



ENGR 475/675: Leadership for Engineers Spring 2024 Course Syllabus

GENERAL INFORMATION

Class Meetings: M 4:00 pm – 6:45 pm in EMM 101

Instructor: Kelly Keselica

Email: kellykeselica@unr.edu

Phone: (775) 784-4223 (email is the preferred method of contact)

Office: SEM 237

Office Hours: By Appointment

Prerequisite: Junior or Senior standing

Catalog Description: Develop a toolbox of leadership skills and practice applying this knowledge to collaborative and technical organizations.

Textbooks:

- Carnegie, Dale. How to Win Friends & Influence People. Gallery Books, 1981.
- Covey, Stephen R. The 7 Habits of Highly Effective People. Free Press, 1989.

Objectives: Students will learn the basics of leadership and management techniques while developing their personal vision and practices for managing their own effectiveness. Verbal and written communication will be a central theme, with emphasis on communication styles, difficult conversations, active listening, emotional intelligence, interacting in a multi-generational workplace, coping under pressure, and managing change. All topics will be taught and applied through an engineering lens to prepare students to succeed in in a technical environment.

ABET Student Learning Outcomes:

- (3) an ability to communicate effectively with a range of audiences
- (5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- (7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Graduate Student Learning Outcome:

 Explain the theory of leadership principles and communicate their importance in the field of engineering

Course Learning Outcomes: At the completion of the course, you will be able to:

- Summarize the main principles in *How to Win Friends and Influence People* and *The 7 Habits of Highly Effective People* and apply these principles in your own life.
- Identify the difference between a leader and a manager and explain transformational leadership.
- Develop a personal vision statement and extrapolate that knowledge to developing a company's vision statement.

- Facilitate small talk with strangers to improve networking.
- Explain active listening and describe techniques for listening effectively.
- Correctly identify communication styles and adjust your interactions as needed.
- Conduct a difficult conversation with someone.
- Define emotional intelligence and identify ways to improve interactions and relationships.
- List and explain the six dimensions of national culture.
- Assess your personal effectiveness and your location on the Maturity Continuum.
- Make decisions using the Vroom-Yetton Decision Model.
- Identify different generations within a workplace and describe ways to effectively communicate with each.
- Apply leadership principles to an engineering environment.

Required Course Materials:

- Course Study Guide A hard copy can be purchased in the Wolf Shop. A hard copy is required because you will be allowed to use it during the final exam. Notes taken on a computer or tablet will not be allowed in the final exam.
- Computer and stable internet connection All assignments will be posted on WebCampus and students must have access to a computer and stable internet connection to submit their work.
- This course may leverage third party web/multimedia content; if you experience any issues accessing this content, please notify your instructor.

COURSE STRUCTURE

We will have a very active classroom environment that prioritizes participation and implementation of the content. Each class period will begin with a reading quiz followed by a class discussion. The remainder of each lecture period will consist of new content in the form of slides, videos, and interactive activities.

Lecture notes are written in class and will not be posted to WebCampus. Research studies show that students retain the most information when writing things down (check out this Huffington Post article on How Writing By Hand Improves Your Memory). If you miss lecture, you must copy the notes from a classmate. If you are ill, hospitalized, or an emergency arises, please contact the instructor to make arrangements to meet one on one and go over the notes.

Schedule

This class meets one day each week for nearly three hours. Each class period will include a ten-minute break roughly halfway through. A detailed schedule of topics and assignments is located in Appendix 1.

There will be a panel discussion during one lecture period where three professional engineers will attend the class and field questions from the students. All students are expected to participate in the panel discussion and prepare at least three questions for the panel related to the content learned in the class.

Online Support

We will use WebCampus in this course to manage administrative functions. Every student should automatically have access to the WebCampus page once enrolled in the class. Materials posted on WebCampus include homework assignments, exams, sample problems, and solutions. Modules allow you to track these throughout the semester. Students will be able to track their grades on WebCampus.

COURSE GRADING

The course grades will be determined by the following formula. Note that undergraduate and graduate students will be graded using separate scales.

	Undergraduate Students	Graduate Students		
Reading Quizzes	20%	15%		
Homework	25%	20%		
Class Participation	30%	30%		
Final Exam	25%	20%		
Final Presentation	N/A	15%		
Total	100%	100%		

Grade Scale

Composite averages in the following ranges will yield the specified grade.

Letter Grade		
Α		
A-		
B+		
В		
B-		
C+		
С		
C-		
D		
F		

Note that standard rules of rounding will apply. That means that if you have a 92.50% at the end of the course, your grade will round up to an A. However, a grade of 92.49% will remain at an A-.

Grade Disputes

Grades will be kept current on WebCampus and it is the student's responsibility to ensure all grades are entered correctly. Mistakes happen, so be vigilant about checking your grades. *All grade disputes must be addressed within one week of posting of your grade on an assignment.* Grading errors will be corrected; however, unprofessional behavior including grade bargaining, begging, negotiating, and haggling will not be tolerated and may result in a reduction of the final course grade. No individual additional extra credit will be provided beyond what is announced.

