

Bossier Parish Community College  
Master Syllabus

**Course Prefix and Number:** AMFG 107

**Credit hours:** (3-2-3)

**Course Title:** Manufacturing Safety, Quality, and Measurements

**Course Prerequisites:** MATH 097, Co-requisite AMFG 108

**Textbook(s):** Amatrol/Sivad. Amatrol eLearning License Amatrol All and AME21 Libraries 4 Month. ISBN: Amatrol Prod# 206-WSC-IND4

**Course Description:** Lecture and lab covering workplace safety, quality practices, and quality measurements used in modern manufacturing. This course prepares the student to take the Safety and Quality Practices and Measurements modules of the Manufacturing Skill Standards Council (MSSC) Certified Production Technician exam.

**Learning Outcomes:**

At the end of the course, the student will be able to

- A. work in safe and productive manufacturing workplace;
- B. identify unsafe conditions and take corrective action;
- C. suggest process and procedures that support safety of the work environment;
- D. monitor safe equipment and operator performance;
- E. participate in periodic or statistically based internal quality audit activities;
- F. check and document calibration of gages and other data collection equipment;
- G. communicate quality problems;
- H. take corrective actions to maintain or restore quality; and
- I. use common measure systems and precision measurement tools.

To achieve the learning outcomes, the student will or will be able to:

1. perform manufacturing related tasks according to workplace rules and in a safe manner; (A)
2. recognize unsafe conditions in the workplace and use proper reporting procedures to rectify the situation; (B)
3. communicate improvements to processes and procedures to continuously improve the safety aspects of the workplace; (C)
4. understand the safety aspects of common manufacturing equipment and monitor these aspects with regard to operator safety and performance; (D)
5. take data by measurements of products or processes to contribute to quality audit activities; (E)
6. calibrate or coordinate calibration common measurement tools such as micrometers, temperature measuring equipment, scales, and electronic meters; (F)
7. identify out of specification products or processes and communicate the issue using proper procedures; (G)
8. make reasonable adjustments to process equipment to correct out of specification products or processes; (H) and

9. take measurements of products or processes with common tools such as micrometers, calipers, hardness tester, digital multimeter, and temperature and pressure indicators (I).

**Course Requirements:** This course may be offered as a face-face or an online course. The certification exam(s) for this course is required to be taken on campus or an approved proctored environment.

**Course Grading Scale:**

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

0 – 59 = F

**Attendance Policy:** The college attendance policy is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams, and/or clinical fees.

**Nondiscrimination Statement:** Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

**COORDINATOR FOR SECTION 504 AND ADA**

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