QMB 6603
Operations Management and Quality Enhancement
MBA Program, Spring, 2023

<u>SYLLABUS</u>

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<u>**Recommended**</u> **Text:**   Heizer, Jay, and Barry Render, *Operations Management: Sustainability and Supply Chain Management,* 12th ed. *onward*

NOTE: THIS TEXTBOOK IS NOT REQUIRED, ONLY RECOMMENDED IF YOU WISH TO LEARN MORE ABOUT THE SUBJECT. YOU CAN COMPLETE THE COURSE WITHOUT IT.

Virtual Office Hours: **By Appointment via Microsoft Teams** (Please schedule appointments at least 24 hours in advance)

Principles of managing manufacturing and service organizations. Topics include: competitive use of operations, comprehensive manufacturing strategies, production system design, material requirements planning, JIT systems, quality management, statistical process control, and project management.

QMB 6603 is about adding value in an organization using techniques to enhance a number of activities. These activities are typically referred to as *production*, *operations*, *processes* or just plain *work*. In more technical terms, Operations Management is concerned with the efficient and effective transformation of inputs into outputs. Some examples of inputs are materials, labor, land, capital, time, information and management. Outputs include products, services or information that customers need. Value is added only when the output meets the needs of customers, both internal and external.

QMB 6603 is built around **two major content areas**: (1) Concepts required to understand and discuss Operations and Quality Management and (2) Analytical Tools required in order to utilize the principles of Operations Management to add value to an organization.

Objectives: Upon completion of the course everyone should:

1. Understand the Role of Operations Management
2. Understand the Fundamentals of Operations Strategy and Supply Chain Management
3. Understand the Importance of Quality Management
4. Understand the Fundamentals of Process Analysis and Inventory Management
5. Understand the Basics of Queueing Theory and Forecasting
6. Understand the Fundamentals of Lean Operations.

Participation and Delivery:

As an online course, all materials will be provided through a combination of readings, slides, previous live lecture recordings and pre-recorded lectures. All material will be available in advance, to allow students to work ahead if they wish. However, each assignment has a specific deadline, so be mindful to not miss them.

Every student must complete an introductory assignment, which doubles as completing your first day attendance requirement – this must be completed by **Wednesday 8 March @ 11:59pm.**

Assignments:

There will be 7 assignment options during the semester, which are to be completed *individually*. These assignments will stress concepts and tools covered in class, as well as more complex problems. Homework will cover the analytical and conceptual concepts covered in class, and that lecture's discussed case. Write-ups must be turned in by **11:59pm each Sunday** **on Canvas as a digital copy**.

For **Assignments #1 through #5**, I allow every student the following:

1. You may turn is any **one** assignment up to **a week late**, without penalty, as long as you inform me **before** the initial deadline.
2. You can choose to **not turn in one** of the first five assignments. Or, if you do submit all five assignments your **lowest score** will be dropped.

All students must complete *one of either* **Assignments #6 or # 7** – no extensions can be given for these assignments, so please plan accordingly.

The five assignments are worth 120 points each.

LINKEDIN LEARNING OPTION:

Due to the ever-evolving nature of the Business and Operations Management worlds, this semester, I am proving all students one additional option on how to complete the course.

For Spring 2023, a student may substitute for **ANY ONE** of Assignments #2 through #7, with the completion of a relevant *LinkedIn Learning Course*.

LinkedIn Learning is USF's online video tutorial platform, which is free to all students, faculty, and staff. Watch 12,000+ of high-quality video courses on the latest software tools and skills taught by industry experts. Learn Excel, PowerPoint, Adobe Photoshop, InDesign, and more. Relevant course recommendations are provided based on each learner's unique need. All contents are accessible to be viewed at any time, on any device, online or offline.

For every module, **EXCEPT MODULE 1**, I will provide a list of appropriate equivalent LinkedIn Learning Certifications to pick from. For any one

assignment, if you would prefer to complete one of these courses (all selected to take the same amount of time to complete as an equivalent assignment), feel free to select one of the recommended certifications, complete the certification by the corresponding assignment due date, and submit proof of completion in the form of the LinkedIn certificate to gain a guaranteed **120 points**.

