Topics on Stochastic Optimization by Computer Simulation
CSc 86030 [10505]
Felisa Vázquez-Abad
Tues., 2:00pm - 4:00pm
3 credits

Syllabus:
Overview of deterministic constrained optimization
The iterative method as an Ordinary Differential Equation
Stochastic approximation methodology
Asymptotic efficiency of numerical algorithms
Statistical estimation of gradients, sensitivity analysis
Stochastic approximation at work (examples of applications and case studies)
Discrete optimisation: MCMC, simulated annealing, randomized methods.