

COURSE SYLLABUS

Course Title:	Advanced Lean Manufacturing		Date submitted:	04/01/09 (09-51)
Department:	Business and Technology			
Curriculum:	Technology Studies			
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101)	MFG*271	Prerequisites:	
	Course Type:	L	C- or better in Introduction to Lean Manufacturing (MFG*171) or permission of Technology Program Coordinator.	
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: Internship M: Seminar P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio			
	Elective Type:	G		
	AH: Art History E: English FA: Fine Arts G: General HI: History HU: Humanities LA: Liberal Arts FL: Foreign Language M: Math S: Science SS: Social Science			
	Credit Hours:	3	Corequisites:	
	Developmental: (yes/no)	No	None	
	Lecture:	3		
	Clinical:	0		
	Lab:	0		
Studio	0			
Contact Hours:				
Other:	0			
TOTAL:	3	Other Requirements:		
Class Maximum:	18	None		
Semesters Offered:	F, Sp			
Catalog Course Description:	The purpose of this course is to provide the student with the knowledge to implement lean improvements within the production environment using a systematic approach. This course will follow an improvement project (from the student's current employer or case study) through the five stages of the DMAIC problem solving methodology. At the completion of the course, the student will be competent to effectively lead a lean implementation project within a company. Prerequisite: C- or better in Introduction to Lean Manufacturing (MFG*171).			
Topical Outline: List course content in outline format.	<ol style="list-style-type: none"> 1. Overview Principles of Lean Leadership 2. Strategic Policy Development 3. Project Selection 4. Tools of Project/Team Management 5. Planning and Conducting Kaizen Events 6. Effective Presentations 7. Developing the Lean Practitioner's Toolbox 8. Lean Production Analysis Tools (DMAIC) 9. Lean Production Models 10. Leading Change 			

	<ol style="list-style-type: none"> 11. Workplace Health and Safety 12. Financial Rewards of Change 13. Control Management Systems 14. Team Presentations 15. Lean Beyond the Production Floor
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <p>COURSE:</p> <ol style="list-style-type: none"> 1. serve as project team leader for a kaizen event 2. manage/facilitate team dynamics 3. determine proper tool usage from the lean toolset for a given project 4. analyze process/project using lean tools 5. develop plans for improvements of process/project 6. document team project improvements for sustainability <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i> None</p> <p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <ol style="list-style-type: none"> 2. Critical Thinking <p>2.4. Solves problems and makes decisions</p> <p>2.4.2. Level 2: identifies appropriate strategies for solving problems</p>
<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on the following criteria:</p> <ol style="list-style-type: none"> 1. Pre-test, quizzes and final exam 2. Class Activities 3. Team Projects 4. Homework
<p>Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p>Required: None Desired: None.</p>
<p>Textbook(s)</p>	<p>Refer to current Academic Year Printout.</p>