

AN INTEGRATED FIRST-YEAR GEOSCIENCE EXPERIENCE TO FOSTER SUSTAINABLE EARTH SCIENCE EDUCATION

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Geoscience-literacy in our community has never been more important. Geoscientific perspectives, guidance and problem-solving abilities are critical for addressing one of the most acute challenges facing society today – environmental sustainability; however, the importance of geoscience for society rarely features in geoscience education. For many students, their first and only exposure to learning about geoscience is as a stand-alone elective in their first year of study at university. While student interest in global environmental issues is high, enrolments in geoscience are comparatively low, and in many instances, in sharp decline.

To develop emerging geoscientists who can recognise and promote their fundamental role in tackling contemporary sustainability challenges, geoscience education requires a revamped first-year undergraduate experience that elevates the social relevance of the geosciences. We highlight our holistic and integrated first-year geoscience experience at The University of Western Australia, in which we meaningfully teach geoscience in the context of broader societal issues to better communicate the significance of geoscience for a sustainable future. We use a range of teaching strategies to increase classroom equity and science engagement. By refocusing the narrative on “why” we teach geoscience to align with contemporary student values, we promote broader and more diverse participation. A future without geoscience is unsustainable.

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