Northeastern College of Engineering

INFO 7385: Managerial Communication for Engineers

Course Information

Course Title: Managerial Communication for Engineers

Course Number: INFO 7385   **Day:** Friday's

Term and Year: Spring 2024   **Time:** 9:00 AM – 12:30 PM PST

Credit Hours: 04
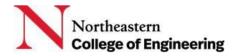
Instructor's Information

Maricla Pirozzi

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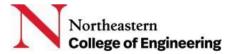
TA Information

TBD

Course Description

Focuses on communication strategies and tactics for engineers at the interpersonal, team, and organizational level. Course topics include forms (oral and written), styles, and differences in communication; coaching and giving feedback to staff; and building teams, managing conflict, and special topics in organizational communication. The primary goal is to strengthen the students' social and emotional intelligence skills to help them progress along their engineering career path. Combines academic content with practical skill-building activities.

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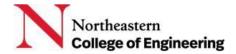College of Engineering

Table of Contents:

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Course Schedule *(Course schedule shall be posted closer to the start of classes)*

Date	Week	Topic/Speaker
01/12/24	Week 1	
01/19/24	Week 2	
01/26/24	Week 3	
02/02/24	Week 4	
02/09/24	Week 5	
02/16/24	Week 6	
02/23/24	Week 7	
03/01/24	Week 8	
03/08/24	Spring Break	
03/15/24	Week 9	
03/22/24	Week 10	
03/29/24	Week 11	
04/05/24	Week 12	
04/12/24	Week 13	
04/19/24	Week 14	

*Tentative, subject to adjustment based on actual pace of the lectures and in-class exercises. *

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Attendance/Late Work Policy

I. Students are expected to complete course assignments, participate in class discussions or other learning activities during the course, and complete written assignments as assigned.

II. If you plan on being absent or late in attending, you must: **(1) In the case of an absence, instructors must be notified 24 hours before class begins, exceptions to this requirement will be evaluated on a case-by-case basis** and **(2) Final grades will be subject to change basis the rubric and overall assessment of the student.**

III. Students must submit assignments by the deadline noted in the syllabus. The assignments shall be submitted by the students before 10:00 AM every Thursday and similarly for the Discussion Boards. Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Work submitted late without prior communication with faculty will not be graded.

Grading Standards

Letter Grade	Cumulative Percentile (100%)
A	95-100%
A-	90-94.99%
B+	87-89.99%
B	84-86.99%
B-	80-83.99%
C+	77-79.99%
C	74-76.99%
C-	70 – 73.99%

Grade Breakdown (% of Total Score)

Mid Semester Technical Assessment	20%
Final Project	30%
Participation	50%
Total	100%

Please see a detailed breakdown for each individual section below

Mid Semester Technical Assessment – 20%

- Your cumulative grade for this assignment will be from both Director Pirozzi's evaluation and through peer evaluation.

Final Project - 30% (*see breakdown below*)

- **Final Assignment Part 1 – 5%**

  Outlining Final Project idea and initiating the initial draft of the concept. *Note: The final project idea needs to be approved by the faculty/TA before the team finalizes the draft of concept. *

- **Final Assignment Part 2 – 5%**

  This assignment comprises budgeting of the proposed concept, along with business strategies and problem solving.

- **Final Assignment Part 3 – 20%**

  Students present their final presentation and submit a proposal pitch to the jury i.e., Sharks.

Class Participation – 50%

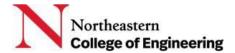## Attendance and Participation – 30%

30% of your grade is based on your participation and your interactions with your peers. This includes class attendance, in-class participation, and post-class assignments. This means that it's important to take this aspect of your coursework seriously and put effort into it

Participating in group activities or assignments and working collaboratively with your peers. It's also important to remember that the quality of your participation is more important than the quantity. It's better to make a few high-quality comments than to post a lot of low-quality or irrelevant ones. Finally, make sure to check the rubric or grading criteria for this part of your course so you know what is expected of you. If you're unsure about anything, don't hesitate to ask your instructor or TA for clarification.

