

MFGT 106 Key Principles of Advancing Manufacturing

UNM-Valencia, Manufacturing

Spring 2020

UNM Instructor of Record: Dr. Laura Musselwhite

Email: lmusselwhite@unm.edu

CRN, Course number and name: 54156 MFTG 106 - 55

School of Dreams Instructor: Shannon Watling

Instructor Contact: swatling@sodacharter.com

- Campus Office Hours: Tuesday and Thursday 9:09-10:29 and Friday 9:50-10:28 am
- Class Time: Tuesday and Wednesday 11:46-1:06 pm and Friday 12:28-1:06 pm

Prerequisites: None

Course Description

Introduces the basic principles and practices of Safety and Quality used in manufacturing environments. Safety instruction covers topics including; Material Safety Data Sheets (MSDS), confined space, lock out/tag out, zero energy state, hazardous materials, storage of flammable materials, storage of fuel gas and high pressure gas cylinders, portable powered tool safety, hand tool safety, record keeping, training, employer enforcement of safety regulations, and right to know. This course also covers current quality control concepts and techniques in industry with emphasis on modern manufacturing requirements.

Abbreviated description: This course introduces the basic principles and practices of Safety and Quality and covers current quality control concepts and techniques in industry with emphasis on modern manufacturing requirements and environments. MSSC and OSHA certifications.

Objectives

Topics of instruction include basic structural and probability theory, sampling techniques, process control charts, nature of variation, histograms, attributes and variable charts. This course will use lecture, lab, online simulation and programming to prepare students for Certified Production Technician Safety Assessment Testing through Manufacturing Skill Standards Council (MSSC). In addition, this course will also include an online OSHA 10-hour certification program in which successful completion results in students earning their OSHA 10-hour General Industry certification.

Course Content

- Reading concepts and skills
- Computer proficiency
- Research and writing processes
- Grammar, usage and spelling
- Composition techniques Information integrity
- Annotated texts
- Media, graphics and visuals

- Vocabulary and definitions
 - Virtual Library
 - Rhetorical situations
 - Oral presentation skills
 - Ratios, rates and proportions
 - Measurements
 - Conversion formulas
 - Tech-related geometric functions
 - Tech-related algebraic formulas
 - Precision calculations
 - Fractions, decimals and percentages
 - Application problems
 - Calculator usage
- Inequalities, interval and builder notation

Required Materials

- Materials: Composition Notebook

Student Responsibilities/Attendance/Participation

Student Responsibilities:

- **UNM Email/Black Board Learn Access:** Beginning Fall 2015 semester, all UNM-Valencia students will be required to have a UNM Net ID which can be created by going to: <http://it.unm.edu/accounts/>. UNM Net ID will give you access to the computer labs on campus, blackboard learn and UNM Email. Make sure to update this information as your method of contact under personal information on Lobo Web.
- **Computer Lab Responsibility:** Please be advised that use of computer labs on UNM properties is governed by “Policy 2500: Acceptable Computer Use” which can be found at <http://policy.unm.edu/university-policies/2000/2500.html>. Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.
- If you have a disability, please inform me of your needs as soon as possible to ensure that your needs are met in a timely manner. For information on Equal Access at UNM-Valencia, please see <http://valencia.unm.edu/students/advisement-and-counseling/equal-access-services.html>
- Cell phones need to be muted during class times. If you must receive a call, leave the lab before you answer. No phone conversations in the studio. No web browsing, email, or text messaging during lectures, demos, discussions, or critiques.
- *In an effort to meet obligations under **Title IX**, UNM Faculty are considered responsible employees. This designation requires that any report made to a faculty member regarding sexual misconduct or gender discrimination must be reported to the Office of Equal Opportunity and the Title IX Coordinator. For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>*
- **Academic Dishonesty and Plagiarism:** Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in

coursework may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University

A+	101+
A	94-100
A-	90-93
B+	88-89
B	84-87
B-	80-83
C+	78-79
C	74-77
C-	70-73
D+	68-69
D	64-67
D-	60-63
F	50-59

Attendance/Participation:

- Students are required to complete all projects on time, participate in class discussions, and maintain a safe, respectable, positive lab environment.
- Students are required to attend class, arrive on time, remain present until the end of class, and be prepared for each day’s work. More than three absences without prior consultation may result in a failing grade or a drop from the class. Leaving early or arriving late three times results in one absence.
- If you have not attended class for three consecutive class periods and have made no attempt to text/ email/contact me in any way, you WILL be dropped.
- Students who do not attend the first week of class will automatically be dropped.
- Students will need to work a few hours each week in addition to the scheduled class times.

Grading Policy

Grading:

- Grading is based on a timely completion of course assignments, the quality of individual technical and critical development, personal commitment and the ability to work in a community setting. Personal commitment involves regular attendance, consistent effort, completion of work, participation in class discussions, and the general willingness to try.
- No full credit will be given for any late work. If an assignment is not presented on time, an automatic 0 will be issued. You will need to make arrangements with me if you are planning to make-up the work, and a fair grade will be issued once the work has been submitted, minus an automatic one letter grade deduction.
- Incompletes are rarely issued. If 75% of the semester’s work/projects/deliverables and participation/attendance have been completed with a satisfactory grade, and incomplete may be issued.

How to Contact the Instructor

Office Hours: Office Hours are held weekly on-campus

- On campus, the office hours are: Tuesday and Thursday 9:09-10:29 and Friday 9:50-10:28 am

Email: I prefer all email to be from your school assigned email and to swatling@sodacharter.com. I will check these messages regularly and will respond to all emails within 48 hours (72 hours weekends), and usually sooner. In the Subject Line of the email, ALWAYS write your full name and class number. For example – “John Doe MFGT 101”

Support Information, Resources, & Tutorials

- **Support for UNM Learn:**
 - UNM Learn help: <http://online.unm.edu/help/learn/support/>.
- **UNM Valencia Tutoring Services:**

- Custom tutoring services are available through The Learning Center at <https://valencia.unm.edu/campus-resources/the-learning-center/index.html>. Even online tutoring is available!
- **Instructor Support:**
 - Please see “How to Contact the Instructor” for instructor help.
- **Accessibility & Equal Access:**
 - UNM-Valencia’s accessibility/ADA compliance website: <http://valencia.unm.edu/about/accessibility.html>
 - UNM-Valencia’s Equal Access Services website: <http://valencia.unm.edu/students/advisement-and-counseling/equal-access-services.html>

Student Printed Name

Student Signature and Date

Parent Signature and Date