Subject code: FG-111.8-1	**Subject name: PETROGRAPHY WITH MINERALOGY**		
Ciklus: I	**Year: I**	**Semester: II**	**ECTS credits: 5**
Status: mandatory		**Contact hours: 125** *Lectures: 30* *Exercises: 30*	
Assigned professors and assistants:			
Prerequisits:	/		
Subject objectives:	*Educating students to independently recognize and interpret the characteristisc of petrogenic minerals that occur as essential, secondary and accessory components of rocks. Then training students to independently recognize the structural and textural characteristics of rocks and explain the mineral and chemical composition of rocks. In addition to these features that significantly determine the application of rocks in different branches of industry, students will be able to recognize the way these features appear and explain their classification.*		
Teaching units:	*1. Introduction to mineralogy and petrography* *2. Crystals and aggregates* *3. Physical characteristics of minerals* *4. The genesis or origin of minerals* *5. Division by groups, nesilicate minerals* *6. Silicate minerals* *7. Test I* *8. Rocks and division by origin* *9. Igneous rock, appearance in the lithosphere* *10. Classification of ingenous rocks* *11. Mineral composition, structural and textural characteristics and distribution of igneous rocks* *12. The origin of sedimentary rocks and classification of sedimentary rocks* *13. Mineral composition, structural and textural characteristics and distribution of sedimentary rocks.* *14. Genesis and classification of metamorphic rocks.* *15. Mineral composition, structural and textural characteristics and distribution of metamorphic rocks*		

Learning outcomes:	**Knowledge:** *The student will be able to explain the genesis of minerals, the origin of rocks, student present and interpret the properties of minerals, classify petrogenic minerals according to crystallochemical classification and classify rocks by genesis.* **Skills:** *The student will be able to present and interpret the chemical composition and physical properties of minerals, student present and explain the mineral composition of rocks, describe and recognize the structure and texture of rocks.* **Competencies:** *The student will be able to, independently and in a team, describe and recognize minerals, rock types, lead a discussion and percieve the differences between individual minerals and rock types.*
Teaching methods:	*Lectures are theoretical and practical based on introducing students to the properties and composition of petrogenic minerals and learning about the structural-textural, mineralogical and chemical characteristics of rocks as well as the differentiation amongst minerals and rocks.*
Knowledge testing methods with grading structure [1]:	**Knowledge assessment - criteria:** *Lecture and exercise attendance: maximum 10 - minimum 6 points* *Activity in class: maximum 10 - minimum 5 points* *Test: maximum 40 - minimum 22 points* *Final exam: maximum 40 - minimum 22 points* *Total 100 points, passing requirement: 55 points minimum.* *Assessment:* *Grade — ECTS grade — Points scale* *10 — (A) excellent — 95 – 100* *9 — (B) very good — 85 – 94* *8 — (C) good — 75 - 84* *7 — (D) satisfactory — 66 – 74* *6 — (E) sufficient — 55 – 64* *5 — (F, FX) insufficient — < 55*

[1] The structure of points and point criteria for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught in accordance with Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

Literature[2]:	*MANDATORY:* *Operta, M. (2014): Petrografija, Udžbenik Prirodnomatematičkog fakulteta u Sarajevu.* *Operta, M. (2013):Opća geologija, Udžbenik Prirodno-matematičkog fakulteta u Sarajevu.* *Pamić, J. (1972): Osnovi petrografije, Univerzitet u Sarajevu.* *RECOMMENDED:* *Tajder, M., Herak, M. (1972): Petrologija i geologija. Školska knjiga Zagreb*

[2] The Senate of the higher education institution as an institution or the council of the organizational unit of the higher education institution as a public institution determines mandatory and recommended textbooks and manuals, as well as other recommended literature on the basis of which exams are prepared by a special decision which must be published on its website before the beginning of the academic year in accordance with Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton