COURSE SYLLABUS
E M 538

Course Name: Lean Tools for Systems Improvement

Course Number: E M 538                     Semester Credits: 3

Instructor/Contact Information: David Paulus, Ph.D., P.E., CQE, CHFEP
Email: david.paulus@wsu.edu            Office Hours: TBD

Meeting Time: Monday 6:15 – 8:30 pm Pacific  Prerequisites: None


Course Description and Objectives: This course covers methods of improving production with using lean manufacturing and six sigma principles. Theory of Constraints is used as a tool to select the project that the lean and six sigma principles are applied.

Learning Outcomes: Students will:

- Learn and apply continuous improvement tools
- Analyze material flow and facility layouts
- Design cellular layouts
- Calculate equipment efficiency using performance, quality, and availability
- Learn how to Poka-Yokes
- Conduct motion studies
- Learn about maintenance
- Reduce machine downtime using SMED
- Environmental Improvements and the 5S Methodology