

## Fall Semester 2008

**Course:** ETLS 671 Human Factors in Technical Management

**Time:** Tuesday 6:00-9:00

**Location:** Saint Paul

**Instructor:** Robert J. Monson  
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**Background:** B.M.E. 1985 University of Minnesota  
M.M.S.E. 1991 University of St. Thomas  
Ph.D. 1999 University of Minnesota

**Required Texts:** **Essentials of Organizational Behavior – Robbins**  
**The Truths of Management - Monson**  
**The DaVinci Code - Brown**  
**The Parable of the Sadhu – McCoy (1997) Harvard Business Review**

### Course Description:

Managers use written, oral and non-verbal communication to accomplish many purposes. This course teaches the student techniques and practice skills for targeting your audience, coaching and supporting employees, interviewing, salesmanship, performance management, personnel selection and employee development, conflict management, running meetings, problem solving and decision making, teamwork, networking and customer and vendor relationships.

### Course Objectives:

By the end of the course the student should have a basic understanding of individual differences and organizational differences, and the resulting impacts these differences have on functioning effectively in a team environment.

## Learning Outcomes:

Upon successful completion of the course, the student will be able to:

Outcome	Mechanism	Objective
1. Describe individual differences and personality traits.	P,M,T,C	SE9, SE15, MS1, TM1
2. Define the impact of individual differences in technical management.	P,M,F,C	SE2, MS2, MS4, MS9
3. Explain general organizational behavior, organizational culture, and cultural change.	T,F,C	SE7, MS2, MS9
4. Describe politics and power in the organization, and how they are appropriately utilized.	M,T,F,C	SE9, MS2, TM1, TM2
5. Effectively bargain and negotiate using a negotiation model.	T,F,C	SE3, MS1, TM2, TM6
6. Define what job performance is, and how it should be measured.	F,C	MS1, TM5
7. Understand and circumvent common communication problems.	M,T,F,C	SE9, SE12, MS2, TM1, TM6
8. Understand ethics within the organization.	T,F,C	SE13, SE14, SE15, TM5

## Course Methodology:

A mix of lecture, case studies, class discussion, in-class role-playing, and student presentations will be used to cover the course materials.

## Major Assignments:

The students will be responsible for the following elements of class

1) Panel Presentation (P)	20%
2) Exam - Midterm (M)	20%
3) Term Paper (T)	25%
4) Exam - Final (F)	25%
5) Class Participation (C)	10%

An important aspect of this class is an ability to synthesize the concepts presented, with personal experiences, knowledge and abilities. Everyone in class will benefit from your participation.

## Grading Policy:

Class members will be graded on a curve based on overall performance of the class. Late papers will not be encouraged. Grades will be affected by timelines of completion.

## **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](http://www.stthomas.edu/engineering/graduate/policies)

### **Don't cheat and don't plagiarize.**

Here are five ways of plagiarizing:

1. Word-for-word continuous copying without quotation marks or mention of the author's name.
2. Copying many words and phrases without quotation marks or mention of the author's name.
3. Copying an occasional key word or phrase without quotation marks or mention of the author's name.
4. Paraphrasing without mention of the author's name.
5. Taking the author's idea without acknowledging the source.

If there is anything about plagiarism you do not understand, ask your professor.

## **Attendance:**

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 will result in a lowered grade for the course. Contact the instructor when a special situation arises. All absences require that the instructor be informed in advance.

## **Presentations:**

This will be discussed the first night of class. The ability to make coherent and thoughtful presentations is critical for personal success. Although most of us don't enjoy presentations, they will provide a strong foundation for future needs. Please try to approach the presentation as an opportunity to learn rather than an aspect to endure.

