Appendix I

Master's Degree Program Outcomes 2012-2013 Assessment Report

Kennesaw State University

Construction Management

Master Degree Program Outcomes 2012-2013 Assessment Report

Mission: The mission of the Construction Management Department is to prepare students for professional construction leadership positions, with a sense of ethical and environmental responsibility, and prepare them for advanced degree programs.

Student Learning Outcomes/Objectives, with Measures and Achievement Targets

LG 1: Continue to update curriculum to reflect global and national construction industry needs.

SG 1: Prepare students for successful construction industry career.

PO1: Prepare bids and estimates for construction projects.

M1: CM 6200 Completion – Students will successfully complete the CM 6200 course to the satisfaction of the faculty.

Source of Evidence: Tests and Project.

Achievement Target: Students will demonstrate that they have mastered techniques for preparing bids and estimates for construction projects by achieving target achievement set for the course level outcomes.

Course CM 6200: Strategic Bidding and Cost - Fall 2012 **Outcomes Assessment & Improvement Plan Test Target** Avg. **Improvement Learning Outcomes** Level Grade Plan The ability to prepare a skeleton detailed estimate for a commercial construction project The ability to prepare a detailed General NO Action Condition Estimate (CSI Div 1) 90 95 Required 3. The ability to prepare an Order of magnitude estimate with Location, Inflation, and Size NO Action 85 89 Required adjustment. Future Plan is to provide student with a Quantity Surveying Refresher as well as a Lecture on 4. The ability to estimate Unit Prices based on

Action Plan: The steps suggested in the improvement plan will be implemented in the next course offering.

85

83

Basic scheduling

M2: Exit Survey – Students will specify the level of achievement of this program level outcome on a scale from 1-5 (highest "5" being Very High and lowest "1" being Very Low) two week before their graduation.

Source of Evidence: Graduate Students Exit Survey Results.

wage rates and crew productivities

Achievement Target: Students will demonstrate that they have mastered techniques for preparing bids and estimates for construction projects by specifying at least 3.5 as their level of achievement for this program level outcome.

Findings: The overall average of graduate students exit survey results for 2012 -2013 academic year (Fall 2012, Spring 2013 and Summer 2013) is 3.31.

Action Plan: CM faculty teaching the course will be presented with the results of the assessment and develop and implement plans to make any needed improvements. Faculty will monitor the performance of the students to identify any problems associated with achieving the outcome.

LG 1: Continue to update curriculum to reflect global and national construction industry needs.

SG 1: Prepare students for successful construction industry career.

PO2: Prepare construction schedule and manage project risks.

M1: CM 6600 Completion – Students will successfully complete the CM 6600 course to the satisfaction of the faculty.

Source of Evidence: Exams, Assignments and Research Report.

Achievement Target: Students will demonstrate that they have mastered knowledge of construction schedule preparation and manage project risk concepts through achieving target achievement set for the course level outcomes.

Course CM 6600: Construction Risk Analysis and Control - Fall 2012 Outcomes Assessment & Improvement

Learning Outcomes	Target Level	Avg.grade	Department Improvement Plan	
1. Understand the concept and probability outcomes of a decision tree analysis for analyzing the risk for pursuing and construction related claim.	85%	Embedded in Course Case Study and Mid- Term Exam 92.5%	The average score of all the students exceeds the target. No improvement needed.	
2. Develop a Risk Register Matrix	80%	Embedded in Course Case Study and Research Project 93.5%	The average score of all the students exceeds the target. Refix target to 90%. Introduce additional learning unit related to Value engineering.	
3. Introduce concept of contract risk mitigation and develop a contract compliance matrix.	85%	Embedded in Final Exam and Case Studies 93%	The average score exceed the target. No action needed at this time.	
4. Provide an overview of the cost of insurance claims / loss and define direct and indirect costs of a construction accident.	80%	Embedded in Case Studies 94%	The average score exceeds target. Refix target to 90%.	
5. Identify common jobsite hazards and prepare a safety flash report to help educate and stop then from occurring.	85%	Embedded in Case Study Course Research Project 93.5%	The average score exceeds the target. Insert an additional instructional learning unit into the syllabus for further development and improvement.	

