

(August 14, 2012)

OM 337: Total Quality Management

Fall 2012 TTH 2:00–3:15 PM UTC 4.104 Unique # 04173

Instructor: Rayan Bagchi

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Office Hours: T 2-3 PM; TH 9:30-10:30 AM and by appointment;

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Course Web Page: via Blackboard.

COURSE TOPICS:

This course focuses on the essence, principles, and practices of total quality management (TQM). Some of the ideas and topics that are covered are: process focus; service quality; customer satisfaction; process control and capability; inspection; economics of quality; report cards; and organizational learning.

COURSE PREREQUISITE:

For business majors, Operations Management 335 (or Management 335 or Management Science 335) or Operations Management 335H (or Management 335H or Management Science 335H) with a grade of at least C; for others, admission to an appropriate major sequence in engineering.

COURSE LEARNING OBJECTIVES:

By the end of this course, you should have gained an improved understanding of:

- what quality is as viewed from a variety of perspectives;
- the foundational elements of total quality management;
- the organizational, competitive and economic potential of quality.

and acquired the skills to

- analyze a process to uncover improvement opportunities;
- determine if a process is in control and its capability;
- articulate a business case for investment in quality.

LEARNING MATERIALS:

The Memory Jogger II by Brassard and Ritter

A **readings packet** containing all the readings and cases is available from the University Co-op Custom Publishing. A **class companion packet** containing some materials we shall use in class is available from the GSB Copy Center (GSB 3.136). Please remember to bring the class companion packet to class starting with Session 2.

PERFORMANCE EVALUATION:

Class Participation	25%
Case Reports (5)	10%
Group Presentation (<i>October 16, 18, 23</i>)	12.5%
Group Presentation (<i>November 27, 29; December 4</i>)	12.5%
Exam 1 (<i>October 9, 7:00-9:30 PM</i>) – covers Sessions 1-10	20%
Exam 2 (<i>November 13, 7:00-9:30 PM</i>) – covers Sessions 1-20	<u>20%</u>
Total	100%

Case Reports: At the beginning of every class session in which a case report is due, you will turn in a typed report, not to exceed 1 double-spaced page, which addresses the case discussion questions listed for that session in the detailed schedule. The report should not have any attachments. **No late report will be accepted.** These reports will not be returned to you, so please keep a copy for yourself. In

preparing the case reports, you are free to work with others in this class, and should you choose, you may submit a group report. But whatever bears your name must have your substantive input.

Class Participation: This, the single most important component of your course grade, is essentially a measure of how actively you are engaged in class proceedings, and what you contribute to the learning of others. Class attendance is an essential component of class participation.

Group Presentations:

Your group will make two oral presentations to the class, of approximately 15 minutes duration each, on topics assigned to you. The presentations are scheduled for October 16, October 18, October 23, November 27, November 29 and December 4. Please form your own group (4-5 members).

McCombs Classroom Professionalism Policy

- **Students arrive on time.** On time arrival shows respect for both fellow students and faculty and it enhances learning by reducing avoidable distractions.
- **Students display their name cards.** This permits fellow students and faculty to learn names, enhancing opportunities for community building and evaluation of in-class contributions.
- **Students minimize unscheduled personal breaks.** The learning environment improves when disruptions are limited.
- **Students are prepared for each class.** Unprepared students cannot contribute to the overall learning process. This affects not only the individual, but their peers who count on them, as well.
- **Students do not speak unless they are speaking to the entire class.** Do not engage in private conversations, however short or innocuous, while the class is in progress. They are disruptive and discourteous to the speaker. Raise your hand if you have a question or comment.
- **Laptops are closed and put away and phones and wireless devices are turned off.**

Academic Dishonesty

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty are described in detail in the *BBA Program's Statement on Scholastic Dishonesty* at <http://www.mcombs.utexas.edu/BBA/Code-of-Ethics.aspx>. *By teaching this course, I have agreed to observe all of the faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all of the student responsibilities described in that document. If the application of that Policy Statement to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification. Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. You should refer to the Student Judicial Services website at <http://deanofstudents.utexas.edu/sjs/> or the General Information Catalog to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.*

A fundamental principle for any educational institution, academic integrity is highly valued and seriously regarded at The University of Texas at Austin. More specifically, you and other students are expected to maintain absolute integrity and a high standard of individual honor in scholastic work undertaken at the University. This is a very basic expectation that is further reinforced by the University's [Honor Code](#). At a minimum, you should complete any assignments, exams, and other scholastic endeavors with the utmost honesty, which requires you to:

- acknowledge the contributions of other sources to your scholastic efforts;
- complete your assignments independently unless expressly authorized to seek or obtain assistance in preparing them;

- follow instructions for assignments and exams, and observe the standards of your academic discipline; and
- avoid engaging in any form of academic dishonesty on behalf of yourself or another student.

