

GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

| Subject name and code | GEOLOGY II, PG_00043997 | | | | | | | | |
|--|---|-----------------------------------|--|------------|------------|--|-----------|-----|--|
| Field of study | Civil Engineering | | | | | | | | |
| Date of commencement of studies | October 2021 | | Academic year of realisation of subject | | | 2021/2022 | | | |
| Education level | first-cycle studies | | Subject group | | | 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 | 1 | | Language of instruction | | | Polish | | | |
| Semester of study | 2 | | ECTS credits | | | 2.0 | | | |
| Learning profile | general academic profile | | Assessment form | | | assessment | | | |
| Conducting unit | Department of Geotechnics, Geology and Marine Civil Engineering -> Faculty of Civil and Environmer Engineering | | | | | | ronmental | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | dr inż. Maria Przewłócka, doc. PG | | | | | | | |
| | Teachers | | dr hab. Małgorzata Pruszkowska-Caceres | | | | | | |
| | | | dr inż. Maria Przewłócka, doc. PG | | | | | | |
| | | dr hab. inż. Beata Jaworska-Szulc | | | | | | | |
| Lesson types and methods | Lesson type | Lecture | Tutorial | Laboratory | Projec | t | Seminar | SUM | |
| of instruction | Number of study hours | 0.0 | 0.0 | 0.0 | 15.0 | | 0.0 | 15 | |
| | E-learning hours included: 0.0 | | | | | | | | |
| | Adresy na platformie eNauczanie: Geologia II 2022 - Moodle ID: 21631 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=21631 | | | | | | | | |
| Learning activity and number of study hours | Learning activity Participation in classes include plan | | a didactic Participation in ed in study consultation hours | | Self-study | | SUM | | |
| | Number of study hours | 15 | | 5.0 | | 30.0 | | 50 | |
| Subject objectives | Geining practical skills in recognising and desription of most common minerals and rocks. Become acquainted with diverse geological and hydrogeological data (profiles, maps, cross-sections) and gaining practical knowledge how to interpret it. Learning rules how to draw hydrogeological cross-sections. | | | | | | | | |
| Learning outcomes | Course outcome | | Subject outcome | | | Method of verification | | | |
| | [K6_W15] Has knowlege of construction law and environmetal impact of investment realisation | | Student understands conditions of groundwater occurrence and the necessity of it's protection. | | | [SW1] Assessment of factual knowledge | | | |
| | [K6_W07] has basic knowlede on natural processes (hydrological, hydraulical or geological) and its influence on building subsoil; understands specific aspects of surface and underground water, which constraints the design and exploitation of buildings and engineering objects | | Student describes geological processess influencing forming of rocks. Student interprets conditions of groundwater occurrence. | | | [SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects | | | |
| | [K6_U14] can read geological maps and profiles, recognizes most popular rocks and minerals, recognizes the soil-water conditions of construction site | | Student recognizes and describes basic rock forming minerals and rocks: igneous, sedimentary and metamorphic. Student analyzises and interprets hydrogeologocal maps and cross-sections; draws hydrogeological cross-sections on the basis of hydrogeological profiles | | | [SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information | | | |

| Subject contents | Minerals (definition, basic physical properties, origin, recognition of common minerals); igneous, sedimentary, metamorphic rocks (origin, mineral composition, textures, classification, recognition), study of hydrogeological maps; drawing of hydrogeological cross-sections; analysis of groundwater occurrence for a chosen region. | | | | | | |
|--|---|--|-------------------------------|--|--|--|--|
| Prerequisites and co-requisites | geography, chemistry (secondary school level) | | | | | | |
| Assessment methods | Subject passing criteria | Passing threshold | Percentage of the final grade | | | | |
| and criteria | Practical exercise | 100.0% | 20.0% | | | | |
| | Class test - minerals | 60.0% | 40.0% | | | | |
| | Class test - rocks | 60.0% | 40.0% | | | | |
| Recommended reading | Basic literature | 1.Mizerski W: Geologia dynamiczna. Wyd. Naukowe PWN,Warszawa 2006 (2004) | | | | | |
| | | 2. Książkiewicz M: Geologia dynamiczna. Wyd. Geologiczne, Warszawa 1979 | | | | | |
| | | Jaroszewski W: Przewodnik do ćwiczeń z geologii dynamicznej. Wyd. Geologiczne, Warszawa 1986 | | | | | |
| | | Czubla P, Mizerski W,Świerczewska-Gładysz E: Przewodnik do ćwiczeń z geologii. Wyd. Naukowe PWN, W-wa 2004 | | | | | |
| | | 5. course materials posted on the departmental website OKNO | | | | | |
| | Supplementary literature | 1. Jaroszewski W,Marks L, Radomski A: Słownik geologii dynamicznej. Wyd. Geologiczne, Warszawa 1985 | | | | | |
| | | 2. Roniewicz P: Przewodnik do ćwiczeń z geologii dynamicznej. Polska Agencja Ekolog., Warszawa 1999 | | | | | |
| | | 3. Thompson &Turk: Modern Physical Geology Saunders College Publishing, 1996 | | | | | |
| | eResources addresses | Geologia II 2022 - Moodle ID: 21631 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=21631 | | | | | |
| Example issues/ example questions/ tasks being completed | How to distinguish between granite and gneiss. Indicate also common properties of the rocks. | | | | | | |
| | What is the hardness of a mineral (according to the Mohse hardness scale) which can be scratched by an iron nail, but not by a fingernail? | | | | | | |
| Work placement | Not applicable | | | | | | |