Geodynamics in Modular Course System at Vienna High School

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In Austria there are currently some major reforms concerning high school education underway. At our school, the Bundesgymnasium and Bundesrealgymnasium Draschestrasse, a school belonging to the Vienna Bilingual Schooling branch, we have developed a course system in which pupils can select courses and determine individually which areas of study they want to focus on.

Specially devised courses have been developed which fit within the framework of natural and applied sciences but go beyond the basic curriculum in physics. Geodynamics is the title of one of these courses, with an emphasis on weather, climate and geodynamic processes of the earth’s crust.

The course „The restless earth“ deals specifically with plate tectonics, vulcanism, formation of mountains and processes such as ocean currents and the physics involved. Apart from theoretical basics we use manifold media and approaches concerning visualization: graphics, map data taken from Google Maps, satellite pictures, and others.

The knowledge acquired in this course is broadened and consolidated by means of excursions to the Vienna Natural History Museum where additional instructional materials and visual aids are on display. Based on this experience pupils are requested to hold presentations (individually or in groups) at the end of the course.