For the official policies on academic integrity and scholastic dishonesty, please refer to [Chapter 11](#) of the *Institutional Rules on Student Services and Activities*.

Honor Code

The core values of the University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

(Link to University Honor Code: <http://registrar.utexas.edu/catalogs/gi09-10/ch01/index.html>).

Class Web Sites and student Privacy

Password-protected class sites will be available for all accredited courses taught at The University. Syllabi, handouts, assignments and other resources are types of information that may be available within these sites. Site activities could include exchanging e-mail, engaging in class discussions and chats, and exchanging files. In addition, class e-mail rosters will be a component of the sites. Students who do not want their names included in these electronic class rosters must restrict their directory information in the Office of the Registrar, Main Building, Room 1. For information on FERPA related issues see <http://registrar.utexas.edu/students/records/ferpa/>.

Students with Disabilities

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

Religious Holidays

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Campus Safety

“Please note the following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/> :

.. Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

.. Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.

.. Students requiring assistance in evacuation should inform their instructor in writing during the first week of class.

.. In the event of an evacuation, follow the instruction of faculty or class instructors.

.. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

.. Behavior Concerns Advice Line (BCAL): 512-232-5050

.. Further information regarding emergency evacuation routes and emergency procedures can be found at: www.utexas.edu/emergency.”

DETAILED SCHEDULE:

SESSION 1 (TH, 8/30)

Readings:

INTRODUCTION

"Made in U.S.A.: A Renaissance in Quality"

SESSION 2 (T, 9/4)

Readings:

WHAT IS QUALITY?

Memory Jogger- Radar Chart

SESSION 3 (TH, 9/6)

Case:

Case Questions:

1. What are the causes of the quality problem on the Greasex line?
2. What should Paul Chesler do about the quality problem?

WHAT IS TQM?

Paul Chesler, Director, Quality Assurance

SESSION 4 (T, 9/11)

Readings:

Case:

Case Questions:

1. What are the reasons for using CABG as the starting point for care path creation at MGH?
2. For each key stakeholder (surgeons, nurses, administrative staff, patients) of MGH, identify why there may be resistance to the care path. For each key concern, what should be the response of MGH?

Assignment:

PROCESS FOCUSMemory Jogger- Team Guidelines

Massachusetts General Hospital: CABG Surgery (A)

*Case Report***SESSION 5 (TH, 9/13)**

Readings:

Case:

Case Questions:

3. What are the reasons for long lengths of stay (LOS) of CABG patients at MGH?
4. Why did LOS decline during 1993-1994?
5. If CABG care path is a success at MGH, what are some of the longer-term improvement opportunities that would leverage the CABG success?

NO CLASS or OFFICE HOUR on Tuesday, September 18

SESSION 6 (TH, 9/20)

Readings:

Case:

Case Questions:

1. What are the two or three key elements of SIA's competitive strategy?
2. SIA management states that cabin crews are a vital component of its service strategy. Evaluate the elements of SIA's cabin-crew-management program (e.g., training program, performance measurement, feedback, and communication procedures).

Assignment: *Case Report***SERVICE QUALITY**

"Improving Service Quality in America: Lessons Learned"

Singapore Airlines (A)

SESSION 7 (T, 9/25)

Readings:

Case:

SERVICE QUALITY

"Improving Service Quality in America: Lessons Learned"

Singapore Airlines (A)

Case Questions:

2. How does SIA assess service quality?
3. How sustainable is SIA's strategy?

SESSION 8 (TH, 9/27) GAP MODEL OF CUSTOMER SATISFACTION
Readings: "The Power of Unconditional Service Guarantees"

SESSION 9 (T, 10/2) ECONOMICS OF QUALITY
Readings: "Zero Defections: Quality Comes to Services"

SESSION 10 (TH, 10/4) ECONOMICS OF QUALITY
Readings: "Zero Defections: Quality Comes to Services"

SESSION 11 (T, 10/9) PROCESS CONTROL & CAPABILITY
Readings: "Understanding Variation"
"Six-sigma Quality Programs"
Memory Jogger- Control Charts, Data Points, Process Capability