This is completely optional, and students can choose to complete the course the traditional way by completing five assignments, but I am giving students options this semester that could be more beneficial for their own career paths.

Different courses provide benefits from LinkedIn certificates, credits approved by the Project Management Institute, and so forth.

More information can be found at:

https://myusf.usfca.edu/ets/educational-technologies/linkedin

ALL ASSIGNMENTS ARE TO BE SUBMITTED BY 11:59PM ON THEIR DUE DATE.

Assignments   600 points
TOTAL   **600 POINTS**

Grading Scale (Points)			
558+	**A**	462 - 479	**C+**
540 - 557	**A-**	438 - 461	**C**
522 - 539	**B+**	420 - 437	**C-**
498 - 521	**B**	360 - 419	**D**
480 - 497	**B-**	0 - 359	**F**

Date	Topics Covered	Deliverables
Module 1 Monday 6 March	1A: Introduction to Operations Management 1B: Operations Strategy	**DUE:** Introductory Assignment **Due 3/8** Assignment 1 **Due 3/19** **READ:** Case 1: *"USF University Bookstore"* **RECOMMENDED READING:** Chapters 1 & 2
SPRING BREAK		
Module 2 Monday 20 March	2A: Design of Goods and Services 2B: Introduction to Quality Management 2C: Quality Tools	**DUE:** Assignment 2 **Due 3/26** **READ:** Case 2: *"Quest Diagnostics"* **RECOMMENDED READING:** Chapters 5 & 6 and Supplement 6
Module 3 Monday 27 March	3A: Process Analysis 3B: Forecasting 3C: The Science of Waiting Lines	**DUE:** Assignment 3 **Due 4/2** **READ:** Case 3: *"Massachusetts General Hospital Pre-Admission Testing Area"* **RECOMMENDED READING:** Chapters 4 & 7, Supplement 7, and Module D
Module 4 Monday 3 April	4A: Location Strategies 4B: Layout Strategies 4C: Job Design Strategies	**DUE:** Assignment 4 **Due 4/9** **READ:** Case 4: *"We Are Market Basket"* **RECOMMENDED READING:** Chapters 8, 9 & 10

Module 5 Monday 10 April	5A: Supply Chain Management and Analytics 5B: Inventory Management	**DUE:** Assignment 5 **Due 4/16** **READ:** Case 5: *"Toyota Supplier Relations"* **RECOMMENDED READING:** Chapters 11 & 12 and Supplement 11
Module 6 Monday 17 April	6A: Production Strategies 6B: Lean Operations	**DUE:** Assignment 6 **Due 4/30** **READ:** Case 6: *"Nummi"* **RECOMMENDED READING:** Chapters 13, 14, & 16
Module 7 Monday 17 April	7: Project Management	**DUE:** Assignment 6 **Due 4/30** **READ:** Case 7: *"Project In Trouble"* **RECOMMENDED READING:** Chapter 3

Late Work & Group Work Policy:

      There are no make-ups for assignments. Case write-ups turned in late (**except** your one free extension) will be assessed a penalty: a 25% grade reduction if a less than 24 hours later, or a 50% grade reduction if longer than 24 hours late, but less than 48 hours. Case write-ups will not be accepted if overdue by more than two days. All assignments must be completed **individually**, no group work is accepted.

Academic Integrity of Students:

      Academic integrity is the foundation of the University of South Florida System's commitment to the academic honesty and personal integrity of its university community. Academic integrity is grounded in certain fundamental values, which include honesty, respect, and fairness. Broadly defined, academic honesty is the completion of all academic endeavors and claioms of scholarly knowledge as representative of one's own efforts. The process for faculty reporting of academic misconduct, as well as the student's options for appeal, are outlined in detail in USF System Regulation 3.027: http://www.usf.edu/undergrad/documents/academic-policies/1academic-integrity-of-students.pdf. The final decision on an academic integrity violation and related academic sanction at any USF System institution shall affect and be applied to the academic status of the student throughout the USF System, unless otherwise determined by the independently accredited institution.

