

SIUE Department of Construction 2017 Assessment report

A) Students will: Create written communications appropriate to the construction discipline.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 210	Resume	90%	95%	100%	100%	100%	99%	Above threshold
CNST 210	Business Letter	90%	95%	100%	100%	93%	97%	Above threshold
CNST 210	Laboratory 1, 2, 3	70%	95%	85%	96%	71%	87%	Above threshold
CNST 452	Letter of Intent	75%	100%	82%	80%	62%	81%	Above threshold
-	AIC Exam	50%	74%	73%	-	71%	73%	Above threshold
-	Proxy exam	50%	93%	57%	-	-	75%	Above threshold
-	Course evaluations	4.0	4.2	4.3	4.1	3.9	4.1	Above threshold

b. Actions taken

All indicators are above the target threshold. To gain more understanding of student performance in written communication, we will add an RFI writing assignment to CNST 351.

B) Students will: Create oral presentations appropriate to the construction discipline..

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 210	Safety Presentation	80%	100%	100%	100%	80%	95%	Above threshold
CNST 452	Capstone Presentation	85%	100%	100%	100%	100%	100%	Above threshold
-	AIC Exam	50%	100%	76%	-	71%	82%	Above threshold
-	Proxy exam	50%	93%	57%	-	-	75%	Above threshold
-	Course evaluations	4.0	4.2	4.3	4.5	3.7	4.2	Above threshold
-	Senior Exit Interview	4.0	4.3	4.3	4.4	5	4.5	Above threshold

b. Actions taken

All indicators are above the target threshold. To gain more understanding of student performance in written communication, we will add an oral presentation assignment to CNST 403.

C) Students will: Create a construction project safety plan.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 470	Create a safety plan	100%	100%	100%	100%	100%	100%	Above threshold
-	AIC Exam	50%	79%	67%	-	66%	71%	Above threshold
-	Proxy exam	50%	76%	33%	-	-	55%	Above threshold
-	Course evaluations	4.0	4.2	4.5	3.9	3.8	4.1	Above threshold
-	Senior Exit Interview	4.0	4.3	4.5	4.1	3.5	4.1	Above threshold

b. Actions taken

All indicators are above the target threshold. To gain more understanding of student performance in this outcome, we will evaluate standards described in Outcome 3 and modify CNST 470 assignment or assignment in another required class if necessary.

D) Students will: Create construction project cost estimates.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 451	Course Project	85%	100%	100%	100%	100%	100%	Above threshold
-	AIC Exam	50%	71%	70%	-	66%	69%	Above threshold
-	Proxy exam	50%	75%	74%	76%	61%	72%	Above threshold
-	Course evaluations	4.0	3.9	4.3	2.8	4	3.8	below threshold
-	Senior Exit Interview	4.0	4.1	4.1	4.2	4	4.1	Above threshold

b. Actions taken

All indicators but the average course evaluations are above the target threshold. To gain more understanding of student performance in this outcome, we will revise the assignment and or assessment of assignment in CNST 451 to provide more information

E) Students will: Create construction project schedules.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 403	Course Project	70%	100%	100%	100%	100%	100%	Above threshold
-	AIC Exam	50%	70%	70%	-	68%	69%	Above threshold
-	Proxy exam	50%	59%	52%	-	-	56%	Above threshold
-	Course evaluations	4.0	4.2	4.4	4.1	3.6	4.1	Above threshold
-	Senior Exit Interview	4.0	4.4	4.3	4.4	2.5	3.9	below threshold

b. Actions taken

All indicators but the senior exit interview survey are above the target threshold. To gain more understanding of student performance in this outcome, we will revise assignment and or assessment of assignment in CNST 403 to provide more information. We will also hire a new tenure track faculty member for 403 instead of adjunct faculty.

F) Students will: Analyze professional decisions based on ethical principles.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 351	Ethics assignment	90%	100%	100%	100%	100%	100%	Above threshold
CNST 452	Ethics memo	90%	100%	80%	100%	77%	89%	below threshold
-	AIC Exam	50%	82%	79%	-	84%	82%	Above threshold
-	Proxy exam	50%	73%	88%	70%	81%	78%	Above threshold
-	Course evaluations	4.0	4.3	4.6	4.3	4	4.3	Above threshold
-	Senior Exit Interview	4.0	4.6	4.5	-	-	4.6	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of the ethics memo assessment. To address this, we will add PHIL 323 Engineering, Ethics, and Professionalism to the curriculum guide.

