# KISHWAUKEE COLLEGE SYLLABUS FALL,20XX

METROLOGY (2 credit hours) MT 102XXXX

Class day(s), Class time, Class Location

Start and end dates

Bob Lawrence

Building A1423

Office Hours: by appointment only

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Prerequisite: None COURSE DESCRIPTION

Provides an introduction to controlling and improving quality in a manufacturing setting,

Explores ways that manufacturers use data and aoalysis to improve quality, Students will have the opportunity to earn the Quality aod Measurement Certification through the Manufacturing Skill Standards Council (MSSC). One hour lecture aod two hours lab per week

METHODS OF PRESENTATION

1. Lecture

# Demonstration

1. Problem solving and discussion

STUDENT OUTCOMES

1. explain the key elements of a quality system.
2. identity the steps involved in building quality into a product.
3. explain the importance of data collection aod analysis to quality.
4. identity the roles of management aod production workers regarding quality.
5. identity methods of inspecting materials, processes, and final products.
6. understand basic measurement in manufacturing.
7. read basic drawings for manufacturing.
8. understand geometric dimensioning and tolerance.

ADDITIONAL STUDENT REFERENCES:

Machinist ready reference, Machine Tool Processes (text)

Various internet sites and reference manuals for equipment used in this class

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METHODS OF EVALUATION

* 1. Tests and quizzes

2. Student presentations

Manufacturing Skill Standards Council, *High-Performance Manu[acturtng,* Woodland Hills, CA, 2006

BREAKDOWN OF COURSE REQUIREMENTS

Exams ................58%

Quizzes .............. 14%

Papers ................ 14%

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Homework .......... 7%

FINAL GRADE DETERMINATION

90 -100 =A

80- 89 = B

70-79 = c

60-69 = D

59- below= F

Grade reports will not be mailed out. Please check KishSOS, My Student Iufo, under Academic Profile, Grades, for grade reports.

TOPICAL OUTLINE

Week I Introduction, discussion of course objectives *I* outcomes and assessments Week2 Defining quality

Week3 Building quality into the product

Week4 Quality management systems

Quiz

WeekS Process improvements

Week6 Controlling and documenting production Week7 Quality inspections,

Discuss and review for Midterm exam

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WeekS Week9

Week 10

Week 11

Week 12

Week 13

Week 14

Week 15

Week 16

Midterm exam

Return and discuss Midterm exam. Quality audits

Preventive and corrective actions Multi-view drawings

Geometric dimensioning and tolerance Quiz

Basic measurement

Precision measurement tools

Continue with precision measurement tools Review for Final exam

Final exam, Date/Time/Location TBA

MAKE-UP POLICY

For tests and other course requirement LEARNING SKILLS CENTER (A-300)

Tutoring and testing is available to all Kishwaukee students free of charge. Students must present their Kishwaukee College student ID when using any Learning Skills Center services. No appointment is necessary for assistance in English. For more information on the Learning Skills Center go to [www.kishwaukeecollege.edu/go/lsc/](http://www.kishwaukeecollege.edu/go/lsc/)

The Writing Center (A-306) answers your writing-related questions regardless of the class or assigmnent. No appointment is necessary, and students can get help individually or in small groups. Also available are workshop opportunities for any size group.

WITHDRAWAL POLICY

A "W" will not be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at "MY CLASS SCHEDULE" onKishSOS.

CLASS CANCELLATIONS

Class cancellations due to inclement weather will be annow1ced on local

radio stations or posted on the College Web site: [www.kishwaukeecollege.edu.](http://www.kishwaukeecollege.edu/)

Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door and posted at [www.kishwaukeecollege.edu/class](http://www.kishwaukeecollege.edu/class) cancellations. Room changes

will be annoW1ced in advance whenever possible and posted on the classroom door.

EMERGENCY PROCEDURES/SAFETY

Yellow and red *Emergency Information Flip Charts* are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus.

GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS

All students intending to graduate with an A.A., AS., A.E.S., or A.F.A. are required to complete a Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at [www.kishwaukeecollege.edu/portfolio.](http://www.kishwaukeecollege.edu/portfolio)

ACADEMIC HONESTY

Academic honesty is essential in a college community. In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Plagiarism, cheating, or other dishonest actions will not be tolerated, and the penalties for such actions are at the discretion of the instructor. A complete explanation of the policy and procedures surrounding academic honesty are outlined in the Kishwaukee College Catalog.

COPYRIGHT

As a Kishwaukee College Student, you may have software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense.

ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student having a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A 317 or at (815) 825-2086 Ext 3960, (815) 825-9106 (TTY), or send an email to awilson@kishwaukeecollege.edu. The student's disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the only way to receive official notices from the college. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

Language on the syllabi course materials developed by INAM funds:

From the grant agreement’s Part IV  Special Conditions, Item 15, Intellectual Property Rights, the following needs to be on all products developed in whole or in part with grant funds:

“This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timelines, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for  non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.”