

Title of presentation

Climate Change: Equipping students with the knowledge and skills to take action

Presenters

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Abstract

Both climate change and biodiversity loss are significant existential threats to humanity. Around 1 million animal and plant species are now threatened with extinction, more than ever before in human history. The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health, and quality of life worldwide. Scientists are observing changes in the Earth's climate in every region and across the whole climate system. If humans do nothing to slow climate change, then global temperatures may increase by 4 degrees Celsius or more by the year 2100. In the worst-case scenarios in scientists' climate models, human-caused climate change is a threat to the continued existence of our species (IPCC, 2019). It is of critical importance that we equip students with the knowledge and skills to progress into sectors dedicated to climate mitigation and adaptation. There is clear growing demand for professionals with training in this area (Leal et al. 2021)

This Pecha Kucha will show how we in the School of Biological Sciences have embedded UN SDGs (Specifically 13: Climate Action, 14: Life Below Water and 15: Life on Land) into our curriculum through the use of innovative and engaging pedagogy and technology. From immersive virtual field courses to actual field-based learning, we have developed an active and inclusive learning environment from Level 1 to 3. This presentation will showcase the resources we utilise in the school which are dedicated to equipping students with not just the theory, but the practical skills needed to make tangible, impactful contributions to the mitigation of the climate crisis.

IPCC, 2019: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer

Leal Filho, W., Sima, M., Sharifi, A. et al. Handling climate change education at universities: an overview. *Environ Sci Eur* 33, 109 (2021).