Module Code: BYU22204
Module Name: Sustainable Production: Food, Drink and Drugs
ECTS: 5 ECTS
Semester taught: Semester 1
Module Coordinators: Mike Williams (willimsm@tcd.ie)

Module Content:
The aims of this course are to familiarise the student with concepts of sustainable development, ecological farming, green pharma, sustainable diets, novel food and drink products, and how environmental impacts are assessed by Life Cycle Assessment methodologies. The food/drink and drug industry are assessed using Life Cycle Assessment methodologies (LCA). Practicals will focus on biotechnology (tissue culture), brewing (students will produce their own SMASH beer – single malt and single hop beer) and environmental LCAs of dietary protein sources ((meta-analysis of published data).

Learning Outcomes:
On successful completion of this module, students should be able to:

LO1. Summarise the UN Sustainability Goals
LO2. Make informed decisions with respect to diet and food choice
LO3. Explain concepts and methodology associated with Life Cycle Assessment of food production pathways
LO4. Comprehend the role of tissue culture in biotechnology
LO5. Demonstrate the processes involved in beer production
LO6. Work as part of a team.

Recommended Reading:

Assessment Details:
Examination – 50%
Continuous Assessments – 50%