Fall 2017/MA 397   HW 7: Go with the flow! (as long as it's feasible!)

Remember that, although you are encouraged to work together, all of your write-ups must be your own (no copying someone else's solution - not even with minor wording changes.) **List the names of everyone you worked with on the HW!** You are encouraged to **not** look online for solutions - your time is better spent wrestling with the proof yourself or getting help from the professor, than squandering it online.

1. READING

Reread Section 4.3.

2. PROBLEMS

Do

(1) 4.3.3

(2) 4.3.4

(3) 4.3.8 (Hint: "ordinary network theory" means that from the digraph G having capacities on the vertices, define a new digraph G' having capacities on edges. Apply Ford-Fulkerson and/or max flow/min cut theorem to G' and then translate the result back to the graph G. Some of the edge capacities in the digraph G' will be infinite.)

(4) (BONUS!) 4.3.14