THE UNIVERSITY OF WISCONSIN-MILWAUKEE
College of Engineering and Applied Science

F A C U L T Y   M E E T I N G

Friday, December 11, 2020 10:30 A.M.   Virtually by Microsoft Teams

M I N U T E S

The meeting was called to order at 10:30 a.m. with Dean Brett Peters presiding.

PRESENT: Professors Abu-Zahra, Amano, Armstrong, Avdeev, Bravo, Chang, Cheng, Church, Cuzner, Dabagh, Dhingra, Dumitrescu, El-Hajjar, Goyal, Graettinger, Hanson, Helwany, Hu, Jang, Kate, Kouklin, Law, Liao, Liu, Ma, Mali, McRoy, Misra, Munson, Nasiri, Niu, Otieno, Petering, Peters, Pillai, Premnath, Qin, Qu, A.Rahman, M.Rahman, Rammer, Reisel, Rohatgi, Salowitz, Seifoddini, Sobolev, Stern, Tabatabai, Titi, Venugopalan, W.Wang, Y.Wang, D.Yu, Z.Yu, Zhang, J.Zhao, T.Zhao

EXCUSED: None

GUEST: R. Barry, I. Mahmood, L. McGovern

I.   DEAN UPDATE

CEAS continues to focus on research and educational excellence. To grow research, faculty should be looking at writing more proposals, targeting ways of improving the success rate (such as through building strong teams and focusing on opportunities that are likely to match well with what we are able to offer), and obtaining larger grants. To grow tuition revenue, CEAS continues to work on developing professional master's programs and graduate certificate programs, and to promote greater use of the accelerated MS program among our undergraduate students. To grow the number of BS graduates, CEAS continues to look for ways to increase pathways into the program to increase the number of students and also seeks to streamline programs to enable greater student success.

The reshuffling of labs and offices to accommodate the upcoming 9th/10th floor renovations will begin soon.

The budget situation remains mostly unchanged from the last month. A FY20 lapse of $0.6M from the carryover has closed out. CEAS is on track to meet the FY21 reduction of $1.5M. The FY22 budget allocation is pending.

Dates to keep in mind: December 18: 2030 Project Update. December 19: "Virtual" Order of the Engineer ceremony. December 20: "Virtual" Commencement.

II. ANNOUNCEMENTS

A. R. Barry thanked Jane Martell for all her work over the years, as she is heading into retirement later this month. He also introduced Imad Mahmood, who will be replacing Jane Martell and handling many of the HR duties.

B. L. McGovern provided an update on the UWM website redesign. CEAS will be one of the first colleges to switch, and there will be a need for rapid turnaround of information as the process proceeds.

C. E. Munson provided an update on academic affairs. The currents CEAS 700 Graduate Seminar will be replaced with a redesigned CEAS 700 focusing on writing (1 cr.), and students will need to take 2 semesters of Grad Studies 801 (1 cr. each).

Fall 2020 course evaluations are on-line, being administered by the Testing Center.

The Dean's Doctoral Fellowship is being revamped. Students will receive a 1-year fellowship, and can be extended for a 2nd year if certain criteria are met.

III. INFORMAL REPORTS – See Attachment 1

IV. DETERMINATION OF THE PRESENCE OF A QUORUM FOR FACULTY MEETING

As 56 voting faculty members were present, a quorum was present.

V. AUTOMATIC CONSENT BUSINESS

A. Minutes of the November 6, 2020 Meeting

B. Course Changes – See Attachment 2

C. Graduation:

"*The faculty recommends to the Board of Regents those students whose names are submitted by the Office of the Registrar as having completed the requirements for the degree of Bachelor of Science in their respective majors.*"

VI. NEW BUSINESS

Prof. Munson moved to add "EAS 710" and "Graduate Certificate in Modern Engineering Leadership" to the agenda. The motion was seconded and passed on a voice vote.

A. EAS 710: Managing Human Resources and Teams – See Attachment 3

Prof. Munson moved to approve EAS 710.

The motion was seconded and approved on a voice vote.

B. Graduate Certificate in Modern Engineering Leadership – See Attachment 4

Prof. Munson moved to approve the Graduate Certificate in Modern Engineering Leadership

CEAS FAC. DOC. NO. 274

The motion was seconded and approved on a voice vote.

VII.   GENERAL DISCUSSION - None

VIII. ADJOURNMENT

Meeting Adjourned at 11:43 a.m.

John R. Reisel, Secretary
CEAS Faculty

JRR
Attachments

INFORMAL REPORTS

Office of Student Services – Todd Johnson

No Report

Career Services – Juli Pickering

No Report

Curriculum Committee – Prof. Church

The Curriculum Committee approved two Course Changes, and discussed an Honors in the Major proposal from IME.

Graduate Program Committee – Prof. Law

GPC had considered appeals for the PhD qualifying exam and discussed a potential alternative for qualifying PhD students.

Academic Planning Committee – Prof. Abu-Zahra

The APC moved to add a representative from Biomedical Engineering to the APC. This will be formally added to the committee charter, and brought to the CEAS Faculty in the spring semester for approval.