Discussion Boards and Post-class group work – 20%

All discussion board posts and responses are DUE BEFORE CLASS at 10:00 AM each week.

- In addition to your reply to the Discussion Board prompt each week, you are required to also reply to 1 other student's post.
- Post-class group work will be assigned weekly.

To do well in this part of your course, you should make sure to actively participate in the discussion board and engage with your group members. This can include:

- Posting thoughtful and well-reasoned comments that contribute to the discussion.

- Responding to other people's comments in a constructive and respectful manner.

- Asking questions or seeking clarification when you don't understand something.

- Bringing in outside sources or examples to support your arguments.
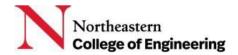
Assignments for the semester:

Assignment 1: USA Business Communication

Next week, you will be divided into 6 groups and assigned to research how to effectively communicate in a business context in the United States with individuals from different cultural backgrounds. Each group will present their findings in a 5-minute PowerPoint presentation consisting of 5-7 slides.
In your presentation, please cover the following topics:

- Unique aspects of American communication style in a business context
- Best practices for communicating with individuals from different cultural backgrounds.
- Tips on how to overcome potential barriers to communication.
- Case studies or examples of successful cross-cultural communication in the American workplace.
- Each member of the group is required to participate in the presentation. Only one person from the group needs to submit the PowerPoint file, but please ensure that everyone's Name and NUID is included in the presentation.

Please focus specifically on the United States in your presentation. You may use outside resources and research to support your findings, but please ensure that all sources are properly cited.

Note: Please upload the PowerPoint file by one group member before the deadline. The file name should be formed by Group number and topic name, for instance: Group2_USA Assignment 1.

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Assignment 2: Teams Communication

Students will be divided into groups as a part of this assignment. The following are the queries each team needs to prepare a presentation on.

- Derive 5 things that are uniquely common amongst your teammates (5 slides - inclusive of Title (Team name) and thank you slides)
- Describe one physical object that your team has in common and why? (e.g., Glasses, apple watch, shoes, type of clothing etc.)
- For Marketing and Advertising: make both attractive flyers and posters with large slogans, interactive images, Gifs, and stickers (add it in your ppt)
- Tell your audience why your team is the best in the class and what makes you all stand out within 5 minutes.

Note: - Make sure to be creative and innovative! You can add videos relevant to your slides, however, it should not exceed the time limit of 5 minutes.
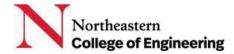
Assignment 3: Constructive Criticism

For this week's assignment, you will be grouped into 6 teams and be tasked with exploring the topic of constructive criticism. Each group will focus on specific topics from the following book: https://transportation.wv.gov/highways/training/Documents/InstructorGuideConstructiveCriticismDOHversion.pdfLinks to an external site.

Please take the time to read the entire document individually, then with your groupmates please discuss your topics in detail and complete the case studies/activities in your assigned sections. You should then prepare a presentation that adheres to the following guidelines:

- As a team, introduce the topics you covered and then explain what you learned from them.
- You will have 5 minutes to present as a group.
- Your audience will be your peers.
- Each member is required to be present during the presentation.
- Remember to be engaged during your delivery, pay close attention to your content and layout, and adhere to the time limit.

Assignment: Technical Concept Presentation for Children [Midterm Assignment Instructions]

Objective: This assignment aims to challenge engineers to explain a technical concept to a 10-year-old child in a clear, simple, and engaging manner. You will have one week to prepare a brief presentation that conveys a technical concept to a child. The slide limit for the midterm assignment is **3 slides (Title slide, Content, Reference).** The duration of the Midterm presentation is **3 minutes**. **This is an individual assignment.**

Instructions:

- Wait for the technical concept to be assigned to you individually.

- Quickly research and understand the technical concept.

- Develop a short presentation with an introduction, an explanation of the technical concept, and a conclusion.
- Use simple language to convey the technical concept engagingly and entertainingly that a child can understand.

- Utilize visual aids such as diagrams, pictures, and videos to make the presentation more interactive and appealing.

- Practice the presentation multiple times, incorporating feedback from your instructors.

