

- COURSE SYLLABUS

1.	Course title: <i>Basic Space Physics</i>
2.	Lecturer: <i>Prof. dr hab. Jan Błęcki</i>
3.	Field, type and level of studies, year of study: <i>Space plasma, magnetosphere, ionosphere, spce weather, all years of study</i>
4.	Course character: <i>monographic lecture,</i>
5.	Teaching method: <i>traditional or on-line</i>
6.	Language: <i>English, Polish, depending on the audience</i>
7.	Course type and number of hours: <i>lecture, 36h</i>
8.	Estimated load of student's independent work: <i>10h</i>
9.	Total workload and number of ECTS points: <i>eg., 36 h, 6 ECTS</i>
10.	Short description and main focus of the course: <ol style="list-style-type: none"> 1. <i>The Earth in the Solar System and in the Universe .</i> 2. <i>Earth's atmosphere –its structure and dynamics.</i> 4. <i>Plasma – definition and fundamental features .</i> 5. <i>The Sun –its structure, activity and Solar Wind.</i> 6. <i>Magnetic Field of the Earth.</i> 7. <i>The Ionosphere – origin, structure and variability.</i> 8. <i>Propagation of the electromagnetic waves in the ionosphere and influence of the disturbances in space on it.</i> 9. <i>The Magnetosphere – creation, structure and processes within it.</i> 10. <i>Disturbances in the near Earth space- their sources and physical processes responsible for their.</i> 11. <i>Overall picture of the Solar-Earth connection s- Space Weather.</i> 12. <i>Cosmic rays – basic information.</i> 13. <i>Influence of the disturbances in the space around Earth on the technical constructions in space and on the ground and on the people .</i>
11.	References: Wolfgang Baumjohann, Rudolf Treumann, Basic space plasma physics. May-Britt Kallenrode, Space Physics.Tamas I.Gombosi, Physics of the Space Environment.

12.	Prerequisites: <i>Good knowledge of physics and mathematics</i>								
13.	<table border="1"> <tr> <td>Educational outcomes:</td> <td><u>PQF level 8 codes:</u></td> </tr> <tr> <td><i>Knowledge:</i></td> <td><i>eg., P8S_WG, ...</i></td> </tr> <tr> <td><i>Practical Skills:</i></td> <td><i>eg., P8S_UW, ...</i></td> </tr> <tr> <td><i>Social Skills:</i></td> <td><i>eg., P8S_KK, ...</i></td> </tr> </table>	Educational outcomes:	<u>PQF level 8 codes:</u>	<i>Knowledge:</i>	<i>eg., P8S_WG, ...</i>	<i>Practical Skills:</i>	<i>eg., P8S_UW, ...</i>	<i>Social Skills:</i>	<i>eg., P8S_KK, ...</i>
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14.	Evaluation of the educational outcomes: <i>written exam,</i>								
15.	Criteria to complete the course: <i>Presence on lectures, final exam min.60% correct answers</i>								
16.	Contact with the lecturer: <i>Email:jblecki@cbk.waw.pl, room 25.</i>								