## **Course Outline – ETLS 671**

Note: Read *The Divinci Code* by midterm exam time

Date	Topic(s)	Assignment(s)
Class 1	Course Introduction and Logistics Organizational Behavior	Chapter 1-2 (Robbins)
Class 2	Communications Exercise Domains to be covered in class	Chapter 3-4
Class 3	Reliability and Validity Individual Motivations Motivational Theories	Chapter 5-6
Class 4	Reliability and Validity Examples Motivation Theories Individual Decision Making – PA Factory	Chapter 7
Class 5	Group Theory Group Decision making Flood Rescue – Lunch Hour Email	Chapter 8-9
Class 6	Leadership Power and Politics Worldbank Scenario	Chapter 10 Chapter 11 Chapter 12
Class 7	Negotiation examples from class Barking Dog / Masonic Lodge Negotiation Structure Presentation Negotiating with Difficult People Noisy neighbor / Barbie / Band Midterm Exams handed out	Handouts
Class 8	Rhetoric Multi-Issue / Single Party Job Search / Real Job Search Midterms Due	Handouts
Class 9	Multi-Issue / Single Party Genovia Negotiation	Handouts
Class 10	Multi Party/Multi Issue	Handouts
Class 11	Knowing What We Want Organizational Design Performance Measurement / Appraisal	Handouts
Class 12	Ethics Personnel Selection Final Exam Handed Out, Term Papers Due	Chapter 13-14 Sadhu Article
Class 13	Personnel Selection Selection Questionnaire Human Factors in TM Summary	Chapter 15 Chapter 16-17
Class 14	Final Course Evaluations Final Exam Due	

**To: ETLS 671 Human Factors Class**

**From: Robert J. Monson**

**Subject: Term paper evaluation criteria**

The term paper is an important part of the ETLS 671 Human Factors in Technical Management course requirements. Therefore, it is important that you think about this paper and its ground rules early in the semester.

The specific subject of the paper is one for you to choose; however, it is expected that the paper's focus will be a study of a real situation where the utilization of the techniques learned in Human Factors contributes to the organization. *Consider the worst problem you have observed in an organization, and address how that problem could be/ should have been solved.* Consider yourself to be the manager in the situation.

You should support your proposal or case with clear references to the counsel and experiences of experts in the field. Use of your personal opinions is valid, but should be liberally supported with outside justifications. Also, a clear road map of how the situation was/will be managed in terms of application in said organization is to be a key part of this paper.

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

The paper must adhere to the *APA Publication Manual* (American Psychological Association) format criteria. This text is available in most libraries and bookstores. Please also note that the paper should be handed-in without report covers or other amenities.

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



### **Instructive Value**

- Is it clear to the reader or would further study and research be needed to totally grasp the subject?

### **Application/Implementation**

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

### **Style and Impact**

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

### **Format, Clarity, Spelling, Structure, etc.,**

- Are acronyms spelled out?
- Does it follow from problem description -- to discussions of solutions--to selection of solutions --to justification--to conclusion?
- Misspellings are a serious distraction to the reader. With all the spell checkers available, there is no good excuse, although there have been creative ones.

### **Bibliography & References**

- It is appropriate to provide evidence that the most relevant scientific work of others or the relevant experiences of others were considered in your analysis and proposal. As a rule of thumb, 6 to 10 references is a reasonable number for a paper of this size.
- We will discuss these term paper requirements as the semester progresses, but we want you to start planning early. This is after all the nature of project management.

Remember to include the pertinent sections of any research paper:

*Abstract*

*Introduction*

*Body*

*Summary and Conclusions*

Student: \_\_\_\_\_

**ETLS 671 Human Factors in Technical Management**  
**Term Paper Assessment**  
(1 low - 5 high)

**Construction**

Abstract	1		2		3		4		5	
Introduction	1		2		3		4		5	
Body	1		2		3		4		5	
Summary	1		2		3		4		5	
Format	1		2		3		4		5	
Grammar/Spelling	1		2		3		4		5	
Acronyms Defined	1		2		3		4		5	

**Style and Impact**

Professional	1		2		3		4		5	
Succinct	1		2		3		4		5	
Clear Intent	1		2		3		4		5	
Scope	1		2		3		4		5	