How to ace the Midterm:

- Demonstrate a basic understanding of the technical concept.

- Convey the concept in simple language, focusing on clarity and ease of understanding.

- Use relevant and interesting real-life examples to make the presentation more relatable.

- Utilize visual aids to create an engaging and interactive presentation.

- Present the exhibition confidently and enthusiastically.

Note: *Submit your presentation with your name and the assigned technical concept (e.g., JohnDoe_ArtificialIntelligence).*

Assignment 4: Documentation

For your assignment, you are expected to create a PowerPoint presentation with respect to the topics assigned, follow instructions as follows:

1. Create a PPT emphasizing the importance of documentation in the domain you are assigned.
2. Elaborate what kind of documents are associated with your domain.
3. Add the leading organizations from your domain, include what is their market share and emphasize why they are the leaders in your domain
4. Duration: 5 minutes (Keep it short & Simple).
5. Only one member of the team needs to submit the PPT.

Assignment 5: Silent Movie: Silent movies tell a story without words.

For this assignment, you are divided into groups of 4-5 people each. Within your respective group, we are asking all of you to coordinate amongst one another to develop and act out a silent skit of your choosing. What we recommend is for you all to divide up responsibility amongst your group members; for example, have a few people act, a few people shoot the movie, etc.

Please delegate according to the needs of your group members and what you all decide is the most effective workflow.

- We encourage you to record yourselves prior to class and play that recording in class. The total time duration of a Silent Movie is anywhere between 6 minutes to 11 minutes.
- The movie cannot consist of subtitles or texts, it must be purely played out.
- The movie should include a story or 'A Day in _____'s life.'
- The movie should have a moral, to keep it interesting your climax could also be a cliffhanger instead of moral.
- You can shoot silent movies on campus or in your dorms, students can use self-recordings, including recordings in their homes, or something similar. Students have the flexibility to choose their location.
- Your key goal is to make your peers and professor understand the silent movie without any support or explanation.

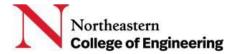**A sample of the ideology behind this assignment:**

(i)
https://www.youtube.com/watch?v=Q-TQQE1y68c Links to an external site.

(ii)
https://www.youtube.com/watch?v=Panc060B4p4 Links to an external site.

 Keep it fun and interesting!!

Technical Concept Virtual Presentation Rubric:

Layout (10 points)

- The slide design is visually appealing and easy to read on the screen.

- Use of relevant images, videos, diagrams, and/or charts to enhance understanding of the concept virtually.

- Appropriate use of transitions and animations.

- Clear organization and flow of slides in a virtual format.

Content (15 points)

- Accurate explanation of technical concepts using appropriate terminology and level of detail.

- Demonstration of understanding of the concept and how it works in a virtual format.

- Use of analogies or metaphors to support understanding for a 10-year-old in a virtual format.

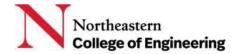- Relevant examples and/or real-world applications of the concept in a virtual format.

Delivery (15 points)

- Clear and concise speech with appropriate volume and pace for a virtual format.

- Maintaining eye contact with the camera and utilizing engaging body language in virtual interactions.

- Use of appropriate gestures and movement to enhance understanding virtually.

- Effective use of time within the 5-minute time limit in a virtual format.

Overall Presentation (scaled to 100 points)

- Presentation effectively engages and maintains the audience's attention virtually.

- Quality of any additional materials or props used to enhance the virtual presentation.

- Ability to adapt to any technical difficulties during the virtual presentation.

- Relevance of the presentation to the assigned technical concept.

Total Score: 100 points (Points to be scaled from 10 to 100)

==Rubric for TEAMWORK Presentation:==

Did the team effectively introduce the topic, provide relevant information, and conclude with a strong summary or call to action?

Visual Design:

- Did the team use appropriate visual aids, such as slides or props, to enhance their presentation?

- Were the visuals visually appealing, relevant, and easy to understand?

Delivery and Engagement:

- How well did the team engage the audience?

- Did they use effective body language, eye contact, and vocal variety?

