

EGU21-4565

<https://doi.org/10.5194/egusphere-egu21-4565>

EGU General Assembly 2021

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Educational course "Creation of virtual geological outcrops of the outskirts of Lviv"

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We present a new educational course "Creation of virtual geological outcrops of the outskirts of Lviv" for students of geological specialties. Discipline "Creation of virtual geological outcrops of the outskirts of Lviv" is a selective discipline for students of 2-3 courses of various specialties, which is lectured in the amount of 3 credits (according to ECTS). The course is 32 hours of classroom classes, 16 hours of these of lectures, the rest 16 hours of practical classes and 58 hours of self-study.

The course is in three parts. First is preparatory ones. Students get acquainted with the geological structure of Lviv, prepare equipment for field work.

The field stage (the second part of the course) includes the survey of 3-4 geological objects around Lviv. These can be natural outcrops, quarries. A particularly valuable object for learning is the Honey Cave, located within the city limits. Depending on the object, we choose the type of survey— digital photogrammetry or terrestrial laser scanning. Each group of 4 students explores 2 objects.

The third cameral period includes field data processing. Students create 3D geological models and perform various measurements on them. Students compare different types of models to choose the best one. At this stage, students use a variety of software available in institutions. The final stage of the course is the preparation of a report and passing the exam.

The project was partly financed by EGU HE Teaching Award.