

ME 5703 Lean Product Development and Service Systems, Spring 2025

Term Project Assignment and Working Guidelines

- A. Each person must carry out an independent research of literature into **applications of lean and six-sigma methodology, concepts, and tools applied to government or not-for-profit non-government organizations (NGOs)**. While product development has presented some unique challenges in adoption of Lean and *Kaizen* (continuous improvement) tools and concepts, various government echelons (Federal, State, and local/municipal levels) and agencies inherently present even greater opportunities for lean operational thinking and practices to better use their resources for serving citizens and customers. Your assignment is *to conduct a comprehensive literature research and report on how current lean and six-sigma tools/concepts (if any) have been used in addressing the transformation of operations of a chosen branch of public sectors and NGOs*. Public services include public works, transportation, water & sewer, utilities, energy (if not privately owned), social & public housing, police, and many others.
- B. **A project proposal is due in class on March 06, 2025 (Thursday)**. It must include, at the minimum, (1) a summary of result of initial literature survey with a list of papers and articles you have secured, (2) a proposed plan for further investigation into this chosen topic area, and (3) the project milestone/schedule. The project proposal must be typed in single-spaced regular size (8.5" X 11") sheets of paper. It should be less than 5 pages long, including tables and figures.
- C. **The final written report is due on May 8, 2025**. It must be professionally prepared with both technical and management contents. The report should start with the title of your research paper, an *Executive Summary (Abstract)* highlighting the project endeavor and conclusions/summary of your findings in one page. The research paper format should be closely followed. The final report should be at least 15 pages long (double-spaced), but no more than 30 pages excluding figures and tables.
- D. **A 15-minute oral presentation for each student (May 8, Thursday)**, in the alphabetical order of last names of all students) is scheduled at the end of the semester as partial fulfillment of term project requirements.
- E. The proposal and final written report must be turned in by the above specified due dates. Late reports will be penalized 10% of the project weight per late day.