| **1. Course title:** Physical Geography of the Carpathian Basin | | | | |
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| **2. Code:** | | **3. Type (lecture, seminar, laboratory):** lecture | | |
| **4. Total of contact hours:** 52 hours | | **5. Number of credits (ECTS):** 6 | | |
| **6. Pre-requisites (max. 3):** none | | | | |
| **7. Announced:** ☐ autumn semester, ☒ spring semester, ☐ both semesters | | | | |
| **8. Limit for participants:** no | | | | |
| **10. Instructor-in-charge (faculty, institute and department):**  Szabolcs Á. FÁBIÁN, PhD (FS, Institute of Geography and Earth Sciences, Department of Physical Geography and Environment) | | | | |
| **11. Instructor(s) and percentage:** | | Szabolcs Á. FÁBIÁN | | 100% |
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| **12. Language:** English | | | | |
| **13. Course objectives and learning outcomes:**  Goal of this course to have skills in physical geographical analysis of a region/location, e.g. Carpathian Basin. Students will develop depth, breadth, and integration of learning in physical geography.  Upon completion of the course on physical geography of Carpathian Basin students:   * will be able to be familiar with fundamental concepts on physical geography of Carpathian Basin and its principles at the level of macro regions; * will be able to list and identify on blank maps core geographical names of Carpathian Basin; * will have an understanding of core concepts around physical geography of Carpathian Basin.   Upon successful completion of this course students are expected to be able   * to evaluate existing data in the context of physical geography; * to analyse with a thematic guide physical macro regions of Carpathian Basin; * to recognise individual types of landscapes and to assess their core properties; * to analyse the impact of Quaternary climate variations on Carpathian Basin and to assess its role in the landscape development; * to interpret and present the effects of society on natural factors.   Upon completion of this course students   * will be able to identify diverse viewpoints, including different geo-disciplinal perspectives; * will be able to identify scientific issues underlying global, national, local, and personal decisions and communicating positions that are scientifically and technologically informed; * will be able to interpret, illustrate and present (both oral and written form) natural/physical characteristics of macro regions and fundamental landscape types in the Carpathian Basin based on existing data. | | | | |
| **14. Course outline / Milestones**  **for lectures**   1. Introduction to course: detailed description of the syllabus. Beginnings of the landform evolution, oldest surface forms and remnants. Long-term geomorphological evolution. Palaeogeography of the Pliocene, Pleistocene and Holocene periods. 2. Development of recent topography and landforms, with a special focus on Quaternary. Periglacial landforms of Carpathian Basin. Development of the recent drainage network and its landforms. 3. Evaluating determining factors of climate of Carpathian Basin. Spatial and temporal distribution of climatic elements. Climatic regions of the Carpathian Basin. 4. Evaluating determining factors of Hungary's climate. Spatial and temporal distribution of climatic elements. Climatic regions in Hungary. 5. Anthropogenic transformation of the fluvial system and drainage works in Hungary. Hydrological characteristics of rivers and streams in Hungary. 6. Origin and evolution of lakes, bogs and marshes in the Carpathian Basin. Genetic types and hydrological characteristics of open water surfaces. Groundwaters in Hungary. 7. Biogeography of Hungary: a human-modified ecosystem in the heart of Carpathian Basin. 8. Genetic soil classification in Hungary. Spatial distribution and characteristics of zonal, intrazonal and azonal soils. 9. Division of natural landscape regions. Landscapes of Little Hungarian Plain and its physical geographical character. 10. Landscapes of West Hungarian Border Region and Transdanubian Hills and its physical geographical character. 11. Landscapes of Transdanubian Mountains and its physical geographical character. 12. Landscapes of North Hungarian Mountains and its physical geographical character. 13. Landscapes of the Great Hungarian Plain and its physical geographical character.   **for seminars**   1. Introduction to seminar: detailed description of syllabus of the seminar. Description of the list of key geographical names and introduction to blank maps for practicing and testing. Description of mid-term weekly exercises. Assignment of students’ presentation on typical landscapes of the Carpathian Basins. Thematic guide and tips for giving good students’ presentations. 2. Plate tectonic model of the Carpathian Basin. Neogene landscape evolution: volcanoes, marine and terrestrial sediments. Brief history of the Lake Pannon. 3. Analysis of Quaternary landscape development and environmental changes with a special focus on periglacial landforms and drainage network and its landforms. Division of natural landscape regions in the Carpathian Basin. 4. Fundamental Quaternary landscape formation processes and examples from Hungary and Europe with geographical names and locations. 5. Analysis and evaluation of meteorological data. Spatial and temporal distribution of climatic elements in the Carpathian Basin. How to draw and interpret a Walther–Lieth climate chart. 6. Mid-term exercise 1: presentation of a chosen city’s climate in the Carpathian Basin. 7. Anthropogenic transformation of the fluvial system and drainage works in Hungary. Main rivers and lakes of the Carpathian Basin. 8. Genetic types of lakes with examples from Europe and the Carpathian Basin. Subsurface water types and their utilization in Hungary. 9. Comparison of genetic soil classification and landscape regions in Hungary. 10. Mid-term exercise 2: presentation of a typical landscape in Hungary compared to global examples. Visualizing physical geography: figures and images. 11. Comparing analysis of landscapes and physical geographic character of the Little and the Great Hungarian Plain. 12. Comparing analysis of hilly surfaces in the Carpathian Basin with a special focus on Transdanubian ‘loess’ Hills. 13. Landscapes of mountains and their physical geographical character. | | | | |
| **15. Mid-semester works**  2 student presentations and biweekly blank map quizzes on geographic names of Carpathian Basin. | | | | |
| **16. Summative assessment, formative assessment**  Seminar assessment: 60 points for biweekly blank map quizzes (10 points each) + 40 points for seminar references (20 points each)  Lecture assessment: 100 points final test on lecure’s topics  Grading percentages may vary according to the position of the Gauss curve, but the approximate ranges are the followings:  just less than 50% = 1  50 to 64.99% = 2  65 to 74.99% = 3  75 to 84.99% = 4  85+% = 5  Final mark is the mean of seminar and lecture grading.  Attendance at all activities will be monitored. Students who fail to attend the activities, or to complete the summative or formative assessment specified above, will not gain the credit for the course. | | | | |
| **17. Reading assignments:**   1. Mezősi, G. (2017). The Physical Geography of Hungary. Geography of the Physical Environment. doi:10.1007/978-3-319-45183-1 | | | | |
| **18. Recommended texts:**   1. Lóczy, D. (Ed.). (2015). Landscapes and Landforms of Hungary. World Geomorphological Landscapes. doi:10.1007/978-3-319-08997-3 2. Kocsis, K., & Schweitzer, F. (Eds.). (2009). Hungary in Maps. Budapest: Geographical Research Institute of Hungarian Academy of Sciences. 3. Karátson, D. (Ed.) (1999). The land that is Hungary. CD-ROM, Pannon Encyclopaedia, Arcanum Publisher | | | | |
| **Date** | 31 January, 2017 | **Prepared** |  | |
| Szabolcs FÁBIÁN PhD  instructor-in-charge | |
| **Endorsed** | | |  | |
| András TRÓCSÁNYI PhD leader of the program | |