

## Anno Accademico 2019/2020

PETROGRAPHY	
Enrollment year	2018/2019
Academic year	2019/2020
Regulations	DM270
Academic discipline	GEO/07 (PETROLOGY AND PETROGRAPHY)
Department	DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES
Course	NATURAL SCIENCES AND TECHNOLOGIES
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	1st semester (01/10/2019 - 15/01/2020)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	WRITTEN TEST
Teacher	REBAY GISELLA - 6 ECTS
Prerequisites	Chemistry and physics as done in first year courses.
Learning outcomes	To be able to describe a rock, to classify igneous and metamorphic rocks and to describe their petrogenesi processes.
Course contents	Igneous and metamorphic rocks: how to recognize and classify them from the description of composition and texture. The mantle. Processes generating magma and intrusive and extrusive magmatic rocks. Magmatism and main geodinamica settings. Factors of metamorphism and the formation of metamorphic rocks. Metamorphic reactions: equilibrium mineralogical associations and phase diagrams. Metamorphic facies, geothermal gradients and relationships with different geodinamica settings. Examples of study of mantle, magmatic and metamorphic rocks at the outcrop and sample scale.
Teaching methods	Frontal lessons.

	Exercises at the blackboard and at home. Group discussion.
Reccomended or required readings	<ul> <li>Klein e Philpotts - Mineralogia e petrografia.2018 - Zanichelli</li> <li>Facultative: <ul> <li>Lucio Morbidelli - Le rocce e i loro costituenti -Bardi Editore.</li> <li>C. D'Amico, F. Innocenti e F.P. Sassi - Magmatismo e metamorfismo.</li> <li>UTET.</li> <li>Arrigo Gregnanin - Elementi di petrografia delle rocce ignee e metamorfiche - ISU Milano.</li> </ul> </li> </ul>
Assessment methods	Written exam for both modules. 10 Open questions and two exercises, as explained in the classroom.
Further information	
Sustainable development goals - Agenda 2030	<u>\$lbl_legenda_sviluppo_sostenibile_</u>