PROGRAM OUTCOMES ASSESSMENT SEMESTER REPORT **Fall 2019**

DEGREE/CERTIFICATE:	Construction Management, Associate of Applied Science (AAS)
DIVISION:	Business, Social Sciences, and History

PROGRAM OUTCOME#	Course Number	Learning Outcome	(Number of Students Assessed) N	"Fives" (Number who Exceed) N≥90	"Threes" (Number who Meet) 89-70	Percentage of Students Competent in Mapped Outcome
Program Outcome 1:						
Apply effective communication, both orally and in writing.	CMGT 1033	1. Describe the role of OSHA on construction sites and in construction accidents.	47	14	28	89.36%
		5. Discuss the role of project management in coordinating safety on construction sites.	47	13	29	89.36%
	CMGT 1103	1. Identify concepts and techniques of the graphic communication language.	30	0	30	100.00%
	CMGT 1213	1. Identify different properties of various building materials used in building construction.	44	15	28	97.73%
	CMGT 2203	4. Conduct project meetings.	37	0	37	100.00%
	CMGT 2413	1. Develop a project for oral presentation.	17	5	10	88.24%
Comments on Program Outcome 1: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 2:						
Apply the skills to estimate quantities and costs for the bidding process in a construction project.	CMGT 2103	2. Apply basic construction methods and procedures to the estimating process.	34	34	0	100.00%
		3. Prepare quantitative materials takeoff for a residential project estimate.	34	34	0	100.00%
		4. Estimate labor and equipment productivity for a residential project.	33	26	6	96.97%
	CMGT 2513	1. Analyze costs when bidding on a construction project.	20	18	0	90.00%
		2. Prepare quantitative materials takeoff for a commercial/industrial project estimate.	20	18	0	90.00%
		3. Use historical cost data for estimating materials, labor, and equipment.	20	18	0	90.00%
Comments on Program Outcome 2: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 3:						

Apply the aptitude to schedule a basic construction project.	CMGT 2413	2. Schedule construction project resources for effective cost control.	17	0	17	100.00%
		3. Determine and adjust activity durations using resource allocation and resource leveling techniques.	17	0	17	100.00%
		4. Monitor and control progress using a construction project schedule.	17	0	17	100.00%
Comments on Program Outcome 3: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 4:						
Apply current technology related to the construction process.	CMGT 1103	5. Create working drawings of a typical residential structure utilizing computer software.	33	23	10	100.00%
	CMGT 2413	5. Use scheduling software in planning and scheduling construction projects.	17	0	17	100.00%
	CMGT 2513	1. Analyze costs when bidding on a construction project.	21	16	5	100.00%
Comments on Program Outcome 4: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 5:						
Apply the interpretation of construction documents (contracts, specifications, and drawings) used in managing a construction project.	CMGT 1103	3. Interpret working drawings of residential and commercial structures.	34	29	4	97.06%
	CMGT 2103	1. Interpret project plans and specifications to prepare an estimate.	25	17	8	100.00%
	CMGT 2203	2. Demonstrate proper use of documents for managing construction projects	37	0	33	89.19%
Comments on Program Outcome 5: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 6:						
Apply basic principles of construction accounting.	CMGT 1103	2. Demonstrate an understanding of project specifications and location of materials by specification division.	35	0	35	100.00%
	CMGT 2413	2. Schedule construction project resources for effective cost control.	17	0	17	100.00%
	CMGT 2203	5. Demonstrate an understanding of how to prepare a construction project progress payment using a schedule of values.	37	0	37	100.00%
Comments on Program Outcome 6: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 7:						

Apply basic surveying techniques used in building layout.	CMGT 2353	1. Demonstrate proper use of surveying equipment and field notes.	16	16	0	100.00%
		2. Determine the measurement of vertical distances by differential leveling.	16	16	0	100.00%
		3. Determine the measurement of angles and directions, horizontal and vertical.	16	16	0	100.00%
		4. Perform a site layout.	16	16	0	100.00%
Comments on Program Outcome 7: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 8:						
Understand basic principles of ethics in the construction industry.	CMGT 2003	5. Explain ethics in construction.	49	13	29	85.71%
	CMGT 2203	3. Identify professional ethics of construction project team members.	37	0	36	97.30%
Comments on Program Outcome 8: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 9:						
Understand the fundamentals of contracts, codes, and regulations that govern a construction project.	CMGT 1033	1. Describe the role of OSHA on construction sites and in construction accidents.	53	0	53	100.00%
	CMGT 1213	2. Explain how different building systems and components are selected, constructed, installed, connected, and integrated.	52	0	51	98.08%
	CMGT 2003	1. Identify the essential elements of a legally enforceable contract.	55	13	32	81.82%
		3. Identify the effects that changes to the scope of work have on contractual obligations.	55	5	35	72.73%
	CMGT 2203	2. Demonstrate proper use of documents for managing construction projects.	37	0	33	89.19%
Comments on Program Outcome 9: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 10:						
Understand basic construction methods, materials, and equipment.	CMGT 1213	1. Identify different properties of various building materials used in building construction.	52	0	52	100.00%
		2. Explain how different building systems and components are selected, constructed, installed, connected, and integrated.	52	0	52	100.00%
		3. Compare properties and applications for heavy timber, dimensional lumber, engineered lumber, structural wood panels.	52	0	52	100.00%

Comments on Program Outcome 10: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 11:						
Understand basic safety hazards on a construction site and standard prevention measures.	CMGT 1033	1. Describe the role of OSHA on construction sites and in construction accidents.	53	0	53	100.00%
		2. Identify unsafe acts and unsafe conditions and how they cause construction accidents.	53	0	53	100.00%
		3. Recognize the four most common causes of construction site fatalities and how to prevent them.	53	0	53	100.00%
	CMGT 2303	2. Apply basic structural design principles.	19	0	19	100.00%
		3. Calculate stresses on structural members.	19	0	19	100.00%
	CMGT 2253	2. Communicate the importance of life safety in the construction and maintenance of buildings.	29	0	25	86.21%
Comments on Program Outcome 11: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 12:						
Understand the basic principles of structural design.	CMGT 2303	1. Explain forces and loads.	27	0	27	100.00%
		2. Apply basic structural design principles.	19	0	19	100.00%
		4. Compare materials for structural design.	19	0	19	100.00%
Comments on Program Outcome 12: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Program Outcome 13:						
Understand the basic principles of mechanical, electrical, and pipings systems.	CMGT 1213	5. Identify major components of electrical, mechanical, and plumbing systems in buildings.	52	0	52	100.00%
	CMGT 2253	1. Apply knowledge of electrical, plumbing, and heating, ventilating, and air conditioning (HVAC) systems in the management of construction projects.	29	0	25	86.21% *
Comments on Program Outcome 13: Students achieved 70% or better on these assessments. We will continue to monitor results.						
Plan of action: How has previous data been used to improve these results (if applicable)? How will the data be used to improve program outcomes? What is the plan of action to improve program outcomes. Students achieved 70% or better on these assessments. We will continue to monitor results.						