Faculty Senate – Prof. Reisel

In its November meeting, the Faculty Senate heard updates on student mental health resources and about the Police Community Advisory Committee. There was also another update on the 2030+ Think Tank Implementation team work, this time centered on the Revising the Undergraduate Experience Work Group. Much of this update concerned questions regarding the work being done to potentially significantly alter the nature of the GER experience for students at UWM.

In the December meeting, the Faculty Senate heard an update on the discussions that are ongoing regarding campus reorganization. Additionally, small modifications to the bylaws of the Senate Subcommittee for the Evaluation of Administrators were approved.

COURSE CHANGES   (Additions made in green. Deletions Indicated in Red)

CIV ENG 480   SOFTWARE APPLICATIONS FOR CIVIL ENGINEERING, 3 cr., U
General knowledge and techniques in using computer software in civil engineering
design/ Software packages include Autodesk Civil 3D and Revit Structure.
Prereq: jr st., Civ Eng 303 (P) or Civ Eng 203 (P).

CIV ENG 495   SENIOR DESIGN, 3 cr., U
Team design project involving application of fundamental civil engineering concepts.
Discussion of specifications, contracts and implementation. Written and oral
presentations. Intended for second semester seniors.
Prereq: Civ Eng 411(P), 413(P), 494 (P); and Civ Eng 335(P), 372(P), 490(P) for Civ
Eng students or Civ Eng 311(P), 412(P), 521(P) for Environmental Engineering
students; or cons instr.

MATLENG 453   POLYMERIC MATERIALS, 3 cr., U/G
Structure, crystallinity of polymers, amorphous polymers and elastomers, synthesis
method, polymerization, copolymerization,polymer characterization, polymer
solutions, and viscoelasticity, deformation mechanics of polymers.
Prereq: jr st., MatlEng 201(P), and MatlEng 316 (P) or MechEng 301 (P).

University of Wisconsin-Milwaukee: College of Engineering and Applied Science

EAS 710: MANAGING HUMAN RESOURCES AND TEAMS:
Fall 2021

Professor:	Dr. Mohammed Yahiaoui; Email: TBD
Virtual Office Hours:	By appointment (Email/Phone)
Textbooks:	*Human Resource Management* (2020, 16th Edition) by Robert L. Mathis and John H. Jackson (Cengage Publishers). Team Building: Proven Strategies for Improving Team Performance (2013, 5th Edition) by W. G. Dyer, J. J. Dyer, and W. G Dyer. (Jossey-Bass Publishers)
Assigned Articles:	All assigned articles are available on your Canvas course site
Cases:	All cases are available on your Canvas Course site

COURSE OVERVIEW:
Managing human resources and teams is a vital function in any organization. Simply defined, it involves the effective direction of organizational systems to ensure effective utilization of human talents, including building, managing, and leading teams in an organization.

This course will provide a foundation for understanding the major functions and processes of human resource management and team management. The course will discuss various ways of talent acquisition, development, management, evaluation, and optimization and foundations of team building and management. The course adopts a practical approach and utilizes a variety of cases and exercises to apply students' understanding to common people and team management problems. This course will employ underlying core principles for managing human resources and teams that are common to different industries and different sectors.

COURSE OBJECTIVES:
- To develop a deeper understanding of the human resource and team management functions and processes
- To enhance critical and analytical thinking skills while addressing common problems and issues in managing human resources and teams.
- To develop an understanding of the legal and regulatory underpinnings of human resource functions.
- To develop an understanding of current trends in common HR and team functions and practices

GRADING:

Grades are based on your total accumulation of task points, with 100 being the maximum number of task points you can earn. Each task point corresponds to one percentage point. You can earn points for the following tasks in the following manner:

1. Low stakes quizzes/assessments (up to 8% each – choice of 5 out of 9) (40% of total grade)
2. Assigned Articles/Readings (up to 25%; each worth 2.5%) (25% of total grade)
3. Team Case Analysis (Choice of 1 of 3) (20% of total grade)
4. Discussion Posts and Participation (15% of total grade)

COURSE GRADE SCALE

The final grade distribution will be as follows:

A	93-100%	B+	87-89%	C+	77-79%	D+	67-69%	F	< 60%
A-	90-92%	B	83-86%	C	73-76%	D	63-66%		
		B-	80-82%	C-	70-72%	D-	60-62%		

WORKLOAD POLICY:

- This is a three credit course and the total time required for an average student is approximately 48 hours per credit per semester for a total of 144 hours for the entire semester or about 9.6 hours/week. On average, the time commitment for these course activities is as follows:
- Weekly Low Stakes Quizzes (includes reading assigned chapters and articles and taking quizzes): 45% of time (approximately 65 hours over the course of the semester)
- Team Case Analysis: 20% of time (approximately 29 hours over the course of the semester which includes getting to know your group members, building a team, coordinating case analysis and write-up)
- Discussion Forum Participation: 15% of time (approximately 21 hours over the course of the semester).
- Assigned Articles Summary: 20% of time approximately 29 hours over the course of the semester)

ACADEMIC HONESTY

Students are expected to conduct themselves responsibly and honestly. Specifically, handing in, or copying from, another student's work or online material, paying someone to write for you, or buying case analyses and assignments, and other acts of plagiarism are prohibited. The first offense will result in a zero for that particular assignment or case. The second offense will result in an F for the course.

