

Study programmes: Bachelor studies – Astronomy and Astrophysics			
Course name: Astrophysical observations			
Lecturers: Dragana Ilić			
Status: Compulsory			
ECTS: 4			
Attendance prerequisites: None			
Course aims: Acquiring general and specific knowledge of astrophysical observations, observing with a telescope and reduction of observed data.			
Course outcome: The student has basic knowledge of the techniques of astrophysical observations and is capable for scientific research in this field.			
Course content: General information on acquiring and collecting astronomical data. Most important telescopes in the world. Time allocation on modern telescopes. Basics steps of optical observations: proposal writing, preparation of observations, performing observations, and data reduction. Writing observational proposal for one active telescope (project work). Preparing observation of astrophysical objects (e.g. variable stars). Performing photometric observations (practical work which includes travel to observatory or remote observations). Reduction of photometric observations. Reduction of spectroscopy data with IRAF. Preparing observations for an X-ray telescope. Acquiring, reduction and analysis of observations from the SWIFT X-ray telescope with HEASOFT package.			
Literature: 1. C.R. Kitchin “Astrophysical Techniques“, 2008, CRC Press 2. S.B. Howell “Handbook of CCD Astronomy“, 2000, Cambridge University Press			
Number of hours: 7	Lectures: 1	Tutorial: 2	Laboratory: 4
Teaching and learning methods: Group work			
Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures	10	Written exam	
Exercises / Tutorials	60	Oral exam	30
Colloquia			
Essay / Project			