COMPLEX ADAPTIVE SYSTEMS (CAS)

Courses primarily for graduate students, open to qualified undergraduates:

CAS 502: Complex Adaptive Systems Seminar
(Cross-listed with COM S). (1-0) Cr. 1. F.S.
Prereq: Admission to CAS minor
Understanding core techniques in artificial life is based on basic readings in complex adaptive systems. Techniques of complex system analysis methods including: evolutionary computation, neural nets, agent based simulations (agent based computational economics). Large-scale simulations are to be emphasized, e.g. power grids, whole ecosystems.

CAS 503: Complex Adaptive Systems Concepts and Techniques
(Cross-listed with COM S). (3-0) Cr. 3. S.
Prereq: Admission to CAS minor or related field
Survey of complex systems and their analysis. Examples are drawn from engineering, computer science, biology, economics and physics.