M2: Exit Survey – Students will specify the level of achievement of this program level outcome on a scale from 1-5 (highest "5" being Very High and lowest "1" being Very Low) two week before their graduation.

Source of Evidence: Graduate Students Exit Survey Results.

Achievement Target: Students will demonstrate that they have mastered knowledge of construction schedule preparation and manage project risk by specifying at least 3.5 as their level of achievement for this program level outcome.

Findings: The overall average of graduate students exit survey results for 2012 -2013 academic year (Fall 2012, Spring 2013 and Summer 2013) is 4.11.

Action Plan: CM faculty teaching the course will be presented with the results of the assessment. Faculty will continue to monitor the performance of the students to ensure they are achieving the outcome.

LG 1: Continue to update curriculum to reflect global and national construction industry needs.

SG 1: Prepare students for successful construction industry career.

PO3: Carry-out project management related tasks.

M1: CM 6600 Completion – Students will successfully complete the CM 6600 course to the satisfaction of the faculty.

M2: CM 6100 Completion – Students will successfully complete the CM 6100 course to the satisfaction of the faculty.

Source of Evidence: Exams, Assignment and Term Paper

Achievement Target: Students will demonstrate that they have mastered knowledge of project management related tasks concepts through achieving target achievement set for the course level outcomes.

Findings: See the tables below

Course CM 6600:	Construction	Risk Analysis a	nd Control - Fall 2012			
Outcomes Assessment & Improvement						
Learning Outcomes	Target Level	Avg.grade	Department Improvement Plan			
1. Understand the concept and probability outcomes of a decision tree analysis for analyzing the risk for pursuing and construction related claim.	85%	Embedded in Course Case Study and Mid- Term Exam 92.5%	The average score of all the students exceeds the target. No improvement needed.			
2. Develop a Risk Register Matrix	80%	Embedded in Course Case Study and Research Project 93.5%	The average score of all the students exceeds the target. Refix target to 90%. Introduce additional learning unit related to Value engineering.			
3. Introduce concept of contract risk mitigation and develop a contract compliance matrix.	85%	Embedded in Final Exam and Case Studies 93%	The average score exceed the target. No action needed at this time.			
4. Provide an overview of the cost of insurance claims / loss and define direct and indirect costs of a construction accident.	80%	Embedded in Case Studies 94%	The average score exceeds target. Refix target to 90%.			
5. Identify common jobsite hazards and prepare a safety flash report to help educate and stop then from occurring.	85%	Embedded in Case Study Course Research Project 93.5%	The average score exceeds the target. Insert an additional instructional learning unit into the syllabus for further development and improvement.			

Course CM 6100: Construction Law: Contracts and Construction Claims - Fall 2012

Outcomes Assessment & Improvement Plan

Types of Coverage and Assessment Used:

- 1. Tests (2)
- 2. HWs (9)
- 3. Term Paper (1)

Performance Criteria Level:

Students will average 75% for all assessments used for a learning outcome.

Assessment Data:

LO	Tl	T2	HWI	HW2	HW3	HW4	HW5	HW6	HW7	HW8	HW9	TP
*												
1	96		100			100		95	92	95	88	87
2	96		100						92	95	88	87
3		84		96					92	95	88	87
4		84	100	96	88	100	85		92	95	88	87
5							85	95	92	95	88	87

*LO - Learning HW: Assignment 1 through Assignment 9

Outcome T1 - Test 1 through Test 2

TP - Term Paper

Outcome Conclusions (improvements)

Students' performance outcome exceeds our 75% goal.

Improvements from Prior Term Brought Forward: This course exceeded all requirements however more guidance in legal research methods to prepare for the term paper will be given.

M3: Exit Survey – Students will specify the level of achievement of this program level outcome on a scale from 1-5 (highest "5" being Very High and lowest "1" being Very Low) two week before their graduation.

Source of Evidence: Graduate Students Exit Survey Results.

Achievement Target: Students will demonstrate that they have mastered knowledge of project management related tasks concepts by specifying at least 3.5 as their level of achievement for this program level outcome.

