TO: The Faculty of the College of Engineering

FROM: Elmore Family School of Electrical and Computer Engineering

RE: New Graduate Course, ECE 60004 Communication for Engineering Leaders

The faculty of the School of Electrical and Computer Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

ECE 60004 Communication for Engineering Leaders
Sem. 1, 2, 3 Lecture 3, Cr. 1.
Prerequisite: Graduate Standing

Description: The goal of this course is to upskill talented engineers' communication abilities. By the end of the course, you should have new adeptness at creating and delivering powerful presentations on a short deadline, as well as strategies for leading others effectively.

Reason: There are very limited options for engineers to develop and improve their communications skills with an engineering focus. This course was first developed as part of the "professional skills" in our Professional Master's Program. ECE has recognized that the majority of our graduate students will be working in high-tech companies where improved communication skills will enhance their incredible technical skills and knowledge.

Course History:
Fall 2020 (27), Summer 2021 (3), Fall 2021 (27), Spring 2022 (11), Summer 2022 (5), Fall 2022 (71), Spring 2023 (6), Fall 2023 (45), Spring 2024 (22)

Milind Kulkarni,
Associate Head for Teaching and Learning
Elmore Family School of Electrical and Computer Engineering

ECE 69500: Communication for Engineering Leaders
Our course Brightspace page will always have the most updated information.

Instructor: Brooke Parks
brookeparks@purdue.edu
Online office hours: By appt
https://purdue.webex.com/meet/parks46

GTA: Robert Beck
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Online office hours: M (1-2pm)
https://purdue-edu.zoom.us/j/3365106514

Syllabus is subject to change. The version linked on Brightspace is always the most updated one.

Course Description:
The goal of this course is to upskill talented engineers' communication abilities. Engineers at all stages of their careers will find helpful guidance and dedicated space for practicing skills necessary for more effective communication with teammates, clients, and employees and/or pursuing the next level of leadership opportunities.

By the end of the course, students should have new adeptness at creating and delivering powerful presentations and documents on short deadlines, applying laser focus to their intended audiences, resolving conflicts, and leading others effectively.

> *Note:* **This class is 5 weeks long and moves VERY quickly. Please let your TA know right away if you're struggling.**

Learning outcomes:
1. create engaging, effective presentations and documents
2. design plans for valuable, productive workplace and team interactions
3. develop a leadership or mentoring plan tailored to your specific workplace

Diversity, equity, and inclusion statement:
In this class, discussions, collaboration, and feedback will be an integral part of each week. Respect for each other as people and professionals is, of course, expected. I'm excited to see how we can all learn from each other and make connections we may have missed otherwise. A few points I'd like to draw your attention to:
- We are all in the process of learning about others and their experiences. Please speak with me if something has made you uncomfortable.
- Intention and impact are not always aligned, and we should respect the impact something may have on someone even if it was not the speaker's intention.
- We all come to the class with a variety of experiences and a range of expertise, we should respect these in others while critically examining them in ourselves

Learning resources, technology, & texts:
Required texts: (available on Amazon)
- *Communicate with Mastery* (Schramm, ISBN: 1119550092)
- *HBR's 10 Must Reads 2020* (HBR; ISBN: 1633698122)

- *Connect First* (Katzman; ISBN: 1260457834)

Purdue library access for the Schramm and HBR books is available:

https://purdue.primo.exlibrisgroup.com/permalink/01PURDUE_PUWL/uc5e95/alma99170207731901081

https://purdue.primo.exlibrisgroup.com/permalink/01PURDUE_PUWL/uc5e95/alma99169693895701081

Brightspace page:
You can access the course via Brightspace. I strongly encourage you to spend some time at the start of this course becoming familiar with the site navigation, content, and resources available to you throughout Brightspace page. This is where our course lives and comes to life, so please get to know the space! (See the Help tab, if needed.)

