

Fermanian MGT 4084 Operations Management 3 units

SP 24

Meeting days: Tu and Th	Instructor title and name: Matt Boyne
Meeting times: 1:30-2:45	Phone: 7607158071
Meeting location: FSB 102	E-mail: mboyne@pointloma.edu
Final Exam: April 30 1:30 FSB102	Office location and hours: FSB 130 TH 2:45-5:00
Additional info: FSB 130 Friday 10:00-5:00	Additional info: Call anytime.

PLNU Mission To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Fermanian School of Business Mission

Character – Professionalism – Excellence – Relationships – Commitment - Innovation As members of a vital Christian community, we strive to provide high quality business programs that equip students to make a positive impact in their workplace and community by connecting purpose to practice.

COURSE DESCRIPTION This course provides an analysis of the information support systems which aid the manager in the decision-making process. Topics include supply chain, project and operations management, allocation of resources, planning and financial analysis.

COURSE LEARNING OUTCOMES On completion of this class, students achieve the following Course Learning Outcomes (CLOs):

- 1. Exhibit an in-depth knowledge of operations management theory and methods (PLO1 & F1).
- 2. Evaluate and apply continuous process improvement methods (PLO 2 & F1).
- 3. Assess the competitive advantage of a business based on management concepts (PLO 2 & F2).
- 4. Prepare written reports and deliver presentations on operations management topics (PLO 3).
- 5. Formulate operations management decisions influenced by ethical considerations (PLO

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

- 1. *Operations Management in the Supply Chain Decision and Cases* (8th ed.) by Roger Schroeder and Susan Goldstein. The book is in the Bookstore or through the McGraw Hill website.
- 2. Please subscribe to the Student Digital Wall Street Journal. The \$4 subscription per month can be found at <u>Digital Wall Street Journal</u>.
- 3. This book is free through Ryan Library's electronic books: Visual Analytics with Tableau

ASSESSMENT AND GRADING

Distribution by percentage:	Sample grade scale:	
 □ Management Exit Exam 5% (50) □ 9-Team-Based Learning 45% (450) □ 3-Individual Assessments 50% (500) □ 1000 Points 	A=93-100 A-=90-92 B+=87-89 B=83-86 B-=80-82 C+=77-79	C=73-76 C-=70-72 D+=67-69 D=63-66 D-=60-62 F=0-59

Management Content Exam (5% as "one homework" assignment for management majors): These times May Change: Friday, April 22 (2pm - 4pm) or Saturday, April 23 (9am - 11am) All Management majors are required to demonstrate knowledge of material expected of persons who graduate with a major in management. You are required to take a department exam that will be administered by the Fermanian School of Business (FSB) as a requirement in our Operations Management class. But, the exam will test your knowledge of material beyond that presented in this course to include organizational behavior and human resources.

An exam day and time will be scheduled and communicated by Alondra, the Operations Manager for the Fermanian School of Business. After the exam is administered, a grading scale will be developed by the FSB and points will be assigned depending on your performance on the exam. A total of 5% or 50 points is possible. It is imperative that you take this exam seriously and do your best. A poor score, relative to your peers, will result in a score significantly less than 50 points and will impact your overall grade for MGT 4084. You will be given a class off and missed homework, around that time. If you are not a management major, we will meet in class as scheduled with homework. If you are a management major and don't attend the test, then 5% will be deducted from your final grade.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

ARTIFICIAL INTELLIGENCE (AI) POLICY

You are allowed to use Artificial Intelligence (AI) tools (e.g, ChatGPT, iA Writer, Marmot, Botowski, etc.) in this course. Any work that utilizes AI-based tools must be clearly identified as such, including the specific tool(s) used. For example, if you use ChatGPT, you must cite ChatGPT including the version number, year, month and day of the query and the statement "Generated using OpenAI. https://chat.openai.com/"

CONTENT WARNING

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive various types of information. In [class name], all of the class content, including that which may be intellectually or emotionally challenging, has been intentionally curated to achieve the learning goals for this course. The decision to include such material is not taken lightly. These topics include [list topics]. If you encounter a topic that is intellectually challenging for you, it can manifest in feelings of discomfort and upset. In response, I encourage you to come talk to me or your friends or family about it. Class topics are discussed for the sole purpose of expanding your intellectual engagement in the area of [subject/major], and I will support you throughout your learning in this course.

