



Contribution ID: 1802

Type: **CLOSED - Oral (Non-Student) / orale (non-étudiant)**

Earth and the composition of our world –a new and highly interdisciplinary undergraduate course

Tuesday 30 May 2017 13:45 (15 minutes)

Undergraduate students in many disciplines must take heavily restrictive course-loads, leaving little room for electives outside their chosen field. This contributes to students graduating without having been exposed to varied modes of academic thinking. We will discuss the development and delivery of a new, highly interdisciplinary course (lectures and labs) designed to provide students with the skills to approach problems with a wider context than they would otherwise have been exposed to within their narrow academic 'silos'.

This interdisciplinary course is the first of its kind at our university. The course is designed to teach undergraduate students about the limitations of approaching topics with narrow, field-specific viewpoints and demonstrate the benefits of approaching material with a broader context than they would otherwise likely encounter within their individual academic 'silos'. The course involves people in a large range of disciplines, nearly every department on campus. Students are placed into teams of mixed academic background for the duration of the course. Conceptual scaffolding takes the students through the relevant fundamental concepts in the various disciplines to finding connections between related disciplines and, finally, to finding connections between seemingly unrelated fields.

Authors: Dr XU, Li-Hong (University of New Brunswick); GRANGER, Aaron Daniel; WILSON, Lucy; FREGO, Katherine; KIDD, Karen; BEST, Lisa; MOIR, Rob; CREELMAN, David; LINDSAY, Debra; SMITH, Margaret Anne; JONES, Miriam; GALBO, Joe; DIANE BUHAY, Diane Buhay; BELL, Sandra; BOTH, Lilly; MICIAK, Leta; GORDON, Renee

Presenter: Dr XU, Li-Hong (University of New Brunswick)

Session Classification: T3-6 Creating Thriving Physics Programs (DPE) | Créer de vigoureux programmes de physique (DEP)

Track Classification: Physics Education / Enseignement de la physique (DPE-DEP)