INSTRUCTIONAL PHILOSOPHY AND EXPECTATIONS:

1. The success of this class depends on all class members being prepared for class to make this course a positive learning experience for all. What you get out of the course depends on how much you invest in your own learning and growth.
2. The class is conducted in an atmosphere of mutual respect. The conflict of ideas is encouraged and welcome. The orderly questioning of the ideas of others, including the instructor's, is welcome as long discussions and arguments proceed in an orderly fashion. Incivility or rudeness will not be accepted.
3. The expectations around online discussion posts are on page 10 of the syllabus.
4. ***PLEASE NOTE: All course submissions need to be made via Canvas. Instructions for use are given on page 6 of the syllabus.***
5. ***PLEASE NOTE***: ***Some parts of the syllabus may change as the semester unfolds. Class members will be notified of all changes ahead of time.***

COURSE SCHEDULE AT A GLANCE

Week	Topic
Week 1 (Sept XX-XX)	Introduction to Course and Class Members
Week 2 (Sept. (Sept XX-XX)	Designing jobs for low turnover and high engagement
Week 3 (Sept. XX-XX)	Developing team skills for working in high-performing teams *One article summary Due*
End of Week 3	**Low Stakes Assessment – 1**
Week 4 (Sept. (Sept XX-XX)	Using team science to design an effective team-building program *Two article summaries Due*
Week 5 (Oct. XX-XX)	The Legal Context of Employment Decisions: EEO laws
End of Week 5	**Low Stakes Assessment – 2**
Week 6 (Oct. XX-XX)	Managing diverse teams and understanding inclusive organizational practices. *Three article summaries Due*
End of Week 6	**Low Stakes Assessment – 3**
Week 7 (Oct. XX-XX)	Understanding talent acquisition in teams and organizations. *One article summary Due + Case 1 Due*
End of Week 7	**Low Stakes Assessment – 4**
Week 8 (Oct. XX-XX)	Understanding performance management. *One article summary Due*
End of Week 8	**Low Stakes Assessment – 5**
Week 9 (Oct. XX-XX)	Managing virtual and temporary teams *One article summary Due*
Week 10 (Oct. XX-XX)	Employee health and safety at work *Two article summaries Due*
End of Week 10	**Low Stakes Assessment – 6**
Week 11 (Nov. XX-XX)	Employee and Employer Rights: Discipline and termination practices. *One article summary Due*
End of Week 11	**Low Stakes Assessment – 7**
Week 12 Nov. XX-XX)	Understanding essentials of employee compensation and benefits *One article summary Due + Case 2 Due*
Week 13	*ENJOY YOUR THANKSGIVING BREAK*
Week 14 (Dec. XX-XX)	Managing disagreements and conflict in teams
End of Week 14	**Low Stakes Assessment – 8**
Week 15 (Dec. XX-XX)	Effective Labor-Management Relations
Week 16 (Dec. XX-XX)	**Low Stakes Assessment – 9**

DETAILED COURSE SCHEDULE

Week 1 September (XX-XX): INTRODUCTION TO COURSE AND CLASS MEMBERS
    Text Reading Assignment: Please read Chapters 1 and 2 from Mathis et al. and Dyer et al. textbook

Week 2 September (XX-XX): DESIGNING JOBS FOR LOW TURNOVER AND HIGH ENGAGEMENT: BASICS OF HUMAN RESOURCE PLANNING, JOB ANALYSIS, & DESIGN
    Text Reading Assignment: Please read Chapters 4 and 5 from Mathis et al. textbook
    Online Asynchronous Discussion Essential of Job Descriptions; Enhancing engagement at work

Week 3 September (XX-XX): DEVELOPING TEAM SKILLS FOR WORKING IN HIGH-PERFORMING TEAMS
    Text Reading Assignment: Please read Chapters 3-4 from Dyer et al. textbook
    Article (1) Katzenbach, J.R., & Smith, D.K. (2005). The discipline of teams. *Harvard Business Review, 1-10.*

End of Week 3 (September (XX-XX): Low Stakes Assessment 1
    Short online assessment on Canvas based on 16 multiple choice questions. Open notes/book.

Week 4 September (XX-XX): USING TEAM SCIENCE TO DESIGN AN EFFECTIVE TEAM-BUILDING PROGRAM
    Text Reading Assignment: Please read Chapters 5-6 from Dyer et al. textbook
    Article (2) Summary Due: Haas, M. Mortensen, M. (June 2016) Secrets of great teamwork. *Harvard Business Review,* 1-8
    Article (3) Summary Due: Pentland, A. S. (April 2012) The new science of building great teams. *Harvard Business Review,* 1-11
    Online Asynchronous Discussion Challenges and best practices in building effective teams

Week 5 October (XX-XX): OVERVIEW OF EEO AND LEGAL ENVIRONMENT: IMPLEMENTING EQUAL EMPLOYMENT LAWS
    Text Reading Assignment: Please read Chapter 3 from Mathis et al. text.
    *Online Asynchronous Discussion***:** Understanding the application of various EEO laws

End of Week 5 October (XX-XX): Low Stakes Assessment 2 (same format as the first one). Study guide and sample questions will be available on your Canvas course site.

