



## Course Syllabus AMS594: Lean Systems

Fall 2020

### INSTRUCTOR CONTACT INFORMATION:

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**OFFICE HOURS:** by appointment

**COURSE CREDITS:** 3

**COURSE PREREQUISITES:** Graduate Standing

### CATALOG DESCRIPTION

Analysis of lean concepts and process improvement in business value streams, production, and distribution. Pull systems, flow control, inventory reduction, waste elimination, and value creation.

### LEARNING OBJECTIVES

By the end of this course, students should be able to:

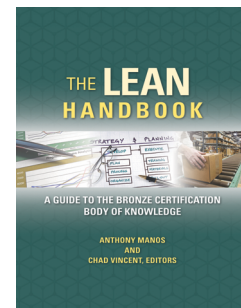
- Justify customer value from the lean perspective
- Perform value stream mapping to remove waste from the system
- Evaluate advanced concepts in lean production principles and practice
- Critique lean production tools and methods
- Assess the role of employees, improvement teams, training, and culture within the lean environment

### TOPICS

This course will cover lean production processes, tools, and techniques. Topics included in the certification's Body of Knowledge at the Bronze Level: cultural enablers; continuous process improvement in terms of principles, systems, and tools; the principles, processes, techniques, and practices of a consistent lean enterprise culture; and how to set up measurement systems for business results.

### REQUIRED TEXTBOOK

Manos, A. & Vincent, C. (2012). *The lean handbook: A guide to the bronze certification body of knowledge*. Milwaukee, WI: ASQ Quality Press. ISBN-13: 978-0873898041



## SUPPLEMENTAL TEXTS

In addition to the text above, you will need to beg, borrow, or buy one of the texts below. This is for your research paper one. Any published edition is acceptable.

1. Dennis, P. (2015). *Lean Production Simplified: A Plain-Language Guide to the World's Most Powerful Production System*, 3<sup>rd</sup> ed. New York: Productivity Press, ISBN 9781498708876 (The second edition is also acceptable).
2. Womack, J. and Jones, D. (2003). *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*, 2<sup>nd</sup> ed. New York: Free Press, ISBN: 0743249275.
3. Rother, M. and Shook, J. (2003). *Learning to See: Value-Stream Mapping to Create Value and Eliminate Muda*. Cambridge, MA: The Lean Enterprise Institute, ISBN-10: 0966784308.
4. Imai, M. (1997). *Gemba Kaizen: A Commonsense Approach to a Continuous Improvement Strategy*, Second Edition. New York: McGraw-Hill, ISBN13: 9780071790352.
5. Imai, Masaaki. (1997). *Gemba Kaizen: A Commonsense, Low-Cost Approach to Management*. New York: McGraw-Hill, SBN-13: 978-0070314467.
6. Womack, J., Jones, D., and Roos, D. (1990). *The Machine That Changed The World*. New York: Free Press, ISBN-13: 978-0743299794 (Also acceptable the Reprint edition, 2007).
7. Liker, J. (2003). *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*. New York: McGraw-Hill, ISBN-13: 978-0071392310.
8. Osterling, M. and Martin, K. (2014). *Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation*. New York: McGraw-Hill, ISBN13: 9780071828918.
9. Henderson, B. A. and Larco, J. L. (1999). *Lean transformation: how to change your business into a lean Enterprise*. Richmond, Virginia: The Oaklea Press. ISBN-13: 978-0964660120 (Reprinted in 2010).
10. Mann, D. (2014). *Creating a Lean Culture: Tools to Sustain Lean Conversions*, 3<sup>rd</sup> Edition. New York: Productivity Press. ISBN 9781482243239.

## GRADING/COURSE EVALUATION

▪ Assignments	20%
▪ Research Papers	60%
▪ Discussion Participation	20%

All deliverables MUST be completed in order to pass the course.

**GRADING SCALE:** A = 90-100%, B = 80-89.99%, C = 70-79.99%, D = 60-69.99%, F = < 60%.

**See course schedule on Blackboard for weekly activity details and due dates**

## COURSE REQUIREMENTS

## ASSIGNMENTS

The homework assignments can be a variety of short reports, case studies, quizzes, and presentations. The assignments have specific due dates and must be submitted on time.

