

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) <table border="1" style="display: inline-table;"><tr><td>MFG*271</td></tr></table>	MFG*271	Prerequisites:	
	MFG*271			
	Course Type: <table border="1" style="display: inline-table;"><tr><td>L</td></tr></table>	L	C- or better in Introduction to Lean Manufacturing (MFG*171) or permission of Technology Program Coordinator.	
	L			
	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: <table border="1" style="display: inline-table;"><tr><td>G</td></tr></table>	G		
	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: <table border="1" style="display: inline-table;"><tr><td>3</td></tr></table>	3	Corequisites:	
	3			
Developmental: (yes/no) <table border="1" style="display: inline-table;"><tr><td>No</td></tr></table>	No	None		
No				
Lecture: <table border="1" style="display: inline-table;"><tr><td>3</td></tr></table>	3			
3				
Clinical: <table border="1" style="display: inline-table;"><tr><td>0</td></tr></table>	0			
0				
Lab: <table border="1" style="display: inline-table;"><tr><td>0</td></tr></table>	0			
0				
Studio: <table border="1" style="display: inline-table;"><tr><td>0</td></tr></table>	0			
0				
Other: <table border="1" style="display: inline-table;"><tr><td>0</td></tr></table>	0			
0				
Contact Hours:	TOTAL: <table border="1" style="display: inline-table;"><tr><td>3</td></tr></table>	3	Other Requirements:	
3				
Class Maximum: <table border="1" style="display: inline-table;"><tr><td>18</td></tr></table>	18	None		
18				
Semesters Offered: <table border="1" style="display: inline-table;"><tr><td>F, Sp</td></tr></table>	F, Sp			
F, Sp				
Ability-Based Education (ABE) Statement:	Tunxis faculty and staff have identified a set of specific abilities (skills and knowledge) that students should develop in a successful and well-rounded education. We believe that ten of these abilities, the general-education abilities, are necessary for all students to be successful at work, in future education, and as citizens. In most college-levels course at Tunxis, students will be assessed on at least one general-education ability as well as abilities that are specific to the course. Students in professional programs will also be assessed on abilities that are important to that profession. (In some externally accredited programs, general-education abilities may not be assessed in every course, but all abilities will be assessed by the time the student completes the program.) On some assignments, students will receive feedback on the degree to which they have mastered certain abilities. When this happens, students will receive a rating of 1 (Not Satisfactory), 2 (Satisfactory), or 3 (Distinguished) and an explanation for the rating. The goal will be to let students know where they stand at a specific time and what they need to do in order to improve in these abilities. We are convinced that development of these abilities, and the general-education abilities in particular, is critical to students' success in all aspects of life.			
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			

	<p>competent to effectively lead a lean implementation project within a company.</p>
<p>Topical Outline: List course content in outline format.</p>	<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 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 <hr/> <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p> <hr/> <p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <ol style="list-style-type: none"> 1. Communication <ol style="list-style-type: none"> 1.2 applies discipline-specific and/or professional techniques to communicate in assigned tasks
<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>