

Study programmes: PhD studies – Astronomy and Astrophysics				
Course name: Star catalogues and fundamental astronomical constants				
Lecturers: Stevo Šegan				
Status: Optional				
ECTS: 9				
Attendance prerequisites: None				
Course aims: Obtaining advanced and specific knowledge of the conventions and fundamental concepts of astronomical catalogues and constants				
Course outcome: After completing the course, student has advanced knowledge general concepts and conventions about astronomical catalogues and constants and is capable to do independant scientific research.				
Course content: Star catalogs; Basic and fundamental systems; International Astronomical Union and conventions; Historical retrospective of resolutions and concepts; Derived and special catalogs; Upgrading of catalogs; Modern experimental processes and basic systems; FK5 catalog; Extension of FK5 catalog; FK6 catalog; Hipparcos, Tycho, IRS, ACRS, PPM, GC, AC, CCD, AC... catalogs; History of sky survey; Double stars catalogs; Catalogs of electromagnetic properties of stars; Projects and perspectives: CPIRSS, UCAC, etc.; Catalogs of Messier objects, catalogs of Supernova remnants; Catalogs of star clusters; catalogs of galaxies and clusters of galaxies; Fundamental astronomical constants; Derived constants; Historical procedures and modern resolutions, sustainability and duration of fundamental constants.				
Literature: К. А Куликов, Фундаменталние астрономицеские постојание, 1980. П. И. Бакулин, Фундаменталние каталоги звезд, 1987. К. Seidelmann, Explanatory supplement to the Astronomical Almanac, 1992. Trumpler and Weaver, Statistical Astronomy, 1953.				
Number of hours: 10		Lectures: 4	Tutorials: 6	
Teaching and learning methods: Frontal, Group, Tutorials				
Assessment (maximal 100 points)				
Course assignments		points	Final exam	points
Lectures		20	Written exam	0
Exercises / Tutorials		30	Oral exam	20
Colloquia				
Essay / Project		30		