

Syllabus
Engineering Leadership

EGS 4038 – Section 11AD (On-campus Undergraduate Students)

EGS 6039 – Section 109F (On-campus Graduate Students)

EGS 6039 – Section 07C9 (Special Distance Learning for Graduate Students)

EGS 6039 – Sections 109G and 109H (EDGE Distance Learning Program for Graduate Students)

Class Periods: Tuesdays, Periods 3-5 (9:35 a.m. – 12:35 p.m.)

Class Location: NEB 102

Academic Term: Spring 2017

- 1. Instructor:** Bill McElroy, P.E., Assistant Director, Engineering Leadership Institute, University of Florida Herbert Wertheim College of Engineering
 - a. E-mail address: mcelrowj@eng.ufl.edu
 - b. Office Telephone: 352-294-7383
 - c. Office location: Weil Hall Room 313B
 - d. Office hours: By appointment; flexible except for Tuesday and Friday mornings
 - e. Web site: UF course Canvas web site
 - f. No teaching assistant

- 2. Course Description:** *Engineering Leadership* introduces engineering students to the concepts, theory and practice of engineering leadership; effective written and oral communications and presentations; engineering leadership characteristics, individual differences and self-awareness; developing and building teams; managing change, conflicts, and crises; and understanding real-world ethics and core values.

- 3. Credit Hours:** 3
Graduate students will not receive graduate credit for taking the undergraduate version of the class. They are allowed to enroll in the undergraduate section, but the credits will then not count toward the degree.

- 4. Course Pre-Requisites/Co-Requisites:** For EGN 4038, Junior/Senior standing

- 5. Course Objectives:** Prepare students to assume leadership roles in their professional careers, whether in the private, academic, public, or non-profit sectors; Help students describe and apply the foundations of leadership and linkages to vision, high ethical standards and professionalism; Assist students in developing their effective communications and presentation skills; Provide students with a background in applying concepts to manage collaborative team dynamics, drive change, and manage conflicts and crises. Course completion is one of the prerequisites for obtaining the Engineering Leadership Certificate to be offered by the Herbert Wertheim College of Engineering.

6. **Material and Supply Fees:** not applicable
7. **Professional Component (ABET):** Not applicable as course is not specific to a major under ABET purview.
8. **Relation to Program Outcomes (ABET):** Not applicable as course is not specific to a major under ABET purview.
9. **Required Textbooks and Software:**
 - a. Title: Exploring Leadership – for College Students Who Want to Make a Difference (all Sections)
 - b. Author: Komives, S.R., Lucas, N. and T.R. McMahon
 - c. Publication date and edition: 2013, 3rd Edition
 - d. ISBN number: 978-1-118-39947-7 (pbk.)

 - a. Title: Lincoln on Leadership (all Sections)
 - b. Author: Donald T. Phillips
 - c. Publication date and edition: 1992
 - d. ISBN number: 0-446-394459-9

 - a. Title: Leadership Conversations (Graduate Sections Only)
 - b. Author: Berson, Alan S. and Richard G. Stieglitz
 - c. Publication date and edition: 2013, 1st Edition
 - d. ISBN number: 978-1-118-37832-8
10. **Recommended Materials:** Students should expect to have additional reading assignments and materials that will be outlined in the detailed course schedule provided by the instructor. posted in the course schedule. Reading materials will be articles that are available electronically through the University library system or through postings on the Canvas course website.
11. **Course Schedule:** The course will be delivered weekly in the 3-hour segments typically through lecture overviews by the instructor and class discussions/workshops facilitated by the instructor and supported by guest presenters, plus videos and student presentations. Students will have access to an updated course schedule that outlines the expected coverage of topics each week, as well as the reading requirements and expected classroom discussions and activities for that week.