G) Students will: Analyze construction documents for planning and management of construction processes.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 341	Final exam	80%	75%	100%	45%	93%	78%	below threshold
-	AIC Exam	50%	68%	70%	-	69%	69%	Above threshold
-	Proxy exam	50%	80%	56%	93%	73%	76%	Above threshold
-	Course evaluations	4.0	4.3	4.5	4.1	4.1	4.3	Above threshold
-	Senior Exit Interview	4.0	4.5	4.5	4.4	5	4.6	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of the CNST 341 final exam assessment. To address this, we will revise and coordinate a portion of the final exam to provide consistent measurement for spring and fall semester classes.

H) Students will: Analyze methods, materials, and equipment used to construct projects.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 210	Exams 1, 2, 3	70%	95%	92%	94%	73%	89%	Above threshold
CNST 301	301 Exam 2	80%	83%	33%	63%	82%	65%	below threshold
-	AIC Exam	50%	67%	66%	-	68%	67%	Above threshold
-	Proxy exam	50%	80%	56%	70%	72%	70%	Above threshold
-	Course evaluations	4.0	4.3	4.6	4.1	4.1	4.3	Above threshold
-	Senior Exit Interview	4.0	4.5	4.4	4.4	4	4.3	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of the 301 exam assessment instrument. To address this, we will replace the 301 instrument with an assessment instrument in CNST 211

I) Students will: Apply construction management skills as a member of a multi-disciplinary team.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 452	Senior Capstone Project	95%	100%	100%	100%	100%	100%	Above threshold
-	AIC Exam	50%	79%	67%	-	72%	73%	Above threshold
-	Proxy exam	50%	74%	53%	62%	65%	64%	Above threshold
-	Course evaluations	4.0	4	4.5	4.2	4.1	4.2	Above threshold
-	Senior Exit Interview	4.0	3.5	4	4.3	5	4.2	Above threshold

b. Actions taken

All indicators are above the target threshold. To better evaluate this outcome, we will clarify assessment method of Capstone project to increase individuality evaluation of student outcomes.

J) Students will: Apply electronic-based technology to manage the construction process.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 353	Homework #3	80%	-	63%	-	78%	71%	Above threshold
-	AIC Exam	50%	69%	64%	-	61%	65%	Above threshold
-	Proxy exam	50%	74%	53%	-	-	64%	Above threshold
-	Course evaluations	4.0	4	4.5	3.5	3.9	4.0	Above threshold
-	Senior Exit Interview	4.0	3.5	4	4.1	4.5	4.0	Above threshold

b. Actions taken

All indicators are above the target threshold. To improve student performance in this area, we will revise CNST 353 content to increase construction specific program applications.

K) Students will: Apply basic surveying techniques for construction layout and control.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 264	Layout assignment	90%	91%	82%	82%	93%	87%	Above threshold
-	AIC Exam	50%	86%	64%	-	68%	73%	Above threshold
-	Proxy exam	50%	83%	82%	68%	75%	77%	Above threshold
-	Course evaluations	4.0	3.7	4.3	4.1	3.9	4.0	Above threshold
-	Senior Exit Interview	4.0	3.3	3.8	4	4.5	3.9	below threshold

b. Actions taken

All indicators are above the target threshold with the exception of the senior exit survey. To improve this outcome, we will adjust survey laboratory session schedules to reduce class size of laboratory sessions.

L) Students will: Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 452	Roles, Duties, Authority assignment.	95%	-	95%	100%	100%	98%	Above threshold
CNST 452	Organization Chart.	100%	100%	100%	100%	77%	94%	below threshold
-	AIC Exam	50%	79%	70%	-	73%	74%	Above threshold
-	Proxy exam	50%	74%	53%	80%	78%	71%	Above threshold
-	Course evaluations	4.0	3.5	4	4.2	3.9	3.9	below threshold
-	Senior Exit Interview	4.0	4	4.5	4.4	4.5	4.4	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of the org chart and assessment and average course evaluation. To improve our understanding of student performance for this outcome, we will revise, balance, and remap Proxy exam to conform better with 20 Outcome assessment.

M) Students will: Understand construction risk management.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 452	Construction Surety and Insurance Assignment	95%	100%	100%	100%	93%	98%	Above threshold
-	AIC Exam	50%	71%	70%	-	74%	72%	Above threshold
-	Proxy exam	50%	77%	98%	60%	73%	77%	Above threshold
-	Course evaluations	4.0	3.9	4.5	4.7	4.1	4.3	Above threshold
-	Senior Exit Interview	4.0	3.4	3.8	4.4	5	4.2	Above threshold

b. Actions taken

All indicators are above the target threshold. To improve our understanding of student performance for this outcome, we will revise, balance, and remap Proxy exam to conform better with 20 Outcome assessment.

