

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ PHR/11	Course name: Natural hazards and risks
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method:	
Number of ECTS credits: 4	
Recommended semester/trimester of the course: II. (Master)	
Course level:	
Prerequisites:	
Conditions for course completion: A student has to compile one semestral work with a submission in the last semester week (20 points) and two partial works (10 points) during the semester. The semestral work will be counted as 20% to the total exam points. The written exam will count together with semestral work points (together 100%). The student managed successfully the exam if he has more than 51% in total. The subject will be taught also by the distance forms. For the final evaluation of the subject, the evaluation scheme applies: A (100-90 points), B (80-89 points), C (70-79 points), D (60-69 points), E (50-59 points), FX (0-49 points).	
Learning outcomes: After this subject graduation the student should to be fammiliar with all important natural hazards, that influence human beying and consequences huge economic and social damage. The student should know all different origin factors and should be able to evaluate model situation and case studies. At the same time, he will acquire practical skills in working with GIS in modeling and evaluation of natural threats in model areas, acquire communication skills in working with a partner in solving model crisis situations and will work with various databases of highly up-to-date information and data.	
Brief outline of the course: The subject deals with hazards and risk as f.e. earthquakes and secondar hazards, tsunami, volcanoes and volcanism, relief forms, volcanic hazards and case studies. In next semester weeks we are deals with other types of hazards that are typical for Slovakia also, landslides, rock collapses, subsidence, foods, avalanches and collapses in karstic or non-karstic areas. Many hazards are really important but not well known - so we are talking about soil hazards (devaluation and erosion) also. In long term period and importance for human beying these hazards are the most important. During the semester we will pay attention on these topics: <ol style="list-style-type: none">1. main terms, tektonic movements2. earthquakes and secondary hazards3. tsunami as a natural hazards and risk for a human4. volcanoes and volcanism, relief forms, volcanic hazards and case studies5. Water and wind erosion6. Landslides and other dynamic processes7. Subsidence, karstification and liquification of sediments	

8. Avalanches
9. Floods as an very important hazard for human settlements
10. Natural fires
11. Atmospheric natural hazards and classification
12. Huricanes

Recommended literature:

DRDOŠ, J., 1992: Prírodné prostredie: zdroje – potenciály – únosnosť – hazardy – riziká. Geografický časopis, 44, 1, 30-39.

GOVORUSHKO, S., M., 2011: Natural Processes and Human Impacts. Springer. 653 s.

HYNDMAN, D., HYNDMAN, D., 2011: Natura Hazards and Disasters. Brooks-Cole. Canada. 572 s.

ONDRÁŠIK, R., VLČKO, J., FENDEKOVÁ, M., 2011: Geologické hazardy a ich prevencia. Prírodovedecká fakulta, UK Bratislava. 288 s.

REICHARD, S., J., 2011: Environmental geology. McGraw-hill, New York. 545 s.

TRIZNA, M., 1994: Hydrologické aspekty hodnotenia povodňovej hrozby (na príklade toku Žarnovica). AFRNUC, Geographica 35, 85-94.

Internetové zdroje:
www.nat-hazards-earth-syst-sci.net
www.oas.org/usde/publications/classifications/publicationsh.htm
www.usgs.gov

Course language:

slovak

Notes:**Course assessment**

Total number of assessed students: 159

Course assessment is visible only in case of include the course to some study plan.

Provides: RNDr. Alena Gessert, PhD., Mgr. Imrich Sládek, PhD., Mgr. Jozef Šupinský, PhD., doc. Ing. Katarína Bónová, PhD.

Date of last modification: 24.11.2021

Approved: