



# Total Quality Management/IE673 Syllabus SPRING 2024

### **Course Modality:**

This is an online course, which will be conducted fully online, asynchronously via Canvas. For more information on using Canvas and other supported learning tools, visit the IST Service Desk <u>Knowledgebase</u>.

#### **Instructor Information**

Instructor	Email	Office Hours
Cowander Gillespie	cmg3@njit.edu	I will typically respond to direct communications, such as email, within 48 hours. Allow up to 2 weeks for feedback on submitted assignments. This feedback will be provided in Canvas.

# **General Information**

#### **Course Description**

Introduces the concept of total quality management as applicable to industrial systems. Presents methods for product quality improvement. Emphasis is on prevention through quality engineering and design, and goes beyond traditional statistical process quality control. Presentation of recent methods in supplier management, quality assurance, process control, and competitor analysis. Includes Taguchi methods and quality function deployment. Description of ISO 9000 and Baldridge Award.

#### **Prerequisites/Co-requisites**

None

#### **Course Learning Outcomes**

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

- 1. Engage in group work using the total quality approach to quality management (TQM).
- 2. Interpret some fundamental concepts of quality and global competitiveness; strategic quality management.
- 3. Critique fundamentals of quality management, social networking for quality, quality ethics, corporate responsibility, quality culture, and customer satisfaction.
- 4. Apply fundamentals of employee empowerment, quality leadership and change, teambuilding, effective communication, quality education and training methods.
- 5. Present on the fundamentals of ISO 9000, and related international quality standards, quality tools, quality problem solving and decisions, the fundamentals of quality function deployment (QFD).
- 6. Analyze modern quality methods, tools and technologies, including prevention techniques, waste reduction, lean six-sigma (LSS), and other statistical methods, as well as how to document their work on the web (in digital documents they create and control).

## **Required Materials**

David L. Goetsch and Stanley Davis: Quality Management for Organizational Excellence; Introduction to Total Quality, by Pearson Publ., 9 ED. ISBN: 9780137848249

# **Grading Policy**

NJIT Grading Legend

# **Final Grade Calculation**

Final grades for all assignments will be based on the following percentages:

Case Studies	30%
Discussion Forums	30%
Quizzes	30%
Project	10%

## Course Work

**Case Study Presentations: (30% of grade)** You will be presenting biweekly group PowerPoint presentations that analyze and summarize specific case studies provided.

**Discussion Forums: (30% of grade)** You are expected to participate in weekly discussion forums in Canvas. When all students participate in a discussion, it creates an active learning environment that will help you better understand the materials and be more successful in the class. You will post your initial response to the prompt by Fridays at 11:59pm and respond to two classmates by Sunday at 11:59pm of the week they are listed.

**Quizzes: (30% of grade)** These activities are designed to help you practice and prepare for the projects.

**Projects: (10% of grade)** The project will require students, in their already assigned discussion and presentation groups, to come up with a company and a Total Quality Management System that would include their vision, mission statement, value, criteria of production, feedback from customers, product line and more.

The project has been broken down into milestones that will allow students to get feedback from the instructor as they work towards their final submission.

Project Milestones:

- Module 8: Begin working on your Term Project
- Module 9: Milestone 1: Company name and mission statement due
- Module 11: Milestone 2: List of sources due
- Module 13: Milestone 3: Draft of pages 1 to 2 due
- Module 15: Term Project

#### Feedback

I will typically respond to direct communications, such as email, within 48 hours. Allow up to 2 weeks for feedback on submitted assignments. This feedback will be provided in Canvas.

#### Letter to Number Grade Conversions

A	90-100	
B+	85-89	
В	80-84	
C+	75-79	
С	70-74	
D	65-69	
F	0-64	

## **Exam Information and Policies**

This course does not have any exams. Per the NJIT <u>Online Course Exam Proctoring</u> <u>Policy</u>, this course will use authentic assessment, meaning you will be assessed and graded on your ability to deliver real-world outputs as well as your participation and feedback to other students.

#### **Policy for Late Work**

Late work will be accepted on an individual basis. Please email the professor directly.

#### **Academic Integrity**

"Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the <u>NJIT academic code of integrity</u> <u>policy</u>.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of *F*, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at <u>dos@njit.edu</u>"

#### Netiquette

Throughout this course, you are expected to be courteous and respectful to classmates by being polite, active participants. You should respond to discussion forum assignments in a timely manner so that your classmates have adequate time to respond to your posts. Please respect opinions, even those that differ from your own, and avoid using profanity or offensive language.

#### **Weekly Expectations**

This course is organized by weekly modules. Each week, you must watch lecture videos, complete a reading assignment, and participate in a class discussion forum by Sunday at 11:59pm.

# Course Schedule

Week/ <u>Modul</u> e	Topic e	Reading/Assignment	Due Dates
1	Introduction and Class Requirements	Reading: Chapter 1 Assignments: • TQM Module 1 Discussion • Chapter 1 Quiz	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz: Sunday by 11:59pm

Week/ Module		Reading/Assignment	Due Dates
2	The Total Quality Approach to Quality Management, achieving Organizational Excellence	Reading: Chapter 2 Assignments: • TQM Module 2 Discussion • Chapter 2 Quiz • Module 2 Case Study Presentation	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
3	Quality and Global Competitiveness	Reading: Chapter 3 Assignments: • TQM Module 3 Discussion • Chapter 3 Quiz	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz: Sunday by 11:59pm
4	Strategic Management, Planning and Excellence	<ul> <li>Reading: Chapter 4</li> <li>Assignments: <ul> <li>TQM Module 4 Discussion</li> <li>Chapter 4 Quiz</li> <li>Module 4 Case Study Presentation</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
5	Quality Management and Ethics	Reading: Chapter 5 Assignments: • TQM Module 5 Discussion • Chapter 5 Quiz	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz: Sunday by 11:59pm
6	Partnering and Strategic Alliances Excellence	<ul> <li>Reading: Chapter 6</li> <li>Assignments: <ul> <li>TQM Module 6 Discussion</li> <li>Chapter 6 Quiz</li> <li>Module 6 Case Study Presentation</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
7	Quality Culture and Attitudes	Reading: Chapters 7 & 8 Assignments: • TQM Module 7 Discussion • Chapters 7 & 8 Quiz	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz: Sunday by 11:59pm
8	Customer Satisfactions and	Reading: Chapter 9 Assignments: • TQM Module 8 Discussion	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm

Week/ Module	-	Reading/Assignment	Due Dates
	Employee Empowerment	<ul> <li>Chapter 9 Quiz</li> <li>Module 8 Case Study Presentation</li> </ul>	Quiz and Case Study Presentation: Sunday by 11:59pm
9	Changettitudee	<ul> <li>Reading: Chapter 10</li> <li>Assignments: <ul> <li>TQM Module 9 Discussion</li> <li>Chapter 10 Quiz</li> <li>Module 9: Milestone 1</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
10	Teensurerle	<ul> <li>Reading: Chapter 11</li> <li>Assignments: <ul> <li>TQM Module 10 Discussion</li> <li>Chapter 11 Quiz</li> <li>Module 10 Case Study Presentation</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
11	Effective Communication Works	<ul> <li>Reading: Chapter 12</li> <li>Assignments: <ul> <li>TQM Module 11 Discussion</li> <li>Chapter 12 Quiz</li> <li>Module 11: Milestone 2</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
12		<ul> <li>Reading: Chapter 13</li> <li>Assignments: <ul> <li>TQM Module 12 Discussion</li> <li>Chapter 13 Quiz</li> <li>Module 12 Case Study Presentation</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
13	and Conflict	<ul> <li>Reading: Chapter 14</li> <li>Assignments: <ul> <li>TQM Module 13 Discussion</li> <li>Chapter 14 Quiz</li> <li>Module 13: Milestone 3</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm

Week/ Module		Reading/Assignment	Due Dates
14	ISO 9000 and Total Quality	<ul> <li>Reading: Chapter 15</li> <li>Assignments: <ul> <li>TQM Module 14 Discussion</li> <li>Chapter 15 Quiz</li> <li>Module 14 Case Study Presentation</li> </ul> </li> </ul>	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm
15	Continual Improvement Methods with Six Sigma, Lean, Lean Six Sigma and More	Reading: Chapter 19 Assignments: • TQM Module 15 Discussion • Chapter 19 Quiz • Term Project	Initial Discussion Post: Friday by 11:59pm Peer Responses: Sunday by 11:59pm Quiz and Case Study Presentation: Sunday by 11:59pm

# **Additional Information and Resources**

#### Accessibility:

This course is offered through an accessible learning management system. For more information, please refer to Canvas's <u>Accessibility Statement</u>.

## **Requesting Accommodations:**

The Office of Accessibility Resources and Services works in partnership with administrators, faculty, and staff to provide reasonable accommodations and support services for students with disabilities who have provided their office with medical documentation to receive services.

If you are in need of accommodations due to a disability, please contact the <u>Office of</u> <u>Accessibility Resources and Services</u> to discuss your specific needs.

#### **Resources for NJIT Online Students**

NJIT is committed to student excellence. To ensure your success in this course and your program, the university offers a range of academic support centers and services. To learn more, please review the "Student Services" page in Canvas, which includes information related to technical support.