- Were they able to maintain a positive and energetic tone throughout the presentation?

Content Quality:

- Did the team provide accurate and insightful information on the topic of teamwork?

- Did they effectively convey and support their main points with evidence or examples?

- Were their arguments or ideas well-developed and persuasive?

Teamwork and Collaboration:

- Did the team demonstrate effective collaboration and teamwork during the presentation?

- Did they allocate tasks and responsibilities appropriately?

- Were team members supportive of each other and actively engaged in the presentation?

Time Management:

- Did the team effectively manage their time and stay within the allocated presentation time?

- Did they refrain from rushing through important points or extending beyond the time limit?

(Note: Agenda and references will be excluded from the evaluation, considering the total number of slides is five.)

This rubric assesses the critical aspects of the teamwork presentation, including clarity and organization, visual design, delivery and engagement, content quality, teamwork and collaboration, and time management. Each criterion should be evaluated on a scale (e.g., 1-5) to comprehensively assess the team's performance.
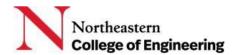
==Total: 100 points== **(Points to be scaled from 10 to 100)**

Criteria for Virtual Final Project Presentation:

- **Content:** The presentation provides clear and relevant information that effectively addresses the topic or question at hand. The content is adapted appropriately for the virtual format. **(25 points)**

- **Organization**: The presentation is well organized, with a clear introduction, main points, and conclusion. The transitions between ideas are smooth and logical. The structure of the presentation is adapted appropriately for the virtual format. **(20 points)**

- **Delivery:** The presenter speaks clearly and confidently, with appropriate volume, pace, and tone. The presenter uses nonverbal communication (such as eye contact, gestures, and facial expressions) effectively to engage the audience. The presenter is comfortable and competent using the virtual platform (such as Zoom or Microsoft Teams). **(20 points)**

- **Visuals**: Any visuals (such as slides or video) are clear, attractive, and support the presentation's content. The visuals are adapted appropriately for the virtual format. **(15 points)**

- **Engagement:** The presenter engages the audience throughout the presentation, using techniques such as asking questions, encouraging discussion, or using interactive features of the virtual platform. The presenter can maintain the audience's attention throughout the presentation. **(10 points)**

- **Time Management:** The presenter stays within the allotted time for the presentation. **(5 points)**

- **Technical Proficiency:** The presenter demonstrates proficiency in using the virtual platform, including audio and video quality, screen sharing, and other technical features. **(5 points)**
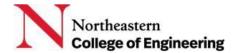
Total: 100 points **(Points to be scaled from 10 to 100)**

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Submissions Rubric:

Criteria	Excellent (5)	Good (4)	Fair (3)	Poor (2)	Very Poor (1)
Content	The presentation thoroughly covers all required elements and includes additional relevant information. The content is clear, concise, and well-organized.	The presentation covers all required elements and includes some additional relevant information. The content is mostly clear, concise, and well-organized	The presentation covers most of the required elements but may lack some detail or be somewhat disorganized.	The presentation is missing some required elements and may be difficult to follow.	The presentation is missing many required elements and is difficult to follow or understand.
Delivery	The presenter is confident, engaging, and maintains good eye contact with the audience. Voice tone and pace are appropriate, and the presenter effectively uses body language and gestures.	The presenter is mostly confident and engaging, with some occasional lapses in eye contact. Voice tone and pace are mostly appropriate, and the presenter uses some body language and gestures.	The presenter is somewhat nervous or monotone, with inconsistent eye contact. Voice tone and pace are occasionally inappropriate, and the presenter uses limited body language and gestures.	The presenter is visibly nervous or monotone, with little or no eye contact. Voice tone and pace are inappropriate, and the presenter does not effectively use body language or gestures.	The presenter is extremely nervous or monotone, with no eye contact. Voice tone and pace are consistently inappropriate, and the presenter does not use body language or gestures.
Visual Aids	The visual aids (e.g., slides, handouts, props) are professional-looking, relevant, and enhance the presentation. They are used effectively to convey information and engage the audience.	The visual aids are mostly professional-looking and relevant but may lack some detail or be somewhat disorganized. They are used effectively to convey information and engage the audience.	The visual aids are somewhat unprofessional or irrelevant and may be disorganized or difficult to follow. They may not be used effectively to convey information or engage the audience.	The visual aids are unprofessional or irrelevant and may be disorganized or difficult to read. They do not effectively convey information or engage the audience.	There are no visual aids, or they are unusable.
Time Management	The presentation is within the time limit, with a clear and effective introduction, body, and conclusion. Transitions between sections are smooth and seamless.	The presentation is within the time limit, with a mostly clear and effective introduction, body, and conclusion. Transitions between sections are mostly smooth and seamless.	The presentation is slightly over or under the time limit, with some issues in the introduction, body, or conclusion. Transitions between sections are somewhat choppy.	The presentation is significantly over or under the time limit, with major issues in the introduction, body, or conclusion. Transitions between sections are awkward or nonexistent.	The presentation significantly exceeds or falls short of the time limit, with no clear introduction, body, or conclusion. Transitions between sections are nonexistent.

