## **Directed Graphs and Critical Paths**

Read the book chapters first, then make sure you can answer the questions in the notes. Following that, work on some skills-check problems and exercises. Then take the online quizzes.

**Reading** 2.5 **Skills Check** 28, 29, 30 **Exercises** 74, 75, 77, 79, 80 **Quiz** Take the quiz<sup>1</sup>

## 2.5

- What is the purpose of an *order-requirement digraph* (digraph is shorthand for "directed graph")?
- In a order-requirement digraph, do we associate numbers/weights with the edges or with the vertices?
- Provide some examples from your personal experience where you might use an order-requirement digraph.
- What is a *critical path* in an order-requirement digraph? What is its significance?
- Determine the critical paths in some examples of order-requirement digraphs.

<sup>&</sup>lt;sup>1</sup>https://moodle.hanover.edu/mod/quiz/view.php?id=4769