Week 6 October (XX-XX): MANAGING DIVERSE TEAMS AND UNDERSTANDING INCLUSIVE ORGANIZATIONAL PRACTICES
    Text Reading Assignment: Please read Chapter 12 from Dyer et al. text.

    Article (4) Summary Due: Ely & Thomas (2020): "Getting Serious About Diversity." Harvard Business Review, 11, 21-31.
    Article (5) Summary Due: Williams, J. Milalyo. (2019). "How Best Bosses Interrupt Biases In their Teams." Harvard Business Review, 68, 107-117.
    Article (6) Summary Due: Thomas, D.A. & Ely, E.J (1996). "Making Differences Matter: A New Paradigm for Managing Diversity." Harvard Business Review, Sept.-Oct., 79-90.
    Online Asynchronous Discussion: Managing diversity in teams and creating inclusive work practices

End of Week 6 October XX-XX): Low Stakes Assessment 3 (same format as the first one)

Week 7 October (XX-XX): UNDERSTANDING TALENT ACQUISITION IN TEAMS AND ORGANIZATIONS: RECRUITMENT AND SELECTION OF HIGH QUALITY TALENT
    Text Reading Assignment: Please read Chapters 6 and 7 from Mathis et al. textbook.
    Article (7) Summary Due: Beu & Buckley: "Interview Research Applied to Candidates."
    Online Asynchronous Discussion: Managing diversity in teams and creating inclusive work practices

Case 1 Due: Oct. XX: **"Managing Diversity: Johnson Chemical International."** *(Case Study on Canvas)*

End of Week 7 October (XX-XX): Low Stakes Assessment 4 (same format as the first one)

Week 8 October (XX-XX): UNDERSTANDING EFFECTIVE PERFORMANCE MANAGEMENT AND FEEDBACK PROCESS
   Text Reading Assignment: Please read Chapter 10 from the Mathis et al. textbook
   Article (8) Summary Due: Buckingham, and Goodall (April 2015). "Reinventing Performance Management." Harvard Business Review, 40-50
   Online Asynchronous Discussion: politics in performance reviews.

End of Week 8 October (XX-XX): Low Stakes Assessment 5 (same format as the first one)

Week 9 October (XX-XX): MANAGING VIRTUAL AND TEMPORARY TEAMS
   Text Reading Assignment: Please read Chapter 11 and 13 from the Dyer et al. textbook
   Article (9) Summary Due: Ferrazi, K. (Dec. 204) Getting Virtual Teams Right, *Harvard Business Review,* 1-5
   Online Asynchronous Discussion: Challenges and opportunities in managing virtual and temporary teams

Week 10 November 5: **EMPLOYEE HEALTH AND SAFETY AT WORK**
   Text Reading Assignment: Please read Chapter 14 from the Mathis et al. textbook.
   Article (10) Summary Due: Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams, *Administrative Science Quarterly*, 44(2), 350-383
   Article (11) *Due: 11/5/20:* Edmondson, A. C. Daley, G. (Aug 2020) How to foster psychological safety in virtual teams, *Harvard Business Review,* 1-5
   Online Asynchronous Discussion: Effective safety training practices; creating psychological safety for quality and innovation.

End of Week 10 November (XX-XX): Low Stakes Assessment 6 (same format as the first one)

Week 11 November (XX-XX): EMPLOYEE AND EMPLOYER RIGHTS: DISCIPLINE AND TERMINATION PRACTICES
   Text Reading Assignment: Please read Chapter 15 from the Mathis et al. textbook.
   Article (12) Summary Due: Buckley & Weitzel: "Employing At Will."
   *Online Synchronous Discussion***:** Drug and substance abuse testing practices; humane termination process

End of Week 11 November (XX-XX): Low Stakes Assessment 7 (same format as the first one)

Week 12 November (XX-XX): UNDERSTANDING ESSENTIALS OF EMPLOYEE COMPENSATION AND BENEFITS
   Text Reading Assignment: Please read Chapters 11 and 12 from the textbook.
   Article (13) Summary Due*:* Deloitte Human Capital Trends Report (2020) "The compensation conundrum: Principles for a more human approach." Pages 81-89
   Online Asynchronous Discussion: Effective practices in giving merit raises; ethical compensation dilemmas

Case 2 Due Nov. **(XX)) "The Broken Employment Contract?" (Case Study on Canvas)**

NOVEMBER 3ᴿᴰ WEEK: ENJOY YOUR THANKSGIVING BREAK

Week 14 December (XX-XX): MANAGING TEAM CONFLICT AND DISAGREEMENTS
   Text Reading Assignment: Please read Chapter 7-9 from the Dyer et al. textbook.
   Online Asynchronous Discussion: Functional and dysfunctional team conflict; resolving disagreements/conflict

End of Week 14 December (XX-XX): Low Stakes Assessment 8 (same format as the first one)

Week 15 December (XX-XX): EFFECTIVE LABOR-MANAGEMENT RELATIONS
   Text Reading Assignment: Please read Chapter 16 from the Mathis et al. textbook.
   Online Asynchronous Discussion: relevance of labor unions

