

Syllabus

Course Number:	ISE / SYS 5517
Course Name:	Statistical Methods in Engineering
Term:	Winter 2018
Time:	5:30 – 7:17 p.m., M W
Text:	Statistical Methods in Engineering, Solberg-Montgomery-Parnell, Wiley & Sons
Location:	Math and Science 93
Instructor:	Glenn Meinhardt, Ph.D.
Email:	gmeinhardt@oakland.edu
Phone:	586-662-7622
Office Hours:	M W 7:15 – 8:15 or by appointment
Grading:	Homework: 25% Midterm: 35% Final: 40%
Academic Conduct:	Students are encouraged to discuss homework and laboratory assignments with one another for their mutual benefits. However, no form of plagiarism (for example, copying) is permitted. Further information and examples are available from the “Academic Conduct Policy” in the Oakland University Undergraduate Catalog. The code of Academic Conduct” is also available at: http://www2.oakland.edu/oakland/ouportal/index.asp?site=75
Objectives:	On successful completion of the course the student should be able to do the following: <ul style="list-style-type: none">• Develop mathematical model and analyze a Markov Chain,• Analyze pure birth and pure death systems,• Develop models for simple queueing systems as birth- death systems,• Derive steady-state behavior of different queueing systems,• Derive propagation of manufacturing error from component to product,• Model and analyze reliability of simple systems,• Perform simple linear, multiple linear and logistic regression analyses,• Integrate statistical process control with engineering process control techniques.