

MET-102-NBD2 - Methods of Statistical Process Control (SPC) - Fall 2010

Catalog Description:

Methods of Statistical Process Control (SPC) presents basic statistical concepts, quality tools, common probability distributions, problem solving techniques, control charts for variable and attribute data, interpretation, Gage R&R, process capability analysis, and acceptance sampling. Instruction and lab exercises integrate management strategies, data planning, cross-functional project teams, and requirements of modern quality standards that lead to successful application of SPC.

Prerequisite: MTH 100, MTH 132, or MTH 125

Credit: Credits 3.00 CEUs Lecture: 2 Lab: 2

Objective:

1. Provide a basic understanding to SPC.
2. Present a management philosophy for the successful application of SPC.
3. To give the student a solid foundation of SPC and its use.
4. For the student to learn quality concepts and problem solving techniques of SPC.

Important Dates/Times:

Class meets Thursdays 8/26 through 12/9 5:00-8:30pm

College closed - No class 11/25

Final exam Thursday 12/16 6:00-8:00pm

Grades due Monday 12/20 12pm

Assessment Methods:

Grade scale 90/80/70/60

1. 3 Exams (20% each), 1 Final (25%) – no late test accepted
2. Homework or research (15%) – no late work accepted
3. Class participation (attendance)

Note: College policy on cheating and plagiarism will be adhered to.

Topical Outline: (tentative)

Chapter 1

Chapter 2

Appendix A.1-.5

Chapter 3

Chapter 4

 Test 1

Chapter 5

Chapter 10

Chapter 6

 Test 2

Chapter 7

Chapter 8

Chapter 9

Chapter 11

 Test 3

Chapter 12

Chapter 13 Comprehensive Final

Text and Supplies:

Required: Statistical Process Control and Quality Improvement (5th edition or latest),
Gerald M. Smith, ISBN 0-13-025563-7
Scientific calculator (must have average, standard deviation, etc)

Recommended: The Memory Jogger, Goal-QPC, ISBN 1-879364-44-1
Access to Microsoft Excel or recent spreadsheet program

Class Layout:

Homework assignment – Q/A – Lecture – Exercise

Instructor:

Jim Akers Home: 815-877-1636 jnakers@hotmail.com (6-10pm M-F, 9am-10pm S-Su)
Work: 815-639-6454 jakers@woodward.com (8am-5pm M-F)
<http://jimakers.com>

Office Hours:

Monday 4:30 to 5:30, Adjunct Work Room, WTC 227
Or you can call me at home, work, or setup an appointment.

Notification of Services for Students with Disabilities:

"If you have a documented disability and would like to request accommodation and/or academic adjustments, contact the Disability Support Services Coordinator. You should contact the coordinator as soon as a need for accommodation is known so that implementation can occur as soon as possible. The telephone number for the coordinator's office is 921-2356."

Disclaimer

Circumstances may require some changes to this syllabus.