



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP38_DIP_SCITER

Visiting Professor Program Academic year 2019/2020

DEPARTMENT OF EARTH SCIENCES

TEACHING COMMITMENT: 16 hours

COURSE TITLE

Structural and Applied Geology

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Earth Sciences

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

Deformation; finite strain and progressive deformation in natural deformed rocks. Quantification of the deformation at all the scales of observation using different methodologies. Kinematics of nappes and shear zones in collisional orogens with reference to the Alps and Himalayas.

Relations among folding, fractures and slope instability with case studies from the Alps and the Canadian Rocky Mountains.

LEARNING OBJECTIVES

Advanced knowledge of deformation and its quantification methodologies at all the scales of observation.

Knowledge of relations among folding and fractures and slope instability with application to case histories.

Topics addressed in this course are integral part in the educational targets related to the Master's degree, specifically for the different aspects of the applied structural geology. The focus is paid on the wide spectrum of techniques, typical of structural geology, which are fundamental tools for the description and reconstruction of geological and geological-structural models. This background is

fundamental for numerous types of geological applications, such as the study of slope instability, and for a legitimate professional path.

LAB ACTIVITIES

Applications of slope instability analysis to natural examples from the Alps and other orogens

OTHER ACTIVITIES BESIDES THE COURSE

Seminars on the geometry and kinematics of the nappes in two classical collisional belts such as the Alps and the Himalaya.

VISITING PROFESSOR PROFILE

Expert in structural geology with knowledge of the quantification of the deformation at all scales and expertise on the geometry and kinematics of nappes in classical collisional orogens such as the Alps and the Himalaya.

Expertise in the relations among folding, fractures and slope instability with direct knowledge of case studies from the external parts of collisional orogens.

CONTACT PERSON AT THE DEPARTMENT

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