**RESEARCH PAPER 1 (20%):** Each student will be responsible for selecting one of the supplemental texts mentioned above and preparing an 8 -12-page review paper that describes, critically analyzes, and evaluates the quality, meaning, and significance of the selected book. It should focus on what the author has tried to do, evaluate how well the author has succeeded, and present evidence to support this evaluation. The paper must be an original work. Your source of information should only be taken from the selected book. There is a zero-tolerance policy for Plagiarism.

**RESEARCH PAPER 2 (40%):** Each student will be responsible for writing a 15-20-page paper on one aspect of lean processes or techniques. More details about the paper requirements will be given in class.

Each paper should be typed in a 12 point font, one inch margins, and double-spaced lines. The report will be graded for both content and presentation. The paper will be evaluated for completeness, scientific accuracy, adherence to topic, correctness and quality of works cited, and presentation (readability, grammar, and spelling). It is recommended to follow the American Psychological Association Publication Association style. The paper must be an original work. Your source of information should be taken from peer-reviewed articles published in scientific journals, books, and reliable online sources (typically government or scientific society). There is a zero-tolerance policy for Plagiarism. The paper must be submitted on time via Blackboard.

## DISCUSSION PARTICIPATION

Participation in discussion boards is required. A description of discussion questions can be found on the course website. You are required to answer the initial discussion questions and then respond to classmates on a minimum of three separate days per week.

Your responses to classmates must contribute to the quality and advancement of discussion. Your post to classmates should be a minimum of one short paragraph and a maximum of two paragraphs. At minimum, your post should have at least five to seven sentences in the paragraph. Whether you agree or disagree explain why with supporting evidence from the assigned readings or a related experience. Support your discussion with a reference, link, or citation when appropriate.

The discussions also provide a forum for students to ask questions and answer important questions about the course material. The discussion questions also allow students to receive feedback from other students in the class and the instructor.

The discussion questions have **specific due dates and must be submitted on time.** There will be **no make-up discussion accepted** so pay a close attention to deadlines. The discussion questions will be graded and posted to the grade sheet in a timely manner. The following rubric will be used for the online discussion assessment.

	1 pt	2 pts	3 pts	4 pts	Total Points
<b>Timeliness</b> Post to the <b>INITIAL</b> discussion topics/questions and respond to classmates on a minimum of <b>THREE SEPARATE</b> days per week.	Fewer than 2 posts	2 or more posts--all on one day	2 or more posts on two days	3 or more posts on three or more days	<b>X 2 =</b>
<b>Response Content</b> 1. Responses on topic 2. Responses original 3. References are utilized where appropriate 4. Responses contribute to the quality and advancement of the discussion.	Meets 0-1 Criterion	Meets 2 Criteria	Meets 3 Criteria	Meets all 4 Criteria	<b>X 2 =</b>
<b>Organization</b> 1. Clear Structure 2. Responses meet posted length requirements. 3. Any references or resources utilized are cited using APA format. 4. Responses are clearly written and contain few spelling/grammatical errors.	Meets 0-1 Criterion	Meets 2 Criteria	Meets 3 Criteria	Meets all 4 Criteria	<b>=</b>
				<b>TOTAL</b>	<b>= ____ / 20</b>

## **COURSE AND UNIVERSITY POLICIES/PROCEDURES**

### **BLACKBOARD**

This course will use Blackboard, so you must be committed to learn to use the technology required to participate in Blackboard course management system. The course materials can be found at the course [Blackboard](#) website. If you experience technical problems or need assistance with Blackboard, you may contact the WKU IT Helpdesk at (270) 745-7000.

### **CLASS EXPECTATIONS**

Students are required to logon to the Blackboard system *regularly* and be alert for my announcements. Students must complete the class work individually, unless stated otherwise. You are expected to be responsible for your own learning, to thoughtfully complete the assigned readings, to bring questions and offer thoughtful and constructive comments to discussion boards, and to actively participate in discussion and class activities. You are expected to do all required assignments and turn them in on time, as late assignments are not accepted. I also expect you to act honestly and ethically at all times and to treat one another with respect.

### **COMMUNICATION POLICY**

Email is the preferred method of communication. My response time is within 24 hours Monday – Friday, and 48 hours on the weekends. Please start your subject lines in email correspondence with Course Number-username: Subject\_Of\_Message (**for example, AMS594-JHilltopper: A#01**)

Unprofessional emails will not receive a response.

### **MAKE-UP EXAM POLICY**

Make-up examinations will only be granted under extenuating circumstances and at my discretion. It is your responsibility to inform me (ahead of time, whenever possible) of extenuating circumstances that might prevent you from completing work by the assigned deadline. Please note that evaluation of extenuating circumstances is at my discretion and documentations are required for verification of the extenuating circumstances. In case of a medical emergency, a doctor's note or a statement from a medical professional must be submitted.