The outline of expected topics to be covered each week is summarized below. The actual weekly outline and topics are subject to change at the course instructor's discretion, and will be reflected in the updated course schedule that students will have access to via the Canvas course website:

Week	General Topics
1	course overview; explanation of course requirements; leadership and engineering leadership in context; an initial look at effective leadership elements
2	overview of evolution of leadership theories, approaches, and processes; leadership styles and simple leadership frameworks; concept of authentic leadership
3	components of the Relational Leadership Model; concepts of leadership vs. management, leadership vs. power, competence vs. likeability, vision and values, and ethical leadership
4	persuasion and influence, persuasive communications, concept of target audiences
5	developing effective presentations and speeches; effective techniques for public speaking; the role of storytelling
6	effective writing styles, approaches and techniques; conversational approaches
7	nature and sources of conflict; individual reaction styles to conflict; resolution methods; having difficult conversations
8	emotional intelligence and leadership; communications styles; personality types and teams
9	overview of motivational theory and applications; attitudes, perceptions and judgments
10	teams, team dynamics and team building
11	organizational vision, mission and values; the concept of corporate culture; leading without authority; leading virtual teams
12	diversity and inclusion in organizations and teams; global leadership concepts, realities and awareness
13	leading and managing change in organizations
14	professional credibility and its foundations; values and ethics in engineering leadership; technical competence and disciplined execution as components of credibility and excellence
15	framework for professional engineering ethics; the nature of crises; critical success factors for managing and leading during a crisis
16	final class presentations; class summary and close-out

12. Attendance Policy, Class Expectations, and Make-Up Policy: For on-campus students, attendance is mandatory at all sessions and will be monitored through assignment submittals, sign-in sheets, and/or similar methods. Turning in a submittal or signing in for a non-attending student may be considered for honor code violation.

On-campus students are allowed one unexcused absence during the semester class. More than one unexcused absence can result in a loss of a letter grade per each absence over one at the discretion of the instructor, subject to the UF attendance policies. Excused absences must be consistent with university policies in the undergraduate (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>) or graduate

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance> catalog and require appropriate documentation.

Students are expected to arrive to class on time and to remain in class through completion. Excessive student use of electronic devices during class sessions, for non-class purposes, may be considered by the instructor as an unexcused absence for that day. Students are expected to come to class prepared (including completion of all assigned readings) to actively participate in class discussions and activities.

Unless stated otherwise, assignments (up to 10) are to be submitted via Canvas by the stated deadline. Late submissions may be accepted by the instructor for partial credit, subject to the policies in the above undergraduate or graduate catalogs, as appropriate. **Note:** Review the Assignment Grading Criteria document available on the course website that outlines general requirements for assignments and how the instructor will evaluate assignments.

No make-up quizzes will be available, subject to UF attendance policies in the above undergraduate or graduate catalogs, as appropriate.

13. Evaluation of Grades: The base learning framework will be similar for both graduate and undergraduate students in that they will have the same course schedule, receive the same lecture materials, receive some of the same reading assignments, and receive some of the same homework assignments. Class requirements for graduate students will differ in several ways. They will have an additional, more advanced course textbook containing more in-depth treatment of the base subject matter; may receive supplemental, more in-depth reading assignments as well as relevant case-study evaluations; and may receive more challenging homework assignments corresponding to the assigned reading and case-study materials. Testing formats and content will be similar for all students, although the test content may differ for the graduate student group to match higher level course requirements.

Assignments (up to 10) are to be submitted via Canvas by the stated deadline. Late submissions may be accepted by the instructor for partial credit, subject to the policies of the above undergraduate or graduate catalogs, as appropriate. **Note:** Review the Assignment Grading Criteria document available on the course website that outlines general requirements for assignments and how the instructor will evaluate assignments.

Quizzes (up to 8) will be completed electronically through the Canvas website for the course. The quizzes will be available for prescribed periods of time (normally a couple days) with dates and times of availability established by the instructor based on the course schedule and updates as required through announcements and emails using the Canvas course website. Quizzes for all students in the class will be administered through services provided by ProctorU.