TRIGGER WARNING

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive several types of information. In [class name], we will cover a variety of topics, some of which you may find triggering. These topics include [list topics]. Each time this topic appears in a reading or unit, it is marked on the syllabus. The experience of being triggered versus intellectually challenged are different. The main difference is that an individual must have experienced trauma to experience being triggered, whereas an intellectual challenge has nothing to do with trauma. If you are a trauma survivor and encounter a topic in this class that is triggering for you, you may feel overwhelmed or panicked and find it difficult to concentrate. In response, I encourage you to take the necessary steps for your emotional safety. This may include leaving class while the topic is discussed or talking to a therapist at the Counseling Center. Should you choose to sit out on discussion of a certain topic, know that you are still responsible for the material; but we can discuss if there are other methods for accessing that material, and for assessing your learning on that material. Class topics are discussed for the sole purpose of expanding your intellectual engagement in the area of [subject/major], and I will support you throughout your learning in this course.

LANGUAGE AND BELONGING

Point Loma Nazarene University faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice free. Inclusive/Bias-free language is the standard outlined by all major academic style guides, including MLA, APA, and Chicago, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality.

You may report an incident(s) using the Bias Incident Reporting Form.

LOMA WRITING CENTER

The Loma Writing Center exists to help all members of the PLNU community cultivate transferable writing skills to engage their academic, professional, personal, and spiritual communities. We work toward this goal by conducting one-on-one consultation sessions, supporting writing education across the PLNU community, and participating in ongoing writing center research.

Getting feedback from the Loma Writing Center while you're in the process of working on an assignment is a great way to improve the quality of your writing and develop as a writer. You are encouraged to talk with a trained writing consultant about getting started on an assignment, organizing your ideas, finding and citing sources, revising, editing for grammar and polishing final drafts, and more. For information about how to make in-person or online appointments, see Loma Writing Center webpage or visit the Loma Writer Center on the first floor of the Ryan Library, room 221.

SEXUAL MISCONDUCT AND DISCRIMINATION

In support of a safe learning environment, if you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that accommodations and resources are available through the Title IX Office at pointloma.edu/Title-IX. Please be aware that under Title IX of the Education Amendments of 1972, faculty and staff are required to disclose information about such misconduct to the Title IX Office.

If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu or find a list of campus pastors at pointloma.edu/title-ix.

SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith. If students have questions, a desire to meet with the chaplain or have prayer requests you can contact your professor or the Office of Spiritual Life and Formation.

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog.

TUG Only:

See <u>Academic Policies</u> for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

COURSE MODALITY DEFINITIONS

- **1. In-Person:** Course meetings are face-to-face with no more than 25% online delivery.
- **2. Online:** Coursework is completed 100% online and asynchronously.
- ${f 3.}$ **Online Synchronous:** Coursework is completed 100% online with required weekly online class meetings.
- **4. Hybrid:** Courses that meet face-to-face with required online components.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Face-to-Face TUG Courses:

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions, the faculty member will issue a written warning of de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive an "F" grade.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the <u>Class Schedules</u> site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for <u>one</u> of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

COURSE SCHEDULE AND ASSIGNMENTS

Module One - Operations and Supply Chain Strategy, Processes and Lean Thinking; Weeks 1-5

Operations is the transformation of materials and information into goods and services for customers. Whether managing a hospital with patients or a brokerage firm with financial services, there will be operations required to create products that add value to customers' lives. The Tuesday class on 1/9 will introduce the text book and resources, with an overview of operations in our daily lives, along with the skillsets we'll develop in class that employers like Microsoft, Amazon and Qualcomm are looking for. On Thursday, the class will cover Chapter 1 of the text in detail, along with introducing the software Tableau, that we will use for supply chain analytics in class. The week will also introduce the Team Based Learning method of study, along with the Assessments that will be based on the Team Based Learning.