### **LATE ASSIGNMENTS**

All assignments have specific deadlines and must be submitted on time via Blackboard. In general, a late submission will not be graded and receive a score of zero. With prior arrangements, students may be allowed to submit their late assignments after the due date. However, students who submit assignment up to 3 days late will be penalized by 10 percent per day applied to the grade achieved on the late assignment. Students who submit assignments more than 3 days late will receive a grade of zero on the assignment.

### **HOW TO LABEL YOUR WORK**

**Assignments:** All homework assignments should be labeled as follows:

Student name-class#-assignment#.doc. For example, a student named John Hilltopper would name his assignment **JHilltopper-AMS594-A01.doc**. Your name and the assignment number must be included in the text of the document attached.

Failure to follow these guidelines could result in loss of points.

### **COURSE WITHDRAWAL**

Students should refer to the Drop/Add deadlines and to information for withdrawing from a class for the particular term. It is the student responsibility to officially withdraw from the class if you wish no longer to continue in the course. The university policy states "Nonattendance does NOT release students from the responsibility to officially drop any course for which they have enrolled and choose not to complete."

## **ACADEMIC HONESTY**

All Western Kentucky University policies are in effect. Academic dishonesty will not be tolerated in any form. Plagiarism is defined as the use of the words and ideas of another as one's own without crediting the source. References must be cited and quotation marks used in direct quotes. Academic dishonesty includes cheating on exams, quizzes, assignments and representing someone else's work as your own work. Plagiarism and cheating are serious offenses and may be punished by failure on the exam, assignment, paper or project.

## **WKU COVID-19 MASK STATEMENT**

Out of respect for the health and safety of the WKU community and in adherence with the CDC guidelines, the University requires that a cloth face covering (reusable or disposable) that covers both the nose and mouth must be worn at all times when in public areas within all buildings. Students must properly wear masks face coverings while in class regardless of the room size or the nature of the classroom activities. Students who fail to wear a face covering mask as required will be in violation of the WKU Student Code of Conduct and will be asked to comply or will face disciplinary action, including possible dismissal from the University. Accommodations to masks face coverings must be determined by the Student Accessibility Resource Center and documented before a student may attend class.

## **STUDENT ACCESSIBILITY RESOURCE CENTER**

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, Room 1074. The SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at [sarc.connect@wku.edu](mailto:sarc.connect@wku.edu). Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

## **TITLE IX MISCONDUCT/ASSAULT STATEMENT**

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at <https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf> and Discrimination and Harassment Policy (#0.2040) at [https://wku.edu/policies/hr\\_policies/2040\\_discrimination\\_harassment\\_policy.pdf](https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf).

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and **MUST** report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who

may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

## NETIQUETTE

Interactions in an online classroom are in written form. Your comfort level with expressing ideas and feelings in writing will add to your success in an online course. The ability to write is necessary, but you also need to understand what is considered appropriate when communicating online.

The word "netiquette" is short for "Internet etiquette." Rules of netiquette have grown with the growth of the Internet to help users act responsibly when they access or transmit information online. As a WKU student, you should be aware of the common rules of netiquette for the Web and employ a communication style that follows these guidelines.

- ***Wait to Respond.*** Wait to respond to a message that upsets you and be careful of what you say and how you say it. Allow time for email to be received, and replied to, keeping in mind time differences around the world and other people's busy schedules.
- ***Be Considerate.*** Rude or threatening language, inflammatory assertions, personal attacks, and other inappropriate communication will not be tolerated. Sending harassing messages to students is not only frowned on, it may be illegal. Keep in mind that threaded discussions are meant to be constructive exchanges.
- ***Be Respectful.*** Be respectful and treat everyone as you would want to be treated yourself. Always remember the **Golden Rule!**
- ***DON'T SHOUT.*** Never post a message that is in all capital letters; it comes across to the reader as SHOUTING! Using a word or two in caps is fine, but shouting is not recommended.
- ***Be Brief Online.*** Keep messages short and to the point.
- ***Think Before Posting.*** Always practice good grammar, punctuation, and composition. Use spell check! This shows that you've taken the time to craft your response and that you respect your classmates' work.
- ***Keep Personal Information Private.*** Posting private and personal information online can have serious consequences. Keep private messages private; don't post to the group.