

MGNT 3437 - Service Operations Management – FA11

Section A (CRN 83833) – T/R, 9:30-10:45 a.m. – COBA, Rm 2244



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Office hours: M/W 1:10-2:30 p.m. & T/R 10:45-11:30 a.m. (subject to change)
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Course prerequisite: BBA status and a C or better in BUSA 3131 or STAT 2231

General: I have tried to include all the administrative information you need for this course in the syllabus. So if you have an administrative question, please check the syllabus first. I intend to conduct the class as described here, but I reserve the right to make any changes I consider necessary to correct mistakes or to improve the value of your learning experience. If changes are necessary, I will announce them in class in sufficient time for you to prepare. (As described later in the attendance policy, absence from class will not excuse you from responsibility for any changes.)

Text: To minimize your cost, we're using a paperback, customized version of *Service Management: Operations, Strategy, and Information Technology* (5th edition) by Fitzsimmons and Fitzsimmons, published by McGraw-Hill/Irwin. This version will be sold through the bookstore. If you buy your book from another source, the regular version of this text is ISBN 0-07-298230-6. You DO need to get the book and bring it to each class.

Course objectives: In the U.S., the vast majority of jobs and the greatest percentage of the Gross National Product are generated by the service sector. Because of this, most of you will be employed to manage some sort of service activities. While many of the operations management techniques devised for manufacturing (and taught in MGNT 3430) can be transferred to service operations, services are inherently different. This course is intended to help you better anticipate, recognize, analyze, and improve the key characteristics and decision making processes of service operations.

Class format: We will use a variety of traditional and active learning methods. Please be prepared for class and participate constructively. Out of courtesy to your classmates and me, please turn off your cell phones/pagers, arrive prior to our scheduled start time, and remain for the entire class. If late arrivals become a problem, I may close and lock the classroom doors when we begin class.

Course grades: The first table below lists the graded activities and their relative weights. I try to provide feedback on graded activities promptly – generally by the following class period. Throughout the course, I will give you access to a record of your graded activities and your current course average, calculated using the relative weights shown. Your final course letter grade will be determined by your course average. You can be assured of receiving grades at least as good as those shown in the second table.

Graded activity	%
Quizzes (drop lowest two)	15
Class activities (drop lowest two)	20
Exam 1	20
Exam 2	20
Final exam	25
Total	100

%	Letter grade
90% or higher	A
80% or higher	B
70% or higher	C
60% or higher	D
Less than 60%	F

Quizzes (15%): To encourage preparation for class, we will have quizzes throughout the semester. Some quizzes may be given in class, but most are to be completed in Georgia View (GaView) prior to when we discuss that topic in class. During the dates shown in the course schedule, you will be allowed one attempt to take each GaView quiz. You will have a 15-minute time limit, but you may use your textbook and notes. You are not allowed any other form of assistance. I may also give unannounced, closed book quizzes in class. Quizzes cannot be “made up” and no credit will be given for missed or late quizzes, regardless of your reason for not completing them on time. (This includes computer and network problems, which are beyond my control.) So you’re taking a risk if you wait until the last minute. However, I will drop your lowest two quiz scores from the calculation of your course average.

Class activities (20%): To help you develop the ability to apply the course content, we will have several graded activities during class. Activities will often be based on the short cases or problems shown in the syllabus. You are expected to read and attempt these cases and problems prior to coming to class, so that we don’t waste time waiting for people to become familiar with what we’re doing. I may also assign “homework” activities in one class that will serve as the basis for activities in a subsequent class. Graded class activities cannot be “made up” (even if you have a good reason for not being in class) because classroom interaction will be an important component. However, I will drop your lowest two activity scores from the calculation of your course average.

Examinations (65%): The two exams during the semester will each be worth 20% of your course grade. The final exam (worth 25%) will include a comprehensive portion, but will mostly emphasize material covered since the previous exam. Each exam will consist of closed book responses to items based directly on the learning objectives specified at the end of this syllabus for each of the topics covered on the exam. Exams will include both conceptual and analytical items. Formulas will not be provided for you except for solving waiting line (queuing) problems. (In that case, you will still have to know which formula to use.) However, answers will probably be solicited in multiple choice format. Therefore, you must bring a brown scantron sheet to each exam.

