Level: bachelor

Course title: Mathematical Geography with basics of Astronomy

Status: compulsory

ECTS: 6

Requirements: None

Learning objectives:
Introduction to basic astronomic processes, as well as analysis of planetary movements and interplanetary gravitation influences.

Learning outcoms:
Expanding knowledge about the basic characteristics of the Universe, Solar system, interplanetary processes and movement of the Earth.

Syllabus
Mathematical Geography: definition, subject, aim and tasks: basic planetary characteristics of the Earth and astronomical surroundings; Kepler's laws and laws of gravitation; Stars: evolution, physical and chemical characteristics; Galaxies, radio galaxies and quasars; Solar system: the Sun (physical, chemical characteristics, composition), planets: Earth type planets, and Jupiter type planets, satellites, Moon (dimensions, relief, movement and consequences – librations, Sun and Moon eclipse), comets and asteroids; Shape, dimensions and movement of the Earth; Geographical coordinate system elements, calculation of time, calendar making; Cosmic influence on the processes on the Earth.
Practical work:
Visit to the Petrovaradinska Fortress, where the orientation is explained.
Visit to the provincial Planetarium.
Students are introduced to segments of the star planetarium in Belgrade.

Weekly teaching load 5 (75)				Other: 0
Lectures: 3	Exercises: 2	Other forms of teaching: 0	Student research: 0	