Week 16 December (XX-XX): Final Low Stakes Assessment 9 (same format as previous ones)

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Uploading Files on Canvas

*Before you proceed, make sure your filename does not contain characters such as #, @, %, * otherwise your file will not upload correctly. Dashes and underscores are ok.*

> *Please use the following format for your filename– first name, last name, name of the assignment you are submitting and the date.*

Please use this link to access Canvas training/orientation/resources/call and chat center.
https://uwm.edu/canvas/students/

Please use this link top learn how to upload your assignments to Canvas
https://community.canvaslms.com/t5/Student-Guide/How-do-I-submit-an-online-assignment/ta-p/503

What to do if you have problems with Canvas

Canvas provides 24/7 support to UWM students. They are very helpful! Don't hesitate to reach out to them!

If you have problems with your login (e.g., you forgot your password, or if you just can't get on) or if you run into any other difficulties with Canvas, help is available from the UWM Help Desk. You may do one of the following:
- Send an email to **help@uwm.edu,** Call UWM Help Desk at 414.229.4040, OR Go to Bolton 225; if calling from outside the 414 or 262 area codes, but from within the USA, you may call the UWM Help Desk at 1.877.381.3459.

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NOTE 1: For record-keeping purposes, you are responsible for retaining your graded assignments until the end of the semester.

NOTE 2: If you need assistance with any part of your writing, please contact the writing center on campus. The Writing Center welcomes writers at all skill levels, inexperienced through advanced, freshmen through graduate students. (FYI: over 1/3 of the students who visited in the past 3+ yrs were juniors, seniors or grad students.)

WRITING CENTER: CURTIN 127 (Phone: 229-4339) or Library's East Wing
Make appointments online 24/7: http://www4.uwm.edu/writingcenter/

SUMMARIES AND REFLECTIONS OF ASSIGNED ARTICLES

Summaries of Assigned Articles: 25 %

    a. There are a total of 12 assigned articles on Canvas and appear under the specific topic/module for a given week. The purpose of these articles is to provide comprehensive information on HR and team management topics that go beyond the textbook material. These articles have been selected to provide a thought-provoking and a critical, in-depth look at a particular topic and are intended to push the learner to consider critical additional perspectives in human resource and team management. The collection of articles will give you the type and quality of information and perspective you will need to perform at an advanced level in your case analysis, discussion forums, and in your work life.

    b. By thoroughly reading each of the assigned articles and completing one of the following tasks for EACH READING, you can earn 2.5% per reading. ***You have a choice of doing any 10 of the 13 assigned articles..***

    c. To earn your points you need to:

        i. **SUMMARIZE MAIN IDEAS AND THEMES FOR EACH ARTICLE:** Type notes from the article, clearly identifying main ideas and sub-themes.

        ii. **BRIEFLY ADDRESS THESE QUESTIONS FOR EACH ARTICLE**:

            1. Which parts of the article were most appealing, relevant and meaningful to your course of study and/or work situation?

            2. Which parts of the article surprised and/or troubled you the most?

            3. Which ideas from the article might you use in your professional life?

        iii. You notes should be typically about four double-spaced pages using 12 size Times Roman font, with 1 inch page margins and submitted on Canvas.

Additional Note:

All readings for this course, except for the ones from *Harvard Business Review, ASQ, and Deloitte Report* are from the following source: *Human Resources Management: Perspectives, context, functions, and outcomes (4th edition) by Gerald R. Ferris, M. Ronald Buckley, and Donald B. Fedor (2002). (Englewood Cliffs, NJ: Prentice-Hall).*

CASE ANALYSIS AND WRITE-UPS

Team Case Analysis Write-Up: **Total 20% of the overall course grade**

The purpose of a case analysis is to apply your accumulated knowledge and understanding as a team from assigned articles and textbook material to your choice of one of two possible case problems. Teams will be assigned in the second week of semester. *You are required to complete one (1) case analysis from the two listed below*. If you wish, you may submit two (2) of them, and your best score will be used toward your grade. ***Late cases will be penalized*** 2% ***for each day that they are late.***

The written case needs to be **at least** **6-8 typed** pages, double-spaced in 12 size Times Roman font, with one inch margins. Case analyses that exceed the recommended page limit will not be penalized ***Please submit your case analysis via Canvas course website.***

PICK **1 of the 2** **cases listed below**:

- "Managing Diversity: Johnson Chemical International" (Case Study on Canvas)—**Case Due (Week 7:XX)**

  In addition to the textbook and class lecture, you do need to incorporate various insights and suggestions from the following readings to enhance your analyses and responses to this case: Ely & Thomas, "Gettign Serious About Diversity;" **Williams and Mihalyo**. "How Bets Bosses Interrupt Biases on Their Teams;" **Thomas & Ely**: Making Differences Matter: A New Paradigm for Managing Diversity."). **Please cite the articles that you use in your analysis.**

  ## OR

- "The Broken Employment Contract" (Case Study on Canvas)—**Case Due (Week 12: XX)**
  In addition to the textbook, you do need to incorporate various insights and suggestions from the following readings to enhance your analyses and responses to this case: Beu & Buckley: "Interview Research Applied to Candidates," **Buckley & Weitzel**: "Employing At Will." And **Buckingham and Goodall**, "Reinventing Performance Management.") **Please cite the articles that you use in your analysis.**

SCORING: Use this rubric to plan and prepare your case analysis submission. You can earn up to 20% for your case analysis. In addition, you may earn **TWO** extra credit bonus points as described below.

