AGRO 375, Special Topics: Designing a New Course in Systems Thinking for a Sustainable Future. Professor Molly Jahn (& Cathy Middlecamp), Tuesdays & Thursdays, 9:30 – 10:45

This seminar offers a novel lens through which to view and more completely understand and manage the complex global issues that we now face: Systems Thinking. Together we will read A Systems View of Life, an interdisciplinary book written primarily for college undergraduates. The authors explain: “Over the past 30 years, a new systemic conception of life has emerged at the forefront of science. New emphasis has been given to complexity, networks, and patterns of organization, leading to a novel kind of “systemic” thinking.”

Seminar participants will work with each other, with the professors, and with the author of this book & his colleagues at UC Berkeley to create a new sustainability course at UW-Madison. We will write class learning goals, design activities to meet these learning goals, and class test our products. Look for lively discussions and a chance to shape a new undergraduate course to be offered in Fall Semester 2017.

ENVIR ST 600, Section 001: Water in a Changing World. Professor Mutlu Ozdogan; Tuesdays and Thursdays, 1:00-2:15 p.m.

Renewable fresh water comprises only a small fraction of global water resources, and the mismatch between the demand and supply is increasing due to climate change and growing human populations. What will the Earth’s freshwater resources look like in the next century? This course will examine the hydrologic cycle, its natural and human-induced variability, the hydrologic impacts of human activities, and predicted short- and long-term hydrologic changes and impacts under a changing climate. It will also explore social factors including population pressure on water resources, economic development and water quality/quantity, access to water, and poverty and water. The class will combine lectures and participation by students in collaborative research, classroom presentations, software simulations and visualizations, and extended discussions. Students will be exposed to physical principles of the global water cycle and understand the relationship between humans, climate and water systems, and gain an understanding of the disparate distribution of fresh water resources from a changing climate and socioeconomics.

ENVIR ST 600, Section 003: Capstone in Soil and Water Management Professors. Nick Balster and Steve Ventura; Mondays, Wednesdays and Fridays, 12:05-12:55 p.m.; Meets-with Soil Sci 499

Our campus natural areas are an important buffer between highly developed and intensively used parts of the campus and the beautiful lake that frames it. Careful management of the soil resources and storm water moving through this edge are critical to sustaining its ecological services, aesthetics, and educational value. This class will work with Lakeshore Nature Preserve staff to identify a management issue, conduct relevant research, and provide recommendations for the long term stewardship of the campus natural areas.