



ETLS 504 Excellence in Operations

Fall 2009

Instructor: Thomas Becker

Time: Section 01, Monday, 6:00 – 9:00 p.m.

Location: St. Paul Campus, OWS **275**

Telephone: Cell Phone: (651) 402-1398
Home Phone: (651) 770-7549
Twbecker@stthomas.edu
Please feel free to contact me during reasonable hours.

- Required Text:**
- Class Handouts
 - Case Studies to be provided

- Suggested Readings:**
- Henderson and Larco. *Lean Transformation*
 - Schroeder, Roger G., *Operations Management: Contemporary Concepts and Cases*
 - Zimmerman and Beal. *Manufacturing Works*
 - Bossidy and Charan. *Execution*

Course Description: An advanced course in concepts essential to achieving excellence in operations. The course covers the development and implementation of a coherent manufacturing strategy consistent with business and corporate strategies; importance of global competitiveness; and structuring of the production process based on the manufacturing mission. The human interaction involved in Current Quality Issues, Just In Time (JIT), Total Productive Maintenance (TPM), Set-up Time Reduction, Simultaneous Engineering, lean manufacturing and contemporary logistics systems, employee involvement and teamwork are key concepts of this course. (Previously MMSE 510)

Course Objectives: To provide insights into the key elements of contemporary Operations Management and their relationship / interaction with each other.

To develop an understanding of the relationships between Corporate, Business and Operations Strategies and how those relationships relate to the success of the enterprise.

Learning Outcomes:

A knowledge of contemporary Operations issues.
(T,P,TP,CP)

A recognition of the need for lifelong learning. **(CP)**

Program Outcome References

SE1, MMSE: n, MS3

SE15, MMSE: i, MS1

ETLS 504 Excellence in Operations

An ability to function in multi-disciplinary teams and communicate effectively. (P,TP,CP)	SE9, MMSE: g, MS2
An ability to analyze and present information and formulate a presentation. (P, CP)	SE12, MMSE: q, MS4
The ability to understand Operations from the viewpoint of all stakeholders. (P, TP, CP)	SE2, MS9
The understanding of functional strategies supporting the business strategy and competitive advantage of the enterprise. (T,P,TP,CP)	SE2, MS7
An awareness of the profound impact of the global economic environment on Operations. (P, TP, CP)	SE14, MMSE: h, MS8

Note: the designators in parentheses refer to the learning outcomes of the master degrees.(MMSE, MS = MSMS, SE = Systems Engineering)

Course Methodology: The instructor will serve as a facilitator and lecturer. Extensive group participation is expected. Outside readings are assigned and are expected to be maintained on schedule, regardless of their inclusion in the following class's discussion.

Major Assignments:	Two take-home exams (T) :	30 points
	Term Paper: (TP)	30 points
	Panel Presentation: (P)	20 points
	Class Attendance & Participation: (CP)	10 points
	Homework and assignments	5 points
	Term paper presentation: (P)	<u>5 points</u>
		100 points

Grading Policy: Tests and papers must be completed on time. Effective class participation is essential.

100 - 95 A
94 - 92 A-
91 - 89 B+
88 - 86 B
85 - 83 B-
82 - 80 C

See also: [Term Paper Evaluation Criteria](#)

Academic Integrity: All students are expected to understand and follow the University of St Thomas policies on Academic Integrity. These are described at: www.stthomas.edu/engineering/graduate/policies

Exams:

Exams are one of the instruments used to evaluate the knowledge gained by an individual student of the class subject matter, and the progress towards meeting the outcomes of the class and the degree. To this end all exams (in class or take home) are intended to represent the effort of the individual and not a group effort unless specifically stated otherwise.

Attendance Policy: Students are expected to attend all class sessions. Circumstances which prevent attendance will be honored up to two instances. Absences in excess of two times may result Students are expected to attend all class sessions. Circumstances which

ETLS 504 Excellence in Operations

prevent attendance will be honored up to two instances. Absences in excess of two times may result in a lower grade for the course. Contact the instructor when a special situation arises. All absences require that the instructor be informed in advance.

Students with Disabilities

Qualified students with documented disabilities who may need classroom accommodations should make an appointment with the Enhancement Program – Disability Services office during the first two weeks of the semester. Appointments can be made by calling 651-962-6315 or in person in O’Shaughnessy Educational Center, room 119.

Instructor Biography:

Tom earned a BA in Economics and a BA in Business Finance from the University of St. Thomas in 1984. In 1989, he earned his Masters degree in Marketing from the University of St. Thomas. He worked several years as a financial analyst for a property management firm in Minneapolis where he performed financial analysis, managed the fiscal budgeting process and a financial system implementation. He also was responsible for the development and implementation of all support training materials for the financial system rollout. He has also worked for a software development firm in Minneapolis as a financial software consultant working in pre-sales, training and product development and support. Tom has worked at Andersen Windows in Bayport, Minnesota in the marketing department where he has worked on such projects as:

- Managing a customer conversion program within the distribution channel
- Development and implementation of a sales incentive program
- Managing the development and marketing of an electronic quoting tool for Andersen dealers
- Part of a development team for a preferred retailer program across the distribution channel

Also at Andersen, Tom managed the order intake process for all orders coming into Andersen West of the Mississippi. Based upon customer specifications, materials for manufacturing are sourced and production is scheduled and executed.

