

**Innovations in
Education for Sustainability:
A Trans-Disciplinary Ecosystem
Approach to Teaching Sustainability**

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New Jersey County Planners Association Meeting
September 21, 2018
Tatum County Park, Middletown

Overview

- While RCNJ does not have a planning degree, both SUST and MASS are informed by a deep knowledge of Sustainability Planning from within a complex adaptive socio-ecological systems frame, offering a holistic ecosystem approach to Sustainability Planning. Rittel and Webber's seminal article, *Dilemmas in a General Theory of Planning*, and Holling and Goldberg's often overlooked article, *Ecology and Planning*--which both go back almost fifty years--lay out the foundational basis for taking an ecosystem approach to Sustainability Planning.

Complex adaptive systems act as “wicked problems”

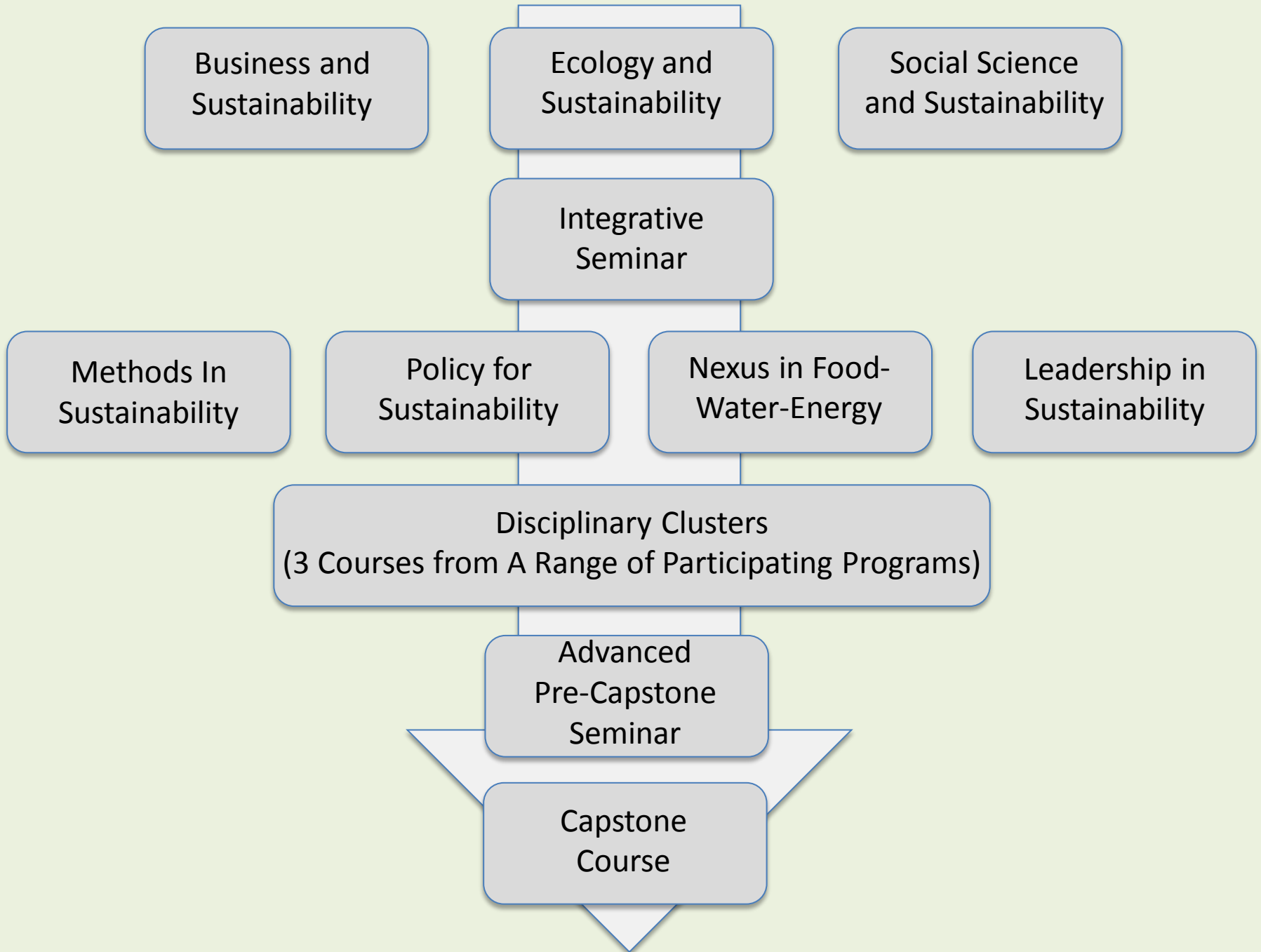
Rittel, Horst W. J. & Melvin M. Webber. 1973.
"Dilemmas In A General Theory of Planning," *Policy Sciences* 4, 1973, pp 155-169.

