



LANSING COMMUNITY COLLEGE

ASSOCIATE OF APPLIED SCIENCE
IN CONSTRUCTION MANAGEMENT

QUALITY IMPROVEMENT PLAN

Quality Improvement Plan (QIP) for the Construction Management Program at Lansing Community College

This QIP will be the basis for continuous improvement of the Associate of Applied Science in Construction Management degree.

The Quality Improvement Plan has three major components:

1. Strategic Plan
2. Assessment Plan
3. Assessment Implementation Plan



CONSTRUCTION MANAGEMENT PROGRAM STRATEGIC PLAN

Our Mission

The Construction Management Program at Lansing Community College is dedicated to providing all students interested in the study of construction with the academic means to achieve their individual goals. To achieve this mission, the program will structure all curricula, courses, events, and activities as part of an instructive learning environment, designed and implemented by field trained professionals, using the latest techniques and technologies available. The Construction Management Program will continually seek direction and guidance from a board of advisors who represent a diverse cross section of practicing professionals throughout the architectural, engineering and construction industry.

The program is committed to developing construction management professionals of the future; are trained in the art of leading the architectural, engineering and construction community to build high quality, safe and desirable buildings. With the ability to lead these teams in an integrated fashion, our graduates will exude the abilities of planning, problem solving, cost estimating, scheduling, supervision, and commissioning.

Our graduates enter the construction industry in various positions with the ability to lead, problem solve and use innovative applications on their projects. With the hands-on experience in several complex building systems including: Electrical and Mechanical, they can provide valuable services immediately.

The Construction Management Program is designed to prepare students to work in entry-level supervisory and management positions related to construction, including site supervisors, construction and project superintendents, field supervisors, project engineers, and estimating/scheduling assistants. Construction management professionals plan, direct, or coordinate activities related to the construction and maintenance of buildings and infrastructure. They participate as members of an integrated project team in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation. This curriculum incorporates elements of the Associate Constructor Level I examination body of knowledge as established by the American Institute of Construction. The curriculum provides graduates with a broad foundation of technical and management abilities with an emphasis on job entry skill development, estimating, scheduling, project management, and specialized technical skills related to one of four construction focus areas (building, heavy/civil, electrical/construction, and HVAC/mechanical construction).

The department has developed a number of specific goals for the next five years; these goals are broken down into the areas of Curriculum, Students, Faculty, Facilities, Industry and Alumni Relations. The specific goals are listed below:

Curriculum

- Review curriculum with program faculty at the completion of each semester
- Increase role of IAB for curriculum review
- Identify and develop more Open Learning Resources to use in courses
- Annual review of D2L course layout and content
- Create and implement a graduate exit interview survey to be implemented to measure and track the indirect assessment of the Student Learning Outcomes

Students

- Further diversify the students in our program. Specifically focusing on traditionally underrepresented student groups, such as females and minorities.
- Increase the number of program completers
- Encourage students to participate in construction related competitions to expand their firsthand learning.
- Continue to develop and improve the Construction Club Student Organization

Faculty

- Increase the number of faculty to meet goals for class sizes and offerings as necessary
- Enhance the effectiveness of faculty by encouraging and supporting professional development in technical areas as well as teaching, through seminars and CTE resources.
- Meet with faculty as a group prior to Fall and Spring semesters to review upcoming semester classes, goals and receive curriculum feedback from faculty

Facilities

- Upgrade or increase lab facilities to meet the growing number of students.
- Evaluate, implement, and update technology to keep pace with industry.

Industry Relations

- Increase industry awareness of the CM program
- Add current students and alumni to the Industry Advisory Board
- Formalize Industry Advisory Board Fundraising opportunities

Alumni Relations

- Create a LCC Construction Management Alumni Association
- Develop a system to track alumni



CONSTRUCTION MANAGEMENT PROGRAM ASSESSMENT PLAN

The Construction Management programs learning outcomes align with the American Council for Construction Education's (ACCE) thirteen Student Learning Outcomes (SLOs) listed below. Upon graduation our students shall be able to:

1. Apply effective communication, both orally and in writing.
2. Apply the skills to estimate quantities and costs for the bidding process in a construction project.
3. Apply the aptitude to schedule a basic construction project.
4. Apply current technology related to the construction process.
5. Apply the interpretation of construction documents (contract, specifications, and drawings) used in managing a construction project.
6. Apply basic principles of construction accounting.
7. Apply basic surveying techniques used in building layout.
8. Understand the basic principles of ethics in the construction industry.
9. Understand the fundamentals of contracts, codes, and regulations that govern a construction project.
10. Understand basic construction methods, materials, and equipment.
11. Understand basic safety hazards on a construction site and standard prevention methods.
12. Understand the basic principles of structural design.
13. Understand the basic principles of mechanical, electrical, and piping systems.