	Scoring Rubric for Case Analysis	Range of Points
	Criteria	*Points*
1.	**Language**	
a.	Is your submission in 12 size Times Roman font, double spaced, with 1 inch margins and at least 6 pages long? Did you use standard written English, with NO (zero) grammar, spelling, or word use errors?	1-2
2.	**Comprehension**	
a.	Did your response to all the questions contain only correct facts and accurate concepts? (no opinions please.)	3-5
b.	Did your response identify **all** of the major issues and/or problems posed in **each question** and in the case?	3-5
c.	*Did your response include at least* **two** *(2) additional citations of information from* **beyond the assigned class readings/articles**?	2 BONUS
3.	**Explanation, Application and Insights**	
a.	Did your response include clear and complete explanations and support for each of your statements/positions? In other words, did each part of your answer or explanation adequately explain "why", "how" or in "what way"?	1-3

b.	Did your analysis include information from assigned readings/articles and class discussions to illustrate and support your statements?	2	
d.	Did your analysis incorporate information from the textbook to explain and support your statements?	2	
e.	Did your analysis demonstrate creative thinking and other insights?	1	
	TOTAL POINTS		
	(Bonus Points)		

PARTICIPATION AND EXPECTATIONS FOR DISCUSSION POSTS

An important goal for this class is to create a learning environment in which class members can participate, engage, and interact with one other in a meaningful and respectful manner. Prompts will be provided based on the theme identified in the specific weekly session.

Expectations and Criteria for Discussion Posts on Canvas
Based on existing successful participation grading systems, class participation for this course will be graded using the following rubric. ***A minimum of TEN posts are expected throughout the semester.*** Participation is graded on a scale from 0 (lowest) through 15 (highest), using the criteria described below. These criteria aim to capture what you demonstrate in your discussion posts and are not designed to guess *what you know but do not demonstrate*. This is because what you offer to the discussion forum is what you and others learn from.

Criteria	Ratings		
	Excellent	**Satisfactory**	**Unsatisfactory**
Writing Quality	Consistently uses grammatically correct posts with rare misspellings	Few grammatical or spelling errors in some posts	Posts are marked by poor spelling and grammar
Relevance & Clarity of Post	Consistently posts topics related to the discussion; Expresses opinions and ideas in a clear and concise manner	Occasionally posts topics that are unrelated to the discussion or that miss the main point; Opinions and ideas are somewhat unclear	Posts topics which do not relate to discussion;
Contribution to the Class Learning Environment	Answers all prompts posted by the professor in the discussion forum for a module. Posts an initial entry on the first day and responds to others' ideas throughout the discussion; Expresses ideas respectfully; Posts at least 8-10 substantive contributions throughout the discussion	Answers half of the prompts posted by the professor in the discussion forum for a module. Posts an initial entry on the first day and responds to others' ideas throughout the discussion; Posts may occasionally convey rudeness. Posts only 5-7 substantive contributions throughout the discussion	Fails to answer prompts posted by the professor in the discussion forum for a module. Posts an initial entry on the first day but does not respond to others' ideas; Expresses ideas in a disrespectful manner; Posts 2-4 contributions throughout the discussion
Knowledge & Understanding of Module Topics	Demonstrates accurate understanding of the concepts and principles based on the assigned reading. Back up statements with evidence; Shows deep engagement with the topic	Understanding of concepts and principles based on assigned readings is imprecise or shallow; Occasionally backs up statements with evidence; Inconsistent engagement with the topics	Does not show understanding of the concepts and principles based on the assigned readings; Does not attempt to support statements with evidence; Does not engage critically with the topic
Originality & Creativity	Explores relationships between the different concepts and principles; Introduces new examples or insightful observations. Attempts to develop a new or stimulating perspective on every issue	Sometimes explores relationships between the different concepts and principles; Often uses examples already provided by others; Occasionally attempts to develop a new or stimulating perspective	Does not explore relationships between the different concepts and principles; Only uses examples provided by others; Does not attempt to develop a unique perspective
TOTAL POINTS			**15%**

Rubric modified from "Graduate Discussion Rubric" Online Ethics Center for Engineering 11/7/2015 OEC
<www.onlineethics.org/Resources/30931/31369/31382.aspx>

University of Wisconsin-Milwaukee: College of Engineering and Applied Science

All University policies will be followed in this course. Details are available at this link:
https://uwm.edu/secu/wp-content/uploads/sites/122/2016/12/Syllabus-Links.pdf

Statement of Academic Misconduct https://uwm.edu/deanofstudents/conduct/academic-misconduct/
Cheating on exams or plagiarism are violations of the academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University.

