

# Data Sciences and Operations

## USC Marshall School of Business

### DSO 482 (16241)

### Supply Chain Management

Monday/Wednesday  
10:00-11:50am

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BRI 303  
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DSO 482

### Why take this course?

With global operations becoming more complex, **companies** in manufacturing, retail and technology—and the consulting firms that service them—**are scrambling to hire people with supply-chain expertise**. Whether the focus is on driving faster innovation, improving productivity and growing profits, or building sustained customer loyalty, a firm's supply chain strategy can be key. This foundational course **will** significantly enhance your tool kit no matter what sector of the economy you work for, as it concerns almost 10% of US GDP.

### Who should take the course?

Students who plan to have a **career in operations, supply chain management, marketing or finance** functions ... in a **manufacturing, retail or distribution** firm ... management **consulting**, operations consulting, or internal consulting groups of large corporations.

### Course objectives

This course focuses on management and improvement of supply chain processes and performance. We explore key supply chain metrics, primary trade-offs in supply chain decisions and basic tools for effective supply chain management and coordination ... so it becomes a **flywheel for sustainable growth and profitability**.

### Key concepts

- Logistics and distribution
- Procurement
- Outsourcing
- Global supply chain management
- Supply chain coordination
- Forecasting
- Inventory management
- Supply chain network optimization
- Aggregate planning
- Key supply chain performance indicators
- IT in supply chains
- Bullwhip effect in supply chain
- Just in time

### Course description

This course teaches key concepts and tools for effective and efficient supply chain management and coordination. You will learn several recent influential innovations such as RFID, VMI, revenue management as well as classic topics such as global supply chain design, Bullwhip effect, outsourcing, logistics, etc. The class format includes lectures, case discussions, guest speakers, movie clips. The content covers both quantitative and qualitative materials with a **focus on application in the real-world**.