Exam 1 on Tuesday, October 9, 7:00-9:30 PM, covering Sessions 1-10

NO CLASS or OFFICE HOUR on Thursday, October 11

SESSION 12 (T, 10/16) GROUP PRESENTATIONS

SESSION 13 (TH, 10/18) GROUP PRESENTATIONS

SESSION 14 (T, 10/23) GROUP PRESENTATIONS

SESSION 15 (TH, 10/25) OPTIMAL INSPECTION POLICIES

SESSION 16 (T, 10/30) OPTIMAL INSPECTION POLICIES

SESSION 17 (TH, 11/1) MEASUREMENT, FEEDBACK, MOTIVATION

SESSION 18 (T, 11/6) ORGANIZATIONAL LEARNING
Readings: "Building a Learning Organization"
Case: Analog Devices: The Half-Life System
Case Questions:
1. How is Schneiderman's half-life effect different from the well-known experience/learning curve effect?
2. What is the role of the half-life method at Analog?
Assignment: *Case Report*

SESSION 19 (TH, 11/8)**HEALTH AND SAFETY**

Case:

Workplace Safety at Alcoa (A)

Case Questions:

1. What has been and needs to be the half-life of Mission Valley's safety improvement?
2. As Paul O'Neil, how do you describe what has and has not worked at Mission Valley?

Assignment: *Case Report***SESSION 20 (T, 11/13)****HEALTH AND SAFETY**

Case:

Workplace Safety at Alcoa (A)

Case Questions:

2. As Paul O'Neil, how do you describe what has and has not worked at Mission Valley?
3. What is your evaluation of Linda Merton's plan for 1992?

Exam 2 on Tuesday, November 13, 7:00-9:30 PM, covering Sessions 1-20

NO CLASS or OFFICE HOUR on Thursday, November 15

NO CLASS or OFFICE HOUR on Tuesday, November 20

SESSION 21 (T, 11/27)**GROUP PRESENTATIONS****SESSION 22 (TH, 11/29)****GROUP PRESENTATIONS****SESSION 23 (T, 12/4)****GROUP PRESENTATIONS****SESSION 26 (TH, 12/6)****QUALITY AND FOCUS**

Case:

Shouldice Hospital

Case Questions:

1. What evidence is there that Shouldice is better (not cheaper or faster)?
2. What is Shouldice's service concept?
3. What explains Shouldice's superior quality?

OM 337		Total Quality Management (#04173)		Fall 2012	Bagchi	Course Outline	
Session	Day	Date	Topic	Case		Assignment Due	
1	TH	8/30	Introduction				
2	T	9/4	What is Quality?				
3	TH	9/6	What is TQM?	Paul Chesler			
4	T	9/11	Process Focus	Mass Gen Hosp		Case Report	
5	TH	9/13	Process Focus	Mass Gen Hosp			
	T	9/18	NO CLASS (No Office Hours)				
6	TH	9/20	Service Quality	Sing Airlines (A)		Case Report	
7	T	9/25	Service Quality	Sing Airlines (A)			
8	TH	9/27	Gap Model of Customer Satisfaction				
9	T	10/2	Economics of Quality				
10	TH	10/4	Economics of Quality				
11	T	10/9	Process Control & Capability				
EXAM 1			<u>Tuesday, October 9, 7:00-9:30 p.m.</u> (EXAM 1 covers Sessions 1-10)				
	TH	10/11	NO CLASS (No Office Hours)				
12	T	10/16	Group Presentations				
13	TH	10/18	Group Presentations				
14	T	10/23	Group Presentations				
15	TH	10/25	Optimal Inspection Policies				
16	T	10/30	Optimal Inspection Policies				
17	TH	11/1	Measurement, Feedback, Motivation				
18	T	11/6	Organizational Learning	Analog Devices		Case Report	
19	TH	11/8	Health and Safety	Alcoa (A)		Case Report	
20	T	11/13	Health and Safety	Alcoa (A)			
EXAM 2			<u>Tuesday, November 13, 7:00-9:30 p.m.</u> (EXAM 2 covers Sessions 1-20)				
	TH	11/15	NO CLASS (No Office Hours)				
	T	11/20	NO CLASS (No Office Hours)				
21	T	11/27	Group Presentations				
22	TH	11/29	Group Presentations				
23	T	12/4	Group Presentations				
24	TH	12/6	Quality and Focus	Shouldice		Case Report	
FINAL EXAM (Comprehensive - covering Sessions 1-24) Saturday, December 15, 7:00-10:00 p.m.							

****PLEASE Note****

1. No office hours on NO CLASS days (Sep. 18, Oct. 11, Nov. 15, and Nov. 20).

2. Evening exams on October 9 and November 13**