Available by agreements with the University of Florida, ProctorU is a live online proctoring service that allows students to take the quizzes from the comfort of their home. ProctorU is available 24/7; however, students will need to schedule their proctoring session at least 72 hours in advance of the exam availability to avoid payment of a demand scheduling fee (that will be borne by the students in the event they occur). Creating a ProctorU account is very simple; all students will need to do is visit go.proctoru.com. Additional information about the ProctorU process is provided in a document posted on the Canvas course site (under the Files folder).

ProctorU also provides free technical support to ensure that students have the best testing situation possible. That support is available at www.proctoru.com/testitout. On this page, students will also be able to test their equipment, learn about what to expect during the proctoring session, and ask any questions they may have about the proctoring process with a ProctorU representative.

In order to use ProctorU, students will need to have a high-speed internet connection, a webcam (internal or external), a Windows or Apple operating system, and a government- issued photo id. ProctorU recommends that students visit proctoru.com/testitout prior to their proctoring sessions to test their equipment. For additional technical services needed before their exam, students can click on the button that says “connect to a live person.”

Test Taker Walk Through Video

URL: <https://vimeo.com/107066503>

Final grades for on-campus students will be determined as follows:

- Students will receive weekly points for class attendance and participation that will count for 10%. This may include scores on weekly “readiness assurance quizzes” related to preparation for class.
- Students will be required to complete an Individual Leadership Development Plan (ILDLP) that will count for 20%. The ILDP requirements are explained in the ILDP Framework document that is available on the course website and will be discussed at the outset of class.
- Assignments (up to 10 total) will count for 20%, For team-based assignments, each team member will receive the same score provided they participated; non-participating students will receive a score of 0 for those respective assignments.
- Quizzes (up to 8) will count for 30%.
- Presentations (up to 2) will count for 20%. Each team member will receive the same score for a team-based presentation assignment provided they participated; non-participating students will receive a score of 0 for those respective presentations.

Final grades for distance-learning, graduate students will be determined as follows:

- Students will be required to complete an Individual Leadership Development Plan (ILDP) that will count for 20%. The ILDP requirements are explained in the ILDP Framework document that is available on the course website and will be discussed at the outset of class.
- Assignments (up to 10 total) will count for 25%. For team-based assignments (if any), each team member will receive the same score provided they participated; non-participating students will receive a score of 0 for those respective assignments.
- Quizzes (up to 8) will count for 30%:
- Presentations (up to 2) will count for 25%. As applicable, each team member will receive the same score for a team-based presentation assignment (if any) provided they participated; no-participating students will receive a score of 0 for those respective presentations.

14. Grading Policy:

The grade scale for undergraduate student total weighted class scores is:

A = 94 or above	C = 74 – 76
A- = 90 – 93	C- = 70 – 73
B+ = 87 – 89	D+ = 67 – 69
B = 84 – 86	D = 64 – 66
B- = 80 – 83	D- = 60 – 63
C+ = 77 – 79	E = 59 or below

The grade scale for graduate student total weighted class scores is:

A = 90 or above	C = 70 - 73
A- = 87 – 89	C- = 67 - 69
B+ = 84 – 86	D+ = 64 - 66
B = 80 – 83	D = 60 - 63
B- = 77 – 79	D- = 57 - 59
C+ = 74 – 76	E = 56 or below

More information on UF grading policy may be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> and <http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>.

NOTE: Class grades indicated through the Canvas class website are unofficial and may not accurately reflect the grading criteria and policy contained in this syllabus. Students are encouraged to keep up with their class grade individually based on the class grading approach.

15. Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

16. Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu/evals>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

17. University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.” On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

18. Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

19. Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

<http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

20. Campus Resources:

Health and Wellness

U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or

<http://www.police.ufl.edu/>.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <https://teachingcenter.ufl.edu/>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <https://writing.ufl.edu/writing-studio/>.

Student Complaints Campus:

https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

On-Line Students Complaints: <http://www.distance.ufl.edu/student-complaint-process>.