OPRE7315 - Dynamic Programming

OPRE 7315 Dynamic Programming (3 semester hours) This course is an introduction to both deterministic and stochastic dynamic programming. The basic ideas of recursion and functional equation will be introduced. A wide variety of applications will be used to illustrate these concepts. Specific topics include: Markov and Semi-Markov decision processes, principle of optimality, structure of optimal policies under various cost criteria, LP formulations, and policy-improvement techniques. Prerequisites: OPRE 6331 or consent of instructor. (3-0) R