

<b>COURSE: Geochemistry</b>			
<b>ACADEMIC YEAR: 2018-2019</b>			
<b>TYPE OF EDUCATIONAL ACTIVITY: Basic</b>			
<b>TEACHER: Prof. Giovanni Mongelli</b>			
e-mail: <b>giovanni.mongelli@unibas.it</b>		website:	
phone: +39 0971 206181		mobile (optional):	
Language: <b>Italian</b>			
ECTS: <b>8</b> (6 of lesson and 2 of tutorials/practice)	n. of hours: <b>72</b> (48 of lesson and 24 of tutorials/practice)	Campus: <b>Potenza</b> Dept./School: <b>Dipartimento di Scienze</b> Program: <b>Geology (L34)</b>	Semester: second <b>01/03/2018 till 15-20/06/2018)</b>
<b>EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES</b>			
<ul style="list-style-type: none"> <li>○ The main goal of this course is to provide the knowledge useful for studying the chemical composition of relevant terrestrial environments, and in addition to face the mineralogy and petrography courses.</li> <li>○ The principal topics are: <ul style="list-style-type: none"> <li>○ interaction and matter transfer among some of the most relevant geochemical spheres;</li> <li>○ chemical data I: representation, modelization and evaluation of their significance</li> <li>○ <i>chemical data II: a powerful tool for unroofing geological processes</i></li> </ul> </li> </ul>			
<b>PRE-REQUIREMENTS</b>			
Basic knowledge of chemistry and mineralogy			
<b>SYLLABUS</b>			
<b>SYLLABUS</b>			
1- Thermodynamics (4 hours).			
2- Cosmochimistry (2 hours)			
3- The Continental Crust (6 hours).			
4- Water-rock interaction (12 hours).			
5- Isotope Geochemistry (12 hours).			
6- <i>Representation of chemical data (12 hours).</i>			
<b>TEACHING METHODS</b>			
<i>Teacher intended 48 hours to theoretical lessons and 24 hours to classroom and laboratory tutorials. Field trips are also planned. Field and laboratory activities are mandatory.</i>			
<b>EVALUATION METHODS</b>			
<i>At the end of the course a written verifications is planned. The verification test will consist of open-ended questions.</i>			
<b>TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL</b>			
<ul style="list-style-type: none"> <li>○ Textbook: <ul style="list-style-type: none"> <li>○ S.M. Richardson, H.Y. McSween Jr., Geochemistry, pathways and processes. Prentice Hall.</li> <li>○ H.Rollinson, Using geochemical data– evaluation, presentation, interpretation. Longman.</li> <li>○ D.G. Brookins, Eh-pH diagrams for Geochemistry. Springer-Verlag.</li> <li>○ LECTURE NOTES AND LEARNING RESOURCES PROVIDED BY THE TEACHER DURING THE COURSE.</li> </ul> </li> </ul>			
<b>INTERACTION WITH STUDENTS</b>			
The teacher will receive students in his office (on the second floor of the building 3D) on Wednesdays from 10:00 to 12:00 and Thursday from 14:00 to 16:00. The appointment must be agreed by email (giovanni.mongelli@unibas.it).			

EXAMINATION SESSIONS (FORECAST)<sup>1</sup>

23/01/2019; 27/03/2019<sup>8</sup>; 22/05/2019; 26/06/2019; 17/07/2019; 16/10/2019; 18/12/2019.

SEMINARS BY EXTERNAL EXPERTS    YES X    NO

FURTHER INFORMATION

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<sup>1</sup> Subject to possible changes: check the web site of the Teacher or the Department/School for updates.