COMP 790: Stochastic Performance Modeling and Scheduling in Computer Systems

Homework 3: Discrete-Time Markov Chains

Released: February 16, 2026   Due: March 2, 2026

Instructions: This assignment is due at the start of class on the above due date. Collaboration is allowed, but please note your collaborators and turn in your own version of your answers. For more info on collaboration, see the course syllabus. Please utilize office hours if you get stuck! Office hours are Monday 10:00 - 11:30 and Friday 4:00 - 5:30 in FB 336. All problems come from the course textbook unless otherwise stated. **Please staple this page to the front of your answers.**

Book Problems: 7.2, 7.3, 7.5, 8.6, 9.7, 10.3, 10.4, 10.7

All problems are worth 1 point, except 8.6 and 10.7, which are worth 2 points. 10.7 is difficult, so leave some time to work on it.

Problem	Score
7.2	
7.3	
7.5	
8.6	
9.7	
10.3	
10.4	
10.7	
Total	

Name/onyen: _____

Collaborators (or write N/A): _____