

CS 489 Research in Computer Science Guidelines

1. **Goal:** students are able to apply the knowledge learned in classrooms to the real-world problems.
2. **Choosing a project title:** the project should focus on solving the real-world problems with *computer programming skills and technologies* learned the classroom.
3. **Progress reports:** students should meet (once every two/three weeks) with their mentor to report and discuss the progress of the research. Through presentations and/or reports, the subjects could be shared and discussed. The group could provide ideas, feedback, and suggestions so that the next step of research objectives could be planned.
4. **Final presentation:** to complete the course, the research project should be presented in the forms of oral presentation or a poster in a scheduled event. The abstract of the project (pre-proofed by the mentor & the UR director) should be published in the UR website.
5. **Paper/Codebook:** the paper named as *CS489FinalPaper_yourFullName.doc(x)* and submitted as an attachment to usvwccs@gmail.com (NOT linked to the Web) with the subject same as the file name. The final paper concludes the course with a full contented paper, including the following basic components.
 - a) Abstract
 - b) Introduction/overview of the project background
 - c) Theoretic foundation and/or related technology outlines
 - d) Main methods/theories, designs of the system of the project
 - e) Experiments, application tests, and/or case studies
 - f) Conclusion
 - g) References: papers, articles, websites, etc.
 - h) Appendices: codes, data, etc.

The code book named as *CS489codeBook_yourFullName.doc(x)* and submitted together with the paper as an attachment to usvwccs@gmail.com (NOT linked to the Web). Each of the program in the project should be included and numbered in order; title comments (and comments for classes/methods if needed) are required.

6. **Grading:** term progress reports (25%); final presentation (file 15%, presentation 20%); final report (Paper 30%, code book 10%).

7. Note for Writing a Scientific Paper or Report: Don't use the words including *I, me, my, or mine*. Limit to use *you, he, she, and we*. Use tables, charts, figures, and different folds/colors/backgrounds for presentations of the results and make the content more attractive.