

BREAKING INSTITUTIONAL BARRIERS THROUGH EXPERIENTIAL LEARNING DURING FIELD EXCURSIONS

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Interactions between disciplines are required to obtain integrated solutions to complex environmental issues. This requires inter-department cooperation and finding ways to establish cross-disciplinary teaching content. Field excursions, where collegiate boundaries are blurred, represent ideal bridges allowing students to combine a wide range of concepts and integrate knowledge from distinct disciplines.

Students enrolled in first-year Geoscience at The University of Western Australia undertake a one-day field excursion in the Perth metropolitan area, during which they have the opportunity to explore the relationship between the biota and geology of the region. During this experiential 'journey', the students are introduced to different vegetation types including i) the Marri–Jarrah-Wandoo woodland of the Darling Plateau; ii) the flooded gum–swamp paperbark association, of wetlands associated to the Swan River; and iii) the heath-dominated vegetation covering coastal areas. The biological and geological processes leading to the development of the three types of geomorphologies are described and linked to the historical development of the city. Students are asked to collect samples and data, which are later analysed in the lab and eventually integrated into a capstone assignment. During the process, students develop further subjects encompassing a wide range of topics, from pure geological processes to subjects mixing regional flora, geology and early developments in engineering geology. This activity allows students to obtain a better knowledge of, and develop a sense of connection with, their surroundings.

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