Minimum technology requirements
- You will need a strong, reliable Internet connection on a daily basis to meet the requirements for this class.
- It is NOT recommended that students attempt to complete this course using only a mobile phone.
- This course will utilize video, which will require more data if using a mobile device.
- Students must be able to use Brightspace and all of its features to be successful in this course.

Assignments:
Weekly discussion posts:
> One: Each week you will have one main post. This is your course assignment for the week. You will turn this into the discussion board for feedback from classmates to establish a collaborative experience in the course and to practice giving and receiving feedback regularly.
>
> Two: You will also have a post each week in response to a prompt about the week's supplemental reading. You need to complete three out of five of these. If you want to complete all five to improve your scores, please feel free. Your lowest two grades will be dropped.

Weekly responses:
> One: Each week, you'll comment extensively at least 2 times on the weekly assignment board by contributing to the discussions and moving them forward.
>
> Your goals here are to interact, dive deeper, complicate, and resolve. Your goal is not just to agree or disagree. Your goal is to add and enhance. Use this opportunity to work on the skills of beginning and facilitating a discussion. If you see a conflict – or a way to bring diverging voices together – hone the skill of effectively moderating online discussions.

How do you make sure all voices are heard? How do you steer a derailing conversation? How do you wrap up a topic with clear takeaways? You can practice different skills each week, but don't waste these opportunities to improve this aspect of your communication.

Two: You'll also comment TWO times a week on the supplemental reading discussions. These responses will be shorter, but also a good place to practice the skills listed above. You might also use this opportunity to suggest further resources to your classmates. Again, three of these five assignments are required.

Typical weekly requirements:
~50-100 pages of reading
3-4 lectures
1 main discussion assignment
2 main discussion responses
1 supplemental discussion post
2 supplemental discussion responses

Typical weekly due dates:
Wednesday: Discussion assignment posts
Friday: Discussion responses

Course grade structure:
Main discussion assignments and responses – 70% of grade
Supplemental discussion assignments and responses – 30% of grade

Grading scale:

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

Engagement expectations:
Online classes can be incredible opportunities to experience high-quality courses while collaborating with incredible peers. But a great experience will take work. Succeeding in this course will involve:
- Accessing Brightspace and actively participating in this course
- Scheduling time each week for working on this course, outside of scheduled due dates.
- Following the course schedule, rather than trying to work ahead on your own.
- Reaching out to the instructor with any questions, as early as possible.

Academic integrity:
Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert
university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate

the concern. More details are available on our course Brightspace table of contents, under University Policies. See Purdue's Student Guide for Academic Integrity under University Policies in Brightspace.

Policy on Artificial Intelligence and Large Language Models:
Students who use AI-generated writing for any portion of their written assignments will be deemed in violation of the academic integrity expectations for this course. Violations can include a failing grade on an assignment, failing grade in the course, and restrictions from further class participation. All suspected incidents of academic dishonesty will also be referred to the Office of Student Rights and Responsibilities for further review of the student's status with the University, which may include being separated from the University.

Using AI tools to help with such things as idea generation or planning your work may be appropriate uses of AI/LLM tools, though your context and the nature of the assignment must be considered. Also, keep in mind that words and ideas generated by some AI tools make use of other, human authors' ideas without referencing them, which, as things stand, is controversial in itself and can be viewed as a form of plagiarism. *If you decide to use AI tools for any aspect of any graded work in this class, you must disclose such use with a brief acknowledgement and explanation, e.g.:* I acknowledge the use of ChatGPT (https://chat.openai.com/) to plan my essay, and generate some initial ideas which I used in background research and self-study in the drafting of this assessment.

Adapted from: https://www.ucl.ac.uk/students/exams-and-assessments/assessment-success-guide/engaging-ai-your-education-and-assessment

Purdue's Honor Pledge: "As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together — we are Purdue."

Nondiscrimination Statement:
Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. More details are available on our course Brightspace table of contents, under University Policies.

Accessibility:
Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience
physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247. More details are available on our course Brightspace under Accessibility Information. See Brightspace for more detailed information from the Office of Institutional Equity, and links to the DRC website, Purdue's Web Accessibility Policy, and Brightspace's Accessibility Compliance statement.

