# Supply Chain Management

MGMT 323 L1
Fall Semester 2024

“Management is, above all, a practice where art, science and craft meet” Henry Mintzberg

## Course Information

| Start Date | End Date | Class Location | Meeting Time |
|---|---|---|---|
| Aug 19 2024 | Aug 23 2024 | E-012 | Mon (11:30 AM-12:45 PM) |
| Aug 26 2024 | Dec 03 2024 | Mon (04:00 PM-06:30 PM) | Mon (04:00 PM-06:30 PM) |
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**Hardware/Software Prerequisites (if any): None**
**Content Area:** This course meets requirements for Management Science elective for EE & CE majors helping engineering students to build a comprehensive skill of management to plan, lead, organize and control diverse operational activities and processes.

## Instructor Information

**Instructor:** Muhammad Wamiq
**Title:** Assistant Professor
**Office Location:** TBD
**Email:** muhammad.wamiq@sse.habib.edu.pk
**Office Hours:** TBD

## Course Description

It has become increasingly important for engineering and tech professionals to learn, manage, control work, time and resources more efficiently and effectively. This course provides the basics to teach the engineering and tech professionals about the key concepts and tools employed to design, analyze, control and improve business with effective and efficient supply chain management. Supply Chain is an exciting and growing discipline serving as the key business function in various industries of manufacturing, agriculture, service, and healthcare, among others. Efficient, responsive, cost-effective, and reliable supply chain is crucial for a firm's success in today's volatile economy and competitive market environment. Through this course, you will learn a comprehensive range of topics and concepts in supply chains, and enjoy a variety of industrial examples and cases, to understand the important role and value of supply chains. Hence, this course will help the students to acquire most demanded skill by the employers all around the world. Therefore, this course will essentially help to inculcate skills to produce well rounded engineering professionals.

## Course Aims

The course aims to provide an understanding of fundamental concepts of supply chain management. All functional areas of supply chain management are explored in an integrated view of procurement, manufacturing and operations management, transportation and logistics, inventory and warehousing, demand planning, scheduling, network design, collaboration, and performance measurement. Topics may also cover supply chain financial metrics, strategy and risk management for demand driven value networks. Following are the main objectives of this course,

1. Develop an understanding and appreciation of supply chain management functions and processes within the company and across the supply chain partners.
2. To understand the importance of management component to gain competitiveness through supply chain initiatives.
3. To learn about the tools and techniques for the implementation of supply chain management.

4. To understand the roles technology and Industry 4.0 standard for reshaping the supply chain management.

## Course Learning Outcomes (CLOs)

By the end of the course, students will be able to:

1. Understand the key drivers of supply chain performance and their inter-relationships with strategy of the firm.

2. Explain the complexity of inter-firm and intra-firm coordination in implementing various programs.

3. Analyze improvement opportunities of supply chains for various industries with the help of case studies such as defining legitimate problems and offering solution to those problems.

4. Demonstrate skills of teamwork and management in a diverse group of individuals.

5. Identify the barriers that companies face during the implementation of new supply chain strategies from range of issues such as management practices, human resource capabilities, customer service, external orientation, communication, technology, environment, sustainability, innovation etc.

## Mode of Instruction

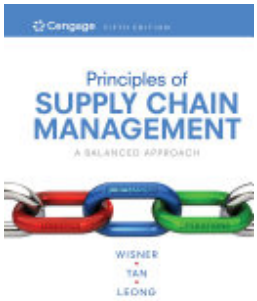
The contents and knowledge will be shared through lectures via multimedia, class activities, presentations and industry visits. All relevant teaching resources including slides, reading notes course book, reference books etc. will be available on LMS. The class will be held in an interactive session whereby students have to respond and share their opinion on the subject under discussion. Therefore, it should be the utmost priority of the students to contribute to the class discussion without any hesitation as there is no “wrong answers” for any question or scenario presented by the instructor. Moreover, the due respect to others opinion should be kept well noted and must be followed. Lastly, due consideration should be given to the punctuality and attendance of the class.

