Study programme: MAS Geography

Course title: Methods of paleoclimate reconstruction

Teacher(s): dr Biljana Basarin, dr Mlađen Jovanović

Status: elective

ECTS: 5

Requirements: none

Learning objectives

Students will be introduced to the basic methods of paleoclimatic and paleoecological reconstructions in marine and terrestrial environments.

Learning outcomes

After successfully completing the course the students are expected to:

Better understand paleoclimatic and paleoecological fluctuations especially during the Quaternary;

Determine paleoecological and paleoclimatic changes based on results obtained by various measurements.

Syllabus

Theoretical part:

Paleoclimate and paleoecological archives, dating methods, ice cores, deep sea sediments and terrestrial archives, macrofossils, palynological sequences, malacology, dendroclimatology.

Practical part:

Analysis of the results obtained by various measurements, different statistical and mathematical methods used to analyze the results.

Literature

Bradly, S.R. (2000): Paleoclimatology, Reconstructing Climates of the Quaternary. International Geophysics Series, Amsterdam

Cronin, T.M.(2010): Paleoclimates: Understanding Climate Change Past and Presen. Colombia University Press, New York

Weekly teaching load 4 (60)	Lectures 2	Exercises 2

Methods of Teaching

Lectures, Illustration and Demonstration, Practical skills. Lectures are conducted using a computer presentations on the video projector, projection of films and slides. The exercises are performed practically, where students have to write and present one seminar paper durin the course.

Grading method (maximu 100 points) points points Pre-examination assignments **Final examination** Activities during lectures 0-5 Written examination Activities during exercises 0-5 Oral examination 30-45 Colloquia 20-40 0-5 Seminar paper