BIOSPHERE-ATMOSPHERE INTERACTIONS								
CÓDIGO	**SEM**	**HT**	**HP**	**HA**	**SCT**	**REQUISITO**	**ÁREA DE FORMACIÓN Y TIPO DE ASIGNATURA**	**UNIDAD RESPONSABLE**
AG	Primavera	1	0	3.4	3	Postgraduate Inscription	Elective	Postgraduate School
Course description	In this course we study the interactions that occur between biosphere and atmosphere. We will review the theoretical background associated to these topics, along with the most common techniques used to monitor these interactions. The course will combine classes with discussions, field trips to long term research sites, and some work with data.							
Objetives	The objectives of this course are that the student develops the following skills: Skill type (B=Basic, G=Generic, S=Specific) - Understands the components of the biosphere-atmosphere continuum and the interactions that occur in it (S). - Understands the most common techniques used to measure the interactions in the biosphere-atmosphere continuum (S). - Analizes literature critically (G). - Communicate and discuss technical information with classmates (G).							
Course units	Leaf exchange processes Plant water relations Soil physics and biogeochemistry Energy balance Canopy exchange processes Boundary layer Eddy covariance method Closed chamber method Micrometeorological instrumentation Flux measurements							
Evaluation	- Participation 20% - Report 40% - Presentation 40%							
Bibliography	**Basic:** - Monson, R., and Baldocchi, D. 2014. Terrestrial biosphere-atmosphere fluxes. Cambridge University Press. - Chapin F.S., Matson P. and Vitousek P. 2011. Principles of terrestrial ecosystem ecology. New York: Springer. 436 p. - Weathers K.C., Strayer D.L. and Likens, G.E. 2013. Fundamentals of ecosystem science. Academic Press. 312 p.							
	Recommended: - Connor D.J., Loomis, R.S. and Cassman K.G. 2011. Crop ecology, productivity and management in agricultural systems. 2nd edition. Cambridge University Press. 568 p. - Sala O.E., Jackson R.B., Mooney H.A. and Howarth R.W. (eds.) 2000. Methods in ecosystem science. New York: Springer-Verlag. 421p. - Schlesinger W.H. and Bernhardt E.S. 2013. Biogeochemistry: An analysis of global change. 3a. ed. London: Academic Press. 688p.							