For week 1, please read Chapter 1 of Operations Management in the Supply Chain (OMSC) and Chapter Visual Analytics with Tableau (VAT).

Week 2 January 16 and 18

Operations and Supply Chain Strategy aligns the operational processes used for the product transformation with the larger business strategy of the firm. We'll use Southwest Airlines as an example of a company that exemplifies how operations executes the strategy for the company. The elements of product design will be explored showing how decisions are made about designing quality and performance into both the product and the processes that make the products. Using Tableau, we'll work through how the software connects to a variety of data sources.

For week 2, please read Chapters 2 and 3 of OMSC; and Chapter 2 of VAT.

Week 3 January 23 and 25

The way an organization transforms inputs to outputs are through processes. Week 3 is dedicated to the understanding of process design, management, and improvement. Visualizations using Tableau will be introduced so as to describe the performance of processes. On Thursday the first Team Based Learning Exercise will take place. This learning activity is worth 50 points or 5%. The TBL exercise will focus on process analysis and data visualization.

For week 3, please read Chapters 4-6 of OMSC and Chapter 3 of VAT.

Week 4 January 30 and February 1

Processes are improved using a system of management known as Lean Thinking and Systems. Lean is a system of ongoing improvement efforts designed to drive waste out of the processes so as to produce goods and services of higher quality at a lower cost and greater speed. On February 1 there will be a Team-Based Learning activity worth 50 points.

Please

Week 5 February 6 and 8

Tuesday February 6, will be dedicated to a review of Chapters 1-7 of the textbook and Chapters 1-3 of VAT. On February 8th, a learning assessment worth 150 points will be held covering Chapters 1-7 of the textbook. The assessment will be open book and note, using multiple choice and short answer questions drawn from the OMSC text.

Module Two – Quality, Capacity and Scheduling (Weeks 6-9)

Week 6 February 13 and 15

Excellent operations use quality management as a system to both design the goods and services as well as produce the products for customers. Quality is assessed with customer acceptance to specifications of performance. Though it seems counterintuitive, the more effort that is invested in quality, the higher the resulting margin. On Thursday February 15 there will be a Team Based Learning activity worth 50 points.

For week 6 please read chapters 8 and 9 of OMSC.

Week 7 February 20 and 22

Matching the capacity of the work an organization needs to do, to the demand customers place on the organization is the secret art and science of operations management. If you know the analytic skills to forecast, plan capacity, schedule the resources and manage projects you will be a valuable talent for any organization. This week is a deep dive into operations and analytics necessary to execute along the entire value stream. On Thursday February 22 there will be a Team-Based Learning activity worth 50 points.

For week 7 please read chapters 10 and 11 of OMSC.

Week 8 February 27 and 29

In order to execute well the right people have to be doing the right work at the right time, and of the right quality, to exceed customer expectations. This is where scheduling comes in, especially the correct scheduling of projects. On Thursday, February 29 there will be a Team-Based Learning activity worth 50 points.

For week 8 please read chapters 12 and 13 of OMSC.

The week of March 4 is off for your Spring holiday. Please enjoy.

Week 9 March 12 and 14

Tuesday March 12 will be a review of Module 2's material. On Thursday March 14 there will be an assessment worth 150 points covering Chapters 8-13 of OMCS.

Module Three - Inventory Management and the Global Supply Chain (Weeks 10 – 16)

Week 10 March 19 and 21

Inventory is a cost business must bear but at the same time must be carefully balanced with that necessary for customer demand to not incur un-necessary cost. If the world of business learned any lesson during the Covid Pandemic it was that not having enough stock on hand during the surge of customer demand can prove disastrous. This week will also pick up with Tableau studies again as we build the structure of a supply chain analytics dashboard. On Thursday March 21 there will be a Team-Based Learning exercise worth 50 points.