Tom has also worked at 3M in the Customer Contact Center where he managed several teams that perform the customer service function by processing service requests, dispatching service technicians, performing product testing and repair and finally product re-distribution. Tom has also worked for Cummins Power Generation as a Project Manager responsible for gaining International Building Code Certification for the entire product offering.

Tom has also been a Project Manager at Cummins Power Generation. While there, he managed several multi-million dollar projects with teams spread throughout the world.

ETLS 504 Excellence in Operations

ETLS 504-01		
Excellence in Operations		
Fall 2009		
Class / Date	Topics	Assignments
Class 1 9/14/09	Course overview and introduction to operations strategies.	
Class 2 9/21/09	Need for cohesive operations strategy Understanding your operations Panel presentation instructions	HBR Article Class Handouts (CHO)
Class 3 9/28/09	Learning from the competition Benchmarking Developing an operations strategy Making operations strategy work	Benchmarking article CHO
Class 4 10/5/09	Introduction to JIT Principles of JIT Take Home Exam #1	CHO
Class 5 10/12/09	Quality concepts Return Take Home Exam #1	CHO
Class 6 10/19/09	Group Dynamics	
Class 7 10/26/09	Simultaneous engineering Design for assembly Design for disassembly Design for automation	CHO
Class 8 11/2/09	Plant Tour	
Class 9 11/9/09	Malcolm Baldrige/ISO 9000 Group technology Cellular operations Flexible Automation Take Home Test #2	CHO
Class 10 11/16/09	Lean Operations Return Take Home exam #2	CHO
Class 11 11/23/09	Lean Operations continued	CHO
Class 12 11/30/09	Quality Function Deployment Team building/Empowerment Work teams Supplier Relations	CHO
Class 13 12/7/09	Six Sigma Panel Leadership Paper Presentations	
Class 14 12/14/09	Paper presentations	

ETLS 504 Excellence in Operations

	Wrap up	
--	---------	--

To: **ETLS 504 Excellence in Operations Students**
From: **Tom Becker**
Subject: **Term Paper Evaluation Criteria**

The term paper is an important part of the ETLS 504 course requirements. Therefore, you should give thought to this paper and its ground rules early in the semester.

You can choose the specific subject of the paper, however, we expect the paper to focus on a proposed solution to a real problem using techniques and key elements of the course materials. The subject you choose should be relevant to your operations, its potential impact, and what is needed to implement it (human resources, timing and finances). Consider yourself a consultant making a persuasive presentation to your management for support of and possible funding for your proposal.

You should support your proposal with clear references to the counsel and experiences of experts in the field. Using your personal opinions is valid, but should be liberally supported with outside justifications. Also, a clear road map of "how-to" implement your proposal in your own company is a key part of this paper.

This is a demanding chore, so the topic you selected should not be too broad. The paper should be about 10 typewritten, double-spaced pages and must include a bibliography of reference material to support your recommendations.

Some subjects might be sensitive to your company. If so, it may restrict your topics or you may want to veil it with code names, etc., or request confidentiality. If you choose the latter, please review this with the instructor.

It might be helpful to discuss some of the attributes that are looked for in technical and managerial reports in industry in general and the grading criteria used for this specific course.

Instructive Value

- Is the subject clear to the reader or would further research be needed?

Application/Implementation

- Is the recommended course of action presented persuasively? Is it reasonable, financially feasible and can it be implemented?

Style and Impact

- Is your paper professional, succinct and easy to read?
- Are key concepts highlighted?
- Do you make clear recommendations of how to implement? A well-constructed concluding section brings the paper to a graceful conclusion.

Bibliography and References

ETLS 504 Excellence in Operations

- The proper use of references does not mean a footnote every other sentence. Too many are distracting. Providing evidence that you considered the most relevant scientific work or the relevant experiences of others in your analysis and proposal is appropriate.

We will discuss these term paper requirements as the semester progresses, but it is highly recommended that you begin planning early.

ETLS 504 Excellence in Manufacturing

Term Paper Assessment

Possible Points						Score
12	Instructive value					
	(1 low - 5 high)					
	Clear to reader	1	2	3	4	5
	Persuasive?	1	2	3	4	5
	Is it feasible	1	2	3	4	5

8	Style and Impact					
	Is it professional?	1	2	3	4	5
	Is it succinct?	1	2	3	4	5
	Is it easy to read?	1	2	3	4	5

8	Format, Clarity, Spelling and Structure					
	Do conclusions follow?	1	2	3	4	5
	Are acronyms defined?	1	2	3	4	5
	Misspellings?	1	2	3	4	5

2	Bibliography and References					
	Relevant to paper?	1	2	3	4	5
	Reasonable number of supporting references?	1	2	3	4	5

30	TOTAL POSSIBLE POINTS					-----

Comments: