



**COWLEY COLLEGE
& Area Vocational Technical School**

COURSE PROCEDURE FOR

**SANITATION AND MILL PROCESS CONTROL
MLL3594 2 Credit Hours**

Student Level:

This course is open to high school and post-secondary level students.

Catalog Description:

MLL3594– SANITATION AND MILL PROCESS CONTROL (2 hrs) During this course, students will achieve a high level of understanding of the proper mill sanitation, integrated pest management, granulation curve, cumulative ash, moisture correction addition, step charts, troubleshooting, and statistical process control.

Prerequisites:

None

Controlling Purpose:

This course is designed to help the student increase their knowledge regarding mill sanitation, process controls, and associated regulatory compliance.

Learner Outcomes:

Upon completion of the course, the student will be able to demonstrate a knowledge of the mill sanitation, integrated pest management, granulation curve, cumulative ash, moisture correction addition, step charts, troubleshooting, and statistical process control.

Units Outcomes and Criterion Based Evaluation Key for Core Content:

The following defines the minimum core content not including the final examination period. Instructors may add other content as time allows.

Evaluation Key:

- A = All major and minor goals have been achieved and the achievement level is considerably above the minimum required for doing more advanced work in the same field.
- B = All major goals have been achieved, but the student has failed to achieve some of the less important goals. However, the student has progressed to the point where the goals of work at the next level can be easily achieved.
- C = All major goals have been achieved, but many of the minor goals have not been

achieved. In this grade range, the minimum level of proficiency represents a person who has achieved the major goals to the minimum amount of preparation necessary for taking more advanced work in the same field, but without any major handicap of inadequacy in his background.

- D = A few of the major goals have been achieved, but the student's achievement is so limited that he is not well prepared to work at a more advanced level in the same field.
- F = Failing, will be computed in GPA and hours attempted.
- N = No instruction or training in this area.

UNIT 1: Starting and Stopping the Process

Outcomes: Upon completion of this unit, the students will be able to demonstrate a safe start up and shut down process in a flour mill.

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Understand orderly start up and shutdown sequence.
						Identify keys for starting and stopping a system.
						Ensuring safety and verification in these processes.

UNIT 2: Mill Process Operation and Troubleshooting

Outcomes: Upon completion of this unit, the students will be able to successfully identify checkpoints in the milling system that impact stock quality and quantity.

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Identify key check points.
						Explain impact of observed changes in stock quality and quantity.
						Identifying proper equipment operation.

UNIT 3: Process Management Tools for the Operative Miller

Outcomes: Upon completion of this unit, the students will be able to define and interpret the granulation curve, and cumulative ash and step chart development.

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Granulation curve development and interpretation.
						Cumulative ash curve development an interpretation.
						Step chart development and use.

UNIT 4: Sanitation Basics for Food Processing

Outcomes: Upon completion of this unit, the students will be able to successfully identify key stakeholders in plant sanitation, and components of a sanitation master plan.

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Identify stakeholders directing sanitation focus.
						Explain the role of good housekeeping in plant sanitation.
						Identify components of a sanitation master plan.

UNIT 5: Integrated Pest Management

Outcomes: Upon completion of this unit, the students will be able to successfully define successful integrated pest management and the resources available to the flour mill.

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Define integrated pest management.
						Explain importance of integrated pest management.
						Identify various tools associated with integrated pest management.

Projects Required:

As assigned.

Textbook:

Contact Bookstore for current textbook.

Materials/Equipment Required:

Various wheat-based products readily available to consumers.

Attendance Policy:

Students should adhere to the attendance policy outlined by the instructor in the course syllabus.

Grading Policy:

The grading policy will be outlined by the instructor in the course syllabus.

Maximum class size:

Based on classroom occupancy

Course Timeframe:

The U.S. Department of Education, Higher Learning Commission and the Kansas Board of Regents define credit hour and have specific regulations that the college must follow when developing, teaching and assessing the educational aspects of the college. A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work for approximately fifteen weeks for one semester hour of credit or an equivalent amount of work over a different amount of time. The number of semester hours of credit allowed for each distance education or blended hybrid courses shall be assigned by the college based on the amount of time needed to achieve the same course outcomes in a purely face-to-face format.

Refer to the following policies:

[402.00 Academic Code of Conduct](#)

[263.00 Student Appeal of Course Grades](#)

[403.00 Student Code of Conduct](#)

Disability Services Program:

Cowley College, in recognition of state and federal laws, will accommodate a student with a documented disability. If a student has a disability, which may impact work in this class which requires accommodations, contact the Disability Services Coordinator.