**Instructive Value**

Interesting	1		2		3		4		5	
Persuasive	1		2		3		4		5	
Feasible/Reasonable	1		2		3		4		5	
Conclusions Supp.	1		2		3		4		5	

**Concepts**

Detail/Relevancy	1		2		3		4		5	
Completeness	1		2		3		4		5	
Paper Scope	1		2		3		4		5	

**Bibliography and References**

Relevancy	1		2		3		4		5	
Supporting/Number	1		2		3		4		5	

*100 Total Possible Points*

*Total Score* \_\_\_\_\_

**Comments:**

**To: ETLS 671**

**From: R. J. Monson**

**Subject: Panel Presentation Organization and Evaluation Criteria**

The panel presentation or special report paper for ETLS 671 is an important part of the course requirement and will account for 20% of your course grade. The following will serve as "ground rules," organization and grading criteria.

### **Purpose of Panel**

The panel presentation will give students an opportunity to develop expertise in an area of technical management and demonstrate that expertise to the class. An important part of your business careers will be, not only to know your subject, but to convince others not already enamored with your personality of said knowledge. Your individual presentation should be adequately researched and forcefully presented. You are the expert on the subject presented. The collective presentation of the panel should relate well, be well organized and have apparent structure for the listeners.

*Panel subjects will be discussed the first session of class.*

### **Panel Assignments**

As much as possible, panel selection will be on a volunteer basis with the following control:

- Maximum of four students per panel. The intent of the panel is to cover the subject as fully as possible, and some interaction between members will be necessary. Students from the same geographic area or some nearby companies may want to volunteer as a group. This is your decision.
- Limited time will be available in class for panel coordination
- Panel subjects may differ from class discussions due to lecture/panel scheduling

### **Panel Presentations**

Each panel will be allotted a maximum of one hour with four 15 minute presentations. This will be followed by 10 minutes of questions and discussion with class and instructor should any still be awake.

Please keep your presentations within this time frame. If your presentation is too lengthy, you may be cut off without making key points. It must be focused, concise and succinct. *An outline of your presentation should be made available to each class member at the start of the panel presentation.*

Panels should consider the typical guidelines for any presentation:

*Tell them what you are going to say*  
*Tell them*  
*Tell them what you said*

*Summary and Introduction*  
*Body*  
*Summary and Conclusions*

### **Grading Criteria**

- A grade will be given to each student -- for the presentation itself and for responses to questions and discussion.
- Is the individual presentation clear, relevant and instructive?
- Is it presented in a forceful manner? Does it have impact?
- Is it redundant? Is it redundant? Is it redundant? Is it redundant?
- Are visual aids used to make the presentation more succinct, understood and remembered? Visual aids can include transparencies, slides, VCR tapes and posters.
- Are questions answered clearly, concisely and with authority?

**We will have opportunities to discuss this as the class progresses.**



Student: \_\_\_\_\_

**ETLS 671 Human Factors in Technical Management**  
**Presentation Assessment**  
(1 low - 10 high)

**Construction**

Introduction	1	2	3	4	5	6	7	8	9	10	
Outline Printed	1	2	3	4	5	6	7	8	9	10	
Outline	1	2	3	4	5	6	7	8	9	10	
Summary	1	2	3	4	5	6	7	8	9	10	
Body	1	2	3	4	5	6	7	8	9	10	
Summary	1	2	3	4	5	6	7	8	9	10	
Closing	1	2	3	4	5	6	7	8	9	10	

**Speaking Skills**

Presence	1	2	3	4	5	6	7	8	9	10	
Comfort Level	1	2	3	4	5	6	7	8	9	10	
Knowledge	1	2	3	4	5	6	7	8	9	10	
Coverage	1	2	3	4	5	6	7	8	9	10	

*110 Total Possible Points*

*Total Score* \_\_\_\_\_

**Comments:**