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**AAM491 Quality Systems**

**Spring 2023**

Syllabus for Jian Qiao University

**Instructor**: Ray Axmacher

**Title:** Adjunct Professor

**Office:** Online / Zoom

**E-Mail**: ray.axmacher@vaughn.edu

**Office Hours:**

Before or after class, or by appointment

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**Course Description**

This is a three-credit course introducing the student to the topic of Quality Systems Management as it applies across all product and service industries, with an emphasis on aviation. The ISO 9000 quality management standard in addition to several other theories and teaching will be used as a framework for developing this knowledge.

Students will be shown the intricacies of how and why ISO certification is obtained. The course includes topics such as history of quality systems, quality terminology, inspection and test quality tools, and control of quality records.

We will also closely look at other quality systems such Total Quality, Lean, Six Sigma and other industry specific quality methods.

This course will be taught using a variety of techniques including:

* Weekly Zoom Lecture
* Text readings
* Class examples and discussion
* Case analysis
* Supplemental videos, articles and readings
* Power Points

Credits: 3

Grading System: Letter Grade

**Prerequisites**

ENG110

**Course Objectives and Outcomes**

After successful completion of this course, students will have acquired the ability to answer the following questions:

* What role Quality systems play in industry? Aviation?
* How is “quality” viewed and measured by different groups within a company?
* How does a company establish and certify a Quality program and under ISO?
* How does the application of Quality Management principles and systems affect a company’s reputation and profitability?

**Course Requirements**

**Assignments – 30%**Weekly assignment questions based on lectures, videos, notes and resources.

**Quizzes – 25%**As assigned, based on textbook readings

**Mid-Term Assignment—20%**

Read an article and present in writing (summarize, discuss, and critique) a current publication
on a Quality Management issue.
Create a short Power point presentation as **an addition** to your written paper.

**Final Examination – 25%**

A FINAL Examination (Comprehensive)

**Required Text(s)**

|  |  |
| --- | --- |
| Text: | *Juran’s Quality Management and Analysis* |
| ISBN: | 9787-111-52485 4 |
| Author(s): | De Feo and Gryna |
| Publisher | McGraw Hill |

**Required Materials and Proficiencies**

* Text as noted above.
* Laptop running the standard Microsoft suite of productivity applications (i.e., Excel, PowerPoint, Word)
* Supplementary articles from various sources as directed by the instructor
* Basic mathematical concepts
* Mid-level Excel (Spreadsheet)
* Basic PowerPoint (Presentation)
* Basic word processing (MS Word)

**Additional Reading List**

***Managing Quality: Integrating the Supply Chain*,**
6th Edition Foster, S. Thomas

**Jurans Quality Handbook 6th Edition**

Additional Recommended Readings, Articles and Materials will be
provided by the Course Instructor

**Grading Policy**

The student's grade will be determined as follows:

|  |  |  |
| --- | --- | --- |
| **Assignment** | **Due Date** | **Percentage** |
| Quizzes |  Weekly | 25% |
| Weekly Assignments | TBD | 30% |
| Mid Term Paper | TBD | 20% |
| FINAL | TBD | 25% |
|  | **TOTAL** | **100%** |

**Grading Scale**

|  |  |  |
| --- | --- | --- |
| **Grade** | **Numeric Value** | **Standard** |
|  A | 90-100 | Excellent |
|  B+ | 85-89 |  |
|  B | 80-84 | Good |
|  C+ | 75-79 |  |
|  C | 70-74 | Average |
|  D\*\* | 60-69 | Min. Passing |
|  F | Below 60 | Failure |

\*\*For Aviation Training Institute students, minimum passing grade

for all courses in the airframe and powerplant curriculum is a “C”.

**Incomplete Grades**

Requests for Incomplete grades must be made in writing before the course ends, and after the mid-term has been passed.