



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF FOOD, AGRICULTURAL AND BIOLOGICAL ENGINEERING

Construction Systems Management – Bachelor of Science {CONSYM-BS}

Academic Program Learning Outcomes Assessment Plan

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Department Chair: **Scott Shearer.95**

Goals have the inferred prefix of: ***Students will*** ---

Outcomes have the inferred prefix of: ***Students will have the ability to*** ---

CONSYM-BS_SLOAssessmentPlan_2025.docx

Program Learning Goals <i>Broad descriptive statements of what students are to be able to do, know, and care about upon the completion of the program</i>	Supporting/Contributing Outcomes <i>Detailed descriptions of what a student must be able to do to reach a goal under the specific conditions</i>	Methods – Means/Measures <i>The method or means by which the quality of student learning for each goal and associated outcome will be measured and assessed</i>			Type <i>DA denotes direct assessment and IA denotes indirect assessment</i>	Criteria <i>The standards the program will use to evaluate the quality of student learning for each goal and associated outcome</i>	
			Course or program requirement	Embedded course assignment, exam, exercise, or activity to serve as authentic assessment method / the perception, opinion, or attitude of students or others			
1.0 Apply the interpersonal and communication expertise and professional ethics essential for employment and advancement in the construction industry	1.1 Create written communications appropriate to the construction discipline {ACCE SLO #1}	1.1.1	CSM4605	Combined grade for three writing assignments	DA	A	
		1.1.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B	
	1.2 Create oral presentations appropriate to the construction discipline {ACCE SLO #2}	1.2.1	CSM4605	Final presentation	DA	A	
		1.2.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B	
	1.3 Analyze professional decisions based on ethical principles {ACCE SLO #6}	1.3.1	CSM 4641	Course assignment related to ethics	DA	A	
		1.3.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B	
	2.0 Apply and integrate the appropriate construction methods, skills, and techniques for planning and managing construction projects	2.1 Create a construction project safety plan {ACCE SLO #3}	2.1.1	CSM2600	Safety plan assignment	DA	A
			2.1.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
		2.2 Create construction project cost estimates {ACCE SLO #4}	2.2.1	CSM 3450	Take-home exam for an estimating project	DA	A
2.2.2			Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B	
2.3 Create construction project schedules {ACCE SLO #5}		2.3.1	CSM 3451	A schedule lab based on an actual project	DA	A	
		2.3.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B	
2.4 Analyze methods, materials, and equipment used to construct projects {ACCE SLO #7}		2.4.1	CSM 3450	Take-home exam for an estimating project	DA	A	
		2.4.2	CSM 4660	A course project based on a case study building	DA	A	
		2.4.3	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B	

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	2.5 Apply electronic-based technology to manage the construction process {ACCE SLO #8}	2.5.1	CSM 4641	Average grade for two homework assignments using electronic-based technology to deal with issues related to a differing site condition	DA	A
		2.5.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	2.6 Apply basic surveying techniques for construction layout and control {ACCE SLO #9}	2.6.1	CSM 2440	Lab assignment to apply construction layout and control using the Total Station	DA	A
		2.6.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
3.0 Understand the concepts, knowledge, and principles of building subsystems, construction discipline, and business management	3.1 Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process {ACCE SLO #10}	3.1.1	CSM 4642	A 20-question exam	DA	A
		3.1.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	3.2 Understand construction accounting and cost control {ACCE SLO #11}	3.2.1	CSM 4900	A project-based course assignment	DA	A
		3.2.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	3.3 Understand construction quality assurance and control {ACCE SLO #12}	3.3.1	CSM 4641	Average grade for two project-based homework assignments	DA	A
		3.3.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	3.4 Understand construction project control processes {ACCE SLO #13}	3.4.1	CSM 4641	Average grade for two project-based homework assignments	DA	A
		3.4.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	3.5 Understand the legal implications of contract, common, and regulatory law to manage a construction project {ACCE SLO #14}	3.5.1	CSM 4642	Combined grade for two exams and the final project	DA	A
		3.5.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B

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	3.6 Understand the basic principles of sustainable construction {ACCE SLO #15}	3.6.1	CSM 4660	A home assignment related to best management practice	DA	A
		3.6.2	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	3.7 Understand the basic principles of structural behavior {ACCE SLO #16}	3.7.1	CSM 3545	Average grade of three midterms	DA	A
		3.7.2	CSM 3546	Average grade of three midterms	DA	A
		3.7.3	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B
	3.8 Understand the basic principles of HVAC, electrical and piping system {ACCE SLO #17}	3.8.1	CSM 2310	Average grade of two midterms	DA	A
		3.8.2	CSM 2345	Average grade of three midterms	DA	A
		3.8.3	Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	IA	B

EXAMPLE identified “criteria”

Indicate the standards the program will use to evaluate the quality of student learning for each goal and associated outcome. Programs are to indicate both the minimum criteria required to assert a learning outcome (and thus collectively with other outcomes the associated goal) was achieved, and criteria of excellence the program is striving toward.

A	Minimal acceptable criterion for this supporting outcome method is 75% of students scoring 70% or higher on the identified assessment tasks for the measurement of achievement for this outcome. When 90% of the students obtain scores of 90% or higher on the selected assessment associated assignment, the performance standard constituting programmatic excellence for this learning outcome measure will be attained.
B	This indirect measure will serve as an indicator of attainment of this learning goal's supporting outcome. Specifically, minimal acceptable criterion for the identified supporting learning outcome is when the students graduating from the program rate at least 3.5 on average based on scale of 1 to 5 on the question that asks how a student feels that he/she was prepared to accomplish this learning outcome. When the average rating is 4.5 or above, the performance standard constituting programmatic excellence for this learning outcome will be attained.

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