UNIVERSITY OF BRIDGEPORT
School of Engineering

SPRING 2014
COURSE OUTLINE

TCMG 571
Foundations of Service Management and Engineering

Instructor:	Elif Kongar	**Office:**	141 TECH
Course Number:	TCMG 571	**E-mail:**	kongar@bridgeport.edu
Credit Hours:	3 SH	**Phone:**	(203) 576-4379
Office Hours:	Tuesday: 11:00 AM – 1:00 PM Thursday: 1:00 – 3:00 PM [Other times by appointment]		

Course Description:

With the rapid growth of the services industry, this course integrates topics from economics, engineering, law, technology and organizational theory to deal with how firms change over time to become more service oriented or become service business and the mechanisms and tools by which they seek innovation and competitive advantage in the service sector. The services life cycle is reviewed. In addition, enabling technologies and how different disciplines help to answer questions about how business services combine, evolve, standardize and mature are covered.

Course Prerequisites:

- Basic knowledge of management concepts.
- General spreadsheet skills and familiarity with computer science and engineering topics.

Course Objectives:

Successful completion of the course will provide:

1. Demonstrating a comprehensive understanding of the concepts of service management and engineering.
2. An understanding of integrated and comprehensive models for services.
3. An understating of preventing, detecting, and analyzing the root cause of problems in service management and engineering.

Course Topics:

- Introduction to basic concepts of service management and engineering
- Services definitions
- Services economics
- IT services definition and examples

Schedule and Classroom:

- Tuesday: 1:30 p.m. - 4:00 p.m.
- Mandeville Hall, Room 210 (MAN 210)

Examinations and Grading Criteria:

- Assignments: 30% - Announced throughout the semester
- Midterm exam: 35%
- Final Exam/Project: 35% - To be explained in detail during the course

Attendance / BB utilization will be considered as a part of the final exam grade.
Bonus points will be credited throughout the course.
The grading is subject to change and the changes will be communicated with the students.

Textbook:

1. Service Management w/ Student CD-Rom (Hardcover) by James A. Fitzsimmons, Mona J. Fitzsimmons, Hardcover, Publisher: Irwin/McGraw-Hill; Edition: 7th, McGraw-Hill/Irwin, ISBN-10: 0077426975, ISBN-13: 9780077426972.
2. Additional handouts may be providing during the semester.

Required Reading:

- Innovative Company of the Year. McEachern (December 4, 2006). VARBusiness.
- Career Watch. Maglio (November 6, 2006). Computerworld.
- "Next step" in science studies: The Web. Lohr (November 1, 2006). The New York Times.
- Service Science: growing a good idea. Barto (October 12, 2006). Adapted from IBM internal use.
- The Emergence of Service Science: Toward systematic service innovations to accelerate co-creation of value. Spohrer and Maglio.
- Moves to Demystify the Science of IT Service. Lebihan (September 4, 2006). Financial Review.
- Services Science: A New Field for Today's Economy. Paulson (August 2006). IEEE Computer Magazine.
- Are You Being Served? Douglas (August 2006). Government Technology's Public CIO.
- The IT Profession: 2010 Special Report. Fanning (July 13, 2006). ComputerWorld.
- - Hot Skills, Cold Skills. Collett (July 17, 2006). ComputerWorld.
    - The World Gets Smaller Still. Brandel (July 17, 2006). ComputerWorld.
    - Line Between Business and IT Blurs. Pratt (July 17, 2006). ComputerWorld.
- Services Science Special Issue. Spohrer, Riecken et al (July 2006). ACM Communications.
- Big Blue Shift. (June 5, 2006). BusinessWeek Online.
- The New Science. Bakshi (April 30, 2006). The Sunday Express.
- Academia Dissects the Service Sector, but Is It a Science? Lohr (April 16, 2006). The New York Times.
- Serving the Services. Dietrich and Harrison (April 2006). ORMS Today.
- Trends in Services Sciences in Japan and Abroad. Hidaka (April 2006). The New York Times.
- Will web services really transform collaboration? McAfee (Winter 2005). MIT Sloan Management Review.
- What is "Service Science?" Abe (March 8, 2005). Fujitsu Research Institute.
- The New Discipline of Services Science Horn (January 21, 2005). BusinessWeek Online.
- Service worlds. Bryson et al (2004). Routledge. London, UK.
- A failing grade for the innovation academy. Chesbrough (September 24, 2004). Financial Times.
- On the uneven evolution of human know-how. Nelson (October 1, 2001). J. of Research Policy.
- Quality erosion in the services industry. Oliva & Sterman (2001). J. of Management Science.
- New rules for a new economy. Herzenberg et al (1998). Cornell University Press. Ithaca, NY.

