



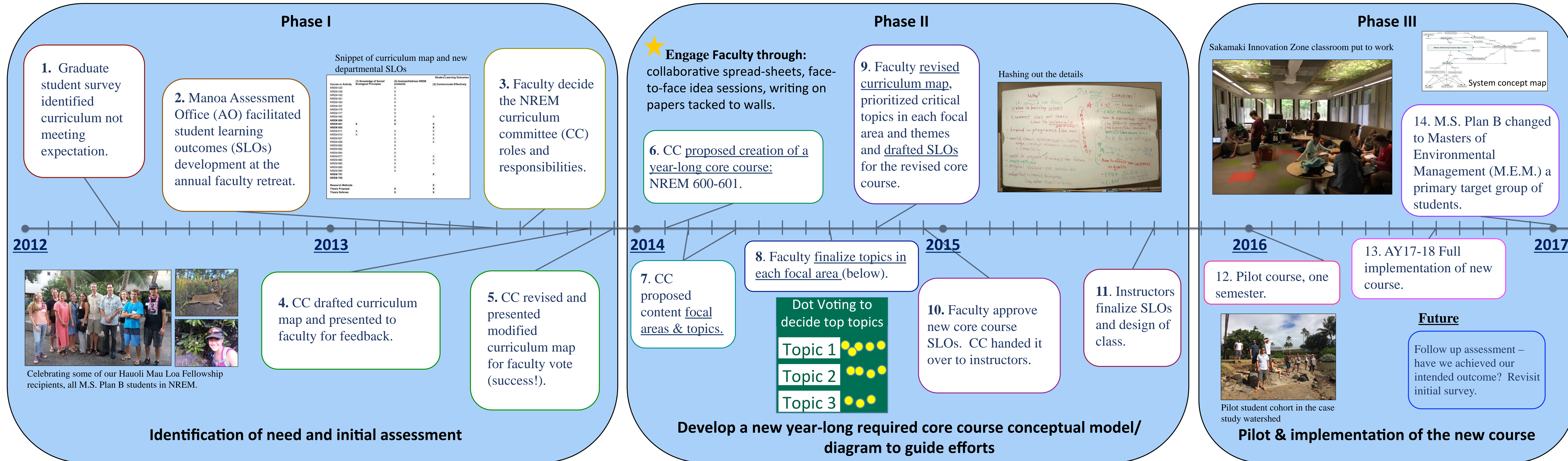
A Collaborative Assessment Process for Sustained Curriculum Improvement in Natural Resources and Environmental Management



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Timeline and key collaborative moments in the journey



Introduction to NREM

The graduate degree program in the Department of Natural Resources and Environmental Management (NREM) consists of a Ph.D. and three M.S. degree programs, and enrollment increased steadily over its 15 year history. Graduate program assessment began in 2012 with a survey of current students and alumni that identified critical areas for improvement. The next 5 years have been a collaborative journey utilizing various facilitative processes to identify areas for improvement and implement solutions.

Objectives

Address fundamental and critical questions:

Q1: Are NREM graduate degree program student learning outcomes (SLOs) still appropriate?

Q2: Do current grad core & elective courses adequately address program SLOs?

Q3: If current courses do not adequately cover the existing SLOs, how can they be modified to do so?

Methods

The NREM Curriculum Committee gathered answers through multiple, collaborative activities inclusive of both graduate students and faculty. In total, the assessment process and implementation included input collected during departmental faculty meetings, faculty and student meetings, collaborative Google documents, faculty workshops, and departmental retreats.

Results

Timeline (above) and key collaborative moments in the journey:

Phase I 2012-2013 Identification of need and initial assessment activities

A fundamental problem was realized – A graduate student survey revealed the current core, required curriculum was not meeting their needs (Fig. 1 left), particularly within the M.S. Plan B program intended to educate and train future professionals (Fig. 1 right).