Religious observances. Accommodations for absences due to religious observance should be noted.
https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-2.%20Accommodation%20of%20Religious%20Beliefs.pdf

Students called to active military duty. Accommodations for absences due to call-up of reserves to active military duty will be noted.
Students: http://uwm.edu/active-duty-military/
Employees: https://www.wisconsin.edu/ohrwd/download/policies/ops/bn9.pdf

Incompletes. A notation of "incomplete" may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination or to complete some limited amount of term work.
https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-13.%20Incomplete%20Grades.pdf

Discriminatory conduct. Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience, and well-being of students, faculty, and staff.
https://apps.uwm.edu/secu-policies/storage/other/SAAP%205-1.%20Discriminatory%20Conduct%20Policy.pdf

Title IX/Sexual Violence. Title IX is a federal law that prohibits sex discrimination in education program or activities, and UWM policy prohibits such conduct (see Discriminatory Conduct, above). This includes sexual violence, which may include sexual harassment, sexual assault, relationship violence, and/or stalking in all educational programs and education-related areas. UWM strongly encourages its students to report any instance of sex discrimination to UWM's Title IX Coordinator (titleix@uwm.edu). Whether or not a student wishes to report an incident of sexual violence, the Title IX Coordinator can connect students to resources at UWM and/or in the community including, but not limited to, victim advocacy, medical and counseling services, and/or law enforcement. For more information, please visit:
https://uwm.edu/sexual-assault/.

Academic misconduct. Cheating on exams or plagiarism are violations of the academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University.
https://uwm.edu/deanofstudents/conduct/academic-misconduct/

Complaint procedures. Students may direct complaints to the head of the academic unit or department in which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy.
https://apps.uwm.edu/secu-policies/storage/other/SAAP%205-1.%20Discriminatory%20Conduct%20Policy.pdf

Grade appeal procedures. A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School.
https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-10.%20Grade%20Appeals%20by%20Students.pdf

LGBT+ resources. Faculty and staff can find resources to support inclusivity of students who identify as LGBT+ in the learning environment. http://uwm.edu/lgbtrc/
Smoke and Tobacco-Free campus. UWM prohibits smoking and the use of tobacco on all campus property.
https://apps.uwm.edu/secu-policies/storage/other/SAAP%2010-8.%20Smoke%20and%20Tobacco-Free%20Campus%20Policy.pdf

Final Examinations. Information about the final exam requirement, the final exam date requirement, and make-up examinations. https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-9.%20Final%20Examinations.pdf

I.   PROGRAM IDENTIFICATION

    1.1   **Title of Proposed Graduate Certificate :** Modern Engineering Leadership

    1.2   **Department(s) or Functional Equivalent(s) Sponsoring the Certificate :** None

    1.3   **College(s), School(s) or Functional Equivalent(s) Sponsoring the Certificate :**

    College of Engineering and Applied Science

    1.4   **Timetable for Initiation :** Fall 2021

II.   RATIONALE

The Faculty of the College of Engineering and Applied Science believe that many of its own alumni, as well as professionals working in regional industry, want to advance their careers with graduate education with a professional focus, but that they are not yet ready to pursue a full MS degree. Furthermore, conventional undergraduate engineering programs, including UWM's, have little coverage of two key topics for engineers who want to become leaders and managers in their organizations. Broadly speaking, those two topics are 1) management of people and of projects, and 2) data science and data analytics.

Thus, CEAS is proposing a 15-credit graduate certificate in Modern Engineering Leadership whose required courses address the previously mentioned topics while having an elective in a technical area covered by the College. In order to provide convenient access for students who may live and work at a considerable distance, the certificate program will be delivered primarily online, though the elective course could be taken in-person if desired and some of the required courses may be available in-person.

III.   INSTITUTIONAL CONTEXT

    3.1   **Relationship to Mission of Institution**

The proposed certificate will address the UW System Mission Statement by developing human resources and by developing in students professional and technological expertise. It will address the UW System Doctoral Cluster Mission Statement because it will be a program that leads to a professional degree at the post-baccalaureate level and because it is designed to promote the economic development of the state. It will address the UWM Select Mission Statement by developing and maintaining a high quality graduate program and by attracting highly qualified students who demonstrate the potential for intellectual development, innovation, and leadership for their communities.

    3.2   **Relationship to/Impact on Other UWM Programs**

To our knowledge, UWM does not have any programs that are very similar to the proposed certificate. The management material is certainly related to courses taught by the Lubar School, but it is taught in greater isolation from other business content. CEAS consulted with the Lubar Dean's office before proceeding with the development of its own courses. The data science courses are related to and may end up being part of nascent efforts to create an MS in Data Science, but they represent only a modest subset of the material that would be found in such a program.

CEAS's intention is that the proposed certificate would be "stackable" with other CEAS coursework into a professionally-focused tracks in the MS in Engineering program. The College is developing plans for Professional MS tracks and this proposal grew out of the desire to have a small set of core courses whose topics are germane to all CEAS departments. CEAS is hopeful that students will be drawn to and will complete this relevant and practical certificate. After that, a completed MS will be possible with only fifteen additional credits. We have no illusions that huge numbers of students will take this option, but we do believe that a solid number might choose to.