For week 10 please read Chapter 14 of OMSC and Chapter 4 of VAT.

Week 11 March 26 (No Class on March 28 for Easter)

Ordering and scheduling of supply orders is done within a collaborative framework facilitated with systems known as Material Requirements Planning and Enterprise Resource Planning. These are complicated systems that coordinate the arrival of parts and people inside the production processes.

For week 11 please read Chapter 15 of OMSC and Chapter 5 of VAT

Week 12 April 2 and 4

Supply chain management is the system of people, processes and technologies that begins with the final customers and works backwards through the transportation and warehousing of goods and services, the logistics of delivery, the manufacturing production, the inbound logistics and the quality management of vendors. On Thursday April 4 there will be a Team-Based Learning exercise worth 50 points.

For week 12 please read Chapter 16 of OMSC and Chapter 6 of VAT

Week 13 April 9 and 11

Sourcing requires using procurement as a competitive advantage for the firm. Sound procurement finds high quality goods and services within a trusted network of vendors. There needs to be clarity on terms though. If procurement involves purchasing, you might be wondering: What's the difference between purchasing and procurement? The answer is that purchasing is essentially transactional, focusing on managing specific orders to meet company needs. Procurement is a much broader and more complex set of processes, including establishing and maintaining supplier relationships. Another way to think about the difference between purchasing and procurement is that procurement takes a proactive approach that starts with analyzing the company's needs, whereas purchasing is a reactive approach — simply focusing on obtaining what the company has already decided it needs. Sourcing, like purchasing, is only *part* of the overall procurement process. Sourcing is an early stage of the procurement cycle. It encompasses activities such as identifying and assessing potential suppliers of goods or services, negotiating terms, and selecting the

vendors that best meet the company's needs. Procurement covers one aspect of supply chain management. Procurement includes sourcing, obtaining, and paying for goods and services. Supply chain management also covers the logistics involved in obtaining goods, such as shipping and warehouse management, as well as transforming the procured goods into products and distributing them to customers. On Thursday April 11 there will be a Team-Based Learning exercise worth 50 points.

For week 13 please read Chapter 17 of OMSC and Chapter 7 of Visual Analytics with Tableau.

Week 14 April 16 and 18

The global logistics industry facilitates this worldwide flow of goods. Global logistics is the process—largely a science but also an art—of managing the flow of goods through the supply chain, from the place where they are made to the place where they are consumed. It might involve shipping seeds and fertilizer to a grain farmer, sending harvested grain to a processing mill, trucking flour to an industrial bakery, sending containers full of loaves of bread to a distribution center, and then delivering them to restaurants. Global logistics involves the movement of goods—by truck, train, ship, or plane—as well as preparation, packaging, and storage of goods in distribution centers and other logistics real estate facilities. On Thursday April 18 there will be a Team-Based Learning exercise worth 50 points.

For week 14 please read Chapter 18 of OMSC and Chapter 8 of Visual Analytics.

Week 15 April 23 and 25

This week will focus on the creation of a supply chain dashboard using Tableau. As visual representations of data dashboards provide quick and easy access to important information. In the context of supply chain and shipping, dashboards can provide real-time visibility into the supply chain and shipping operations, allowing stakeholders to quickly identify and address any issues that may arise.

With access to up-to-date and accurate information, decision-makers can make informed decisions that can help optimize the supply chain and shipping processes. Dashboards can also help facilitate collaboration and communication among different teams and departments involved in the supply chain and shipping processes.

The right dashboards can help identify bottlenecks and inefficiencies in the supply chain and shipping processes, allowing stakeholders to take corrective actions and improve overall efficiency. And by providing real-time visibility into the supply chain and shipping processes, dashboards can help improve customer service by providing customers with accurate and timely information about their orders.

Dashboards can help improve supply chain and shipping operations by providing stakeholders with timely and accurate information, facilitating collaboration, and enabling informed decision-making. Thursday April 25 will be a Module Review

Week 16 April 30

There will be an assessment for Module 3 on April 30 worth 200 points.					