N) Students will: Understand construction accounting and cost control.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 452	Pay Request Exercise	90%	100%	45%	100%	-	82%	below threshold
-	AIC Exam	50%	65%	68%	-	65%	66%	Above threshold
-	Proxy exam	50%	74%	76%	60%	73%	71%	Above threshold
-	Course evaluations	4.0	3.9	4.4	4.7	4.1	4.3	Above threshold
-	Senior Exit Interview	4.0	3.9	4.1	4.4	5	4.4	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of the pay request assessment. To improve our understanding of student performance for this outcome, we will revise, balance, and remap Proxy exam to conform better with 20 Outcome assessment.

O) Students will: Understand construction quality assurance and control.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 210	Assignment	90%	90%	100%	90%	100%	95%	Above threshold
-	AIC Exam	50%	59%	70%	-	70%	66%	Above threshold
-	Proxy exam	50%	74%	53%	41%	29%	49%	below threshold
-	Course evaluations	4.0	4	4.5	4.2	4.1	4.2	Above threshold
-	Senior Exit Interview	4.0	3.5	4	4.1	4.5	4.0	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of the proxy exam. To improve this outcome, we will add concrete technician certification to CNST 210 and add an assessment tool to the new CNST 211 class spring semester 2018.

P) Students will: Understand construction project control processes.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 403	Exam 2 - Short answers	70%	46%	78%	-	-	62%	below threshold
CNST 403	Exam 2 - EVM question	70%	68%	67%	-	-	68%	below threshold
CNST 403	Exam 2 - Schedule update	70%	77%	89%	-	-	83%	Above threshold
-	AIC Exam	50%	78%	71%	-	72%	74%	Above threshold
-	Proxy exam	50%	74%	53%	66%	56%	62%	Above threshold
-	Course evaluations	4.0	4	4.5	3.6	3.9	4.0	Above threshold
-	Senior Exit Interview	4.0	3.5	4	4.5	4.5	4.1	Above threshold

b. Actions taken

All indicators are above the target threshold with the exception of exam 2 short answers and exam 2 EVM question. To improve this outcome, we will hire new tenure track faculty for CNST 403

Q) Students will: Understand the legal implications of contract, common, and regulatory law to manage a construction project.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 411	Final exam	80%	-	100%	-		100%	Above threshold
-	AIC Exam	50%	70%	69%	-	67%	69%	Above threshold
-	Proxy exam	50%	77%	98%	64%	67%	77%	Above threshold
-	Course evaluations	4.0	3.4	3.8	4.1	4	3.8	below threshold
-	Senior Exit Interview	4.0	3.9	4.5	4	5	4.4	Above threshold

b. Actions taken

All indicators are above target thresholds, with the exception of course evaluations. To maintain our improved outcomes in the past year, we will retain current adjunct instructor

R) Students will: Understand the basic principles of sustainable construction.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 210	Quiz	90%	95%	85%	100%	100%	95%	Above threshold
-	AIC Exam	50%	33%	33%	-	54%	40%	below threshold
-	Proxy exam	50%	80%	56%	-	-	68%	Above threshold
-	Course evaluations	4.0	4.3	4.6	4	3.9	4.2	Above threshold
-	Senior Exit Interview	4.0	4.5	4.4	4.1	2.5	3.9	below threshold

b. Actions taken

All indicators are above target thresholds, with the exception of AIC exam results and senior exit interviews. To better understand student performance in this outcome, we will revise, balance, and remap Proxy exam to conform better with 20 Outcome assessment. Consider offering Sustainable Construction as a technical elective on a regular basis

S) Students will: Understand the basic principles of structural behavior.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 351	Exam 1, 2, 3	70%	100%	96%	100%	84%	95%	Above threshold
-	AIC Exam	50%	62%	68%	-	69%	66%	Above threshold
-	Proxy exam	50%	42%	50%	63%	71%	57%	Above threshold
-	Course evaluations	4.0	4.3	4.6	4.1	4	4.3	Above threshold
-	Senior Exit Interview	4.0	4.4	4.3	4.2	4.5	4.4	Above threshold

b. Actions taken

All indicators are above target thresholds. To maintain this level of performance, we will support and retain Dr. Werner

T) Students will: Understand the basic principles of mechanical, electrical and piping systems.

a. Assessment data

Course Assessed	Assessment instrument	Threshold	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Average	Performance
CNST 321	Final Exam	80%	-	96%	-	-	96%	Above threshold
CNST 332	CNST 332 exam 1 and 2	80%	96%	-	-	-	96%	Above threshold
-	AIC Exam	50%	56%	63%	-	70%	63%	Above threshold
-	Proxy exam	50%	42%	50%	73%	75%	60%	Above threshold
-	Course evaluations	4.0	4.3	4.6	3.8	4.0	4.2	Above threshold
-	Senior Exit Interview	4.0	4.4	4.3	3.9	4.0	4.2	Above threshold

b. Actions taken

All indicators are above target thresholds. To maintain this level of performance, we will support and retain Professor Dunda for CNST 321 are hire, support, and retain Professor Dunda for CNST 332