The following tables list the specifics of the assessment tools that were used and the performance criteria to measure the achievement of the student learning outcome. Following each table is the expected performance criteria, analysis of the assessment and performance, discussion of the assessment and required improvement of the assessment.

Student Learning Outcome 1

Apply effective communication, both orally and in writing

Course	Semester	Type	Description	Class Average	CM Student Average
<i>(Direct)</i>					
DCTM 200	FA17	Student Project	RFP project	86.36%	86.81%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we will continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
<i>(Direct)</i>					
DCTM 201	SP18	Student Project	Course final project which included estimating and scheduling of a selected project. Final project includes a presentation to the class as well as attached prepared documentation	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q1: I feel I can effectively communicate both orally and in writing appropriate to the construction industry.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 2

Apply the skills to estimate quantities and costs for the bidding process in a construction project.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 200	FA17	Student Project	Estimating book and class presentation	79.92%	84.47%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we will continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 200	FA17	Student Project	Playhouse Estimating Project	79.23%	76.36%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and if we continue with this current academic structure, we will need to document a current 3-year average of this assessment.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q2: I feel I can effectively apply the skills to estimate quantities and costs for the bidding process in a construction project.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 3

Apply the aptitude to schedule a basic construction project.

Course	Semester	Type	Description	Class Average	CM Student Average
<i>(Direct)</i>					
DCTM 201	SP17	Student Project	Schedule and cash flow student project	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
<i>(Direct)</i>					
DCTM 200	FA18	Student Project	Scheduling project for East Town Project	68.49%	63.64%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment show that we do not meet the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be improved and we must document a current 3-year average of this assessment showing its improvement.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

*Q3: I feel I can effectively apply the aptitude to schedule a basic construction project.
5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree*

Student Learning Outcome 4

Apply current technology related to the construction process.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 103	FA18	Certification	PRO-CORE If students successfully complete the training, they receive a certificate of certification.	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 200	FA18	Student Project	On-Center Takeoff The students utilize this software in all their takeoffs which are incorporated into their semester project.	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented and we must show a current 3-year average of this assessment.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q4: I feel I can effectively apply current technology related to the construction process.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 5

Apply the interpretation of construction documents (contract, specifications, and drawings) used in managing a construction project.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 103	SP18	Quiz #1	This quiz was given to students to assess the knowledge of the students learning on week 5 of the class.	79.01%	81.84%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we can continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 103	SP18	Assignment #4	This assignment was given to the students to assess their understanding of how to interpret the General Conditions of the Contract for Construction	86.67%	100%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we can continue with this current academic structure. If we continue using this direct assessment, we will need to document a current 3-year average of this assessment.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q5: I feel I can effectively apply the interpretation of construction documents (contract, specifications, and drawings) used in managing a construction project.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 6

Apply basic principles of construction accounting.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 201	FA18	Student Project	Construction Management Report and presentation	89.28%	89.09%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we will continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 201	SP17	Student Project	Construction Management Project Planning Report No. 1	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

*Q6: I feel I can effectively apply basic principles of construction accounting.
5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree*

Student Learning Outcome 7

Apply basic surveying techniques used in building layout.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 100	FA18	Student Assignment	Homework #3 – Civil Technology Worksheet.	73.53%	69.23%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment show that we do not meet the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be improved.

Improvement: Increase the Performance Criteria average for the CM students and document a current 3-year average of this assessment.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 100	SP19	Student Activity	Building Layout Activity – Finding the First Corner of the House	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

*Q7: I feel I can effectively apply basic surveying techniques used in building layout.
5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree*

Student Learning Outcome 8

Understand basic principles of ethics in the construction industry.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 103	SP19	Mid-term Exam	Mid-Term Exam which tests the students on Contract Administration Covering Legal Contracts, Ethics and The Law	67.77%	64.77%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment show that we do not meet the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be improved.

Improvement: Increase the Performance Criteria average for the CM students and document a current 3-year average of this assessment.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 200	FA18	Mid-term Exam	Mid-Term Exam which tests the students on Contract Administration, Estimating, Legal and Ethical Issues	69.38%	64.27%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment show that we do not meet the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be improved and we must document a current 3-year average of this assessment showing its improvement.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

*Q8: I feel I understand basic principles of ethics in the construction industry.
5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree*

Student Learning Outcome 9

Understand the fundamentals of contracts, codes, and regulations that govern a construction project.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 103	SP18	Final Exam	The final exam is a comprehensive exam covering the content of the entire semester.	72.67%	66.25%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment show that we do not meet the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be improved.