## Engagement & Participation Rules

Students are encouraged to enquire about any aspect of the course and topics discussed during the class sessions. However, it is our responsibility to maintain class decorum and discipline. Moreover, We understand that our members represent a rich variety of backgrounds and perspectives. Habib University is committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:

- share their unique experiences, values and beliefs.
- be open to the views of others.
- honor the uniqueness of their colleagues.
- appreciate the opportunity that we have to learn from each other in this community.
- value each other's opinions and communicate in a respectful manner.
- keep confidential discussions that the community has of a personal (or professional) nature.
- use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the Habib community.

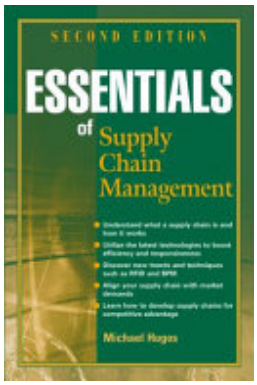
## Required Texts and Materials




**Principles of Supply Chain Management: A Balanced Approach**
ISBN: 9781337672016
Authors: Joel D. Wisner, Keah-Choon Tan, G. Keong Leong
Publisher: Cengage Learning
Publication Date: 2018-01-01

## Optional Materials

**Essentials of Supply Chain Management**
ISBN: 9780471776345
Authors: Michael H. Hugos
Publisher: Wiley
Publication Date: 2006-03-10




## Assessments

| Course Assessment | CLO # 1 | CLO # 2 | CLO # 3 | CLO # 4 | CLO # 5 |
|---|---|---|---|---|---|
| Assignment 1 | | | | | |
| Assignment 2 | | | | | |
| Assignment 3 | | | | | |
| Quiz 1 | | | | | |
| Quiz 2 | | | | | |
| Midterm Exam - Q1 | | | | | |
| Midterm Exam - Q2 | | | | | |
| Midterm Exam - Q3 | | | | | |
| Project | | | | | |
| Final Exam - Q1 | | | | | |
| Final Exam - Q2 | | | | | |
| Final Exam - Q3 | | | | | |

## Grading Scale

| Letter Grade | GPA Points | Percentage |
|---|---|---|
| **A+** | 4.00 | [95-100] |
| **A** | 4.00 | [90-95) |
| **A-** | 3.67 | [85-90) |
| **B+** | 3.33 | [80-85) |
| **B** | 3.00 | [75-80) |
| **B-** | 2.67 | [70-75) |
| **C+** | 2.33 | [67-70) |
| **C** | 2.00 | [63-67) |

| Letter Grade | GPA Points | Percentage |
|---|---|---|
| **C-** | 1.67 | [60-63) |
| **F** | 0.00 | [0, 60) |

**Note:** [a, b) is a range of numbers from a to b where a is included in the range and b is not.

## Late Submission Policy

It is expected from the students to ensure the compliance and adherence to the deadlines imposed for any type of assessments in this course. A policy rule of 10% grade reduction will be applied for every delay of 24 hours for any due submission imposed with a deadline.

## Week-Wise Schedule (Tentative)

**Fall 2022 Weekly Schedule***

| Week | Description | Readings | Assessments and Due Date |
|---|---|---|---|
| Week - 1<br>August 22 – 26, 2022 | Sessions & Add / Drop period | Introduction to Supply Chain Management | |
| Week - 2<br>August 29 – September 2, 2022 | Sessions<br>Last day to Drop Course(s): **August 31, 2022**<br>Last day to Add Course(s): **September 2, 2022** | Why is Supply Chain Management Important? | |
| Week - 3<br>September 5 – 9, 2022 | Sessions | Purchasing Issues in Supply Chain Management | Assignment No. 1 |
| Week – 4<br>September 12 – 16, 2022 | Sessions | Supplier Selection | Quiz 1 |
| September 17, 2022 | Arbaeen/Chehlum Imam Hussain†‡ | | |

