

WORKPLACE COMMUNICATION FOR COMPUTER SCIENCE PROFESSIONALS

COMP 608 | FALL 2025 | RICE UNIVERSITY

This course prepares master's students in computer science to communicate effectively and ethically in professional environments. Students will learn to navigate diverse communication situations by understanding various workplace contexts, audiences, and roles and adapting their written, oral, and visual communication to these situations. Students will apply communication principles and strategies to explain technical ideas clearly, manage intercultural team dynamics constructively, and communicate effectively across industry-standard formats, genres, and tools.

Through interactive classroom activities, ongoing practice, and consistent feedback, students will develop their ability to explain their communication and design decisions in ways that demonstrate ethical reasoning. By the end of the course, students will be equipped to communicate with more confidence, cultural awareness, and integrity in a variety of professional and technical settings.

COURSE LEARNING OUTCOMES

- Understand and apply communication principles, including audience, genre, and purpose, to evaluate written, oral, and visual communication situations.
- Develop and adapt communication strategies to create messages that align with audience needs, cultural norms, and organizational contexts.
- Explain technical concepts, design decisions, and project outcomes effectively for different professional contexts and situations.
- Apply interpersonal communication strategies to express yourself clearly, give and receive feedback respectfully, and manage team conflict effectively.
- Create communication that effectively aligns with industry-standard formats and genres (e.g., emails, presentations, specifications).
- Apply ethical reasoning to professional practices and make responsible communication and design decisions, including decisions about generative AI.

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INSTRUCTIONAL TEAM

COURSE INSTRUCTORS Contact: mg158@rice.edu

Mary Glavan, Ph.D. Office Hours: Wednesday 1:15 pm - 4:00 pm

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Office Hours: Monday, 1pm - 3pm

TEACHING ASSISTANTS Contact

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COURSE VALUES AND POLICIES

value: community and collaboration

We'll work in teams to provide feedback and support to one another. Communicating effectively in teams is crucial, but it takes practice and interpersonal acuity. You'll have multiple opportunities to collaborate with others, to practice writing and communicating together, and to give each other feedback.

value: names and pronouns

We will all have the opportunity to indicate our preferred name, correct pronunciation, and our pronouns. Please do your best to learn and use your classmates' names, pronunciations, and pronouns. If you feel comfortable correcting us when we make a mistake, please do, and if you would like to change how we address you, let us know at any time.

value: inclusive and accessible learning

We all learn and access information differently. In this course, we encourage you to manage your classroom experience in the ways that work best for you. If there are aspects of this course that prevent you from learning or exclude you, please talk with us as soon as possible. Together, we will develop strategies to meet both your needs and the requirements of the course.

We encourage you to visit the <u>Disability Resource Center</u> (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine how you could improve your learning. Other resources on campus include <u>Activate Engineering Communication Coaching</u>, the <u>Center for Academic and Professional Communication</u>, the <u>Office of Academic Advising</u>, and the <u>Center for Career Development</u>.

policy: deadlines

MAJOR ASSIGNMENTS

Most project deadlines are multi-day "deadline windows". We grade in the order of submission. If you submit an assignment to Canvas, you are giving us permission to grade it. Work submitted after the deadline window is accepted with a late penalty unless you negotiate an alternative deadline with me in advance. You can submit major projects until the last day of the semester.

HOMEWORK ASSIGNMENTS

Most homework (concept quizzes and communication practice) is due each Friday at 11:59p CST. You can submit these assignments late with a 10% grade reduction (unless otherwise noted). Some assignments (e.g., usability testing) require "day of" or other hard deadlines and cannot be submitted after the deadline. These deadlines will be communicated well in advance. For extenuating circumstances, please speak with us to arrange alternative deadlines. Unless otherwise noted, you can submit homework for partial credit until the last day of the semester.

policy: generative ai

We welcome generative AI tools in this class as long as your use aligns with the learning goals associated with the assignments. Please document and cite any use of AI tools according to the course AI documentation guidelines. For some assignments, we will ask that you NOT use genAI tools. For these assignments, using genAI will be considered a violation of the honor code.