Attendance policy: University policy requires attendance on the first day of class, which I will verify. After that, I will continue to expect you to attend all classes, even if I don’t record attendance. If you don’t come to class, you can’t earn any points available for that day’s activities and you won’t learn as much. However, you are still responsible for all material covered that day, as well as any new guidance I give out. Please do not ask me to repeat what happened in class. In addition, the university’s policy for participation in final exams applies to all exams in this class. According to that policy, you are not allowed to take exams at other than the scheduled time except for emergency reasons, such as serious illness or the death of an immediate family member (i.e. parents, siblings, or spouses). If one of circumstances happens, contact me immediately to avoid receiving a zero and then bring your documentation to the next class you attend.

Academic misconduct: I expect you to comply with the university’s *Student Conduct Code*. Penalties for violations of the Code may include a course grade of F, suspension, and/or expulsion from the campus. Although I encourage you to study with other students, **ALL** work you submit/present for grading is to be accomplished on your own unless I tell you otherwise. Plagiarism is never acceptable. If the instructions for any written submissions allow the use of information sources, you must specifically and correctly document your use of sources. During exams, you may use only the information given on your exam and may not look at any other sources. (To avoid any appearance of cheating, keep your eyes on your own work.) In addition, you are not to discuss the content of examinations or how your work was evaluated with anyone unless and until I explicitly tell you it’s OK to do so.

MGNT 3437 COURSE SCHEDULE & ASSIGNMENTS

Days	Dates	Topics	Assignments (do before class)	GaView quizzes*
T	23 Aug	Course introduction		23-29 Aug (covers syllabus)
R	25 "	The role of services in an economy	Study Ch 1, e-mail photo	
T	30 "	The nature of services	Study Ch 2	24-29 Aug
R	1 Sep	" " " "	"Xpresso Lube"	
T	6 "	New service development	Study Ch 4	31 Aug-5 Sep
R	8 "	" " "	"Commuter Cleaning"	
T	13 "	Service quality	Study Ch 6	7-12 Sep
R	15 "	" "	"The Complaint Letter"	
T	20 "	Review		
R	22 "	Exam 1		
T	27 "	Service supply relationships	Study Ch 15	21-26 Sep
R	29 "	" " "	"Peapod"	
T	4 Oct	The service encounter	Study Ch 7	28 Sep-3 Oct
R	6 "	" " "	"Amy's Ice Cream"	
T	11 "	The supporting facility	Study Ch 8	5-10 Oct
R	13 "	" " "	Exercises 8.5 & 8.10	
--- Note: Monday, 17 Oct is last day to withdraw without academic penalty. ---				
T	18 "	Service facility location	Study Ch 9	12-17 Oct
R	20 "	" " "	Exercises 9.4 & 9.12	
T	25 "	Review		
R	27 "	Exam 2		
T	1 Nov	Managing capacity and demand	Study Ch 12	26-31 Oct
R	3 "	" " " "	Exercises 12.4 & 12.7	
T	8 "	Managing waiting lines	Study Ch 13	2-7 Nov
R	10 "	" " "	"Eye'll Be Seeing You"	
T	15 "	Capacity planning & queuing	Study Ch 14	9-14 Nov
R	17 "	" " " "	Exercises 14.1, 4, 7, 9	
T	22 "	<i>Thanksgiving holiday – no class</i>		
R	24 "	" " " "		
T	29 "	Capacity planning & queuing (cont.)	Practice queuing problems	(in-class quiz)
R	1 Dec	" " " "	"Renaissance Clinic (B)"	
T	6 "	Computer simulation	Study Ch 13 Sup	30 Nov-5 Dec
R	8 "	" "	"Renaissance Clinic (A)"	
T	13 "	Final exam @ 10:00 a.m. - 12:00		

* These are the dates on which you will have GaView access to quizzes that must be completed prior to the class in which we begin to cover that topic.

MGNT 3437 – LEARNING OBJECTIVES

Ch. 1 – The role of services in an economy

Desired overall outcome: Recognize the pervasiveness, forms, and evolution of service businesses.

Specific learning objectives:

1. Provide several definitions for the term “services”.
2. Describe the various roles or types of services in an economy and how they relate to each other, as well as to the manufacturing sector. (Figure 1.1)
3. State the Clark-Fisher hypothesis concerning the evolution of an economy.
4. Identify and differentiate the five stages of economic activity. (Table 1.1)
5. Describe the features of preindustrial, industrial, and postindustrial societies.
6. Quantify the magnitude of the service sector in the U.S. economy.
7. Describe the features of the new experience economy.
8. Contrast the push vs. pull theories of innovation.
9. Identify three significant social trends and the effects they will have on services.

Ch. 2 – The nature of services

Desired overall outcome: Accurately characterize a service, its constituent elements, and how it can be differentiated from other services.

