SCHOOL PLAN

University Unit:
Engineering school

Graduate program:
Geospatial Sciences and Applications

Curse:
☒ Academic Master ☐ Professional Master's ☒ Doctorate degree

Discipline :
Planetary Science

Teacher (s):
Adriana Benetti Marques Valio

Note:

The Geospatial Science and Applications Program is multidisciplinary, encompassing research in several lines. The disciplines of the Program reflect this multidisciplinarity and require, many times, several professors, specialists in different topics, studied in the disciplines.

Workload:	**Credits**	
48 h	4	☐ Required ☒ Optional ☐ Eleffective

Description:
Constitution of the Solar System: the eight planets and their natural satellites, dwarf planets, comets, asteroids and interplanetary dust. Types of planet and their characteristics: terrestrial and gas giants. Orbital dynamics, constitution, structure and main features of the bodies that make up the Solar System. Theories of formation of planetary systems. Discovery of planets in orbit of other stars. Detection methods of extrasolar planets and their characteristics. Habitability Zone and Astrobiology. Interaction between stars and their planets, tidal effects and magnetic interaction. Stellar activity and its effects on the planets.

Program content:

List of themes, subjects and concepts that will be studied in the stage.

Evaluation criteria

According to the General Regulation of Stricto Sensu Post-Graduation, Art. 98:

A - excellent: corresponds to grades in the interval between grades 9 and 10;

B - good: corresponds to grades in the interval between grades 8 and 8.9;

C - regular: corresponds to grades in the interval between grades 7 and 7.9;

R - disapproved: corresponds to grades in the interval between degrees 0 and 6.9 "

Bibliography:
- Planetary Sciences", de Pater, I. E Lissauer, J. J., Cambridge University Press, 2001.

- Planetary Systems: Detection, Formation and Habitability of Extrasolar Planets", Ollivier, M., Encrenaz, T., Roques, F., Selsis, F., Casoli, F., Ed. Springer, 2009.

Complementary:
- The Solar System", Encrenaz, T. e Bibring, J.-P., Springer Verlag, Berlin, 1990.

- The New Solar System", Beatty, J. K., 4a. Ed, Cambridge University Press, 1999.

Schedule	
Date	**Theme**