

...Planetology...
- COURSE SYLLABUS



1.	Course title:	
		<i>Planetology</i>
2.	Lecturer:	
		<i>Hans Rickman</i>
3.	Field, type and level of studies, year of study:	
		<i>astrophysics, solar system dynamics, all years of study</i>
4.	Course character:	
		<i>monographic lecture using compendia, GeoPlanet interdisciplinary lecture</i>
5.	Teaching method:	
		<i>traditional or on-line</i>
6.	Language:	<i>English</i>
7.	Course type and number of hours:	
		<i>lecture, 16h</i>
8.	Estimated load of student's independent work:	<i>8h</i>
9.	Total workload and number of ECTS points:	<i>22 h, 2 ECTS</i>
10.	Short description and main focus of the course:	
		<i>Emphasis will be placed on processes related to the origin and evolution of planetary systems. Both the solar system and exoplanets will be considered. The interplay between these systems and their Galactic environments will be treated in detail. This will involve both physical and dynamical processes. Below is a list of lecture topics.</i> <i>1. Structure of planetary systems</i> <i>2. Dynamics of planetary systems</i> <i>3. Planetary Interiors and atmospheres</i> <i>4. Asteroids and comets</i> <i>5. Transneptunians</i> <i>6. Meteors and meteorites</i> <i>7. Star formation</i> <i>8. Planet formation</i>
11.	References:	
		<i>compendia, journal papers</i>
12.	Prerequisites:	
		<i>none</i>

13.	Educational outcomes:	<u>PQF level 8 codes:</u>
	Knowledge: • <i>Students know and understand the physical and dynamical processes governing the formation, structure and evolution of planetary systems.</i> • <i>Students know and understand the formation and evolution of stars, planets and smaller Solar System bodies.</i> • <i>Students know and understand the similarities and differences between the Solar System and exoplanetary systems and the role of their Galactic environment.</i> Practical Skills: • <i>Students are able to apply physical and dynamical principles to analyse planetary systems and their evolution.</i> • <i>Students are able to critically interpret observational and theoretical results concerning planets and planetary systems.</i> • <i>Students are able to critically analyse and discuss scientific literature in planetary science.</i> Social Skills: • <i>Students understand the need for a critical assessment of scientific knowledge, theories and models in planetary science.</i> • <i>Students understand the importance of integrating knowledge from different fields of astronomy, astrophysics and planetary science.</i> • <i>Students understand the importance of independent development of knowledge and constructive participation in scientific discussion.</i>	<i>P8S_WG</i> <i>P8S_UW</i> <i>P8S_UK</i> <i>P8S_KK</i> <i>P8S_KO</i>
14.	Evaluation of the educational outcomes: <i>essay, homework assignments, oral exam</i>	
15.	Criteria to complete the course: <i>at least 75% attendance, final grade depends on the evaluations</i>	
16.	Contact with the lecturer: <i>email</i>	