



SCHOOL PLAN

<b>University Unit:</b> Engineering school		
<b>Graduate program:</b> Geospatial Sciences and Applications		
<b>Curse:</b> <input checked="" type="checkbox"/> Academic Master <input type="checkbox"/> Professional Master's <input checked="" type="checkbox"/> Doctorate degree		
<b>Discipline :</b> <b>Solar Physics</b>		
<b>Teacher (s):</b> Adriana Benetti Marques Valio Emilia Correia Discipline of a multidisciplinary nature		
<b>Note:</b>  The Geospatial Science and Applications Program is multidisciplinary, encompassing research in several lines. The disciplines of the Program reflect this multidisciplinary nature and require, many times, several professors, specialists in different topics, studied in the disciplines.		
<b>Workload:</b> 48 h	<b>Credits</b> 4	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional <input type="checkbox"/> Eleffective
<b>Description:</b>  The study of the physical properties of the interior of the Sun and of its different atmospheric layers is fundamental for the better characterization of the phenomena of the quiet or active Sun; the latter are determinants of the Space Weather. Study of the solar atmosphere: photosphere, chromosphere, transition region and crown. The quiet sun and solar activity like solar explosions and coronal mass ejections. Description of activities Sun-Earth.		
<b>Program content:</b> List of themes, subjects and concepts that will be studied in the stage.		
<b>Evaluation criteria</b>  According to the General Regulation of <i>Stricto Sensu</i> 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 "		
<b>Bibliography:</b>  The Sun: an Introduction", Stix, M., 2a. ed, Springer-Verlag, 2004. Astrophysics of the Sun", Zirin, H., Cambridge University Press, 1991. <b>Complementary:</b> Guide to the Sun", Phillips, K.J.H., Cambridge University Press, 1995. Solar and Stellar Magnetic Activity", Schrijver, C.J. e Zwaan, C., Cambridge University Press, 2000. The Many Faces of the Sun" , Strong, K., Saba, J.L.R., Haisch, B.M. e Schmelz, J.T., Nova York, Springer-Verlag, 1998.		



# UNIVERSIDADE PRESBITERIANA MACKENZIE

Pró-Reitoria de Pesquisa e Pós-Graduação  
Coordenadoria Geral de Pós-Graduação *Stricto Sensu*



Schedule	
Date	Theme