

## MGNT 3437 (Dr. Simons) – Learning Objectives for Final Exam

### Ch. 1 – The role of services in an economy

1. State the Clark-Fisher hypothesis concerning the evolution of an economy.
2. Describe the features of the new experience economy.

### Ch. 2 – The nature of services

1. Reconstruct the service process matrix, differentiate the four quadrants, and use the matrix to classify a specified service business.
2. Identify the five distinctive characteristics of service operations and explain the implications for managers.

### Ch. 4 – New service development

1. Explain and demonstrate service blueprinting, to include the three lines.
2. Compare and contrast the production-line, customer as coproducer, and customer contact approaches to service system design.

### Ch. 6 – Service quality

1. Describe and illustrate the five dimensions of service quality.
2. Explain how the service gap model can be used to diagnose quality problems for a service.

### Ch. 15 – Service supply relationships

1. Explain and give examples of the customer-supplier duality that leads to service supply relationships.
2. Describe three strategies to improve the capacity of service workers.

### Ch. 7 – The service encounter

1. Explain and demonstrate how to use the service encounter triad to describe a service firm's delivery process.
2. Explain the role of the consumer as coproducer and the effect of scripts.

### Ch. 8 – The supporting facility

1. Define the term “servicescape” and state the impact of a well-designed servicescape on the behavior of customers and employees.
2. Recommend facility design features to remove the anxiety of disorientation.

### Ch. 9 – Service facility location

1. Differentiate the type of criteria most likely to be used for private or public sector location decisions.
2. Using the objectives of maximizing utilization, minimizing distance per capita, and minimizing distance per visit, explain how the choice of criteria affects location.

### Ch. 12 – Managing capacity and demand

**Desired overall outcome:** Match service capacity with demand.

**Specific learning objectives:**

1. Differentiate what it means to manage demand vs. managing supply.
2. Identify and describe the five strategies for managing the demand for services.
3. Use the critical fractile to determine the overbooking strategy for a service that minimizes expected loss.
4. Identify and describe the six strategies for managing the capacity to supply services.
5. Use a manual heuristic (demonstrated in class) to prepare a weekly workshift schedule with two consecutive days off for each employee.
6. Explain what yield management is and when it is most appropriate.

### Ch. 13 – Managing waiting lines

**Desired overall outcome:** Understand how waiting lines work and effect customers in order to reduce and improve waiting experiences.

**Specific learning objectives:**

1. Describe four ways to shorten waits or make them more tolerable.
2. Describe how and when queues form.
3. Identify Maister's two “laws of service”.
4. Describe five aspects of the psychology of waiting and suggest management strategies to deal with each.
5. Identify the five essential features of a queuing system and the alternatives for each.
6. Define and use the terms “balk”, “renege”, and “jockey” as they relate to queuing systems.
7. Know the relationship between a negative exponential distribution of time between arrivals and a Poisson distribution of arrival rates.

### **Ch. 14 – Capacity planning & queuing**

**Desired overall outcome:** Quantify the effect of system capacity and design on important measures of waiting.

**Specific learning objectives:**

1. Explain the basic tradeoff addressed by capacity planning decisions.
2. Classify queuing models using the standard notation system.
3. Differentiate the concepts of “transient state” and “steady state” and explain how they relate to the use of queuing models vs. simulation.
4. Describe the nature of the relationship between  $\rho$  and congestion.
5. Explain the effects of pooling in terms of the contrast between increasing the number of servers and increasing the service rate. (Table 14.2)
6. Apply queuing model equations to determine system characteristics.
7. Recognize the important relationships among certain system measures and models.
8. Apply alternative criteria to evaluate service system capacity.

### **Ch. 13 Supplement – Computer simulation**

**Desired overall outcome:** Understand the capabilities and limitations of simulation as a tool for service system design and improvement.

**Specific learning objectives:**

1. Define and differentiate the terms “dynamic” and “stochastic”.
2. Describe the process of system simulation. (Fig. 13.14)
3. Define, differentiate, and explain how to accomplish model verification and validation.
4. Explain what Monte Carlo simulation is and when it should be used.
5. Describe how discrete-event simulation works.
6. Analyze simple service systems using the ServiceModel simulation software.