

ARCHITECTURAL & MANUFACTURING SCIENCES DEPARTMENT AMS 394 LEAN MANUFACTURING

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Course Syllabus Fall 2018

OFFICE HOURS:

EST 106

Office Hours: I am in the CNC lab often this semester so please Call or by appointment cell 270 590 4360 Email is best way to contact me.

CATALOG DESCRIPTION:

Prerequisites: AMS 356

Credit: 3 semester hours (lecture)

Introduction to the production system and the role of inventory, market characterization, aggregate planning, lean manufacturing and the just-in-time philosophy.

REQUIRED TEXTS:

Dennis, P. (2002) *Lean Production Simplified*, Productivity Press, New York, ISBN 1-56327-262-8 A video cam.

COURSE OBJECTIVES:

- To learn the basics of lean manufacturing system
- To learn the origins and underlying principles of the lean production system
- To learn how to develop plant wise lean strategies
- Identifying the goals of lean production
- Designing lean facilities, layout, fixtures for production system
- To learn practical problem solving skills for lean production
- To learn how to implement cellular manufacturing

COURSE TOPICS:

- The birth of lean production system
- Lean Manufacturing and the Toyota Production System
- Inventory and Variation
- Stability
- The significance of lead time
- Standardized Work
- Just-In-Time
- Jidoka
- Involvement
- Planning and Goals
- Strategies to becoming Lean
- How to implement Lean
- The culture of Lean Production
- Cellular Manufacturing

COURSE POLICIES, STRUCTURE & DESIGN:

General:

The instructor reserves the right to change the syllabus or course topics as necessary and inform the students about the changes.

Assigned readings and videos:

The posted videos and textbook will provide you the content to support your success on the projects and course exams.

Projects/Homework:

There will be weekly home work for this class. Many of these will be projects, some will be discussion board and some writing.

Test and Final exams:

Exams are closed book, closed notes. The test and final exams will be proctored by Distance Learning and Testing Center. Exams will cover material in the reading assignments and videos. The student is responsible for all reading assignments and watching all videos.

GRADING:

The grading scale is as follows: A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = 0-59.

The grading for the course is as follows:

Test (3): 50 points each Homework/Projects (15): 20 points each

Final exam: (1) 100 points

ACADEMIC HONESTY & PROFESSIONALISM:

All Western Kentucky University policies are in effect. All your work must be your own, unless I authorize collaboration, in which case you must, in writing, acknowledge the help you have received. Presenting the words, ideas, or expressions of another person in any form and claiming them as one's own is plagiarism and will not be tolerated. The claim of ignorance is no excuse. (See academic offenses in the WKU student handbook.)

Assignments have to be free of any writing or typing errors. Neatness, use of correct grammar,

STUDENT DISABILITY SERVICES:

In compliance with university policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Office for Student Disability Services in Downing University Center, A-200. The phone number is (270) 745-5004.

Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Anyone caught cheating in anyway will fail this course.