Starting with the Student Learning Outcomes

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Background

- Two CTAHR Undergraduate programs
  - Tropical Plants and Soil Sciences (TPSS)
  - Plant and Environmental Protection Science (PEPS)
- Many of the same required courses
- Several cross-listed courses
- Fundamentally similar objectives and student learning outcomes
- Both small programs
- Recently named by the State Legislature for discontinuance

Opportunities and Challenges

- CTAHR is primarily an agricultural college and leading center of agricultural research in Hawai‘i but offers no named program in agriculture
- Create an interdepartmental, interdisciplinary program with:
  - Clear assessable learning outcomes
  - Plan for assessment from the outset
  - Reduce competition and redundancy in courses
  - Institutional bureaucracy
  - Resistance to change/cultural inertia
  - Personal agendas

Our Process

- TPSS and PEPS Curriculum Committees met
  - Discuss the possibility
  - Way forward
  - Planning
- Consultation with Department faculty
- Consultation with College Administration and Assessment Office
- Recording of meeting discussions and decisions

Objective

Develop an undergraduate program of study in tropical agricultural sciences with program assessment integrated into the design process

The Model

UH Manoa General Education Requirements (Foundation)

CTAHR Requirements

Program Core

Diversification and Focus

Specialization

Required and Elective courses

Specialization

Required and Elective courses

Specialization

Required and Elective courses

Reflection on the process

- Collective commitment to meaningful outcome
- Deadline has helped to move the process ahead
- Better understanding of program assessment
- Metalevel thinking about what we are teaching and why
- Discussion has enabled revisiting individual course content and relationships between courses
- Learning how learning can be organized to be more effective
- How to develop a program leading to meaningful assessment
- Number of meetings necessary but difficult to schedule
- Can be challenging to find the unifying objectives; distill the essential

Proposed program

Tropical Agroecosystems and Environment

Student Learning Outcomes

1. Demonstrate understanding of the science of agriculture and its interaction with the environment from molecules to ecosystems.
2. Demonstrate the ability to critically evaluate scientific evidence, knowledge and issues associated with agriculture in a dynamic world.
3. Demonstrate the ability to identify problems associated with agroecosystems and apply the scientific method to develop solutions.
4. Demonstrate proficiency in oral and written communication for both professional and lay audiences.

CTAHR Requirements

NREM 310 (UD) or FAMR 380/L (DS, UD)
Internship/Capstone TPSS/PEPS 495 (UD)

Program Core

BIOL 171 (DB), 171 L (DY)
BIOL 172 (DB), 172 L (DY)
CHEM 161 (DP), 161 L (DY)
CHEM 162 (DP), 162L (DY)
TPSS/PEPS 200 (DB)
Biol 265 (DB)
TPSS 304 (DP, DY,UD)
PEPS 421 (DB, WI, UD)
TPSS 470 (DB, UD), 470L (DY,UD)
TPSS/PEPS 499 (UD)

UH Manoa Foundation Requirements (req. by program)
MATH 140 (FS) or NREM 203 (FS)
ENG 100 (FW)

Specializations

Agroecology
Invasive Species Management
Soil and Environment
Plant Breeding and Genetics
Urban Landscape Systems

Cooperative
willing
amicable
participants