**ECE6110** **Spring Semester, 2015**

# Project 2 – Comparision of RED vs. DropTail Queuing

*Assigned: Feb 9, 2015* *Due: Feb 25, 2015, 11:59pm*

For this project, we will use the *ns–3* simulator to conduct a set of simulation experiments to compare the performance of the Random Early Detection (RED) queuing method to the more traditional DropTail queuing. You should compare the performance of these queuing methods under a variety of conditions, including varying queue sizes, RED parameters, TCP receiver windows, round trip times, and traffic load. Your topology should be non–trivial, but not so complex that the simulations take excessive running time. The traffic should have some mix of TCP and UDP flows. For defining the queues, you can assume that all queues are either RED or DropTail; you don't need to test with a mix of queuing methods in the same simulation.

Your should prepare a report documenting your findings. State clearly all assumptions, show your topology, describe the various traffic loads you used and present the measured results. Of course, for this assignment there are not necessarily any "right" or "wrong" answers, but instead your findings will be highly dependent on your assumptions and traffic mixes.

Details on submitting your code and report will be provided later.