

# COURSE SYLLABUS

## EDMM 4020: Supervision of Industrial Operations

### Catalog Description

“The essential functions of supervisory management will be presented in this course. Common supervisory duties, obligations, and responsibilities are covered with emphasis on skills in managing interpersonal work relationships. Implications for the student’s early career management are identified.”

Course Objectives	Performance Criteria <sup>1</sup>
1. Identify common supervisory duties, obligations, and responsibilities.	I1. Evaluates the ethical dimensions of professional engineering and technological practices.
2. Identify and understand the basic functions of supervisory management.	
3. Gain or refine skills in managing interpersonal work relationships.	
4. Conduct a structured analysis of a work situation.	K3. Considers the role of time in the design process, in decision making, and/or in manufacturing and service processes.
5. Gain insight into one’s own management and leadership styles.	J2. Applies knowledge that considers professional, societal, and/or global impact.
6. Broaden one’s perspective concerning the global nature of work.	J4. ICES #189: This course broadened my perspective of working in a global/societal context.

**Required Materials:** Mosley, D.C., Jr., Mosley, D.C., & Pietri, P. H. *Supervisory Management: The Art of Inspiring, Empowering, and Developing People*. Stamford: Cengage Learning.

### Prerequisite Learning

Students are expected to have knowledge of and the ability to apply the following concepts in class:

1. Basic understanding of key business processes (e.g., production, finance, marketing) and technical processes (e.g., manufacturing processes, engineering design process). This is typically accomplished through active participation and successful completion of the first two years of coursework in an engineering or

- engineering-related curriculum and through work experience, whether part-time, coop, intern, or full-time employment.
2. Ability to define, model, and solve problems using tools and techniques from operations research, including linear programming, integer programming, etc.
  3. Able to understand, write, speak, and present in clear, understandable English.
  4. Experience finding articles using databases such as ABI/Inform, FirstSearch, InfoTrac, Lexis-Nexis, and other sources.

## Description of Graded Assignments and Evaluation Guidance

**Note on preparation of assignments:** All assignments must be submitted via e-learning. I place special emphasis on the use of proper grammar, spelling, and the use of an appropriate writing style.

All homework is due no later than the beginning of the class period for which it was assigned. ***The first late homework will be subject to a 20% penalty; after one late homework, no further late homework will be accepted.*** No homework will be accepted later than the class period following the one when the homework was originally due. Students who believe their lateness should not be penalized should present appropriate documentation.

**Homeworks**—You'll prepare several homework assignments throughout the semester. Each homework set has instructions on e-learning. The **Leadership Presentation** counts as a homework. You will present your leadership analysis as done for the class homework. This will be a five-minute presentation on the leader, his/her background (brief—1 minute) and an analysis of his/her leadership style (~4 minutes) using one or more leadership models from the course or from the literature.

**Paper:** Writing is an essential skill for a practicing engineer, especially as the engineer assumes management responsibilities. I place high emphasis on proper grammar and spelling throughout the course and a portion of the grade for the paper will reflect this emphasis.

The paper should be on your personal management and leadership philosophy and approach. Considering what you have learned in the course via models, theories, techniques, cases, and practice, identify elements you consider most relevant. Discuss how you fit into those models and the implications for how you will change or create your unique supervisory style. **Your paper must include an action plan for change, that is, what are the 3-5 specific actions you will take to implement your management/leadership philosophy.** These must be behavioral; others should be able to observe these actions and assess their effectiveness. Feel free to discuss your style using a specific context, whether it is a current work situation or other organizational activity (fraternity/sorority, service organization, professional society, other clubs and affiliations).

See more details on this paper later in the syllabus. Turn your paper in on time. Late papers will be penalized 10% for each day late.

**Exams**—The exams will check knowledge and understanding relevant to the course objectives. These test will have both objective items and essay/short answer items and will be based on assigned readings, class lectures, and in-class discussions.

**Final Exam**—The final exam will be comprehensive and of a similar format as the midterm exams.

## Evaluation Distribution

Homework	30%
Paper	10%
Midterms (2)	30%
Class Participation	10%
<u>Final Exam</u>	<u>20%</u>
Total	100%

## Grading Scale

94-100	A	74-76.9	C
88-93.9	BA	67-73.9	DC
84-87.9	B	64-66.9	D
77-83.9	CB	00-63.9	E

## Academic Integrity

You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate and Graduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at <http://www.wmich.edu/catalog> under Academic Policies, Student Rights and Responsibilities.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

## Library Representative

Please contact Mr. Ed Eckel with questions about library materials, finding resources, and other library research inquiries. He can connect you with the many resources available to make your life easier. For EDMM 4020, ABI/Inform is the database you'll primarily use:

<http://search.proquest.com/advanced?selectids=abiglobal>

Email: [edward.eckel@wmich.edu](mailto:edward.eckel@wmich.edu)