*If you submit an assignment late, or do not submit an assignment/discussion board, you will lose points on your submission. If you do not attend class, this will result in a loss of participation points. *

Discussion Boards and/or Group Work:

Group work can be an effective method to motivate students, encourage active learning, and develop key critical-thinking, communication, and decision-making skills. Working with others enables you to pool your ideas and see problems from different perspectives. In a group situation, you can attempt tasks that could not be accomplished by an individual, combining a variety of skills and expertise to tackle more complex and larger scale problems. Discussion boards promote active engagement, critical thinking, and collaborative learning. Students will deepen their understanding of course content, construct well-reasoned arguments, evaluate others' viewpoints, and provide constructive feedback. The discussion boards will foster a sense of community and peer learning, preparing students for academic and professional success.

Individual Presentation:

Individual presentations put all the responsibility for preparation, research, and delivery on you, and you rightfully take all the credit for the final product you produce. Student presentations benefit the presenter in significant ways. By doing presentations, students learn how to speak in front of a group, a broadly applicable professional skill. You will learn how to prepare material for public presentations, and practice (especially with feedback) improves their speaking skill. You rightfully take all the credit for the final product you produce.
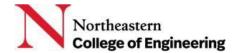
Group Presentations:

Group presentations provide an opportunity for peer learning and feedback, as students engage in constructive discussions and learn from each other's insights. Through group presentations, students will learn to clearly articulate complex ideas, deliver engaging presentations, and successfully navigate diverse communication styles. The online setting will also provide the opportunity for students to develop their technological proficiency by utilizing relevant digital tools for presentation delivery. Overall, these learning objectives will equip students with valuable skills for successful communication and collaboration in professional settings, both in-person and in online environments.

In contrast, Group Presentations often involve more complicated tasks and therefore require more participants to do them.

Inviting Industry Contacts or Guest Presenters to the Course:

Encourages an authentic & active learning environment. Inviting an industry contact, or guest speakers, into our learning space provides an important experience for students. These people expose students to real-world experiences and varied workplace contexts so that they experience the insights and perspectives of experts in their field of expertise. Providing industry engagement improves student experience outcomes. Through embedding industry and enterprise throughout a student's journey and by supporting academics to connect to industry for teaching and research, students connect with industry and alumni providing access to guest lecturers, industry challenges, partners for projects, and mentors.

Peer Evaluations:

Peer evaluations are one way to get students to listen and learn from the presentations of others. Peer evaluations increase the level of attention paid to those presentations and the learning that might result from listening. They can also work to develop critical thinking skills.

Topics Covered in the course:

- Effective communication
- Speaking, Listening, Body language
- Non-Verbal Communication
- Communication Strategies
- Listening, Attending & Responding
- Conflict Resolution
- Best Practices in the Workplace
- Time Management
- Navigating Diverse Communication Styles in Collaborative Environments
- Documentation

Optional/Required Texts

- David F. Beer and David MacMurray, Guide to Writing as an Engineer, 2nd ed., Wiley, 2004, ISBN: 0471430749.