| Week | Description | Readings | Assessments and Due Date |
|---|---|---|---|
| Week - 5<br>September 19 – 23, 2022 | Sessions | Creating & Managing Supplier Relationships | |
| Week - 6<br>September 26 – 30, 2022 | Sessions | Strategic Sourcing | Assignment No. 2 |
| Week - 7<br>October 3 – 7, 2022 | Sessions & Mid Term Examinations | Demand Forecasting | |
| Week - 8<br>October 10 – 14 | Sessions & Mid Term Examinations | | |
| Week - 9<br>October 24 – 28 | Diwali: **October 24, 2022**<br>Sessions | Demand Forecasting | |
| Week - 10<br>October 31 – November 4, 2022 | Sessions | Collaborative Planning Forecasting Replenishment | Assignment No. 3 |
| Week – 11<br>November 7 – 11, 2022 | Sessions<br>Last Day to Withdraw from Course(s): **November 11, 2022** | Collaborative Planning Forecasting Replenishment | Quiz 2 |
| Week – 12<br>November 14 – 18, 2022 | Sessions | Aggregate Planning & Inventory Management | |
| Week - 13<br>November 21 – 25, 2022 | Sessions | Master Production Schedule | Project Report Submission |
| Week - 14<br>November 28 – December 2, 2022 | Sessions | Process Management, JIT & TQM Issues In SCM | Project Presentations |
| Week - 15<br>December 5 – 9, 2022 | Sessions | Supply Chain & Sustainability | Project Presentations |
| December 10 – 11, 2022 | Reading Days | | |

| Week | Description | Readings | Assessments and Due Date |
|---|---|---|---|
| December 12 – 17, 2022 | End Term Examinations Days§ | | |

**Notes:**

* The University reserves the right to correct typographical errors or to adjust the Academic Calendar at any time it deems necessary.

† Subject to the sighting of the moon.

‡ No Class(es).

## Attendance Policy

The Habib University requires that all students must maintain at least 85% for each class in which they are registered. Non-compliance with minimum attendance requirements will result in automatic failure of the course and may require the student to repeat the course when next offered. This policy is at a minimum. Departments, schools, and individual faculty members may alter this policy to include stronger attendance requirements and/or implement them for all levels of students. It is the responsibility of the student to keep track of their own attendance and speak with their faculty member or the Office of the Registrar for any clarification.

## Final Exam Policy

There will be a final exam that will be conducted during the last week of classes. The final exam is included in the overall assessment of the course.

## Academic Integrity

Each student in this course is expected to abide by the Habib University Student Honor Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work.

Scholastic dishonesty shall be considered a serious violation of these rules and regulations and is subject to strict disciplinary action as prescribed by Habib University regulations and policies. Scholastic dishonesty includes, but is not limited to, cheating on exams, plagiarism on assignments, and collusion.

a. Plagiarism: Plagiarism is the act of taking the work created by another person or entity and presenting it as one’s own for the purpose of personal gain or of obtaining academic credit. As per University policy, plagiarism includes the submission of or incorporation of the work of others without acknowledging its provenance or giving due credit according to established academic practices. This includes the submission of material that has been appropriated,// bought, received as a gift, downloaded, or obtained by any other means. Students must not, unless they have been granted permission from all faculty members concerned, submit the same assignment or project for academic credit for different courses.
b. Cheating: The term cheating shall refer to the use of or obtaining of unauthorized information in order to obtain personal benefit or academic credit.
c. Collusion: Collusion is the act of providing unauthorized assistance to one or more person or of not taking the appropriate precautions against doing so.

All violations of academic integrity will also be immediately reported to the Student Conduct Office.

You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e-mail, an e-mail attachment file, a diskette, or a hard copy.

Should copying occur, the student who copied work from another student and the student who gave material to be copied will both be in violation of the Student Code of Conduct.

If you wish to use generative-AI tools to complete any of your assessments, you must first obtain permission from your course instructor. AI generated work will not be accepted in all classes or even all assessments. The instructor's permission is required. If the permission is granted, you should declare its use and properly cite the source of the generated content. Failing to identify AI written or assisted work is academic dishonesty and will be treated as any case of plagiarism by the university.