Findings: The overall average of graduate students exit survey results for 2012 -2013 academic year (Fall 2012, Spring 2013 and Summer 2013) is 3.36.

Action Plan: CM faculty teaching the course will be presented with the results of the assessment and develop and implement plans to make any needed improvements. Faculty will monitor the performance of the students to identify any problems associated with achieving the outcome.

LG 2: Encourage involvement of graduate students in research initiatives.

SG 4: Encourage graduate students to write research paper and proposals.

PO4: Conduct research and disseminate findings through publications.

M1: CM 6000 Completion – Students will successfully complete the CM 6000 course to the satisfaction of the faculty.

Achievement Target: Students will demonstrate that they have mastered concepts of conducting research and disseminating the findings by achieving target achievement set for the course level outcomes.

Course CM 6000: Information Methods (Graduate Course) - Spring 2013 Outcomes Assessment & Improvement Plan

Course Learning Outcomes	Assessment Tool	Target (Instructor)	Students Achieved	Improvement Plan
1) Ability to carry out research process on a subject related to the construction industry 3) acquaint students with the interdisciplinary and dynamic nature of the process	Assignments 1-5	90%	87.8%	Target Not Met. Action required Include additional intermediate steps with the help of an illustration from start to finish
2) <u>Ability</u> to disseminate research information through journal/conference paper based on individual research project completed during the course	Assignment 5	(90%)	92.1%	Target met. No Action Required
4) <u>review</u> library, computer, and communication skills.	Assignment 1-A	85%	92.5%	Met Target. No Action required Raise the target to 90% in next offering

M2: Exit Survey – Students will specify the level of achievement of this program level outcome on a scale from 1-5 (highest "5" being Very High and lowest "1" being Very Low) two week before their graduation.

Source of Evidence: Graduate Students Exit Survey Results.

Achievement Target: Students will demonstrate that they have mastered concepts of conducting research and disseminating the findings by specifying at least 3.5 as their level of achievement for this program level outcome.

Findings: The overall average of graduate students exit survey results for 2012 -2013 academic year (Fall 2012, Spring 2013 and Summer 2013) is 4.92.

Action Plan: CM faculty teaching the course will be presented with the results of the assessment. Faculty will continue to monitor the performance of the students to ensure they are achieving the outcome.

LG 3: Establish the Ph.D. program.

SG 5: Build capacity of the CM department and other resources for applied research.

PO5: Pursue advanced degree programs.

M1: CM 6000 Completion – Students will successfully complete the CM 6000 course to the satisfaction of the faculty.

Source of Evidence: Assignments and Final Paper.

Achievement Target: Students will demonstrate that they do have interest in pursuing advanced degree programs by achieving target achievement set for the course level outcomes.

Course CM 6000: Information Methods (Graduate Course) - Spring 2013 Outcomes Assessment & Improvement Plan

Course Learning Outcomes	Assessment Tool	Target (Instructor)	Students Achieved	Improvement Plan
1) Ability to carry out research process on a subject related to the construction industry 3) acquaint students with the interdisciplinary and dynamic nature of the process	Assignments 1-5	90%	87.8%	Target Not Met. Action required Include additional intermediate steps with the help of an illustration from start to finish
2) <u>Ability</u> to disseminate research information through journal/conference paper based on individual research project completed during the course	Assignment 5	(90%)	92.1%	Target met. No Action Required
4) <u>review</u> library, computer, and communication skills.	Assignment 1-A	85%	92.5%	Met Target. No Action required Raise the target to 90% in next offering

M2: Exit Survey – Students will specify the level of achievement of this program level outcome on a scale from 1-5 (highest "5" being Very High and lowest "1" being Very Low) two week before their graduation.

Source of Evidence: Graduate Students Exit Survey Results.

Achievement Target: Students will demonstrate that they do have interest in pursuing advanced degree programs by specifying at least 3.5 as their level of achievement for this program level outcome.

Findings: The overall average of graduate students exit survey results for 2012 -2013 academic year (Fall 2012, Spring 2013 and Summer 2013) is 4.17.

Action Plan: CM faculty teaching the course will be presented with the results of the assessment. Faculty will continue to monitor the performance of the students to ensure they are achieving the outcome.