Reading Quizzes

Students will be assigned reading each day. Class will begin with a reading quiz to assess whether or not students completed their assigned reading. These will be multiple choice or fill in the blank questions. After students submit their reading quizzes, the answers will be discussed with the class. Quizzes will be graded and scores entered into WebCampus, but the quizzes will not be handed back. Students wanting to review their quiz will need to make an appointment with the instructor. Students arriving late to class will not be given additional time to complete their reading quizzes.

Homework Assignments

Various homework assignments will ask students to apply information learned in the class to their personal life. These include personal reflection, assessment quizzes, and written assignments. Information you share with the instructor will remain confidential. It is recommended that you read the assignments after class, think about the prompts for a few days, and carefully consider what you're asked to learn. These are designed to promote personal growth; students who put more thought into these reflections generally take more away from this experience.

Homework assignments are due on Sundays at 11:59 pm. Assignments must be submitted to WebCampus before 11:59:00 pm on the specified due date. **Note that WebCampus locks assignments at 11:59:01 pm and will not allow the submission of late work.** Do not wait until the last minute to upload your assignments; the computer is unbiased and inflexible with time stamps. A list of assignments is given in Appendix 1.

Class Participation

Participation is the largest portion of the grade in this class. All students are required to actively participate and engage with others to get the most out of this course. You will be expected to relate the class content and reading material to your personal experiences in a thoughtful and meaningful way and be prepared to participate in class discussions. All students must be respectful and open to other students' opinions and willing to listen and learn from everyone in the class.

Students looking to sit quietly in the back of the classroom, neglect the reading assignments, or earn an "easy A" should consider taking a different course. Cell phones may not be out during class time. Participation points may be reduced for students seen interacting with their phones rather than participating in the class.

Attendance Policy

As per the University Administrative Manual (3,020), students are expected to attend classes in which they are enrolled. Attendance is required and an unexcused absence will result in zero participation points for that day. Each subsequent unexcused absence will result in a full letter grade reduction of the final course grade. Students with five unexcused absences will receive an F in the course.

A student who is too ill to attend class must provide either (1) proof of a positive COVID test from a medical provider (complete with date and student name) or (2) documentation signed by a medical professional with explicit dates the student will be missing from campus. A photo of a home COVID test will not be accepted as an excused absence.

Alternate assignment due dates/times may be arranged for <u>university excused absences</u>. Excused absences do not include family vacation, work obligations, dentist appointments, concert tickets, or oversleeping. Absences for approved extracurricular activities must be arranged at least one week in advance and supported with proper documentation. Absences for religious holidays will be honored but must be requested in writing at least one week in advance. If a student is absent due to extended illness, family emergency, bereavement, or other compelling reason, they should notify the instructors as soon as possible and within one week of the start of the absence. Formal, written documentation will be required for extended absences. In such cases, we recommend that students submit help request through the Dean of Students at https://www.unr.edu/dean-of-students to provide documentation and keep their information private.

Classroom Late Policy

Students must be on time for class. We start promptly at 4:00 pm. Students arriving after 4:05 pm (i.e. 04:05:01) will be marked as late. Those marked late will only receive 70% of their participation score for the day. Reading quizzes will last until 4:15 pm. Late students will not be given additional time on their reading quiz. Anyone arriving after 4:15 pm will be considered absent.

Team Building Activity

During the last week of class, there will be a team building activity. This will make up a significant portion of your participation grade (20%). Students will be split into teams and asked to complete an engineering task. The task will include a design phase and a construction phase. Students will be graded on how well the final product functions. The highest scoring team will be given 25/25, the second-place team 22.5/25, and so on.

Final Exam

The final exam will include questions from the reading assignments and from the daily learning objectives. Students will be allowed to access a hard copy of their course notebook and bound copies of the course textbooks. The final exam will be administered on the computers in JTB 125 during the time specified in the course schedule (located in Appendix 1).

Graduate Students

Graduate students taking this course (i.e. those enrolled in ENGR 675) are expected to work at a higher academic level. Collectively, the graduate student cohort will create a three-hour class period to teach any leadership concepts not already presented during the class. Graduate students must work outside of class to coordinate the presentations and must include a few interactive activities. Content will be assessed by the instructor and other students in the class.

Each graduate student will have a one-on-one meeting with the instructor to discuss the content of their presentation and review their proposed interactive activity.

ACADEMIC SERVICES AND UNIVERSITY POLICIES

Statement on Academic Dishonesty

The University Academic Standards Policy defines academic dishonesty, and mandates specific sanctions for violations. See the University Academic Standards policy: UAM 6,502.

Statement for Academic Success Services

Your student fees cover usage of the <u>Math Center</u> (784-4433), <u>Tutoring Center</u> (784-6801), and <u>University Writing Center</u> (784-6030). These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

Statement of Disability Services

Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the <u>Disability Resource Center</u> (William N. Pennington Student Achievement Center, Suite 230) as soon as possible to arrange for appropriate accommodations. This course may leverage 3rd party

web/multimedia content, if you experience any issues accessing this content, please notify your instructor.

