UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Geografia Fisica

1920-1-E3401Q040

Aims

The course aims to transfer to students a series of knowledge and terms to understand and describe the terrestrial landscape.
The relationships between the different aspects concerning landscape formation will be explained, highlighting the anthropic influence on the most common forms of the natural landscape.

Contents

The planet Earth
Atmosphere and climate
Hydrosphere
The shapes of the landscape
Overview of pedology
Man agent modifier of the landscape and climate
Field work in Val Ventina (SO), Vedretta della Ventina glacier.

Detailed program

Planet Earth; the Earth in the solar system; the Earth seen from space; the representation of the Earth; the scale factor in geology; the "deep time"; The table of geological times; Atmosphere and climate; The composition and thermal subdivision of the atmosphere; Climate elements: solar radiation, temperature, pressure, atmospheric circulation, humidity and precipitation; Classification of clouds; Classifications of climates; Extreme meteorological events in the Mediterranean area; Hydrosphere; Preliminary notions of

regional geography; The hydrological cycle; Oceans and seas: currents and waves; Surface and underground waters;

Glaciers; The shapes of the landscape; Distribution of continents and oceans; The great geological structures of the Earth's surface; The orogenic chains, the rift zones, the deserts, the volcanoes; Transportation of sediments along the hydrographic network; Slope stability; introduction of pedology; Surface alteration and soil profiles; Energy resources: oil and geology; man as agent modifier of the landscape; River and coastal protection works; Review of the course topics for the final exam; Preparation for land exits, Val Ventina, Vedretta della Ventina Glacier (SO). Coastal and eolian morphology. Glacial morphology. Climate change.

Prerequisites

There are no specific prerequisites, however an in-depth knowledge of the basic geography and the introductory concepts of the Earth sciences will help, along with an appropriate vocabulary on the issues addressed for a better understanding of the topics covered.

Teaching form

At the end of the course, a daily field work in the Alpine environment will take place to recognize and describe the forms of the landscape associated with the Alpine-type glacial and periglacial environments. (A written report of about 10 pages will be requested on this excursion).

Textbook and teaching resource

The teacher will make the presentations shown at the course three times a week availa ble on the e-learning site.

Text book suggested: Alan Strahler, 2015. Fondamenti di Geografia Fisica, Zanichelli 460 pg.

Semester

The course will start on March and will end on May.
The one-day excursion will take place on September.

Assessment method

The final exam will be divided into two distinct moments.

A first oral exam starting from June will serve to verify the learning of the topics covered during the course. During the oral exam, 5 questions will be asked, in about 30 minutes.

The second evaluation will take place in September following the correction of a written report of a maximum of 10 pages, on the daily output that will be carried out in Val Ventina (SO).

Each student will be invited to take the oral exam via email. The exam, once available, will appear in the first line of the e-learning course website. The exam will be carried out by accessing e-learning and via the Webex platform.

The oral vote will count for 5/6 (25/30) of the final vote, while the final report on the excursion will count for 1/6 (5/30).

The individual report, prepared at home on the computer and enriched with photos taken personally by the students during the exit in Val Ventina (SO), will be prepared following the model shared by the teacher on the e-learning site, in Word format and will be sent to teacher at the e-mail: *sergio.ando@unimib.it*

Office hours

The course teacher is always available by email.