The principle for academic integrity is that your submissions must be substantially your own work and that any work that is not originally your thought must be identified and credited. If the use of AI tools is prohibited in the course, respect the rules and do not use these tools for assessments. The fundamental purpose of assessment is to learn, synthesize information and explain new connections and interpretations that arise from your secondary research. Be aware that unauthorized use of AI tools for assessments can result in a conduct case being filed. This can have serious consequences for your academic standing and future career opportunities.

During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.

Penalty for violation of this Code can also be extended to include failure of the course and University disciplinary action.

## Program Learning Outcomes (For Administrative Review)

**Upon graduation, students will have the following abilities:**

- PLO 1: Theoretical Computer Science: recall and apply foundational principles of computer science.
- PLO 2: : Application Development: build software systems of varying complexity in light of fundamental computer science principles and any other constraints.
- PLO 3: Analysis and Design: perform technical analysis and design using core computing and mathematical knowledge.
- PLO 4: Systems: apply the knowledge of computing systems.
- PLO 5: : Research and Exploration: develop expertise in and contribute to a given sub-field of computing by drawing upon a strong foundation in the fundamentals of computer science and mathematics to solve real-life problems.
- PLO 6: Problem Solving: identify and analyze problems and propose effective computing-based solutions.
- PLO 7: Practical Exposure: make effective use of current tools, technologies, and good industry practices.
- PLO 8: Responsible Citizenship: conduct their computing practice in a manner that is ethical and socially responsible and corresponds to their distinct sense of identity and service to the community.
- PLO 9: Self-Learning: continuously adapt their skills to the changes taking place around them.
- PLO 10: Design Thinking: apply design thinking principles to the design of a solution.
- PLO 11: Multi-disciplinarity: incorporate knowledge and input from multiple disciplines.

- PLO 12: Communication and Teamwork: communicate and function effectively as a member or a leader of a variety of teams.

| Program Learning Outcomes (PLOs) mapped to Course Learning Outcomes (CLOs) | | | | | |
|---|---|---|---|---|---|
| | CLOs of the course are designed to cater following PLOs:<br>PLO 7: Environment and Sustainability<br>PLO 9: Individual and Teamwork | | | | |
| | Distribution of CLO weightages for each PLO | | | | |
| | CLO 1 | CLO 2 | CLO 3 | CLO 4 | CLO 5 |
| PLO 7 | 25% | 25% | 25% | | 25% |
| PLO 9 | | | | 100% | |

**Mapping of Assessments to CLOs**

| Assignments | CLO #01 | CLO #02 | CLO #03 | CLO #04 | CLO #05 |
|---|---|---|---|---|---|
| Assignment 1 | | | | | |
| Assignment 2 | | | | | |
| Assignment 3 | | | | | |
| Quiz1 | | | | | |
| Quiz 2 | | | | | |
| Midterm-Question 1 | | | | | |
| Midterm-Question 2 | | | | | |
| Midterm-Question 3 | | | | | |
| Project Report | | | | | |
| Project Presentation | | | | | |
| Final Exam-Question 1 | | | | | |
| Final Exam-Question 2 | | | | | |
| Final Exam-Question 3 | | | | | |

## Recording Policy

Only asynchronous and synchronous online sessions will be conducted and recorded via MS Teams. Link to the recordings will be available to all students on Canvas Learning Management System.

## Accommodations for Students with Disabilities

In compliance with the Habib University policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first two weeks of the semester, except for unusual circumstances, so arrangements can be made. Students are encouraged to register with the Office of Academic Performance to verify their eligibility for appropriate accommodations.

## Inclusivity Statement

We understand that our members represent a rich variety of backgrounds and perspectives. Habib University is committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:

- share their unique experiences, values and beliefs
- be open to the views of others
- honor the uniqueness of their colleagues
- appreciate the opportunity that we have to learn from each other in this community
- value each other's opinions and communicate in a respectful manner
- keep confidential discussions that the community has of a personal (or professional) nature
- use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the Habib community

## Office Hours Policy

Every student enrolled in this course must meet individually with the course instructor during course office hours at least once during the semester. The first meeting should happen within the first five weeks of the semester but must occur before midterms. Any student who does not meet with the instructor may face a grade reduction or other penalties at the discretion of the instructor and will have an academic hold placed by the Registrar's Office.