Improvement: Increase the Performance Criteria average for the CM students and document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 103	SP18	Project #1	Building Code Analysis Report	91.67%	81.25%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we can continue with this current academic structure. If we continue with Direct Assessment, we must document a current 3-year average of this assessment.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q9: I feel I understand the fundamentals of contracts, codes, and regulations that govern a construction project.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 10

Understand basic construction methods, materials, and equipment.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
ARCH 113	FA18	Final Exam	Final Exam covers last 8 weeks of the course which focuses on light commercial methods and materials of construction.	77.87%	71.46%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we will continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
ARCH 113	FA18	Student Project	Residential Building Project Envelope Part 1 of a 3-part project	94.63%	92.40%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we can continue with this current academic structure. If we continue with Direct Assessment, we must document a current 3-year average of this assessment.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q10: I feel I understand basic construction methods, materials, and equipment.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 11

Understand basic safety hazards on a construction site and standard prevention measures.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 102	FA18	Final Exam	Industrial Construction Safety Final Exam	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented.

Improvement: Creation of a new Construction Safety Course implemented in the Fall of 2021, which is more applicable to the construction industry will help improve this Student Learning Outcome.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
DCTM 102	FA18	Lesson test	Following each of the OSHA Construction Regulations Lectures a lesson test is given to test the students' knowledge and understanding.	%	%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment have no current performance assessment available, so we are unable to prove that it meets the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be better documented. Creation of a new Construction Safety Course implemented in the Fall of 2021, which is more applicable to the construction industry will help improve this Student Learning Outcome.

Improvement: Starting Spring 2020 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q11: I feel I understand basic safety hazards on a construction site and standard prevention measures.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 12

Understand the basic principles of structural design.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
ARCH 113	FA18	Project	Concrete Beam Competition	93.89%	95.83%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we will continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type <i>(Direct)</i>	Description	Class Average	CM Student Average
ARCH 113	FA18	Worksheet	Chapter 15 Precast Concrete Framing Systems Worksheet	81.66%	70.00%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we can continue with this current academic structure. If we continue with this direct assessment, we will need to document a current 3-year average of this assessment.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q12: I feel I understand the basic principles of structural design.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree

Student Learning Outcome 13

Understand the basic principles of mechanical, electrical, and piping systems.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 100	SP19	Quiz	Quiz #3 MEP Systems	79.67%	75.00%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment meets the performance criteria.

Discussion: The students have successfully met the learning outcome and we will continue with this current academic structure.

Improvement: Document a current 3-year average of this assessment.

Course	Semester	Type	Description	Class Average	CM Student Average
		<i>(Direct)</i>			
DCTM 100	SP19	Student Project	MEP Design and Layout Project	76.40%	65.20%

Performance Criteria: At least 80% of the CM students earn a 2.0 (71% - 75%) or better.

Analysis: The results of the direct assessment show that we do not meet the Performance Criteria.

Discussion: In the future if this direct assessment is used the student performance must be improved and we must document a current 3-year average of this assessment showing its improvement.

Improvement: Starting Spring 2021 - Implementation of an Indirect Assessment with the use of an Exit Interview Survey Question will be implemented and documented.

Q13: I feel I understand the basic principles of mechanical, electrical, and piping systems.

5. Strongly Agree/ 4. Agree/ 3. Uncertain/ 2. Disagree/ 1. Strongly Disagree



CONSTRUCTION MANAGEMENT PROGRAM ASSESSMENT IMPLEMENTATION PLAN

The purpose of the Assessment Implementation Plan is to have a well-documented process for assessing and evaluating each of the Student Learning Outcomes using the assessment tools indicated in the Assessment Plan. The Assessment Implementation Plan is used to make changes to support the continuous improvement to achieve high program and student achievement relative to college and program mission and goals.

Each SLO will be evaluated with at least one direct and one indirect assessment tool. The results will be evaluated annually by the Curriculum Guidance Committee. The Curriculum Guidance Committee is a subcommittee of the Industry Advisory Board and is made up of industry partners, current program faculty, current program students and student alumni. The Curriculum Guidance Committee will meet twice a year, prior to the scheduled Industry Advisory Board meetings, at which time they will review and assess 2 to 3 of the Student Learning Outcomes. The Curriculum Guidance Committee determine if all of the performance criteria have been met. If any performance criteria have not been met, the committee will determine what steps, actions or changes are required. After each bi-annual meeting the subcommittee will report to the Industry Advisory Board their findings and the corrective action that is to be taken if necessary.

The Student Learning Outcome Direct Assessments tool will be a whole or part of an assignment or examination that is part of a course grade. Direct assessments of student work have appropriate rubrics, answer keys, or score sheets to standardize and explain how the score/grade is determined. The Direct Assessments will be documented at the end of each semester that the course is held. The minimum performance criteria for each direct assessment shall be at least 80% of the CM students earn a 2.0 (71% - 75%) or better. The Analysis of the Performance Criteria will be reflective of a 3-year period and updated each year.

A survey given to graduating students will serve as the indirect assessment measures for the 13 Student Learning Outcomes. The minimum performance criteria for each indirect assessment shall be a 3.5 on a 1 to 5 scale. Surveys for indirect assessments are anonymous and are created, distributed, and collected online using Google Forms. These surveys will be documented and kept up to date for a 3-year cycle starting in the Spring of 2021.