Class Activities

# Module C: Waiting Line Models

**Activity 1: Experiential Activity**

Learning objective: Identify the various cost implications and the key features of waiting lines

Have students relate a situation where they experienced a long waiting line. Describe the specific situation and its cost implications. Select several students to present their work to the rest of the class.

**Activity 2:** **Activity for Small Groups**

Learning objective: Employ the various queuing models and understand when and how to use them in order to calculate optimal queuing solutions, including the psychology underlying waiting lines

Have students find three or more classmates to form a group. Assign each group one of the four queuing models: single channel, single channel constant service rate, multiple channel, and finite population. Discuss among one another in the group the defining characteristics and assumptions of the model assigned. Illustrate the model with an example. Present the group’s work to the rest of the class.

**Activity 3: Activity for Small Groups**

Learning objective: Employ the various queuing models and understand when and how to use them in order to calculate optimal queuing solutions, including the psychology underlying waiting lines

Prepare at least four problems similar to Examples D.1, D.2, D.3, and D.4. Have students work in pairs and assign each pair one of the problems. Ask the pair to keep a record of the problem solving process, including actual steps, time taken for each step, and a description of each step. Turn in the process analysis at the end of class. Review the analyses for areas where students spend the most time and/or need clarifications. Report back to the class the findings of the analyses and go over areas that need clarifications in the next meeting.