

**DEPARTMENT OF MANAGEMENT AND QUANTITATIVE METHODS
COLLEGE OF BUSINESS
ILLINOIS STATE UNIVERSITY**

SUMMER 2026

MGT227:001 Operations Management

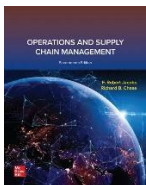
COURSE INFORMATION

Instructor:	Dr. Sandeep Jagani
Course Number & Title:	MGT 227 Operations Management
Prerequisites:	MS Office competency or ACC 167 and 168 or equivalent. ACC 132; ECO 105 (or ECO 101 and 102); MAT 120; MGT 100 (or ECO 138 or POL 138 or PSY 138).
Credit Hours:	3 credit hours
Time and Location:	MGT 227:001 Online asynchronous

INSTRUCTOR INFORMATION

Phone: (309) 438-5774
E-mail: sbjagan@ilstu.edu (Please put MGT 227:001 in the subject of the email)
Office Location: SFHB 217
Office Hours: Over Zoom by appointments
Zoom Office Link: <https://illinoisstate.zoom.us/j/85329234961>

RESOURCES/MATERIALS REQUIRED



Authors:	F. Robert Jacobs and Richard B Chase,
Title:	Operations and Supply Chain Management 17e
Publisher:	McGraw-Hill/Irwin
Edition:	17th edition (2024) <u>SmartBook + CONNECT</u>
ISBN:	9781265282691

Note: Do NOT buy any material before you attend the first day of the classes.

University Catalog Course Description:

Issues related to managing the processes by which organizations transform resources into quality goods and services. Topics include operations strategy, project management, quality management, and inventory management.

Course Purpose:

This course provides a comprehensive overview of supply chain and operations management, exploring the core strategies used by both manufacturing firms (like Ford) and service businesses (like McDonald's). At its heart, 'operations' is the business function that creates and delivers value. We will concentrate on how managers effectively design and run processes to produce high-quality goods and services—delivered in the right quantity and at the right time. Key topics will include process analysis, project management, scheduling, and quality management. A strong understanding of operations is a fundamental asset for any business professional, regardless of your specific career path.

Course-level learning objectives:

Upon successful completion of this course, students will be able to:

1. *Explain* the foundational concepts of operations management, project management, and manufacturing processes.
2. *Analyze* the effectiveness of different queuing models and design process improvements based on process analysis outcomes.
3. *Implement* Six Sigma methodologies to enhance quality control and apply statistical methods to improve process reliability.
4. *Develop* comprehensive sales and operations plans that effectively integrate forecasting and production planning.
5. *Evaluate* and *optimize* inventory management strategies to minimize costs and maximize efficiency.
6. *Design* and *implement* work center schedules that effectively manage resource allocation and minimize downtime.
7. *Apply* the Theory of Constraints principles to identify bottlenecks and improve throughput in operational processes.

COURSE REQUIREMENTS

Canvas: Lecture slides, announcements, and grades will be posted on Canvas. Access it at Canvas.ILSTU.edu/. Please allow up to one week after each assignment due date for me to grade and upload your scores. To stay updated with essential course information, please check Canvas regularly.

Connect Quizzes and Homework (580 points): All assignments for the course must be completed on McGraw-Hill CONNECT. You must register on the course site to begin your assignments in a timely manner. Be sure to remember the due dates! Late submissions may not be accepted or may incur a significant penalty.

Note about CONNECT Homework: Assignments on CONNECT are quizzes and math problem solving. Feedback will be available the day after each due date. The feedback and correct answers can be viewed alongside your submission on CONNECT.

Connect Registration Instructions: Log in to your Canvas MGT 227 class. Locate any assignment on the Modules tab. Click on any assignment name, follow the displayed instructions, and get registered. Connect provides complimentary two-week trial access, which you are encouraged to use.

Discussion Board Participation (120 Points): Discussion boards give students an opportunity to connect weekly operations management concepts to real business situations and learn from classmates' perspectives. Each week's discussion is worth 30 points, for a total of 120 points across the course.

Tests (2 x 150 = 300 points): This course will have two tests, both completed on CONNECT. Each test is split into two sections:

Multiple-choice questions (50 points) – Online Proctored and Timed (45 minutes).

Problem-solving (100 points) – Online Proctored and Timed (1 hr. 15 minutes).

Both tests must be completed on CONNECT.

GRADING POLICIES

Connect quizzes and HW	580
Test 1	150
Test 2	150
Discussion Board	120
Total	1000

Grading System:

Grade	Scores
A	900 – 1000
B	800 – 899
C	700 – 799
D	600 – 699
F	Less than 600

University & Course Policies

Accommodation for Students with Special Needs: Any student needing to arrange a reasonable accommodation for a documented disability and/or medical/mental health condition should contact [Student Access and Accommodation Services](https://studentaccess.illinoisstate.edu/) at 308 Fell Hall, (309) 438-5853, or visit the website at <https://studentaccess.illinoisstate.edu/>.