- Every wicked problem is **unique**;
- Wicked problems can always be **explained in more than one way**;
- There is **no definitive formulation** of a wicked problem;
- There is **no stopping rule** (by which one can know the problem to have been “solved”);
- There is **no enumerable set of solutions**;
- There is **no singular test** of a proposed solution.

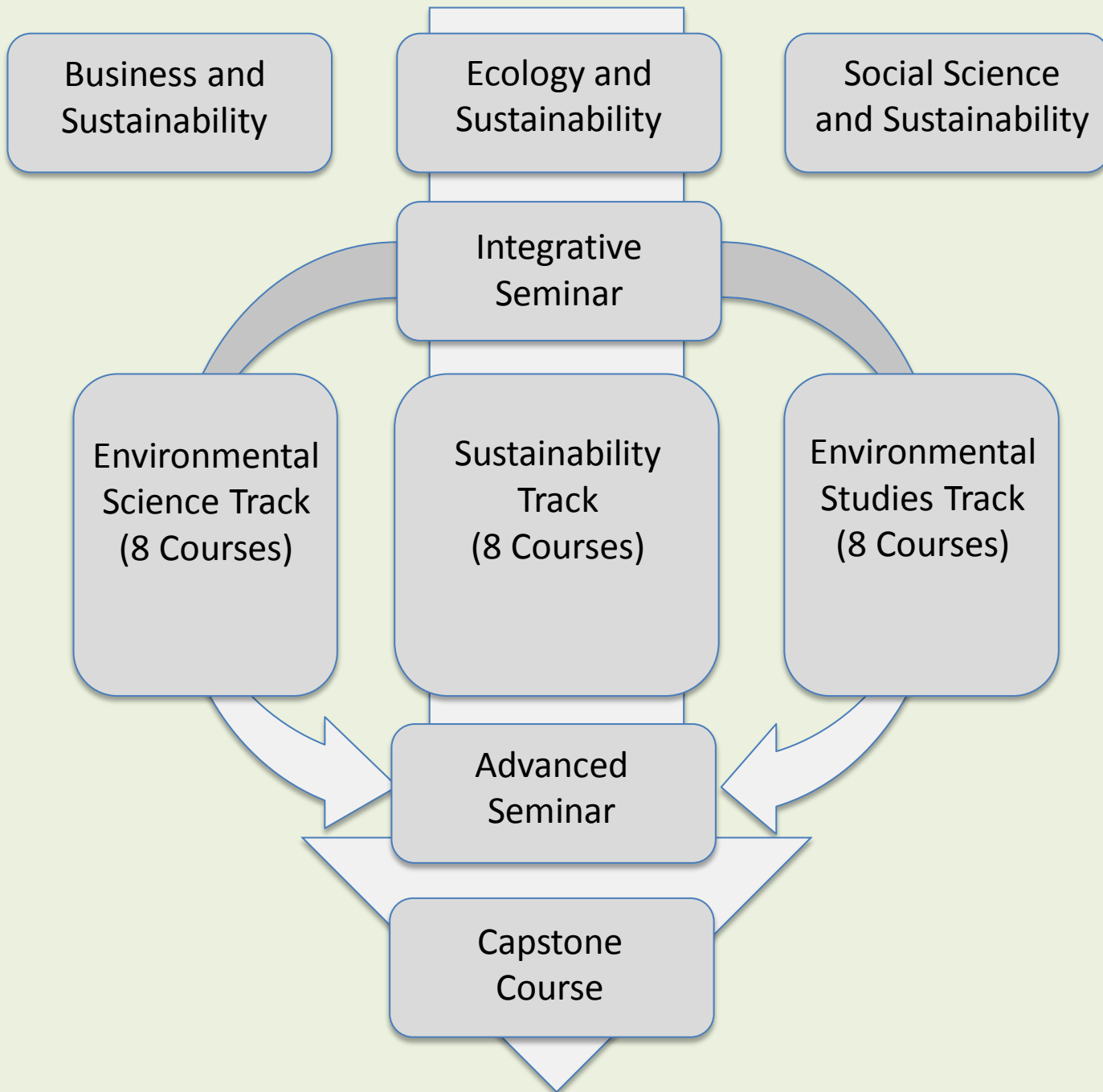
A Trans-Disciplinary Approach

- SUST is an All-College Major
- Draws on four of the College's five Schools
 - School of Social Science and Human Services (SSHHS)
 - School of Theoretical and Applied Sciences (TAS)
 - Anisfield School of Business (ASB)
 - Salameno School of Humanities and Global Studies (SSHGS)

SUST Major: Course Distribution



**SUST Major:
Proposed Track Distribution**



**SUST and MASS:
Proposed Five Year Degree Program**

Business and
Sustainability

Ecology and
Sustainability

Social Science
and Sustainability

Integrative
Seminar

Methods In
Sustainability

Policy for
Sustainability

Nexus in Food-
Water-Energy

Leadership in
Sustainability

Disciplinary Clusters
(3 Courses from A Range of Participating Programs)

MASS
4 Courses

MASS
4 Courses

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