ACN6347 - Intelligent Systems Analysis

ACN 6347 (HCS 6347) Intelligent Systems Analysis (3 semester hours) Mathematical tools for investigating the asymptotic behavior of both deterministic and stochastic nonlinear dynamical systems. Topics include: artificial neural network architectures, Lyapunov stability theory, nonlinear optimization theory, stochastic approximation theory, and Monte Carlo Markov Chain methods such as the Metropolis-Hastings algorithm. Emphasizes development of advanced analytic skills and mathematical reasoning abilities. Prerequisite: ACN/HCS 6348 (or equivalent) or consent of instructor. (3-0) T (2016-02-05 21:31:58)