American Semiconductor Case—“bonus” assignment* due Tuesday, November 27

With a small team, prepare a report of 2-3 pages that addresses the following:

(1) Selection and justification of your goal(s).
(2) For your selected goal(s), devise an appropriate inventory strategy (i.e., at which stages of completion do you want to hold inventory and roughly how much do you want to hold at each stage of completion?) and a scheduling strategy that is consistent with your inventory strategy.
(3) Why you think your approach will help to achieve your goal(s).

There are many reasonable approaches; what is important is that your approach is sensible and internally consistent.

*Each person on our team can earn up to 10 points for turning in this assignment. We will first add points to your homework and case study scores to offset any points that you missed. Any remaining points will be added to your midterm scores.

Homework Problems

1. Problem 9, page 420 of Nahmias. Also, suppose that tardiness penalties depend on the size of the order and the amount of tardiness. What sequence would you use and why?

2. Problem 14, page 428 of Nahmias. You do not have to draw a Gantt chart.


5. Describe a real scenario (from your own experiences or observations) in which each of the following scheduling objectives would be appropriate. Write one paragraph describing each scenario.

   (a) minimize makespan;
   (b) minimize total tardiness;
   (c) minimize number of tardy jobs;
   (d) minimize mean flow time.
   (e) another objective of your choice


7. Problem 27, page 530 of Nahmias. Do parts (a) and (b) only.

8. Problem 29, page 531 of Nahmias. Do parts (a) and (c) only.