WATERSHED AND STREAM PROTECTION AND RESTORATION								
CÓDIGO	**SEM**	**HT**	**HP**	**HA**	**SCT**	**REQUISITO**	**ÁREA DE FORMACIÓN Y TIPO DE ASIGNATURA**	**UNIDAD RESPONSABLE**
AG040513	Otoño Primavera	1	0	2	2	Admisión Postgrado	Electiva	Departamento de Ingeniería y Suelos
Descripción del curso	The course explores the principles of restoration and sustainable management of streams and watersheds. This will include an overview of hydrologic, sediment transport, geomorphic, and ecological principles applicable to the assessment of stream channel and watershed condition, developing approaches to stream management and restoration, and evaluating the performance of restoration projects. We will also emphasize the interrelated nature of hydrology, hydraulics, sediment transport, geomorphology, aquatic ecology, and riparian ecology.							
Competencias: **B: básica** **G: genérica** **E: específica**	Explain the scientific aspects of stream and watershed restoration to non-scientists in a fashion that enhances understanding and decision-making.(G) Obtain/compile and interpret relevant data to describe watershed and stream processes.(G) Explain and predict the effects of natural and anthropogenic stressors on streams and watersheds.(G) Compare and critique the various techniques and/or philosophies of restoration topics.(E) Propose or formulate restoration approaches to specific cases of stream and watershed degradation.(E)							
Contenidos	Stream corridor processes and characteristics Disturbances affecting stream corridors Restoration, rehabilitation, and reclamation concepts Ecological principles to guide stream designs Site assessment and investigation Principles of channel design and restoration treatments Sediment regimes, transport, and continuity Project implementation and monitoring							
Modalidad de evaluación	Exam 1 (50%) & Exam 2 (50%)							
Bibliografía	**Básica:** NEH-653: NRCS - Federal Stream Corridor Restoration Handbook https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/water/ manage/restoration/?cid=stelprdb1043244 NEH-654: NRCS – Stream Restoration Design (http://policy.nrcs.usda.gov/viewerFS.aspx?id=3491)							