Do you feel NREM's education/current curriculum adequately prepares you to solve contemporary NREM problems to assist in sound policy development and implementation?

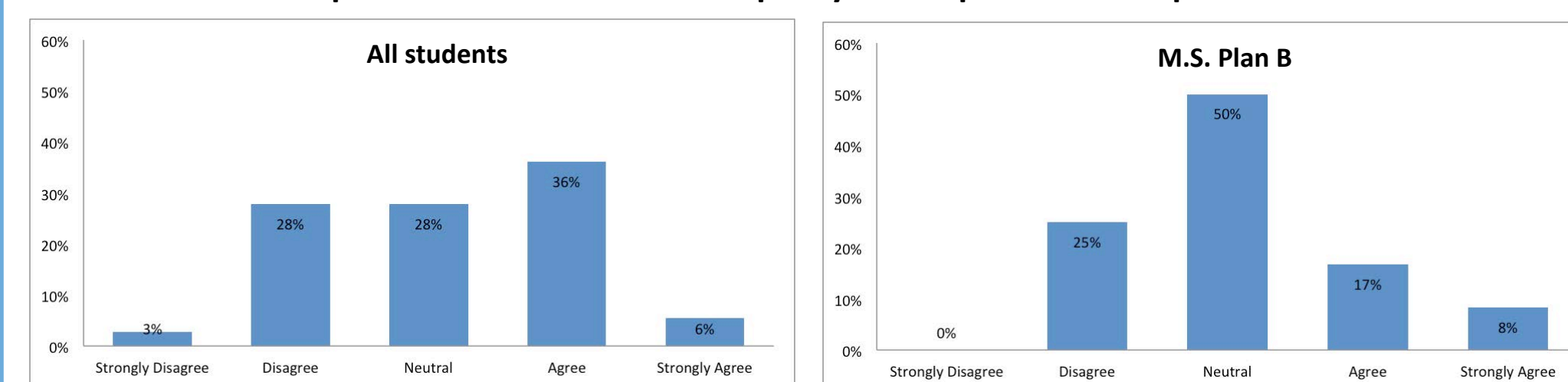


Figure 1. Graduate student responses to survey questions indicated the need for curricular improvement.

Initial assessment activities revealed that our new departmental SLOs covered interdisciplinary approaches to NREM and current courses on curriculum map did not deliver.

Phase II 2014-2015 Develop interdisciplinary conceptual model/diagram to guide the revised curriculum efforts (Fig. 2).

A progression of facilitated and collaborative activities that involved all NREM faculty (on campus, neighbor islands, extension, instructional, research faculty together) followed in order to redevelop core courses to better meet the needs of students and achieve departmental SLOs.

