SYSC 511 Systems Theory
Winter 2011
6:40-8:30 pm Monday, Wednesday

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Description:
This class presents a broad introduction to systems science. It begins with an overview of the systems paradigm and its historical context. The theories of multivariate relations, dynamic systems, learning and optimization will be surveyed in the context of modeling, control and classification problems. Students will gain perspective on issues such as discrete versus continuous systems, types of system representations and linear versus non-linear systems.

Texts:

Topics:
- Object-Relation Model
- The Systems Movement
- Systems Hierarchy
- Complexity
- Information
- Cybernetics
- Fuzzy Systems

Evaluation:
Homework 50%
Final Exam 50%