Disruption to Academic Process:

      Disruptive students in the academic setting hinder the educational process. Disruption of the academic process is defined as the act, words, or general conduct of a student in a classroom or other academic environment which in the reasonable estimation of the instructor: (a) directs attention away from the academic matters at hand, such as noisy distractions, persistent, disrespectful or abusive interruption of lecture, exam, academic discussion, or general University operations, or (b) presents a danger to the health, safety, or well-being of self or other persons.

Student Academic Grievance Procedures:

      The purpose of these procedures is to provide all undergraduate and graduate students taking courses within the University of South Florida System an opportunity for objective review of facts and events pertinent to the cause of the academic grievance. An "academic grievance" is a claim that a specific academic decision or action that affects that student's academic record or status has violated published policies and procedures, or has been applied to the grievant in a manner different from that used for other students.

Disability Access:

      Students with disabilities are responsible for registering with Students with Disabilities Services (SDS) (SVC 1133) in order to receive academic accommodations. SDS encourages students to notify instructors of accommodation needs at least 5 business days prior to needing the accommodation. A letter from SDS must accompany this request.

Sexual Misconduct/Sexual Harassment Reporting:

      USF is committed to providing an environment free from sex discrimination, including sexual harassment and sexual violence (USF System Policy 0-004). The USF Center for Victim is a confidential resource where you can talk about incidents of sexual harassment and gender-based crimes including sexual assault, stalking, and

domestic/relationship violence. This confidential resource can help you without having to report your situation to either the Office of Student Rights and Responsibilities (OSSR) or the Office of Diversity, Inclusion, and Equal Opportunity (DIEO), unless you request that they make a report. Please be aware that in compliance with Title IX and under the USF System Policy, educators must report incidents of sexual harassment and gender-based crimes including sexual assault, stalking, and domestic/relationship violence. If you disclose any of these situations in class, in papers, or to me personally, I am required to report it to OSSR or DIEO for investigation. Contact the USF Center for Victim Advocacy and Violence Prevention: (813) 974-5757.

Anti-Discrimination Policy:

The University of South Florida System (USF System) is a diverse community that values and expects respect and fair treatment of all people. The USF System strives to provide a work and study environment for faculty, staff and students that is free from discrimination and harassment on the basis of **race, color, marital status, sex, religion, national origin, disability, age, or genetic information, as provided by law**. The USF System protects its faculty, staff, and students from discrimination and harassment based on **sexual orientation, as well as gender identity and expression**. The USF System is also committed to the employment and advancement of qualified veterans with disabilities and veterans protected under the Vietnam Era Veterans' Readjustment Assistance Act, as amended (VEVRAA). As part of the effort to maintain an environment that is comfortable for all people and to ensure consistency with state and federal laws, the USF System establishes this policy. Discrimination, harassment and retaliation are prohibited within the USF System, and complaints of such conduct are to be filed with one of the two designated offices within the USF System, specifically the Office of Diversity and Equal Opportunity (DEO) or the Office of Student Rights and Responsibilities (OSRR or the appropriate Student Affairs office at the campus or institution where the discrimination/harassment occurred). The designated office will review such complaints and provide appropriate response including counseling, mediation, and/or referral for disciplinary action, up to and including termination from employment and/or expulsion from the USF System.

Campus Free Expression:

It is fundamental to the University of South Florida's mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive. In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. Objective means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research. Not all ideas can be supported by objective methods or criteria. Regardless, you may decide that certain ideas are worthy of your personal belief. In this course, however, you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding an idea does not mean that you are required to believe it or agree with it.

Additional guidance related to HB 7 "Individual Freedom Act" can be found online.

End of Semester Student Evaluations:

> All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.