master's studies | Subject group | Obligatory subject group in the field of study<br>Optional subject group<br>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 | 1 | Language of instruction | Polish |
| Semester of study | 2 | ECTS credits | 1.0 |
| Learning profile | academic | Assessment form | credit |
| Conducting unit | Faculty of Oceanography and Geography -> Rector | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | dr Patryk Sitkiewicz | |
| | Teachers | | |

| Lesson types | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
|---|---|---|---|---|---|---|---|
| | Number of study hours | 0.0 | 0.0 | 15.0 | 0.0 | 0.0 | 15 |
| | 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 | 15 | 1.0 | 9.0 | 25 |

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| Subject objectives | Knowledge of basic processes and factors influencing the development of the coast and coastal zone; knowledge of coastal types; human influence on coastal zone development; coastal palaeogeography including the Southern Baltic coasts. |

## Learning outcomes

| Course outcome | Subject outcome | Method of verification |
|---|---|---|
| [OCEANMU2-U05] is able to use source information in Polish and a chosen foreign language, including archival and electronic databases, within the field of oceanography; critically analyzes and synthesizes information, and is capable of performing critical interpretation and synthesis of data | Is able to use scientific resources. | [SU1] oral statement/conversation/ discussion |
| [OCEANMU2-U02] is able to fluently and accurately use scientific terminology when presenting and discussing oceanographic issues, and to propose and justify innovative solutions | Understands the geomorphological processes of the coastal zone | [SU1] oral statement/conversation/ discussion |
| [OCEANMU2-U03] can plan and carry out independently advanced research and measurements, both in field and laboratory, using appropriately selected measurement and analytical techniques in the field of oceanography, adequately to the studied specialty and research problem | Is proficient in oceanographic issues, including marine coastal zone processes | [SU1] oral statement/conversation/ discussion |

## Subject contents

Geomorphological processes and forms.Coastal zone dynamics.Human influence on coastal zone development.

## Prerequisites and co-requisites

## Assessment methods and criteria

| Subject passing criteria | Passing threshold | Percentage of the final grade |
|---|---|---|
| presentation of a selected topic | 51.0% | 100.0% |

## Recommended reading

Basic literature


Bird E., 2003, Coastal Geomorphology, J. Wiley & Sons Ltd.

Einsele G., 2000, Sedimentary Basins, Evolution, Facies and Sediment Budget, Springer-Verlag, Berlin.

Leontiew O. K., Nikiforow L. G., Safianow G. A., 1982, Geomorfologia brzegów morskich, Wydawnictwo Geologiczne, Warszawa.

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|---|---|---|
| | Supplementary literature | Allen P. A., 2000, Procesy kształtują powierzchnię Ziemi, Wyd. PWN, Warszawa.<br><br>Klimaszewski M., 1978, Geomorfologia, PWN Warszawa.Lindner L. red., 1992, Czwartorzęd, Wyd. PAE, Warszawa.<br><br>Massel S., 1989, Hydrodynamics of coastal zones, wyd. IBW PAN, Gdańsk.<br><br>Pruszak Z., 1998, Dynamika brzegu i dna morskiego, IBW PAN, Gdańsk.<br><br>Uścinowicz S., 2003, Relative sea level changes, glacio-isostatic rebound and shoreline displacement in the southern Baltic, Polish GeologicalInstitute Special Papers, 10, Warszawa. |
| | eResources addresses | |
| Example issues/ example questions/ tasks being completed | Should we protect coasts against abrasion? Perhaps it's better to abandon such efforts?<br>Ice cover and its role in shaping shorelines<br>The most extreme coastal phenomena global examples<br>Shipwrecks in the coastal zone and their role in morphodynamics<br>Artificial beach nourishment in Poland examples, impacts, and presistance<br>Renaturalization of the coastal zone in Gdańsk<br>Władysławowo Port and coastal erosion on the spit<br>Coastal dunes in Poland and their protection<br>Coral reefs and their role in coastal protection<br>Mangrove forests and their role in coastal protection<br>Mega-nourishment (the Sand Engine) vs. traditional beach nourishment<br>Rocky coasts around the world<br>Dynamics of tidal environments<br>Emerging polar coastlines | |
| Work placement | Not applicable | |

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