

SIME 6500 - ME EN 6190 – Management and Leadership for Engineers

Section In Person | Section XXX: Online
Department of Mechanical Engineering
The University of Utah | Fall 2023

Prerequisites: Graduate standing
and a BS in a STEM discipline

Catalog Description: This course provides a broad overview of building leadership and management tools and skills that can be applied to companies, organizations and individuals. The course’s leadership aspect covers strategic planning and successful leadership qualities, attributes, styles and activities. The management section teaches organization, measures of effectiveness, evaluating projects and people, and operational excellence. These topics will be presented from an engineering or technical point of view. As such, students taking this class will learn to integrate their undergraduate technical training into a technical leadership/management style.

LEARNING OUTCOMES

Upon successful completion of this course, students shall be able to:

- Understand the principles and styles of effective leadership
- Understand the principles and styles of effective management
- Develop and evaluate measures of effectiveness
- Technically evaluate project’s and people’s performance
- Apply technical tools into management and leadership decision making

These objectives will be met and evaluated through projects and exams.

COURSE CONTACTS

Instructor:

Todd Easton

todd.easton@utah.edu

Office: 2465 MEK

OH: **Mondays** | **2:00 - 3:00 PM**
Wednesdays | **MEK 3660**



REFERENCE TEXTS

This course will adopt a textbook as its primary reference text. Students should have access to an electronic copy of both at no additional cost using the J. Willard Marriott Library’s website. While on campus or logged in for off-campus access, use the search tool to find the references below and download individual chapters or view the entire book using a downloadable software or a web interface. Additional materials and other relevant references will be shared throughout the semester at no cost to students.

- Chang, Ching Ming. *Engineering management: Meeting the global challenges* (second edition). CRC Press, 2016.

GRADING

	Weight	This course follows the letter grading scheme below:			
Paper on Leaders	10%	$93 \leq \mathbf{A} \leq 100$ $90 \leq \mathbf{A-} < 93$	$87 \leq \mathbf{B+} < 90$ $83 \leq \mathbf{B} < 87$ $80 \leq \mathbf{B-} < 83$	$77 \leq \mathbf{C+} < 80$ $73 \leq \mathbf{C} < 77$ $70 \leq \mathbf{C-} < 73$	$67 \leq \mathbf{D+} < 70$ $63 \leq \mathbf{D} < 67$ $60 \leq \mathbf{D-} < 63$ $0 \leq \mathbf{E} < 60$
Project 1	15%				
Midterm Exam	25%				
Project 2	15%				
Final Exam	35%				

Regrade and grade correction requests must be made directly to the course instructor no later than one week after the grade or work in question has been returned. Please monitor your grades posted to Canvas continuously as that system holds the course’s official gradebook.

LATE ASSIGNMENTS AND MAKEUP WORK

The grade for an assignment submitted up to one day following the original deadline will have a 50% penalty applied to it. Assignments submitted more than one day after the original deadline will not be accepted or graded. Legitimate excuses must be supported with appropriate documentation. Makeup work, when authorized by the instructor, will be discussed on a case-by-case basis.

COURSE AND LECTURE STRUCTURE

Research on learning has indicated several things about the way people best absorb and retain information. Research indicates that learning is better accomplished through a combination of repetition and active learning about a topic. I will use a lecture based tutoring teaching style. If you are here, you can expect to be called upon by name and asked a question. This is an excellent opportunity to practice management and leadership communication skills. Thus, attendance is heavily encouraged, but not required.

GENERAL POLICIES

All students and instructional staff are expected to follow proper classroom behavior and treat others with civility and respect. If anyone's actions or behavior become disruptive, the instructor reserves the right to invite them to leave for the remainder of that day.

The use of computers and other communication devices during class is allowed for taking notes, referring to an electronic version of the textbook, and/or using calculation software. Cell phones must be silenced. Voice calls, texting, and social media are prohibited unless in case of emergencies or when explicitly authorized by the instructor. Snacks, coffee, and other refreshments can be consumed if permitted by the building code. Liquids must be kept in leak- and spill-proof containers, and food must not produce strong smell or noise. Please properly dispose of all waste and help keep our learning environment clean.

ACCOMMODATIONS FOR DISABILITIES

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Union Building, (801) 581-5020. CDS will work with you and the instructor to plan for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

In addition to the standard process above, please inform the instructor if you have any other issues that may prevent you from fully demonstrating your abilities so that accommodations can be made to ensure your full participation in the course and safeguard your educational opportunities at The U.

NON-DISCRIMINATION POLICY

The University of Utah guarantees equality of opportunity in education and strives to provide an academic environment that is free from any form of discrimination. Therefore, discrimination or harassment of any person based on race, color, religion, creed, gender, national origin, age, disability, veteran status, sexual orientation, or gender identity is a violation of state and federal laws and/or The U's policies and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. Be advised that all students, faculty, and staff are required to report instances of sexual harassment, sexual assault, or discrimination to the appropriate offices within the university. Information regarding non-discrimination policies and reporting guidelines can be found at <https://oeo.utah.edu>.

Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone

you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, (801) 581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, (801) 581-7776. To report to the police, contact the Department of Public Safety, (801) 585-2677(COPS).

Pregnancy/Childbirth: Should you need modifications or adjustments to your course requirements because of pregnancy- or childbirth-related matters, please contact your instructor as soon as possible to discuss an accommodation plan. Congratulations and enjoy the many sleepless nights to come!

Religious Observance: Students may excuse absences that result from religious observances and may reschedule tests and required coursework that fall on religious holidays, without penalty.

LGBTQ+ Individuals: The course instructor advocates in favor of equality for all individuals, regardless of their perceived or actual sexual orientation, gender identity, or gender expression. Please inform your instructor if you have a specific pronoun or chosen/preferred name that you would like to be addressed by.

ACADEMIC INTEGRITY AND STUDENT CONDUCT

Students are required to comply with all university-level policies on academic integrity as published in the Code of Student Rights and Responsibilities. All cases of academic misconduct will be reported to the Office of the Dean of Students. Please review your rights and responsibilities available at <https://regulations.utah.edu/academics/6-400.php>.

Additionally, academic misconduct policies specific to the Department of Mechanical Engineering will also apply. These policies are available at <https://www.mech.utah.edu/academics/me-academic-misconduct-policy>. By continuing your enrollment in this course, you acknowledge to be familiar with these policies and commit to abide by them.

Integrity Pledge: Your signature on any test or assignment indicates *"On my honor, I affirm that I have neither given nor received inappropriate aid in the completion of this exercise."*

UNIVERSITY SAFETY

The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit <https://safeu.utah.edu>.

Please review The U's Emergency Response Guide available at <https://alert.utah.edu/emergency-response-guide> and be familiar with the official procedures in the events of earthquakes, utility failures, fires, medical assistance in case of injury or illness, environmental quality concerns, active shooters and acts of violence, bomb threats, severe weather, bio/chem/RAD spills, secure in place and shelter in place orders, and evacuation orders.

COVID-19 CAMPUS GUIDELINES

Students are required to self-report if they test positive for COVID-19. To report, please contact: COVID-19 Central @ The U, (801) 213-2874, <https://coronavirus.utah.edu>. Masks and face coverings are no longer required at University of Utah facilities. Exceptions include:

- Masks will continue to be required inside University of Utah Health dedicated clinical facilities. Regulations vary for other facilities.
- Masks will continue to be required on campus buses and shuttles based on a federal public health order.
- All job-related personal protective equipment (PPE) safety requirements will continue to be required consistent with best practices for worker safety.

According to the CDC, wearing a mask remains an effective means of preventing infection for both unvaccinated and vaccinated people. Regardless of what someone chooses (mask or no mask), the university seeks to foster a sense of community and asks everyone on campus to be respectful of individual decisions on mask wearing.

Some students may qualify for accommodations and exemptions from these guidelines through the Americans with Disabilities Act (ADA). Accommodations should be obtained prior to the first day of class. If you believe you meet these criteria, contact: Center for Disability and Access, 801-581-5020, <https://disability.utah.edu>.

COURSE DELIVERY

ME EN 6190 will be delivered in person. Section XXX will be delivered via asynchronous, via on-demand recordings. The instructor will deliver in-person lectures every XXX and XXX from XXX to XXX, and every lecture will be recorded and posted online within 24 hours.

Copyright statement: The recordings are the intellectual property of the instructor and may not be shared or reproduced without their explicit and written consent. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class or upload them to any other online environment.

COURSE SCHEDULE AND IMPORTANT DEADLINES

Please refer to pages 5 and 6.

TENATIVE COURSE CALENDAR | XXX and XXX from XXX to XXX in XXX and Online

Week	Book Chapters and Assignments	Topic
1	Chapter 1	Syllabus and Course Introduction
	Paper on leaders assigned	Definitions for managing and leading
2	Chapters 1 and 2	Skills and attributes of effective managers
	Paper on leaders due	Strategic planning and time management
3	Chapter 2	SWOT
	Project 1 assigned	Scenario and planning
4	Chapter 3	Organizing activities
		Developing an organizational structure
5	Chapter 3	Enhancing performance through organization
		Working and managing teams
6	Chapter 4 and 9	Leadership styles and qualities
	Project 1 due	Deciding and Communicating
7		Developing People and Promotion
	Chapter 4 and 9	Incorporating engineering into leadership
8	Review	
	Midterm	
9	Chapter 5	Setting, evaluating and correcting performance
	Project 2 assigned	Evaluating projects and business relationships
10	Chapter 8	Sales versus marketing
		Market forecasting
11	Chapter 8	Pricing strategies
		E-Commerce
12	Chapter 10	Idea generation
		Cultivation of ideas
13	Chapter 10	Innovation value change
		Innovation management
14	Chapter 12	Lean manufacturing
	Project 2 Due	Lean manufacturing
15	Chapter 12	One piece flow and six sigma
	Review	
16	Final exam	

Do not hesitate to send any questions you may have to todd.easton@utah.edu. I am here to help you succeed! 😊
 I also appreciate feedback. Let me know if things are going well for you. We will work together to resolve any issues.