UNIVERSITY OF MARYLAND, COLLEGE PARK

Department of Electrical and Computer Engineering

ENEE 698C – CONTROLS SEMINAR - Fall 2017
Simulation-Based Methods for Markov Decision Processes, Multi-Armed Bandits, and Monte Carlo Tree Search

Meetings: Thursday 2:00 – 4:00 in Rm. 2168, A V Williams Bldg.

Instructor: Prof. Steve Marcus (marcus@umd.edu), 2219 AV Williams Bldg., Ext. 57589

Instructor Office Hours: Monday 9:30 – 10:30 and Wednesday 12:30 – 1:30 in 2219 AVW

Text: Simulation-Based Algorithms for Markov Decision Processes by H.S. Chang, J. Hu, M.C. Fu, and S.I. Marcus (pdf copies of the chapters covered will be supplied)

Course Organization:

Students will present chapters from the text, as well as additional papers that will be supplied.

Course Content:

This seminar will focus on topics related to simulation-based algorithms for Markov decision processes, multi-armed bandit problems, Monte Carlo tree search, with applications including Google DeepMind's AlphaGo.

Students will receive either 1 or 2 credits, depending on how many presentations they give.