

# OPERATIONS MANAGEMENT



Managing business operations . . .

Manufacturing

Distribution

Transportation

Services



# What is Operations Management?

---

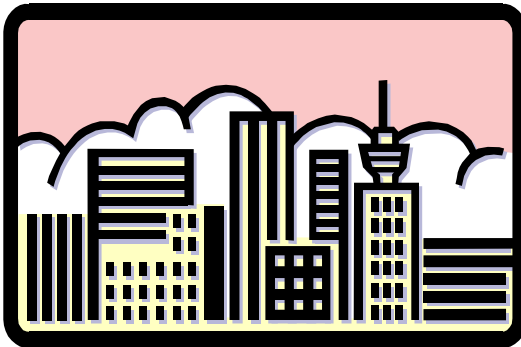
- OM focuses on the effective management of the resources and activities that produce and deliver the goods and services of a business.
  - » Resources
    - People, materials, equipment, information
  - » Activities/Processes
    - Manufacturing, distribution, transportation, purchasing, planning, scheduling, services, transaction processing, etc.

# Operations Management Jobs

---

- CEO!
- Operations Manager
- Materials Manager
- Production Planner
- Logistics Manager
- Quality Manager
- Plant Manager!
- Supply Chain Manager
- Inventory Manager
- Purchasing Manager
- Production Manager
- Transportation Manager
- *and others . . .*

## Recent OM Employers



- Mercedes-Benz U.S.
- Honda
- Hyundai
- Johnson Controls
- U.S. Steel
- Walmart Distribution
- Southern Company
- Elk Roofing
- And others . . .



# Problems OM's Solve

---

- Supply Chain/Distribution Network Design
- Production/Inventory Control
  - » Global supply chains
- Transportation Operations
  - » Vehicle Routing, Fleet Management
- Resource Optimization
  - » Labor, equipment, space
- Reduce Wait Time
  - » Emergency Room, Amusement Park



# Problems OM's Solve

---

- Facility Design and Layout
  - » Plant, warehouse, store
- Cost Analysis
  - » Operations, Marketing, Budgeting
- Process Analysis
  - » Eliminate, transfer, automate, simplify, combine
- Information Systems Development and Implementation



# Characteristics for OM's

---

- A drive to make organizations and activities run smoothly and efficiently
- Communication skills
- Problem solving skills
- Math/analytical skills

# Professional Organizations

---

- APICS
  - » American Production and Inventory Control Society
- ISM
  - » Institute of Supply Management
- CLM
  - » Council of Logistics Management

# OM History

---

- Venice Arsenal ~ 1436
- Interchangeable parts - Eli Whitney
  - » Muskets ~ 1793
- Specialization of labor - Charles Babbage
  - » Early European manufacturing ~ 1835
- Time, motion, and work methods
  - » Frederick Taylor 1881
  - » Frank Gilbreth 1885
- Moving assembly lines - Henry Ford
  - » Automobiles ~ 1900

# OM History

---

- WW-II
  - » Optimization of military and transport operations
  - » Radar coverage, anti-aircraft systems, submarine and ship search and detection, convoy size and U-boat evasion, deployment of mines, depth charge setting
- 1970's –1980's: continuous quality improvement and global competitiveness
- 1990's: supply chain design, e-Commerce

## OM @ UA

---

- Industrial Management (IM)
  - » Prior to 1947: College of Engineering
  - » 1947-1971: Industrial Management Option within the Management program
  - » 1972-2002: Industrial Management Major
- Operations Management (OM)
  - » 2002-Present: OM Major

## OM @ UA

---

- Low student-to-faculty ratio
  - » Faculty contact
  - » Smaller classes
- Friendly, helpful faculty
- Student Organization
  - » Society of Operations Management Students (SOMS)
- Great paid internship, co-op, and part-time job opportunities
- Great job opportunities

## Recent OM Internships/Co-ops

---

- One-third of OM majors are working in paid internship and co-op positions this summer!
  - » Mercedes-Benz, Tuscaloosa
  - » Elk Corporation, Tuscaloosa
  - » Phifer Wire, Tuscaloosa
  - » Honda, Lincoln
  - » U.S. Steel, Birmingham
  - » WalMart Distribution, Cullman
  - » Shaw Industries, Dalton, Georgia

# OM Scholarships

---

- USX Foundation Scholarships
  - » U.S. Steel
- WalMart Distribution Scholarship
  - » Internship
- OM Faculty Scholarships

## Recent Changes

---

- 2002 Name Change
  - » From: *Industrial Management*
  - » To: *Operations Management*
- 2004
  - » New program director – Dr. Sox
  - » Reduced the number of concentrations
    - Streamline and simplify advising
    - Almost all students were in one (POM)
    - Can still use electives to specialize in Quality or Supply Chain

## Successful OM's

---

- Ed Babin
  - » 1957 IM alum
  - » Executive Vice President  
Georgia Pacific
- Kirstin Huettner
  - » 1996 PhD
  - » CEO  
Microlog USA
  - » Supply Chain Logistics  
Consulting and Services

## Major Courses

OM 300	Intro Operations Management
AC 351	Managerial Accounting
MIS 385	Intro Management Information Systems
OM 310	Intro Management Science
OM 321	Production Planning and Control
OM 420	Computer Simulation
OM 422	Scheduling
OM 423	Inventory Management
ST 475	Statistical Quality Control
	OM Elective

## Course Planning

---

- Sophomore year
  - » ST 260
  - » Complete all general and functional field courses
- Junior Year
  - » Fall: OM300 and AC351
  - » Spring: OM310, OM321, and MIS385
  - » NOTE: OM300 may be taken concurrently with OM310 and OM321 in the Spring

## Course Planning, cont.

---

- Senior Year
  - » Fall: OM420, OM422, ST475
  - » Spring: OM423, OM Elective
- Internship Credit
  - » OM492 Internship in OM
  - » Satisfies the OM elective requirement
  - » Can be taken any semester including summer
  - » Must be taken during the semester when you are working on the internship

# Questions?

---

Dr. Chuck Sox

Alston 343

348-8992

[csox@cba.ua.edu](mailto:csox@cba.ua.edu)

J. R. Barnhart

[barnh003@bama.ua.edu](mailto:barnh003@bama.ua.edu)

<http://www.cba.ua.edu/ommms>