Study programmes: Bachelor studies – Astronomy and Astrophysics	
Course name: Stellar Astronomy	
Lecturers: Stevo Šegan	
Status: Compulsory	
ECTS: 5	
Attendance prerequisites: None	
Course aims: Learning of astrophysical characteristics of stars	
Course outcome: Apart from classical knowledge of the physical characteristics of the star, the student develops critical thinking about the facts.	
Course content: Basic statistical methods. Observations. Galactic coordinate system. The photometric system of stellar magnitudes. Spectral classification of stars. Color index, color excess. Bolometric star magnitudes. Trigonometric parallax of the star. Luminosity of stars. Mass luminosity diagram. Photometric distances (Spectral parallaxes, Cepheide parallaxes, Photometric parallaxes, Photometric distances of stars clusters). Proper motion.Radial velocity. Mass of the star. Interstellar medium. The sources of X radiation. Kinematics the stars. Velocity of stars and their components. Motion of the Sun. Methods for determining the motion of the Sun. Determination of the apex of the Sun's motion. Statistical parallaxes. Asymmetry of stars motion. Peculiar velocity of stars and their distribution. Problems of rotation of the Galaxy. Methods for analyzing the data of the Galaxy. Problems. Chronology. Tables. Publications. Coordinate systems. Celestial sphere and constellations. Classification. Projection.	
Literature: 1. George W. Collins, II: The Fundamentals of Stellar Astrophysics, 2003	

Number of hours: **4+**	Lecures: **2**	Tutorials: **2+**	Laboratory: **-**	Research: **-**

Teaching and learning methods: Frontal / Individual / Group

Assessment (maximal 100 points)			
Course assignments	**points**	**Final exam**	**points**
Lectures	30	Written exam	15
Exercises / Tutorials	10	Oral exam	35
Colloquia	-	Written-oral exam	-
Essay / Project	10		