

<b>Study programs:</b> Bachelor studies – Mathematics				
<b>Course name:</b> Selected astronomy chapters				
<b>Lecturers:</b> Nadežda Pejović				
<b>Status:</b> Elective				
<b>ECTS:</b> 5				
<b>Attendance prerequisites:</b> No prerequisites				
<b>Course aims:</b> Acquiring general and specific knowledge in astronomy.				
<b>Course outcome:</b> Upon completion of the course, the student has a basic astronomy knowledge. Student understands terms: star clusters and associations, Milky way, galaxies, galaxy clusters, metagalaxy, interstellar medium, magnetic field, gravitational field, general theory of relativity, cosmology. He is able to solve different problems from mentioned areas and to follow more advanced courses in astronomy.				
<b>Course content:</b>				
<b>Universe.</b> Solar System. Kepler's laws. Sinodic and sidereal periods of the planets. Tidal effects. Fly to cosmos. Artificial celestial bodies. Eclipses and occultations. Eclipses of the Sun and the Moon. Heliocentric system. Motion of the Solar System. Star Systems. Star clusters and associations. Light deflection. General relativity.				
Milky Way (galactic core, spiral branches, rotation). Normal galaxies. Spiral galaxies. Irregular galaxies. Metagalaxy.				
<b>Interstellar medium.</b> Interplanetary medium. Interstellar medium. Magnetic field. Gravitational field.				
<b>Planetary phenomena.</b> Apparent motion of the inner planets. Apparent motion of the outer planets. Stations. Planetary phases. Planetographic coordinates. Heliographic coordinates. Heliographic coordinates of the solar spots. Selenographic coordinates.				
<b>Celestial phenomena.</b> Astronomical refraction. Parallax. Aberration of the light. Precession. Nutation. Proper motion of the stars. Radial velocity. Mean and apparent position. Astronomical yearbooks. Catalogues.				
<b>Cosmogogenesis.</b> Origin and the evolution of celestial bodies and systems. Astronomical constants (definitions and primary constants). Units in astronomy.				
<b>Cosmology.</b> Cosmology assumptions. Cosmological models. The Big Bang.				
<b>Literature:</b>				
1. B. Ševarlić, Z. Brkić, Opšta astronomija, Naučna knjiga, Beograd, 1981				
3. S. Šegan, N. Pejović, Osnovi astronomije ( <a href="http://www.matf.bg.ac.rs/astronomija/spe07.htm">http://www.matf.bg.ac.rs/astronomija/spe07.htm</a> )				
4. V. Mišković, Zbirka rešenih zadataka iz opšte astronomije, Beograd, 1957				
<b>Number of hours:</b> 4	<b>Lecures:</b> 2	<b>Tutorials:</b> 2	<b>Laboratory:</b> -	<b>Research:</b> -
<b>Teaching and learning methods:</b> Frontal, Interactive, Tutorial, Lectures, Exercises				
<b>Assessment (maximal 100 points)</b>				
<b>Course assignments</b>	<b>points</b>	<b>Final exam</b>		<b>points</b>
Lectures	-	Written exam		25
Exercises / Tutorials	-	Oral exam		50
Colloquia	25	Written-oral exam		-
Essay / Project	-			