

# **Program Assessment Report**

2022 - 2023

COA - Construction Management (MS)

# **Program General Information**

# General Information

## Mission

The mission of the Haskell and Irene Lemon Division of Construction Science is to prepare our students to be leaders in the construction industry by fostering a student centered, collaborative learning environment that benefits local, state, national and international communities through innovative teaching, research, and service.

# College

Architecture

Department/School/Division

**Construction Science Division** 

**Assessment Liaison** 

Somik Ghosh

## SLO 1: Fundamental Knowledge in CM

# **Student Learning Outcome (SLO)**

Upon completion of the degree program, students should be able to demonstrate a fundamental knowledge of construction management principles and practices.

#### **Outcome Status**

Active

## **Direct - Course Embedded Assessment**

# **Assessment Method Description**

This SLO will be assessed by the grades of quizzes from CNS 5003: Construction Fundamentals I and grade of midterm exams from CNS 5013: Construction Fundamentals II.

## **Performance Target**

70% of the students will score a 70% or above on the two mid-term exams.

#### **Assessment Results and Use of Results**

# **Reporting Period**

2022 - 2023

#### **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

- In CNS 5003, out of 8 students, the average grade for the quizzes was 95%.
- In CNS 5013, out of 7 students, the average grade for midterm was 84%.

#### **Results Status**

Target Met

#### **Number of Students Assessed**

8

#### **USE OF ASSESSMENT RESULTS**

#### Curriculum

Significant alterations to the curriculum are not anticipated. Nevertheless, the instructors will periodically refresh course content and implement adjustments to ensure students remain informed about the latest industry advancements.

### **Faculty Development**

CNS faculty are constantly encouraged to attend workshops offered by CFE, attend conferences, and engage in discussions with peers for professional development.

## **Learning Outcomes**

Alteration to the learning outcomes are not anticipated at this time.

#### **Methods of Assessment**

No modification to the methods of assessment are anticipated.

#### Overall Program Effectiveness

The CNS faculty are constantly reviewing the admission standards and taking appropriate measures to admit the most qualified applicants.

## **No Changes Needed**

The faculty will continue to monitor student performance for that outcome in future semesters and make modifications as needed.

## **Comments on Use of Assessment Results**

CNS 5013: This course represents the second segment of a two-part series aimed at imparting essential construction management knowledge to students, equipping them with the foundational understanding necessary to excel in subsequent coursework. The instructors of these two courses have engaged in thorough discussions to strategically introduce, reinforce, and evaluate concepts, ensuring minimal redundancy. Notably, students participating in both courses have consistently surpassed performance benchmarks.

#### **Indirect - Student Survey**

#### **Assessment Method Description**

Upon graduation, students will be surveyed on their confidence level to apply fundamental construction management principles and practices in the industry.

#### **Performance Target**

70% of the students will respond with "Very Confident" or "Confident".

#### **Assessment Results and Use of Results**

#### **Reporting Period**

2022 - 2023

#### **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

" 100% of the students (7) responded with "Very Confident" or "Confident.".

#### **Results Status**

Target Met

#### **Number of Students Assessed**

7

#### **Related Documents**

Exit Survey Questionnaire.pdf

# **USE OF ASSESSMENT RESULTS**

#### Curriculum

The current outcome successfully aligns with established benchmarks, and there are presently no impending alterations or adjustments on the agenda. Instructors will, however, focus on bolstering the foundational construction management knowledge to instill greater confidence in upcoming student cohorts.

## **Comments on Use of Assessment Results**

Our program benefits from the diversity of international students who bring unique perspectives shaped by their home countries' construction and design industry structures, which may differ from the United States. Acquiring an understanding of the industry's framework and the evolving roles and responsibilities of various stakeholders can be a challenging task. Nevertheless, our graduates consistently excel in mastering and showcasing these skills.

## SLO 2: Advanced Knowledge in CM

## **Student Learning Outcome (SLO)**

Upon completion of the degree program, students should be able to demonstrate an advanced knowledge of construction management principles and practices.