Specific learning objectives:

1. Reconstruct the service process matrix, differentiate the four quadrants, and use the matrix to classify a specified service business.
2. Identify the five features of a service package.
3. Identify the five distinctive characteristics of service operations and explain the implications for managers.
4. Explain how a strategic classification of services can be helpful to managers.
5. Explain the role of a service manager from an open-systems view of service operations.

Ch. 4 – New service development

Desired overall outcome: Thoroughly incorporate important elements in the design or redesign of a service operation.

Specific learning objectives:

1. Describe the sequence of stages and the enablers of the new service development process.
2. Explain and demonstrate service blueprinting, to include the three lines.
3. Explain the concepts of divergence and complexity, to include how they differ, and use them to position service businesses.
4. Identify the three types of “objects” of the service process.
5. Explain the difference between direct and indirect customer contact.
6. Compare and contrast the production-line, customer as coproducer, and customer contact approaches to service system design.
7. Describe how information can be used to empower both employees and customers.
8. State and explain the customer value equation.

Ch. 6 – Service quality

Desired overall outcome: Appreciate the breadth of service quality and apply appropriate tools to improve it.

Specific learning objectives:

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.
3. Describe how the SERVQUAL survey instrument is used to measure gaps in a service firm's quality.
4. Explain the idea and intent of Taguchi methods for service design.
5. Explain what a poka-yoke is and give examples.
6. Explain the intent and method of constructing a "house of quality" as part of a quality function deployment project.
7. Explain how to design and use a walk-through audit.
8. Identify and give examples of the four costs of quality.
9. Describe the features of an unconditional service guarantee and its managerial benefits.
10. Explain what service recovery is and why it's important.

Ch. 15 – Service supply relationships

Desired overall outcome: Facilitate the ability of a service business to operate successfully in its environment.

Specific learning objectives:

1. Explain the concept and value of supply chain management.
2. Identify the sources of uncertainty that make it difficult to manage a supply chain.
3. Describe strategic supply chain initiatives used to reduce the impact of uncertainty.
4. Explain and give examples of the customer-supplier duality that leads to service supply relationships.
5. Describe significant implications of bidirectional service relationships.
6. Describe the sources of value in service supply relationships.
7. Describe three strategies to improve the capacity of service workers.
8. Identify the benefits and risks of outsourcing services.
9. Identify the important outsourcing considerations for different categories of business services.

Ch. 7 – The service encounter

Desired overall outcome: Analyze and improve service encounters.

Specific learning objectives:

1. Explain and demonstrate how to use the service encounter triad to describe a service firm's delivery process.
2. Explain how the culture and level of employee empowerment in an organization affect the service encounter.
3. Differentiate four organizational control systems for employee empowerment. (Table 7.1)
4. Prepare abstract questions and write situational vignettes to evaluate potential service employees.
5. Differentiate the four groups of service customers identified by Stone, based on their attitudes and expectations.
6. Explain the role of the consumer as coproducer and the effect of scripts.
7. State the relationship between customers' and employees' perceptions of service quality, and its implication.
8. Describe how the elements of the service profit chain lead to revenue growth and profitability.

Ch. 8 – The supporting facility

Desired overall outcome: Design and maintain effective and efficient service facilities.

Specific learning objectives:

1. Define the term “servicescape” and state the impact of a well-designed servicescape on the behavior of customers and employees.
2. Identify and explain the three environmental dimensions of servicescapes.
3. Identify and describe the six factors that influence the design of a service’s supporting facility.
4. Define and use the terminology associated with process analysis.
5. Identify the bottleneck operation in a product layout and regroup activities to create new jobs that will increase the overall service capacity.
6. Use operations sequence analysis to determine the relative locations of departments in a process layout so that total flow-distance is reduced.
7. Recommend facility design features to remove the anxiety of disorientation.

Ch. 9 – Service facility location

Desired overall outcome: Apply appropriate measures and tools to determine the best locations for service facilities.

Specific learning objectives:

1. State and explain the traditional roles and strategic dimensions affected by facility location.
2. Differentiate the Euclidian and metropolitan metric approaches for measuring travel distance and explain the type of situation for which each is most appropriate.
3. Differentiate the type of criteria most likely to be used for private or public sector location decisions.
4. Using the objectives of maximizing utilization, minimizing distance per capita, and minimizing distance per visit, explain how the choice of criteria affects location.
5. Describe the process of estimating geographic demand.
6. Locate a single facility using the cross-median approach.
7. Locate multiple facilities using the set covering model.
8. Explain and differentiate competitive clustering and saturation marketing.

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 ρ 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. Explain how discrete-event simulation works.
6. Describe how simulation software (such as ServiceModel) can be used to analyze simple service systems.