You are responsible for all information you submit based on a genAl query, including inaccurate, biased, and unethical content. It is a violation of the Rice Honor Code if Al is used but not documented.



(image credit.)

ASSESSMENT

community involvement

ATTENDANCE (5%)

Active learning is central to this course, so attendance is required. We ask that you attend every class in person and sign in on a daily basis. We know that life can create circumstances that make attending class difficult, so we're happy to fully excuse 2 absences throughout the semester. However, all unexcused absences after 2 will affect your attendance grade. Excused absences include (i) serious and ongoing medical reasons or family emergencies, (ii) religious observance, and (iii) professional conferences or events. We

Note: Attending a lecture for another class is considered unexcused. Absences for job interviews, career fairs, or tasks related to other classes will not be excused.

expect you to come to class on time. If you are late to class, it is your responsibility to ensure your attendance is recorded. This must be done in person on the same day you were late. No changes or corrections will be made via email. We encourage you to consider attendance and timeliness as an opportunity to practice professionalism.

PARTICIPATION (5%)

We encourage you to actively contribute to our classroom community, which may include contributing to class discussions, collaborating with your team members, and giving and receiving feedback on coursework. Since we know that there are many ways to participate, you'll have the opportunity to self-assess your community involvement at semester end. Your self-assessment will guide our determination of your final community involvement grade. Please review the community involvement self-assessment rubric and raise any questions you might have in class.

homework

CONCEPT QUIZZES (15%)

Your success in this class relies on learning and applying fundamental concepts in written, oral, and visual communication. To ensure you're accessing the course resources (short readings and videos), the course includes short "concept quizzes" (CQ). If you complete a quiz after the deadline, you'll automatically lose 10%. You can take the quiz as many times as you like. Your lowest score will be dropped. **CQs should be completed by Friday (11:59 pm) of the week they're assigned.**

COMMUNICATION PRACTICE (15%)

You will submit communication practice (CP) assignments to practice the communication fundamentals necessary for successfully completing each major project. Most CPs are assessed on completion; a few are assessed for quality using an assignment-specific rubric. If you complete a CP after the deadline, you'll automatically lose 10%; however, you can turn in CPs for partial credit until the end of the semester. Your lowest score will be dropped. CPs should be completed on Friday (11:59 pm), the week they're assigned, unless otherwise noted.

major communication projects

You will complete 5 major projects that will demonstrate your ability to apply the communication concepts and skills we're learning in class. Each project emphasizes a set of core capabilities in written, visual, and oral communication across the types of genres (e.g., resumes, interviews, documentation, and presentations) you're likely to encounter as a professional in your field.

Individual Projects

EMPLOYMENT PORTFOLIO (15%)

Students will create application documents, including a resume and cover letter, for a job or internship in their field. These documents will reflect students' knowledge of industry-specific genre conventions, Al-based hiring technologies, and communication design principles.

INTERVIEWS (10%)

Students will create and practice mock technical and behavioral interviews in small groups.

PROFESSIONAL PORTFOLIO (5%)

Students will curate and publish a professional communication portfolio that demonstrates their technical writing, design, and documentation skills to future employers, collaborators, or clients. The portfolio will showcase their employment documents, individual reflections, and examples of their professional communication work.

Team Projects

SOFTWARE DOCUMENTATION (15%)

Students will work in teams to produce a software API specification document for the backend server of an existing social networking chat application. The document will implement documentation best practices. Students will document decisions about privacy, accountability, and known backend limitations. The document will be usable for the target audience: a front-end software development team implementing the application.

