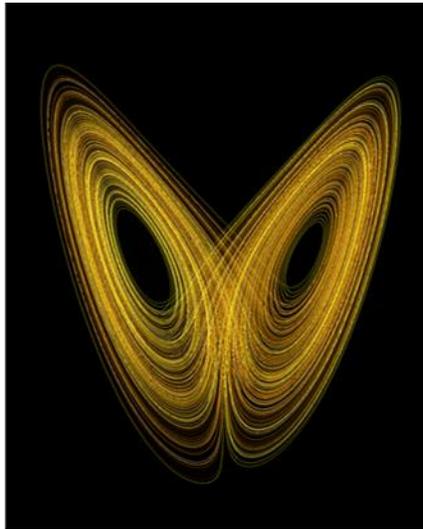


# Systems Ecology Seminar (ENV 6935)



## **Course Description:**

1 credit. The Systems Ecology Seminar is an open-format, weekly seminar that encourages critical thinking about ecological, political, social, and economic systems and their connections. The seminar was initiated at the University of Florida in 1973 by one of the founders of Systems Ecology, Howard T. Odum, and since that time, has had the explicit goal of developing “systems thinkers” who are able to couple quantitative and qualitative understanding of interconnected systems at multiple scales. Each week, a student or group of students, present and lead a discussion about a specific system they are interested in. Student led seminars can cover a wide range of interdisciplinary topics provided they are approached from systems perspective. Participation by students from a variety of academic disciplines is encouraged as it provides context from outside of engineering and science, motivating thoughtful discussion and knowledge sharing across disciplinary boundaries.

## **Instructors:**

Dr. Nathan Reaver, Water Institute  
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Dr. Mark Brown, Environmental Engineering Sciences  
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Dr. David Kaplan, Environmental Engineering Sciences  
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## **Contact:**

Course e-mail: nreaver@ufl.edu

Office Hours: after class and by appointment

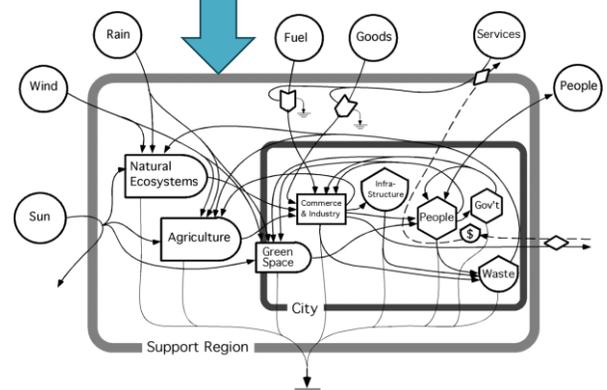
Course website: <https://elearning.ufl.edu>

## **Prerequisites:**

None

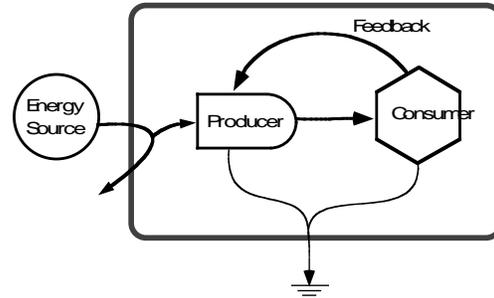
## **Time and Location:**

Thursdays 4:05-4:55, 101 Phelps Lab



### Student Learning Objectives:

- Understand basic concepts of systems thinking and system dynamics
- Understand how to translate system thinking into practical applications
- Actively engage in a science-based forum for the exchange of research findings, ideas, and debate
- Lead and facilitate a scientific discussion



### Course Format:

Weekly seminars. The first few seminars will consist of lectures introducing the basic concepts of systems thinking and how to translate these ideas into conceptual system diagrams and models. Following these initial lectures, each student will lead or co-lead at least one of the weekly seminars on a system of interest. As a part of their seminar, students are required to diagram the system they are discussing, allowing all seminar participants to visualize the often-complex interactions that drive system state and change. Additionally, students are encouraged to translate their diagram into a simplified system model. All participants are expected to actively engage in the weekly discussions. Attendance is required and will be determined using a sign-in sheet circulated during the seminar.

### Grading Scheme and Assignments:

Attendance:	20%
Active participation in discussion:	30%
Lead a seminar:	50%

**Grading Scale:** Satisfactory (S) or Unsatisfactory (U). GPA information can be found here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

**Course Topics and Schedule:** General seminar topic themes and the semester schedule of seminars will be discussed on the first day of class.

**Academic Honesty:** As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. **It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code.** Violations of the Honor Code at the University of Florida will not be tolerated. **Violations will be reported to the Dean of Students Office for consideration of disciplinary action.** For more information, please see: <http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>.

**Software Use:** All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

**Evaluations:** Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

**Students with Disabilities Act:** Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

**Campus Helping Resources:** Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance:

- *University Counseling & Wellness Center* ([www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)), 352-392-1575,
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Training Programs
  - Community Provider Database
- *Career Resource Center*, First Floor, J. Wayne Reitz Union, 392-1601, [www.crc.ufl.edu](http://www.crc.ufl.edu)