Academic course description – Example

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| BACHELOR ‘S PROGRAMME1ST YEAR OF STUDY, 2nd SEMESTER |

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| **Course title** | **GENERAL GEOLOGY** |
| Course code | JT1208 |
| Course type | full attendance/ tutorial |
| Course level | 1st cycle (bachelor’s degree) |
| Year of study, semester | 1st year of study, 2nd semester |
| Number of ECTS credits | 5 |
| Number of hours per week | 4 (2 lecture hours + 2 seminar hours) |
| Name of lecture holder | Associate Professor Delia ANDRONE |
| Name of seminar holder | Associate Professor Delia ANDRONE |
| Prerequisites | Advanced level of English  |
| A | **General and course-specific competences** |
|  | **General competences**:* Acquiring the adequate professional and transversal competencies, according to the specific requirements of the subject and the qualifications listed in the National Index of Higher Education Qualifications (RNCIS) for Geography of Tourism

**Course-specific competences**:* Describe the main lithologic - mineralogical characteristics of the igneous, sedimentary and metamorphic terrains, as well as the particularities of the Earth`s major crustal morpho-structures
* Use the geologic maps in order to describe the structural characteristics of the physico-geographic units
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| B | **Learning outcomes** |
|  | * Analyze the geological features of a particular unit, based on geologic materials (*geologic maps, block diagrams, geologic cross sections, lithostratigraphic columns etc*.) and explain the general trends in the palaeogeographic evolution of the substratum
* Design the chapters regarding the geological and structural features of the terrains being studied within a specific geographical frame (*geomorphological, hydro-climate, natural risks, territorial planning etc.*)
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| C | **Lecture content** |
|  | IntroductionEarth`s Internal StructurePlate Tectonics and Lithosphere DynamicsCristallography and MineralogyIgneous PetrologySedimentary PetrologyMetamorphic PetrologyStructural Geology and Geological CartographyGeologic Time ScaleEarth`s Palaeogeographic EvolutionUsing geological knowledge in the Geosystem study |
| D | **Recommended reading for lectures** |
|  | 1. Androne D. (2018). *Geologie generală:* *Introducere în Geologie*. Curs vol. II, Ed. Tehnopress, Iași.2. Armstrong D., Mugglestone F., Richards R., Stratton F. (2008). *Geology*. Heinemann - Pearson Education Ltd., U.K.3. Androne D. (2008). *Geologie generală*: *Mineralogie*. *C*urs vol. I, Ed. Tehnopress, Iaşi.4. Wenk H.R. & Bulakh A. (2004). *Minerals - Their Constitution and Origin*, Cambridge University Press, U.K.5. Har N. (2005). *Petrologie magmatică*. Ed. Casa Cărții de Știință, Cluj-Napoca.6. Iancu O.G. (2007). *Petrologie metamorfică*. Ed. Sedcom Libris, Iași.7. Philipotts A.R. & Ague J.J., (2011). *Principles of Igneous and Metamorphic Petrology*. Cambridge Univ. Press, UK.8. Buzgar N. (2000). *Petrologie sedimentară*. Ed. Univ. ”Al.I.Cuza”, Iași.9. Tucker M. (2008). *Sedimentary Petrology*. *An Introduction to the Origin of Sedimentary Rocks*. Blackwell Publishing, U.S.A.10. Grasu C. (1997). *Geologie structurală*. Ed. Tehnică, București.11. Filipescu S. (2002). *Stratigrafie*. Presa Universitară Clujeană, Cluj.12. Ogg G.J., Ogg G., Gradstein M.F. (2010). *The concise Geologic Time Scale.* Cambridge Univ. Press, UK. |
| E | **Seminar content** |
|  | Geochronology and Chronostratigraphy. Geologic Time Scale.Crystallography: symmetry elements, unit cell, crystallographic systemsClassification and macroscopic determination of mineral speciesClassification and macroscopic determination of igneous rocksClassification and macroscopic determination of sedimentary rocksClassification and macroscopic determination of metamorphic rocksAnalysis and use of geologic maps and cross-sections |
| F | **Recommended reading for seminars** |
|  | 1. Androne D. (2018). *Geologie generală:* *Introducere în Geologie*. Curs vol. II, Ed. Tehnopress, Iași.2. Androne D. (2008). *Geologie generală*: *Mineralogie*. *C*urs vol. I, Ed. Tehnopress, Iaşi.3. Juravle D.-T. (2013). *Caiet de lucrări practice de Geologie generală*. Suport online.4. Anastasiu N. (1977). *Minerale şi roci sedimentare*. *Determinator*. Ed. Tehnică Bucureşti.5. Pellant C. (2000). *Rocks and Minerals - Handbook*. Dorling Kindersley Ltd., London, U.K. |
| G | **Education style** |
| learning and teaching methods | Lecture, explanation, heuristic coversation, video projection |
| assessment methods | Examination + Seminar Grades |
| Language of instruction | English |