Technology Requirements & Netiquette: As this is a fully online course, students are expected to have regular and reliable access to a computer and a stable internet connection.

- **Required Technology:** A functioning computer (PC or Mac), reliable high-speed internet access, and a current web browser (Chrome or Firefox are recommended for best compatibility).
- **Netiquette:** All communications, whether with the instructor or with fellow students, must be professional and respectful. Please treat our online course environment as you would a professional workplace. Disrespectful or inappropriate communication is not acceptable.

Generative AI Use Policy: The use of generative AI tools (such as ChatGPT, Gemini, Claude, etc.) is **not permitted** for any graded work in this course, including homework, quizzes, tests or discussion boards. The goal of these assignments is to practice and demonstrate your own understanding of the material. Relying on AI tools will hinder your ability to master the concepts necessary for success in this course and in your future career. Use of a generative AI tool to complete assigned work may be referred to [Student Conduct and Community](#)

Responsibilities. Students may use these tools for independent study but should do so with the understanding that generative AI can be inaccurate.

Academic Integrity: You are expected to be honest in all academic work, consistent with the academic integrity policy outlined in the [Code of Student Conduct](#). All work submitted must be your own. Unauthorized and/or unacknowledged collaboration, or presenting someone else's work as your own is a form of academic dishonesty. Allegations of academic dishonesty will be referred to [Student Conduct and Community Responsibilities](#) and may result in a grade penalty.

Instructor Communication Policy: The best way to contact me is through the regular Email or Canvas email system. I will respond to all messages within 24-48 hours on weekdays (Monday-Friday). I do not typically check messages over the weekend, so please plan accordingly. Regular course announcements will be posted on Canvas, and you are responsible for checking them frequently.

Tentative Schedule*

Week	Date	Topic
1	Week of May 18	Chapter 1 – Introduction Connect assignment due Sunday Chapter 4 – Project Management Connect assignment due Sunday Chapter 7 – Manufacturing Processes Connect assignment due Sunday
2	Week of May 25	Chapter 10 – Waiting Line Analysis and Queuing Theory Connect assignment due Sunday Chapter 11 – Process Design and Analysis Connect assignment due Sunday Test 1 (Due Sunday)
3	Week of June 1	Chapter 12 – Six Sigma Quality Connect assignment due Sunday Chapter 13 – Statistical Quality Control Connect assignment due Sunday Chapter 19 – Sales and Operations Planning Connect assignment due Sunday
4	Week of June 8	Chapter 20 – Inventory Management Connect assignment due June 10 Chapter 22 – Workcenter Scheduling Connect assignment due June 10 Chapter 22s – Theory of Constraints Connect assignment due June 10 Test 2 (Due June 12)

*Note: Changes to the above tentative schedule can be made to enrich the course's learning objectives. However, you will be notified as soon as possible if any change occurs.

Course Point Distribution for Homework to be submitted on CONNECT

Homework	Points	Relevant Study Problems*
Ch 01 Introduction - MCQ	20	
Ch 04 Projects - MCQ	20	
Ch 04 Project - Problems	45	4-12; 4-8; 4-9; 4-10
Ch 07 Manufacturing Processes - MCQ	20	
Ch 07 Manufacturing Processes - Problems	45	7-8; 7-16; 7-10; 7-13
Ch 10 Waiting Line Analysis and Queuing Theory - MCQ	20	
Ch 10 Waiting Line Analysis and Queuing Theory - Problems	35	10-6; 10-14
Ch-11 Process Design and Analysis - MCQ	20	
Ch 11 Process Design and Analysis - Problems	30	11-1; 11-6; 11-7
Ch 12 Six Sigma Quality - MCQ	20	
Ch 12 Six Sigma Quality - Problems	20	12-7; 12-10
Ch 13 Statistical Quality Control - MCQ	20	
Ch 13 Statistical Quality Control - Problems	40	13-2; 13-5; 13-6; 13-9
Ch 19 Sales and Operations Planning - MCQ	20	
Ch 19 Sales and Operations Planning - Problems	40	19-7; 19-14;
Ch 20 Inventory Management - MCQ	40	
Ch 20 Inventory Management - Problems	50	20-4; 20-12; 20-23; 20-19; 20-14
Ch 22 Workcenter Scheduling - MCQ	20	
Ch 22 Workcenter Scheduling - Problems	45	22-5; 22-10; 22-13
Ch 22s Theory of Constraints - MCQ	10	
Ch 22s Theory of Constraints - Problems	20	23-12; 23-18
Total	580	

*Notation - "4-12" means problem 12 in the chapter 4: Projects