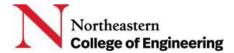## Standard Learning Outcomes:

1. *Learning outcomes common to all College of Engineering Graduate programs:*
2. *An ability to identify, formulate, and solve complex engineering problems.*
3. *An ability to explain and apply engineering design principles, as appropriate to the program's educational objectives.*
4. *An ability to produce solutions that meet specified end-user needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.*

The Information Systems Program accepts students of different engineering backgrounds with minimum programming skills and produces first class Information Systems engineers that operate at the intersection of real-world complexity, software development, and IT management. Graduating students will be able to construct end-to-end advanced software applications that meet business needs.

Specific Learning Outcomes for the Information Systems program:
1. *Create a strong technical foundation through diverse, high-level courses.*
2. *Built crucial interpersonal skills needed to succeed in any industry.*
3. *Foster a deep level of applied learning through project-based case studies.*

Attendance Policy

Students are expected to complete course readings, participate in class discussions or other learning activities during the unit, and complete written assignments for each unit during the time of that unit. It is understood that there might be one week when active participation in ongoing class conversations and learning activities might be delayed. Beyond one week's time, if there is an absence or lateness in participation (1) faculty must be notified in advance; (2) grades will be adjusted accordingly.

Late Work Policy

Students must submit assignments by the deadline in the time zone noted in the syllabus. Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Work submitted late without prior communication with faculty will not be graded. *all the assignment deadlines are in Eastern Standard Time. *

End-of-Course Evaluation Surveys

Your feedback regarding your educational experience in this class is particularly important to the College of Professional Studies. Your comments will make a difference in the future planning and presentation of our curriculum.
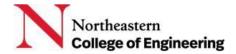
At the end of this course, please take the time to complete the evaluation survey at https://neu.evaluationkit.com Your survey responses are completely anonymous and confidential. For courses 6 weeks in length or shorter, surveys will be open one week prior to the end of the courses; for courses greater than 6 weeks in length, surveys will be open for two weeks. An email will be sent to your Husky Mail account notifying you when surveys are available.

Academic Integrity

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all examinations, tests, papers, creative projects, and assignments of any kind according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

Go to http://www.northeastern.edu/osccr/academic-integrity-policy/ to access the full academic integrity policy.

University Health and Counseling Services

As a student enrolled in this course, you are fully responsible for assignments, work, and course materials as outlined in this syllabus and in the classroom. Over the course of the semester if you experience any health issues, please contact UHCS.

For more information, visit https://www.northeastern.edu/uhcs

Student Accommodations

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit https://drc.sites.northeastern.edu

Library Services

The Northeastern University Library is at the hub of campus intellectual life. Resources include over 900,000 print volumes, 206,500 e-books, and 70,225 electronic journals.
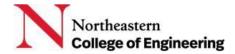
For more information and for education specific resources, visit https://library.northeastern.edu

24/7 Canvas Technical Help

For immediate technical support for Canvas, call 617-373-4357 or email help@northeastern.edu

Canvas Student Resources: https://canvas.northeastern.edu/student-resources/

For assistance with my Northeastern e-mail, and basic technical support:
Visit ITS at https://its.northeastern.edu
Email: help@northeastern.edu
ITS Customer Service Desk: 617-373-4357

Diversity and Inclusion

Northeastern University is committed to equal opportunity, affirmative action, diversity, and social justice while building a climate of inclusion on and beyond campus. In the classroom, members of the University community work to cultivate an inclusive environment that denounces discrimination through innovation, collaboration, and an awareness of global perspectives on social justice.

Please visit http://www.northeastern.edu/oidi/ for complete information on Diversity and Inclusion.

Title IX

Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal financial assistance.

Northeastern's Title IX Policy prohibits Prohibited Offenses, which are defined as sexual harassment, sexual assault, relationship or domestic violence, and stalking. The Title IX Policy applies to the entire community, including male, female, transgender students, faculty, and staff.

In case of an emergency, please call 911.

*Please visit **https://www.northeastern.edu/ouec** for a complete list of reporting options and resources both on- and off-campus*