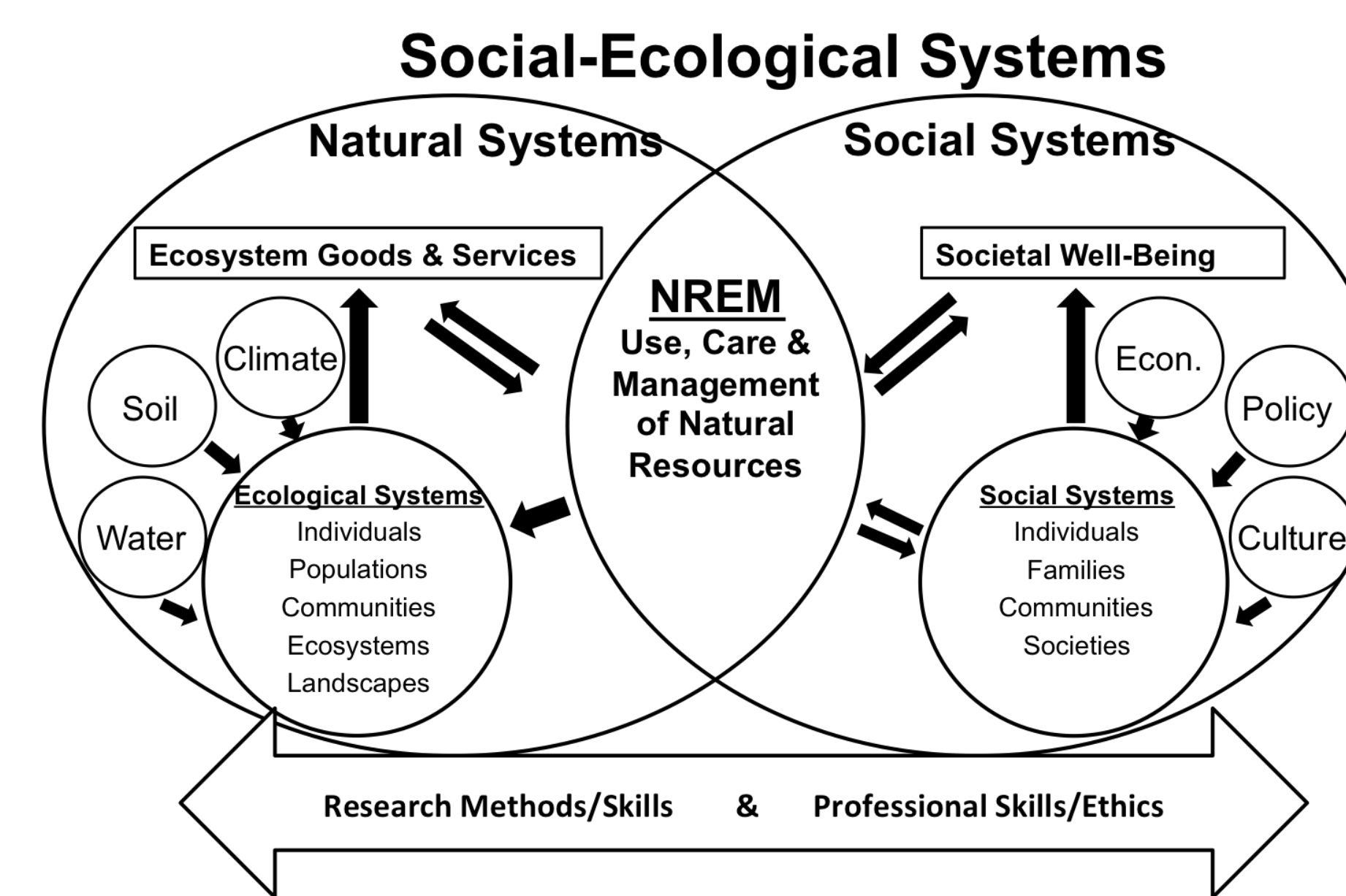


Figure 2. Conceptualization of interdisciplinary curriculum in NREM.

Phase III 2016-2017 Implementation of the revised, core course.

Revised course was implemented in phases, co-instructed by natural and social science faculty to provide a common foundation of knowledge across the breadth of NREM disciplines, fundamental interdisciplinary approaches in social-ecological systems analysis, and professional skills.

Challenges Encountered

- Engaging instructional, research and extension faculty from Oahu and neighbor islands.
- Designing a process that ensured everyone felt heard and not targeted.
- Finding consensus on depth vs. breadth in an interdisciplinary department (i.e., core principles).
- Balancing student feedback with faculty expertise and expectations.

Conclusions

We offer these suggestions for other programs to utilize a facilitated collaborative process to move program assessment forward:

Success Strategies

- Critical activities undertaken in workshops at annual retreats that colleagues stationed on neighbor islands attended; remote participation during faculty meetings; one-on-one conversations in person or on phone; small group feedback session.
- Stay very organized by planning facilitated sessions and structured meeting activities; regularly provide reminders of the history of the process and key decisions (made by vote) to avoid backtrack.
- Dedicated, tenacious team that reaches out for help/feedback when needed in a way that respected individual preferences for interaction.

Acknowledgements and Contact



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