

# Quality Concept & Stat Appl

MFET2410 101

## Course Description

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This course is designed to impart knowledge of Statistical Process Control (SPC). STEM 1010 or appropriate placement. SPC is an industry-standard methodology for measuring and controlling quality during the manufacturing process. It integrates managerial, technological and statistical concepts across all functions of an organization to ensure that a product is fit for use. Provides a foundation in current quality paradigms and introduces students to software tools (MS Excel and Minitab) used to statistically analyze problems encountered in manufacturing firms.

## Course Student Learning Outcomes

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- Demonstrate understanding of the rudiments of statistics that underlay statistical process control including sampling, means and standard deviations by formative and summative assessment.
- Document the use of SPC by surveying local manufacturing companies to learn how they use SPC to insure their product is fit for use. This documentation will demonstrate student understanding by formative and summative assessment.
- Demonstrate competence at the use of required software tools (MS Excel and Minitab) by formative and summative assessment.

## Course Prerequisites

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STEM 1010 or equivalent math placement

## Transfer/Certification/Licensure/Employment Information

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MATH 1040 is recommended for students planning to continue their program of study at Weber State

## Required Text or Materials

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**Title:** Introduction to Statistics

**Subtitle:** An Excel-Based Approach

**ISBN:** <https://ecampusontario.pressbooks.pub/introstats/>

**Authors:** Valerie Watts

**Publisher:** Pressbooks

For more information on textbook accessibility, contact Accessibility & Disability Services at 

## Brief Description of Assignments/Exams

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There will be weekly assignments and one final comprehensive exam.

Assignments are 70% of the grade

Final Exam is 30% of the grade

## Assignment Schedule

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Due Date	Assignment Name	Assignment Type	Points
	<a href="#">Introduce Yourself</a>	Discussion	0
	<a href="#">Introduce Yourself</a>	Discussion	0
9/15	<a href="#">Introduction to Statistics</a>	Assignment	10
9/29	<a href="#">Introduction to Measures of Central Tendency</a>	Assignment	10
10/6	<a href="#">Probability</a>	Assignment	10
10/20	<a href="#">Random Variables</a>	Assignment	10
10/27	<a href="#">Normal Distribution</a>	Assignment	10
11/3	<a href="#">Sampling Distributions</a>	Assignment	10
11/10	<a href="#">Confidence Intervals</a>	Assignment	10
11/17	<a href="#">Hypothesis Testing</a>	Assignment	10
11/24	<a href="#">Linear Regression</a>	Assignment	10
12/8	<a href="#">HW22 Final Preparation</a>	Assignment	0

## Grading Scale

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A 93-100

A- 90-92

B+ 87-89

B 83-86

B- 80-82

C+ 77-79

C 73-76

C- 70-72

D 61-69

E <60

## How to Navigate to Canvas

## Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

## Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or

want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

## Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

## Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)