Statement on Audio and Video Recording

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

Class sessions may be audio-visually recorded for students in the class to review and for enrolled students who are unable to attend live to view. Students who participate with their camera on or who use a profile image are consenting to have their video or image recorded. If you do not consent to have your profile or video image recorded, keep your camera off and do not use a profile image. Students who un-mute during class and participate orally are consenting to have their voices recorded. If you do not consent to have your voice recorded during class, keep your mute button activated and only communicate by using the "chat" feature, which allows you to type questions and comments live.

Equal Opportunity and Title IX

The University of Nevada, Reno is committed to providing a safe learning and work environment for all. If you believe you have experienced discrimination, sexual harassment, sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need information related to immigration concerns, please contact the University's Equal Opportunity & Title IX office at 775-784-1547. Resources and interim measures are available to assist you. For more information, please visit: https://www.unr.edu/equal-opportunity-title-ix.

Statement on COVID-19 Face Coverings

Pursuant to Nevada law, NSHE employees, students and members of the public are no longer required to wear face coverings while inside NSHE buildings irrespective of vaccination status.

Statement on COVID-19 Social Distancing

In alignment with State of Nevada guidelines, social distancing is no longer required.

Statement on COVID-19 Disinfecting Your Learning Space

Disinfecting supplies are provided for you to disinfect your learning space. You may also use your own disinfecting supplies.

Statement on COVID-19, COVID-19 Like Symptoms, and Contact with Someone Testing Positive for COVID-19

Students testing positive for COVID 19, exhibiting COVID 19 symptoms regardless of vaccination status will not be allowed to attend in-person instructional activities and must leave the venue immediately. Students should contact the Student Health Center or their health care provider to receive care and who can provide the latest direction on quarantine and self-isolation. Contact your instructor immediately to make instructional and learning arrangements.

ENGR 475/675: Leadership for Engineers Updated 01/16/2024 Material subject to change

Accommodations for COVID 19 Quarantined Students

For students who are required to quarantine or self-isolate due to 1) COVID 19 infection or 2) exposure while not vaccinated, instructors must provide opportunities to make-up missed course work, including assignments, quizzes or exams. In courses with mandatory attendance policies, instructors must not penalize students for missing classes while quarantined.

Statement on Failure to Comply with Policy (including as outlined in this Syllabus) or Directives of a University Employee

In accordance with section 6,502 of the University Administrative Manual, a student may receive academic and disciplinary sanctions for failure to comply with policy, including this syllabus, for failure to comply with the directions of a University Official, for disruptive behavior in the classroom, or any other prohibited action. "Disruptive behavior" is defined in part as behavior, including but not limited to failure to follow course, laboratory or safety rules, or endangering the health of others. A student may be dropped from class at any time for misconduct or disruptive behavior in the classroom upon recommendation of the instructor and with approval of the college dean. A student may also receive disciplinary sanctions through the Office of Student Conduct for misconduct or disruptive behavior, including endangering the health of others, in the classroom. The student shall not receive a refund for course fees or tuition.

APPENDIX 1: COURSE SCHEDULE

Week	Date	Topic		Reading Due		Homework Assigned
1	01/22/24	Intro to the Course & Personal Vision			Student Information & Photo, Personal Vision Statement, LPI Survey	
2	01/29/24	Management and Leadership	HWFIP	Intro Chs. & Part 1 Ch. 1	pp. xi-16	Criticism Reflection
3	02/05/24	Campus Closed				
4	02/12/24	Leadership Styles and Trust	HWFIP	Part 1 Ch. 2-3	pp. 17-47	Importance and Appreciation; LPI SMART Goal
5	02/19/24	President's Day: Campus Closed				
6	02/26/24	Networking & Holding Conversations	HWFIP	Part 2 Ch. 1-3	pp. 51-79	Cover Letter
7	03/04/24	Active Listening	HWFIP	Part 2 Ch. 4-6	рр. 80-105	Listening Reflection; Emotional Intelligence Assessment Survey
8	03/11/24	Communication Styles	HWFIP	Part 3 Ch. 1-8	pp. 109-166	Making Enemies Reflection
9	03/18/24	Emotional Intelligence & Difficult Conversations	HWFIP	Part 3 Ch. 9-12	pp. 167-190	EI SMART Goal
	03/25/24	Spring Break: No Classes; Campus Open				
10	04/01/24	Culture, Paradigms, & Personal Effectiveness	7HHEP	Part One: Paradigms and Principles	pp.13-62	Maturity Continuum SMART Goal
11	04/08/24	Change Management	7HHEP	Part Two: Habit 1	pp. 65-94	Three Questions for the Panel
12	04/15/24	Leading in a Multi-Generational Workplace & Panel Discussion	7HHEP	Part Two: Habit 2	pp.95-144	Panel Assessment
13	04/22/24	Decision Making	7HHEP	Part Two: Habit 3	pp.145-182	Quadrant II Scheduling
14	04/29/24	Applied Design, Procurement, and Development	7HHEP	Part Three: Paradigms of Interdependence	pp. 185-204	
15	05/06/24	Graduate Student Presentations				Graduate Student Feedback Form
16	05/13/24	Final Exam 3:00-5:00 pm in JTB 125				