| VEGETATION DYNAMICS | | | | | | | | |
|---|--|----|----|----|-----|--------------------------|---|------------------------|
| CÓDIGO | SEM | нт | НР | НА | SCT | REQUISITO | ÁREA DE FORMACIÓN Y TIPO DE ASIGNATURA | UNIDAD RESPONSABLE |
| AG100534 | Otoño Primavera | 1 | 1 | 4 | 4 | Postgraduate Inscription | Elective | Postgraduate School |
| Descripción del curso | The course is aimed at professionals or applied ecologists who aspire to maintain sustainable and resilient ecosystems in a world in constant change. The course focuses on the study of vegetation dynamics at various spatial and temporal scales, from theoretical and empirical perspectives. We seek that the student acquires theoretical and applied concepts of ecological succession. Through the understanding of the vegetation dynamics, the student will be able to investigate the responses of the ecosystems to global change and the coupling of the atmospheric changes with the changes in the ecosystems. It is hoped that through this inquiry, the student will acquire advanced knowledge and tools that will allow him to predict the response of ecosystems to changes produced by man, climatic changes and natural disturbances. The proper use of these concepts can result in effective ecosystem management practices. | | | | | | | |
| Competencias: B: básica G: genérica E: específica | Understands and masters the scientific-technical concepts used in vegetational dynamics (E). Understands methodologies for studying vegetational dynamics and applies to scientific research questions (E). Critically analyzes the scientific literature (G) Communicates and discusses information, effectively, with peers (G). | | | | | | | |
| Contenidos Modalidad de evaluación | Principles and concepts. Successional theories. Niche theory. Path mosaics theory. Ecological resilience. Vegetation responses to environment. Global change uncertainties. Measuring changes in vegetation. Successional models. Presentations (40%), Essay (40%) & Participation (20%) | | | | | | | |

Básica:

Botkin, D. B., Janak, J. F., & Wallis, J. R. 1972. Some Ecological Consequences of a Computer Model of Forest Growth. The Journal of Ecology, 60(3), 849.

Clements, F. E. 1916. Plant Succession: An Analysis of the Development of Vegetation. Carnegie Institution of Washington.

Gleason, H. A. 1927. Further Views on the Succession-Concept. Ecology, 8(3), 299–326

Hutchinson, G. E. 1957. Concluding remarks. Cold Spring Harbor Symposia on Quantitative Biology.

Watt, A. S. (1947). Pattern and Process in the Plant Community. Journal of Ecology, 35(1/2), 1–22.

Whittaker, R. H. (1956). Vegetation of the Great Smoky Mountains. Ecological Monographs, 26(1), 1–80.

Bibliografía

Recomendada:

Gaston, K. J. 2003. The Structure and Dynamics of Geographic Ranges. Oxford University Press.

Kent, M. 2011. Vegetation Description and Data Analysis: A Practical Approach. John Wiley & Sons.

MacArthur, R. H. (1972). Geographical Ecology: Patterns in the Distribution of Species. Princeton University Press.

Oliver, C. D., & Larson, B. C. 1996. Forest Stand Dynamics (Updated ed.). NY: Wiley. Shugart, H. H. 1998. Terrestrial Ecosystems in Changing Environments. Cambridge University Press.

WHITE, P. S., & PICKETT, S. T. A. 1985. The Ecology of Natural Disturbance and Patch Dynamics. San Diego: Academic Press.