Phone: 269-387-5140

**EDMM 4020: Supervision of Industrial Operations**

**Note: See the online learning modules on e-learning for dropboxes.**

#	Topics	Exercise	Reading Due	Assignment Due	P.C.
1	Course Overview Expectations Management Models	introduction	—		
2	Managing as a Supervisor Six Sigma and Lean	Video: Disney Quality	Ch. 1		
3	Planning & Time Management Project Management Fundamentals		Ch. 2	Read about <a href="#">Covey's Importance-Urgency matrix</a> .	
4	Mission & Vision Organizing		Ch. 4		
5	Delegation	Case 5-2	Ch. 5	HW1: Time Log—put into Covey Matrix, analyze and write up; Professional Development Plan	K3
6	Leading		Ch. 8		
7	Leadership Presentations I	5 min		HW2: Choose any leader and write a short leadership analysis (1-2 pg) using material from other sources. Address their leadership style using concepts from the course. Students present leadership analysis	
8	Leadership Presentations II	5 min		Students present leadership analysis	
9	Controlling	Data to Information	Ch. 13		
10	Crisis Management: The Case of UAL 232	Video: Teamwork in Crisis DVD HD66.T4383		Visit <a href="#">e-laws</a>	
<b>11</b>	<b>Exam 1</b>				
12	NGT	NGT in-class	NGT article		
13	Decision Making and Problem Solving		Ch. 3	<b>Paper prospectus due</b>	

#	Topics	Exercise	Reading	Assignment	P.C.
14	Learning to Lead	Video: Lessons with Capt. "Sully" Sullenberger; DVD HD57.7.L43764 2012			
15	Coaching	S-B 11-3 Coach K & John Wooden	Ch. 11		
16	Open session on supervisory papers				
wk	<b>Spring Break</b>				
17	Teams	Robber Story	Ch. 9		
18	Meetings & Facilitation Skills	Skill-Builder 10-4	Ch. 10 Meeting Facilitation Guide		
19	Communication & Sticky Messages	S-B 6-3 PowerPoint YouTube	Ch. 6		
20	No class—work on papers			HW3: Analyze bad meeting & 3 rules to use	
21	Motivation	Ordinary People, Extraordinary Results DVD HD57.7.O73 2008	Ch. 7		
22	Conflict & Stress	Video: Abilene Paradox HD30.23.A255 2002 Type A/B	Abilene article Ch. 12	Take <a href="#">Type A exercise</a>	
23	Managing Organizational Performance		Ch. 14		
<b>24</b>	<b>Exam 2</b>			<b>C-229</b>	<b>I1</b>
25	Managing Your Benefits		Benefits reading	<b>Papers due</b>	J2
26	FISH! Camp Workshop	Video: FISH! DVD HF3	<a href="#">Eat Your FISH!</a>	HW4: Prepare an action plan for managing your benefits (3-5 actions).	
27	No class-SEDP				
28	Course Evaluations; Ethics and Responsibility; Organizational Culture & Change; Resilience	Video: Chilean Mine Rescue DVD HD66.C4666 2012  Virtue Matrix Culture "Quiz"	Culture reading	Siebert's <a href="#">Resilience Quiz</a>	
<b>29</b>	<b>Final Exam</b> 8:00 a.m-10:00 a.m.			<b>C-228</b>	

## EDMM 4020 Paper

Writing is an essential skill for a practicing engineer, especially as the engineer assumes management responsibilities. I place high emphasis on proper grammar and spelling throughout the course and a portion of the grade for the paper will reflect this emphasis.

The paper should be on your personal management and leadership philosophy and approach. Considering what you have learned in the course via models, theories, techniques, cases, and practice, identify elements you consider most relevant. Discuss how you fit into those models and the implications for how you will change or create your unique supervisory style. Your **paper must include an action plan for change**, that is, what are the 3-5 specific actions you will take to implement your management/leadership philosophy. These must be behavioral; others should be able to observe these actions and assess their effectiveness. Feel free to discuss your style using a specific context, whether it is a current work situation or other organizational activity (fraternity/sorority, service organization, professional society, other clubs and affiliations).

Use the following (or similar) sections *with headings* to organize your paper:

Executive Summary	crisp summary of the entire paper, should be able to stand alone, “spills the beans”
Introduction	background and set-up for the paper, identify the need for establishing a supervisory style
Review of literature and relevant models	Which model (e.g., leadership, management, communication) has the greatest impact or relates the closest to your supervisory style? You must include at least two (2) quality references from outside the course.
Statement of supervisory style	A paragraph or two containing a concise statement summarizing how you view your supervisory style
Action Plan	Identify the 3-5 actions you can/will take in the next 12 months to implement your style in the workplace. These should be specific, measurable, and have impact.
References	Use APA style. Be sure to cite in the body of your paper. These must be journal articles from engineering management journals. See <a href="http://www.wmich.edu/library">www.wmich.edu/library</a> for details.
Appendices	Optional, as necessary.

You are encouraged to use graphics, pictures, and tables as appropriate to communicate and/or summarize your ideas. Papers should be single-spaced.

A substantial portion of the grade will be based on your drawing in material from the course and from outside the course. You must include at least two (2) references from outside the course. These should be journal articles from engineering management and related journals. See the Course Library section of the IME 4020 web site (<http://homepages.wmich.edu/~mallakl/DrMallak/Journals/Journals.html>). Use proper referencing style for these references and proper attribution of sources (<http://www.wmich.edu/library/help/guides/style.php>).

**Final papers:** Turn your paper in on time. Late papers will be penalized 10% for each day (or portion of a day) late.

**Paper prospectus:** This counts as a homework assignment. The prospectus should contain the following: 1) overview of your paper—what you intend to cover and why it is important to understand your supervisory style, 2) at least one key model identified and described, and 3) details on your supervisory style (at least one full paragraph).