YWCC 307 Professional Development in Computing – Spring 2025

Part I: Course and Instructor Information

Semester	Spring 2025
Course	YWCC 307-006
Instructor	Mark Chiusano
Location & Time	CKB 315 Fridays 1:00 – 2:20
Office Hours	Available 4:00 – 5:00 PM Fridays or by appointment

Part II: Course Description

1. Course description:

Targeted instruction and practice in the communications required for careers in computer science. The curriculum covers written, oral, and interpersonal communication. Students will hand in pieces of writing, make oral presentations, and work together in simulated project meetings and other realistic scenarios of pair and small group interactions.

Communication techniques and methods employed in the development, marketing, and deployment of large software applications will be reviewed and presented. Topics include user stories, design communication, presentation, market analysis, user training, and research and proposal writing.

The course information is available on Canvas. The information below should help you plan and organize your preparation during the semester.

2. Prerequisite courses and knowledge:

- Prerequisite course: YWCC 207
- Required background:
    - Students are required to have knowledge of key systems concepts, software development life cycle, and programming in Java or Python or a similar language
    - Good understanding of programming, design, development, data modeling techniques and database fundamentals is expected as well
    - Good understanding of modern trends in information analysis, information technology, cloud computing, object-oriented principles and agility are a plus
    - Undergraduate software development courses provide a good foundation

3. Outcomes expected upon completion of the course:

- Good understanding of team formation and team dynamics
- Hands-on analysis and communication skills, using methods such as market analysis, presentation scenarios, blogs, and user stories
- Good understanding of writing persuasive reports and engaging presentations
- Practice writing good emails and minutes of meetings
- Reading technical papers and writing tech summaries

4. Assessment throughout the course:

Term project execution and deliverables – content, mastery of methods discussed in class and creativity; teamwork; research and analysis skills

Blog posts and discussions – active participation and moderation of discussions; free sharing of ideas and information related to the discussion topics; systematic progress with paper reading assignments

Quiz and assignments – content; understanding of methods discussed in class and their effective use or application to the assignment; research and analysis skills

Class participation – open contribution to the discussion and exercises; sharing; collaboration

5. Required & recommended texts:

Lecture notes
Lecture notes are the basic course material for this class. The notes are made available on Canvas every week

Textbook
There are no textbooks for this course

Articles and discussion supporting materials
For the list of readings, check the Course Outline available on Canvas as well as on Discussion forum

Books recommended for extra reading

"The Design of Design: Essays from a Computer Scientist", Frederick P. Brooks, 2010.

"The element of style." William Strung, Jr. Bartley, 1918.

"Peopleware – Productive Projects and Teams". Tom DeMarco, Timothy Lister

"The Essentials of Technical Communication", Elizabeth Tebeaux, Sam Dragga, Oxford University Press, 2020.

6. Required software/hardware:
Free and open software: NJIT supported tools and hosting environments

7. Other web resources:
See class information on Canvas

Part III: Mapping Learning Outcomes to Course Assessment

Course Learning Outcome	Measure (assignment, quiz, or project)
Good understanding of team formation and team dynamics	In-class and online discussions, term project
Hands-on analysis and communication skills, using methods such as market analysis, presentation scenarios, blogs, and user stories	Assignments, quiz, term project
Good understanding of writing persuasive reports and engaging presentations	In-class and online discussions, assignments, term project

Practice writing good emails and minutes of meetings	In-class and online discussions, term project
Reading technical papers, and writing tech summaries	In-class and online discussions, term project, final exam

Part IV: Course Outline (Note: This course outline is preliminary and is subject to change)

Week	**Lecture/Activity/Discussion**	**Reading (preliminary) Check Canvas for additional reading in every module**
Week 1	Course logistics and introduction – topics, objectives, teamwork, communication	Class presentation: Best Practices (discussion on Canvas) Every student is expected to find a paper, survey, or a topic discussing one or several current best practices and to provide an outline and references on Canvas. All students are expected to comment on at least two postings by other students
Week 2	Communication theories, networking	Project presentation guidelines and requirements will be provided on Canvas
Week 3	Presentation skills	
Week 4	Class Presentations 1	
Week 5	Class Presentations 2	Project start: 1) All groups finalized 2) Teams work together on select topics and identify project's key contributions 3) Project proposal posted on Canvas
Week 6	Team formation, Team dynamics	
Week 7	Critical Thinking Reviews	
Week 8	Assigned reading and project work	
Week 9	Final Presentations 1	
Week 10	Final Presentations 2	
Week 11	Final Presentations 3	
Week 12	Final Presentations 4	
Week 13	Final Presentations 5	
Week 14	Final Presentations 6	
Week 15		

Part V: Assignment Weighting (How your Final Grade is Calculated)

Assignment Item	Percentage of final grade
Term project	35%
Quiz and other assignments	35%
Class participation, discussions, etc.	30%

Part VI: Delivery Mechanism

The following delivery mechanisms will be utilized

- Face-to-face lectures
- Canvas
- Online resources

1. Lectures / Class participation (30%)
Class attendance and participation is expected unless otherwise arranged with the instructor in advance

2. Quizzes / Case studies (35%)
There will be several graded quizzes during the semester. Each quiz is meant to review and test your knowledge of the material covered over several weeks. Each quiz has a time limit for completion.

3. Group project (35%)

One of the key learning outcomes for students in this class is the feel of real-world teamwork and presentation experience. The group project is extremely important.

Group work:

Group work is an important part of this course. Students will be allowed to self-select into groups (teams) of 4-5 individuals by a certain date. Students not having formed a group will be formed into separate groups by the instructor. It is expected that all students will contribute equally to the work of a group. Each group submission will include a cover page affirming such.

Recognizing that the semester long group project requires sustained commitment of all members, if a group finds that a member is not carrying his/her assigned group responsibilities, the group will be able to petition the instructor to have that individual removed. Before this petition is accepted, the group and instructor will meet to discuss. If an individual is removed from a group, he/she will have to complete the project steps individually. Therefore, please take group responsibilities seriously.

Part VII: Plagiarism and Academic Integrity

Unexcused late assignment submissions may not be accepted or accepted with penalty.

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: NJIT Academic Integrity Code.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

NJIT will continue to educate top tier students that are academically sound and are self-disciplined to uphold expected standards of professional integrity. **Academic dishonesty will not be tolerated at this institution.** Potential offences in papers and assignments include, but are not limited to:

- Using someone else's ideas or words without appropriate acknowledgement (including an AI such as ChatGPT or Microsoft Copilot)
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

Turnitin.com will be used to assist in the evaluation of the originality of some of the term work. Turnitin.com is only a tool which will assist in detecting plagiarism. Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service is described on the Turnitin.com web site - http://turnitin.com/.

Part VIII: Getting Help

If you are experiencing any challenges, please reach out to me (mark.chiusano@njit.edu) as soon as possible. The longer you delay, the harder it will be to catch up.

For computer/technology-related issues, the IST Helpdesk is the central hub for all information related to computing technologies at NJIT. This includes being the first point of contact for those with computing questions or problems.

Part IX: Student Absences for Religious Observance

NJIT is committed to supporting students observing religious holidays. Students must notify their instructors in writing of any conflicts between course requirements and religious observances, ideally by the end of the second week of classes and no later than two weeks before the anticipated absence.