# **Outcome Status**

Active

## **Direct - Project**

# **Assessment Method Description**

During the Thesis Defense and the Special Studies Presentation (Non-Thesis Exam), the faculty committee will evaluate graduate students performance with the SLO. The faculty committee composes of (1) chair and (2) committee members. Each committee member will utilize the "CM Special Studies or Thesis Rubric" to grade students performance. The average of the three scores will be the overall score for each student.

The following question(s) from the "CM Special Studies or Thesis Rubric" will be used to assess the SLO.

Question 2.1 - Graduates should demonstrate knowledge of advanced Construction Management principles and practices.

### **Performance Target**

70% of students will achieve a score of "Exemplary", "Good", or "Acceptable" on Question 2.1 on the "CM Special Studies or Thesis Rubric".

## **Assessment Results and Use of Results**

## **Reporting Period**

2022 - 2023

# **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

" 100% of students (8) achieved a score of "Exemplary", "Good", or "Acceptable" on Question 2.1 on the "CM Special Studies or Thesis Rubric" that equates to 3.45 on a four-point Likert-type scale.

#### **Results Status**

Target Met

# **Number of Students Assessed**

8

#### **Related Documents**

CM Special Studies or Thesis Rubric.pdf

## **USE OF ASSESSMENT RESULTS**

## **Comments on Use of Assessment Results**

This confirms that students have attained proficiency in fundamental construction management knowledge. The assessment of advanced knowledge, as demonstrated by students through their thesis/special studies projects, has been conducted by individual committee members, offering a more comprehensive evaluation of their capabilities. While we aim to enhance performance in the future, there are presently no significant changes or modifications recommended.

# **Indirect - Student Survey**

# **Assessment Method Description**

Upon graduation, students will be surveyed on their confidence level to apply advanced construction management principles and practices in the industry.

## **Performance Target**

70% of the students will respond with "Very Confident" or "Confident".

#### **Assessment Results and Use of Results**

# **Reporting Period**

2022 - 2023

# **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

" 100% of the students (7) responded with "Very Confident" or "Confident."

## **Results Status**

Target Met

#### **Number of Students Assessed**

7

#### **Related Documents**

Exit Survey Questionnaire.pdf

#### **USE OF ASSESSMENT RESULTS**

## No Changes Needed

No change needed at this time.

## **SLO 3: Research in the Construction Industry**

## **Student Learning Outcome (SLO)**

Upon completion of the degree program, students should demonstrate critical thinking and creativity within current research topics in the construction industry.

## **Outcome Status**

#### **Direct - Project**

# **Assessment Method Description**

During the Thesis Defense and the Special Studies Presentation (Non-Thesis Exam), the faculty committee will evaluate graduate students performance with the SLO. The faculty committee composes of (1) chair and (2) committee members. Each committee member will utilize the "CM Special Studies or Thesis Rubric" to grade students performance. The average of the three scores will be the overall score for each student.

The following question(s) from the "CM Special Studies or Thesis Rubric" will be used to assess the SLO.

Question 3.1 Capability to be published in a conference proceeding (special studies) or a journal publication (Thesis).

Question 3.2 The student demonstrates an understanding of how their research impacts and/or contributes to the Construction Industry.

## **Performance Target**

70% of students will achieve a score of "Exemplary", "Good", or "Acceptable" with Question 3.1 and Question 3.2 on the "CM Special Studies or Thesis Rubric".

#### **Assessment Results and Use of Results**

#### **Reporting Period**

2022 - 2023

## **Assessment Results Entry Date**

09/09/2023

### **Assessment Results**

" 100% of students (8) achieved a score of "Exemplary", "Good", or "Acceptable" on Question 3.1 and 100% of students (8) achieved a score of "Exemplary", "Good", or "Acceptable" on Question 3.2 on the "CM Special Studies or Thesis Rubric"

## **Results Status**

Target Met

#### Number of Students Assessed

R

#### **Related Documents**

CM Special Studies or Thesis Rubric.pdf

# **USE OF ASSESSMENT RESULTS**

#### **Comments on Use of Assessment Results**

Throughout this academic year, faculty members collaborating with students on their research have placed strong emphasis on maintaining high standards. This specific Student Learning Outcome (SLO) is intricately linked with SLO #4. Looking ahead, considering the students' research interests, faculty can suggest potential publication venues for the final research outputs and ensure that students are well-informed about the rigorous standards required for material to be considered "publishable."

