

Study programmes: Bachelor studies – Astronomy and Astrophysics				
Course name: Practical astronomy				
Lecturers: Stevo Šegan				
Status: Compulsory				
ECTS: 6				
Attendance prerequisites: None				
Course aims: Acquiring general and specific knowledge from classical and modern astronomical practice. Student is trained for practical work and high experimental mobility, especially from the standpoint of modern communication.				
Course outcome: Upon completion of the course, the student has the necessary knowledge about the theory and practice of astronomical instruments, astronomical experiment in general, astronomical observation in particular. The student independently performs an astronomical experiment and uses the professional instrument for this purpose. Work in the field and in laboratory conditions.				
Course content: Theory of astronomical instruments. Instruments: Historical overview: Astronomical clocks, chronometers. Pendulum clock. Quartz clocks. Atomic clocks. Instruments for registering. Electromagnetic chronographs. Cylindrical chronographs. Electronic chronographs. A description and use. Principles of meridian astronomy: Universal instrument. Description, rectification. The influence of instrument errors on the measurement of vertical angles. The influence of instrument errors on the measurement of horizontal angles. Zenith telescope. Description, rectification. Theory of the instrument and its use. Passage instrument. Description, rectification. Theory of the instrument and its use. Meridian Circle. Description, rectification. Theory of the instrument and its use. Principles of non-meridian astronomy: Equatorial. Description, rectification. Theory of the instrument and its use. Circumzenithal. Description, rectification. Theory of the instrument and its use. Astrograph. Description, rectification. Theory of the instrument and its use. D'Anjou's astrolabe. Description, rectification. Theory of the instrument and its use.				
Literature: 1. S. Šegan: Practical astronomy, script 2. S. Šegan: Lectures about modern astronomy, «Лекције по реду и без реда» 3. David Vallado: Fundamentals of Astrodynamics and Applications (2007), W. Schlosser et al.: Challenges of Astronomy (1998.) 4. J. V. Wall, C. R. Jenkins, Practical Statistics for Astronomers, Cambridge, 2003 Astronomical Almanac				
Number of hours: 5+	Lectures: 3	Tutorials: 2+	Laboratory: -	Research: -
Teaching and learning methods: Frontal / Individual / Group				
Assessment (maximal 100 points)				
Course assignments	points	Final exam	points	
Lectures	15	Written exam	-	
Exercises / Tutorials	30	Oral exam	30	
Colloquia	15	Written-oral exam	-	
Essay / Project	10			