Mental health statement:
There are many resources available to you regarding your mental health needs:
- If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try WellTrack. Sign in and find information and tools at your fingertips, available to you at any time.
- If you need support and information about options and resources, please contact or see the Office of the Dean of Students. Normal drop-in hours are M-F, 8 am- 5 pm.
- If you're struggling and need mental health services: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office of the second floor of the Purdue University Student Health Center (PUSH) during business hours.
- **Engineering students now have unlimited access to TaskHuman!** TaskHuman offers **1-on-1 live video calls** with coaches who help you focus on wellness topics such as anxiety, mindfulness, reducing stress, clean eating, time management, in-home workouts, relationship tensions, and nearly a thousand more topics. You can log on at any time to access experiences as diverse as working through heightened anxiety to a personalized yoga session with carefully vetted providers. Purdue Engineering has an exclusive agreement with TaskHuman which gives you unlimited access to these resources (and some Purdue-specific bonuses, including mentoring by industry leaders – coming soon!). Using this link gets you access to all the perks: **https://taskhuman.com/referral/purdue**. Learn more here: https://engineering.purdue.edu/ECE/TaskHuman. Don't see a topic you want or have other questions? Let me know, and I'll see what I can do!

COVID-19 policies and information: see protect.purdue.edu for updated information.

Emergency preparation:
In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course Brightspace or can be obtained by contacting the instructor via email or phone. You are expected to read your @purdue.edu email on a frequent basis. A link to Purdue's Emergency Preparedness resources is located on Brightspace under University Policies; this webpage includes a link to resources on COVID-19.

Course Schedule

Weeks	Topics	Readings (to be completed before the week starts)	Lectures	Assignments*
Week One (8.21)	Intro and Adopting a Communication Mindset	*1: Communicate with Mastery* (Schramm), Forward, Introduction, Chapter 1: Adopting a Communication Mindset *2: Harvard Business Review* (*HBR*): Strategy Needs Creativity (Brandenburger)	1: Parks's Personal Intro 2: Course Introduction 3: Communication Mindset	1. AIM 2. (Supplemental) Personal Intro
Week Two (8.28)	Verbal Communication	3: Schramm, Chapter 2: Speaking with Conviction *4: HBR*: How CEOs Manage Time (Porter and Nohria)	4: Anxiety 5: 3 Vs (verbal, vocal, visual) 6: Feedback	3. Elevator pitch 4. (Supplemental) Leadership Time Management
Week Three (9.4)	Workplace Communication	*5: Connect First* (Katzman), Preface (super important – read this!) and Chapter 1: Establish Respect 6: Katzman, Chapter 5: Resolve Conflict 8: Katzman: Chapter 6: Fight Fear	7: Intro to the Katzman text (Emotional Intelligence) 8: Workplace Communication -- Establishing Respect 9. Workplace Atmosphere – Resolving Conflict	5. Katzman plan 6. (Supplemental) The Role of Bravery in the Workplace

Week Four (9.11)	Written Communication	9: Schramm, Chapter 3: Writing for Impact and Appendices A&B 10: *HBR*: What Most People Get Wrong about Men and Women (Tinsley and Ely)	10: ABC (Active, Brief, Clear) 11: Editing	7. Document for feedback 8. (Supplemental) Gender in the Workplace
Week Five (9.18)	Communication and Leadership	11: Katzman, Chapter 7: Have a Big Impact 12: Schramm, Chapter 7-9: Scaling Your Leadership 13. (Optional) *HBR*: The Surprising Power of Questions (Brooks and John)	12: Workplace Leadership – Have a Big Impact 13: Leadership Plans	9. Legacy Plan 10. (Supplemental) The Role of Questions in the Workplace

*Weekly due dates: Discussion assignments – Wednesdays at 11:59pm; Discussion peer responses – Fridays @ 11:59pm