IV.   NEED

As mentioned in Section II, the content of the certificate goes beyond anything that is typically found in undergraduate engineering and computer science programs. Thus, for most professional engineers, it enhances their training and does so with material that is directly relevant to leadership in engineering organizations. Leadership implies leading teams and managing projects. In the modern world, effective leadership also implies the ability to analyze and understand the huge volumes of data that are available about our work.

The primary target population is practicing engineers who possess only a BS degree and seek professional advancement into engineering management roles. Students are likely to be three to seven years out from receiving the BS. Because the program will be online, students could come from anywhere in the world. But we believe that they will principally be from Southeast Wisconsin and neighboring regions (Fox Valley, Dane County, NE Illinois) where UWM has noticeable recognition and where any synchronous activities are likely to be timed conveniently. We are hopeful that some companies will provide tuition reimbursement for the program, but the small size should make the program tractable for self-funded students.

We are planning that courses will enroll an average of twenty students or more. Sections would likely be capped (or managed to attain) enrollments no higher than thirty or thirty-five.

There do not seem to be many comparable programs in the region. Northwestern offers a Masters of Product Design and Development that is similar in the sense that it mixes engineering and business concepts (along with material on design thinking). The program has many more courses, but they are all 0.5 credits, with students forming cohorts that take two years of study over 6 quarter-length terms with 2.0 credit each

term. An internet search for Engineering Leadership programs yields links to (mostly) corporate programs at Lockheed Martin, BAE Systems, and Naval Nuclear Labs (all defense related). Penn State has a twelve-credit Certificate in Engineering Leadership and Innovation Management. Its curriculum shares our project management topic and has another course that might be similar to our human resources and teams course. But the remaining material is not similar to our data science courses.

V.   PROGRAM DESCRIPTION AND EVALUATION

5.1   Description:

5.1.1   Brief Narrative Description:
The program requires a total of fifteen credits. Six credits (two courses) will be in the general area of engineering management. Another six credits will introduce data science techniques in the areas of statistics and machine learning. The remaining three credits are electives drawn from any topic taught by the College of Engineering and Applied Science.

5.1.2   Define the nature of the program:
This certificate is essentially multidisciplinary because it is suitable for professionals from any engineering or computing discipline and should also be accessible to professionals without an engineering degree but who are working in engineering and have sufficient mathematical preparation.

5.1.3   Learning objectives and competencies: Students completing the certificate will
- Understand modern principles for managing human resources and teams
- Understand principles and practices of project management
- Understand how to apply modern multivariate statistical techniques to practical engineering problems and to interpret the results therefrom.
- Understand principles and common techniques of machine learning and be able to interpret the resulting information.

5.1.4   List the mode(s) of instruction :
The program is designed for fully online delivery.

5.1.5   Discuss whether this certificate program prepares students for gainful employment in a recognized occupation. If it does and is eligible for Title IV financial aid, supply the following information:
- Occupations the program prepares students to enter
- Occupational profiles
- Costs for books and supplies

5.2   Curriculum – Courses and Credits:

The program requires 15 total credits.

There are four required courses (12 cr. total):
- EAS 710: Managing Human Resources and Teams (3 cr.)
- IND ENG 890: Project Management (3 cr.)
- IND ENG 716: Engineering Statistical Analysis (3 cr.)
- COMPSCI 411G: Machine Learning and Applications (3 cr.)

The remaining 3 credits are electives that may be taken in any topic taught by the College of Engineering and Applied Science.

5.3   **Admission requirements and procedures:** The minimum G.P.A. for admission is 2.75 in the prior bachelor's or post-baccalaureate degree. Applicants should generally have a prior degree in engineering or computer science. Applicants with other prior degrees will be considered via holistic assessment of the academic record and professional experience, with a focus on substantial work experience in the engineering or computing fields and on adequate mathematics preparation for the required coursework.

5.4   **Allowance for transfer credit (if any):** The program follows the standard rules for certificates and allows up to three (3) credits of prior graduate level coursework to be transferred.

5.4   **Completion requirements:** Completion of the program requires achievement of a cumulative GPA in program courses of at least 3.00.

5.5   **Time limit:** Certificate requirements must be completed within three (3) years of initial enrollment in the program

5.6   **Certificate conferral:** The certificate will be confirmed upon completion of the certificate requirements.

5.7   **Program Administration:** The Certificate Program Representative will be Dr. Ethan Munson, Associate Dean for Academic Affairs. Curricular development and review will be conducted by the CEAS Graduate Program Committee. This committee includes one representative from each CEAS department, chosen by the departments' faculty. Program advising will be handled by the CEAS Graduate Office, whose staff includes Elisabeth Warras and Therese Crary.

5.8   **Participating Faculty:** All CEAS faculty and qualified instructional academic staff are able to participate in the program.

VI.   RESOURCES

The program does not require any new facilities. Courses will be taught current CEAS faculty and staff or by qualified adjunct instructors, where appropriate (as in the two management-focused courses). The online courses will use the Fee-in-Lieu-of-Tuition

(FILT) model. The current plan is to charge $933/credit.

VII.   BULLETIN COPY

Submit copy for the *Graduate School Bulletin* following the template provided by the Graduate School.