

Course Syllabus AMS371: Quality Assurance Summer 2019

INSTRUCTOR CONTACT INFORMATION:

Dr. Hanna(John) Khouryieh Associate Professor Office: 221 EST Building

E-mail: hanna.khourvieh@wku.edu

Tel: 270-745-4126

OFFICE HOURS: by appointment

COURSE CREDITS: 3

COURSE PREREQUISITES: MATH 116

CATALOG DESCRIPTION

A study of quality assurance techniques. Application of Statistical Process Control (SPC), acceptance sampling, military standards 105D & 414. Quality organizations and standards.

Quality and Performance Excellence

REQUIRED TEXTBOOK

Quality and Performance Excellence by James R. Evans, 8th edition, 2016. South-Western Cengage Learning. ISBN-13: 9781305662223

LEARNING OBJECTIVES

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

- Discuss the basic principles associated with total quality.
- Discuss different frameworks for quality.
- Describe techniques and tools for quality and process improvement, including kaizen, Deming cycle, Six Sigma DMAIC, lean thinking, 7 QC tools, and control charts.
- Demonstrate the use of analytical tools in quality control.
- Discuss the importance of teamwork, employee engagement and leadership for quality improvement.

COURSE TOPICS

Topics will include:

Total Quality Management and Philosophies

Frameworks for Quality

Malcolm Baldrige National Quality Award (MBNQA)

ISO 9000

Six-Sigma

Costs of Quality

Tools and Techniques for Quality Design and Control

Process Management

Design for Six-Sigma (DFSS)

Design Failure Mode and Effects Analysis (DFMEA)

Product Design Processes

Design for Agility

Poka-Yoke

Statistical Process Control

Tools and Techniques for Quality Improvement

Process Improvement

The Deming Cycle

Six Sigma DMAIC Methodology

The Seven Quality Control Tools

Lean Thinking and Tools

Quality in Customer-Supplier Relationships

Principles for Customer-Supplier Relationships

Practices for Dealing with Customers

Managing Customer Relationships

Practices for Dealing with Suppliers

Quality Audits

Quality Planning and Leadership for Quality Improvement

Teamwork and Types of Quality Teams

Engagement, Empowerment, and Motivation for Quality Improvement

GRADING/COURSE EVALUATION

•	Quizzes	15%
•	Exams	45%
•	Assignments	20%
•	Discussion	20%

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

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

GRADING SCALE: A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = < 60.

COURSE REQUIREMENTS

QUIZZES

There will be a set of announced quizzes for this course. The purpose of the quizzes is to assess the understanding of the material covered in previous lectures and reading assignments and to prepare you for the exams. There are no make-ups for quizzes.

EXAMS

There are one midterm and one cumulative final exam for this course. The exams questions will be developed from assigned readings and lectures. More details about the exams and due dates can be found on blackboard course website.

ASSIGNMENTS

There will be a set of homework assignments for this course. The homework assignments will consist of case studies and short reports. The assignments have specific due dates and must be submitted on time via blackboard.

DISCUSSION

Participation in discussion boards is required. A description of discussion questions can be found under on Blackboard. 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
Timeliness Post to the INITIAL discussion topics/questions and respond to classmates on a minimum of THREE SEPARATE days per week.	Fewer than 2 posts	2 or more postsall on one day	2 or more posts on two days	3 or more posts on three or more days	X 2 =
Response Content 1. Responses on topic 2. Responses original 3. References are utilized where appropriate	Meets 0-1 Criterion	Meets 2 Criteria	Meets 3 Criteria	Meets all 4 Criteria	X 2 =

COURSE UNIVERSITY POLICIES/PROCEDURES

MODE OF INSTRUCTION

This web-based course will be delivered via Blackboard and follow a traditional, semester-based schedule, so it is important that you join the course as soon as the class starts. You must be committed to learn to use the technology required to participate in a World Wide Web course. This includes using e-mail and Blackboard course management system. On Blackboard, you will find course syllabus, course schedule, announcements, handouts, PowerPoint slides, discussion questions, assignments, exams, and grades. You can find the course materials at Blackboard course website. If you need assistance with Blackboard, you may contact the WKU IT Helpdesk at (270) 745-7000.

You should take the time to thoroughly read the course syllabus. Your success in this class depends on your understanding of and adherence to the policies contained in this syllabus. If you have any questions you should contact your instructor. Remember that it is your responsibility to stay current with your coursework and due dates.

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.

CLASS MAKE-UP 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 SUBMISSION POLICY

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.

COMMUNICATION POLICY

Email is the preferred method of communication. My response time is within 24 hours Monday – Friday, and 48 hours on the weekends.

Email Subject Lines: Please start your subject lines in email correspondence with Course Number-username: Subject_Of_Message (for example, AMS371-JHilltopper: Question regarding A01)

HOW TO LABEL YOUR WORK

- Assignments: All homework assignments should be labeled as follows: username-class#-assignment#.doc. For example, a student named John Hilltopper would name his assignment JHilltopper-AMS371-A1.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 WITHDRAWEL

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.

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. 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.

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.