

# A Chemist's View on the Multidisciplinary Perspectives of Sustainable Development

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## Background

UNESCO has been promoting Education for Sustainable Development (ESD)\* since 1991. Global issues captured within the Sustainable Development Goals (SDGs) urgently require a shift in our lifestyles and a transformation of the way we think and act. Education systems must respond to this pressing need by defining relevant learning objectives and introducing pedagogies that empower learners. One strand of Strathclyde's response in the pursuit of SDGs is the development of a unique credit-bearing module which has academic input from all four Faculties and is available to all students.



Students engage in multi-disciplinary group work to develop educational resources for assessment. Informed by the UNESCO ESD competency framework, this module aims to develop knowledge and critical understanding of sustainable development at local, national & global levels from multidisciplinary perspectives. Additionally competencies including: Systems thinking, Anticipatory, Normative, Strategic, Collaboration, Critical thinking, Self-awareness & Integrated problem solving are also developed.



- Introduction to the SDGs from an external viewpoint
- Contributions from researchers from all four Faculties and Professional Services
- Online to combat timetabling issues
- Focus on SDG3 Health and Wellbeing, SDG6 Clean Water and Sanitation, SDG10 Reduced Inequalities, SDG13 Climate Action
- First in a planned series of elective modules
- Available to UG, PGT and PGR students.



**"...we should be preparing students for the work of the world, not just the world of work" (Jonathon Porritt, *The Guardian*, 2012)**



### Student feedback

"I've heard about the SDGs before and am super excited to learn more about the program. I'm hoping to pursue a career in environmental politics addressing social and environmental injustices. The sustainable development model closely relates to my professional aspirations as well as to my personal interest in environmental and human rights activism."



- Module introduced in semester 2, AY 2019/20 – 37 students registered
- Module offered in both semesters in AY 2020/21 – 248 students registered
- Too early to confirm but expect numbers to increase for AY 2021/22
- Tutors from across the institution support multidisciplinary student groups
- Resources created by students include: posters, infographics, podcasts, videos, games.



**Benefits:** Raises awareness of the SDGs within the student body; enhances the degree of orientation with the SDGs across education; and broadens students' education to encompass different perspectives, attitudes and skills.

**Challenges:** Coordination of tutor across institution; development of rubrics for assessment; encouraging academic staff to interact on the SDGs outside of their own disciplines; and continuing to embed ESD across the curriculum.