Recommended (Optional) Reading:

- IBM Takes the Guesswork Out of Services Consulting. Hira and Goldstein (December, 2006). IEEE Spectrum.
- IBM Launches Major Services in China. McNeese and Tang (November 14, 2006). IBM Press Release.
- IBM to Help Educate China's Outsourcing Pros. McDougall (November 14, 2006). InformationWeek.
- Majoring in IBM. Chaker (September 12, 2006). Wall Street Journal.
- IBM Wakes Up to India's Skills. (June 5, 2006). BusinessWeek Online.
- How IBM is Applying Science to The World of Services. Radding (2006). Consulting Magazine.com.
- IBM Urges Universities to go Multidisciplinary. Watson (May 11, 2005). Computing Information Technology News.

Software:

General spreadsheet applications and other course related software will be used throughout the semester. Blackboard usage is essential for the successful completion of the course.

Policies:

- Late homework / project assignment submission will not be accepted.
- Three or more unexcused absences will result in an automatic failure.
- Make-up exams / quizzes will not be allowed (except for prior instructor approval for a documented emergency)
- Homework assignments and programs are due within a week from the assignment date, unless the instructor notes otherwise.
- All homework assignments are to be typed.
- All programs are to include sufficient comments and documentation with a clear program statement.
- Programs are to be submitted with all I/O files and source code hardcopies.
- Extra credit quizzes, assignments, and programs (if any) will be announced by the instructor.

Assignment Submission Guidelines

1. Computer-type your assignments (preferably MS-Word format).

2. Save your file with a proper filename format:

e.g: If the student name is Elif Kongar, student ID# 0123456, Homework Assignment 1; the filename should be:

TCMG571_Elif_Kongar_0123456_HW1.

3. Login to myub and click on the Canvas link under Library & Technology Resources. Use the first part of your UB email as username (for example: jbond, without the @bridgeport.edu) and follow the instructions to set up your password.

4. Sign in to your UB Canvas account and then into the course, e.g. “Foundations of Service Management and Engineering” to submit your assignments.

To access Canvas tutorial for faculty:

https://bridgeport.instructure.com/courses/900843

UB Canvas account can also be accessed through the URL:

https://bridgeport.instructure.com/login

Important Dates

No Classes, Martin Luther King Day	Monday, 1/20
Classes Begin	Tuesday, 1/21
Spring Break - No Classes	Sunday-Sunday, 3/9-3/16
Last Day of Classes	Friday, 5/2
Final Grades Due	Monday, 5/12

Grading Scale

Letter Grade	Percentage
A	**94.9 – 100%**
A-	**90 – 94.8%**
B+	**87 – 89.9%**
B	**83 – 86.9%**
B-	**80 – 82.9%**
C+	**77 – 79.9%**
C	**73 – 76.9%**
C-	**70 – 72.9%**
D+	**67 – 69.9%**
D	**63 – 66.9%**
D-	**60 – 62.9%**
F	**Below 60%**

Weekly Schedule (1/21/14 - 5/2/14)

Please note that the class notes and handouts are updated every week

Week	Lecture	Assignment
1 1/21	**Introduction** Syllabus Introduction to TCMG 571 Canvas web tool UB online library search Assignment submission guidelines	
2 1/28	**Chapter 1** Service definition Why do we need services? Role of services in an economy Experience design principles Source of Service Sector Growth	Video assignment due Week 3
3 2/4	**Chapter 2** Fortune 500 (First 5 – First 25) The Nature of Services Manufacturing vs. Service Lean Six Sigma Changing customer behavior Service/Product Bundle The Service Process Matrix The Service Package Distinctive Characteristics of Services Service Blueprint Strategic Service Classification Open Systems View *Case Study:* Village Volvo - Xpresso Lube	Blueprint Assignment Due Week 4
4 2/11	**Chapter 3** Service Strategy Competitive Environment of Services Competitive Service Strategies Customer Criteria for Selecting a Service Provider Service Purchase Decision Competitive Role of Information in Services Limits in the Use of Information	
5 2/18	**Chapter 3 - 4** Service Strategy (cont') Efficiency Data Envelopment Analysis (DEA) Applications DEA Examples - Advantages Numerical Examples (using Excel)	DEA Assignment – Quiz Due Week 6
6 2/25	**Chapter 4** New Service Development Levels of Service Innovation Service Design Elements New Service Development Cycle Customer Value Equation True/False Questions Multiple Choice Questions Introduction to Forecasting Methods Forecasting Level and Trend	

	Seasonal Forecasts Applications/Examples	
7 3/4	**Chapter 17** Forecasting Methods Subjective Models Delphi Methods Causal Models Regression Models Time Series Models Moving Averages Exponential Smoothing Exercises for Midterm Exam	Forecasting Assignment Due Week 9
8 **3/11**	Spring Break-No Classes	
9 3/18	**Midterm Exam**	
10 3/25	Midterm Exam Solutions	
11 4/1	**Chapter 6** Service Quality Moments of Truth Dimensions of Service Quality Perceived Service Quality Quality Service by Design Poka-Yoke	Final Project Outline Due Week 15
12 4/8	**Chapter 6** House of Quality Cost of Service Quality Control Chart	
13 4/15	**Chapter 6** Unconditional Service Guarantee Word-of-Mouth Walk-Through-Audit Service Recovery	
14 4/22	**Wrap-Up**	
15 4/29	Last Day of Classes – **Final Project Due**	