## **Indirect - Student Survey**

## **Assessment Method Description**

Upon graduation, students will be surveyed on their confidence level to demonstrate critical thinking and creativity within current research topics in the construction industry.

### **Performance Target**

70% of the students will respond with "Very Confident" or "Confident".

#### **Assessment Results and Use of Results**

# **Reporting Period**

2022 - 2023

## **Assessment Results Entry Date**

09/09/2023

**Assessment Results** 

" 100% of the students (7) responded with "Very Confident" or "Confident."

## **Results Status**

Target Met

#### **Number of Students Assessed**

7

#### **Related Documents**

Exit Survey Questionnaire.pdf

#### **USE OF ASSESSMENT RESULTS**

## No Changes Needed

No changes needed at this time.

## **SLO 4: Professional Communication**

# **Student Learning Outcome (SLO)**

Upon completion of the degree program, students should demonstrate effective professional oral and written communication.

#### **Outcome Status**

Active

# **Direct - Project**

## **Assessment Method Description**

During the Thesis Defense and the Special Studies Presentation (Non-Thesis Exam), the faculty committee will evaluate graduate students performance with the SLO. The faculty committee composes of (1) chair and (2) committee members. Each committee member will utilize the "CM Special Studies or Thesis Rubric" to grade students performance. The average of the three scores will be the overall score for each student.

Question 4 "Graduates should demonstrate effective professional oral and written communication" is broken into seven subcategories.

Question 4.1 - Written - Content/Purpose

Question 4.2 - Written - Organization

Question 4.3 - Written - Grammar, Spelling, punctuation, word choice, syntax, etc.

Question 4.4 - Written - Quality of References

Question 4.5 - Oral - Organization

Question 4.6 - Oral - Verbal and Nonverbal Delivery

Question 4.7 - Oral - Professional Demeanor

# **Performance Target**

70% of students will achieve a score of "Exemplary", "Good", or "Acceptable" on each of the seven subcategories.

#### Assessment Results and Use of Results

# **Reporting Period**

2022 - 2023

#### **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

"100% of students (8) achieved a score of "Exemplary", "Good", or "Acceptable" on each of the seven subcategories on the "CM Special Studies or Thesis Rubric"

# **Results Status**

Target Met

#### **Number of Students Assessed**

8

#### **Related Documents**

## CM Special Studies or Thesis Rubric.pdf

#### **USE OF ASSESSMENT RESULTS**

#### Curriculum

The quality of thesis and special study project reports is often compromised due to time constraints faced by students during the writing process, as well as a failure to address comments provided by the chair and committee members. To enhance the quality of these documents in the future, we will implement strict deadlines for submitting draft copies and final reading copies of the thesis/report. Additionally, the last date to schedule the final defense will be set no less than two weeks before the end of the semester. This timeline will allow ample time to address any feedback received during defense meetings, thereby improving the overall quality of the work.

# **Indirect - Student Survey**

# **Assessment Method Description**

Upon graduation, students will be surveyed on their confidence level to demonstrate effective written communications appropriate to the construction discipline.

## **Performance Target**

70% of the students will respond with "Very Confident" or "Confident".

## **Assessment Results and Use of Results**

## **Reporting Period**

2022 - 2023

# **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

"100% of the students (7) responded with "Very Confident" and "Confident."

#### **Results Status**

Target Met

#### **Number of Students Assessed**

7

### **Related Documents**

Exit Survey Questionnaire.pdf

#### **USE OF ASSESSMENT RESULTS**

# **No Changes Needed**

No change at this time.

#### **Indirect - Student Survey**

## **Assessment Method Description**

Upon graduation, students will be surveyed on their confidence level to demonstrate effective oral communications appropriate to the construction discipline.

# **Performance Target**

70% of the students will respond with "Very Confident" or "Confident".

## **Assessment Results and Use of Results**

## **Reporting Period**

2022 - 2023

# **Assessment Results Entry Date**

09/09/2023

#### **Assessment Results**

100% of the students (7) responded with "Very Confident" and "Confident."

#### **Results Status**

Target Met

## **Number of Students Assessed**

7

## **USE OF ASSESSMENT RESULTS**

No Changes Needed

No change at this time.