ORAL PRESENTATIONS (15%)

Teams will present their design specifications to the class, showcasing their process, design choices, and final documentation. Each team will be assigned a specific target audience and documentation issue to present. Teams will give a 15-minute team presentation that explains and contextualizes their assigned issue, showcases before/after documentation, and justifies design decisions compellingly to their target audience.

course grading scheme

grade	range	grade	range	grade	range
A +	100% to 97%	A	<97% to 94%	A-	<94% to 90%
B+	<90% to 87%	В	<87% to 84%	B-	<84% to 80%
C+	<80% to 77%	С	<77% to 74%	C-	<74% to 70%
D+	<70% to 67%	D	<67% to 64%	D-	<64 to 60%

SEMESTER OVERVIEW

INTRODUCTION TO CLASS (1 WEEK) ☐ Understand why communication matters for computer and data scientists ☐ Practice acknowledging and citing generative AI tools ☐ Learn and apply fundamental communication principles
UNIT 1: EMPLOYMENT DOCUMENTS (4 WEEKS) □ Apply rhetorical principles to analyze communication situations and our audiences □ Understand industry-specific genre conventions □ Design documents that fulfill our purposes/goals and are tailored to users' needs □ Revise job materials based on peer and professor feedback
UNIT 2: INTERVIEW PROJECT (2.5 WEEKS) ☐ Develop interview questions and interview evaluation rubrics based on best practices and inclusive principles ☐ Develop strategies for technical interviews ☐ Practice being interviewed and interviewing others ☐ Assess your interview and team performance
 UNIT 3: SOFTWARE DOCUMENTATION PROJECT (6 weeks, with unit 4) Identify and propose a software documentation gap Conduct a rhetorical analysis of the existing documentation: audience(s), purpose(s), genre conventions, accessibility & inclusivity Conduct usability testing (e.g., task-based tests, surveys) and submit a short report (2-3 pages) summarizing findings and recommendations Revise or create at least two of three possible documentation artifacts: Quick Start Guide (for beginners), Technical Reference (API or function documentation for devs), or How-To Tutorial or FAQ (addressing common use cases)
 UNIT 4: PRESENTATION PROJECT (6 weeks, with unit 3) □ Create effective slides, including data visualizations (e.g., figures, charts, and graphs) that are widely accessible □ Present information that is understandable and compelling for a target audience □ Present ideas to the class in a team with confidence, poise, clarity, and professionalism
 UNIT 5: PROFESSIONAL PORTFOLIO (ongoing) Develop and submit a professional communication portfolio that demonstrates students' technical writing, design, and documentation skills to future employers, collaborators, or clients.

ADDITIONAL COURSE INFORMATION

rice honor code

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at http://honor.rice.edu/honor-system-handbook/. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

mental health and well-being

The well-being and mental health of students are important; if you are having trouble completing your coursework, please reach out to the <u>Wellbeing and Counseling Center</u>. Rice University provides cost-free mental health services through the Wellbeing and Counseling Center to help you manage personal challenges that threaten your personal or academic well-being. If you believe you are experiencing unusual amounts of stress, sadness, or anxiety, the Student Wellbeing Office or the Rice Counseling Center may be able to assist you. The Wellbeing and Counseling Center is located in the Gibbs Wellness Center and can be reached at 713-348-3311 (available 24/7).

mandatory reporting

Rice encourages any student who has experienced an incident of harassment, pregnancy discrimination or gender discrimination or relationship, sexual, or other forms of interpersonal violence to seek support through The SAFE Office. Students should be aware when seeking support on campus that most employees, including all of your instructors as Rice faculty members, are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. For more information, please visit safe@rice.edu or email titleixsupport@rice.edu.

CONSENT TO PARTICIPATE IN RESEARCH STUDIES

research on teaching and learning

This semester your instructors will be conducting a study looking at teaching and learning. The purpose of this study is to determine the factors that influence teaching effectiveness and learning. Your participation in this study will last for the duration of the current semester and will entail activities no different from the regular activities you would otherwise engage in as part of the course. If you would like more information, please do not hesitate to ask. If you would like to opt out of the study, please talk to us as soon as possible.