SCHOOL OF THE BUILT ENVIRONMENT

DEPARTMENT OF CONSTRUCTION MANAGEMENT

'Faculty - Course Self Evaluation' Assessment Report
Fall 2021

Dated: January 20, 2022

BOWLING GREEN STATE UNIVERSITY

ASSESSMENT PARTICULARS:

No. of Surveys Distributed:	Twelve (12)
No. of Surveys Returned:	Twelve (12)
No. of Courses Evaluated:	Twelve (12)
List of Courses Evaluated:	CONS 2350 - Introduction to Construction CONS 2590 - Construction Document Reading CONS 3180 - Construction Surveying CONS 3360 - Structural Design CONS 3590 - Estimating and Cost Control CONS 4000/5000 - Advanced LEED and Lean Construction CONS 4110 - Construction Safety and Health Management CONS 4350 - Construction Methods and Practices CONS 4420 - Construction Scheduling CONS 4700 - Construction Capstone TECH 6200 - Project Management in Applied Engineering TECH 6440 - Engineering Economics and Technical Strategic Management
Assessment Criteria:	Overall level of preparation of students in the course against each of the ACCE student learning outcomes (SLO) listed by means of Likert Scale: - Very High (Assigned Score = 5.00) - High (Assigned Score =4.00) - Average (Assigned Score = 3.00) - Low (Assigned Score = 2.00) - Very Low (Assigned Score = 1.00)
ACCE SLO Reference:	See Appendix for SLO descriptions
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CONS 2350 - Introduction to Construction
Instructors: Lisa Schaller

ACCE SLO	SLO 18
Rating	Very High
Score	5

Improvements/recommendations (self-reflection) for next offering of course:
1. Keep introducing industry professionals to the labs
2. Keep class involved with a service-learning component
3. More hands-on learning.

CONS 2590 - Construction Document Reading
Instructor: Joseph Lavalette

ACCE SLO	SLO 7
Rating	High
Score	4

Improvements/recommendations (self-reflection) for next offering of course:
1. Instructional area that allows for students to stage their prints and computers in a manner conducive to efficient and effective interpretation.
2. Class size that allows instructor to give students individual assistance when required to reinforce lecture concepts and methodology.

CONS 3180 - Construction Surveying
Instructor: Joseph Lavalette

ACCE SLO	SLO 11
Rating	High
Score	4

Improvements/recommendations (self-reflection) for next offering of course:
1. Access to equipment that is more technically advanced. 2 stations for 50 plus students.
2. Reduce lab size to give students more equipment hands on time.
3. Increased drawing platform proficiency. Prerequisite producing weak skill set.
4. Increased proficiency with Excel. Programming skills are either very good or very weak. Prerequisite.
5. Class size requires TA to take on responsibilities often beyond their skill set.

CONS 3360 - Structural Design
Instructor: Arsenio Rodrigues

ACCE SLO	SLO 19
Rating	High
Score	4

Improvements/recommendations (self-reflection) for next offering of course:

1. Continue to reinforce principles and fundamentals of basic structural constructs and their applications in design and construction.
2. Allow more time and review stages for structural system model project.

CONS 3590 - Estimating and Cost Control

Instructor: Scott Gross

ACCE SLO	SLO 1	SLO 4
Rating	High	Very High
Score	4	5

Improvements/recommendations (self-reflection) for next offering of course:

1. Currently, the homework and modules used in the course are effective.
2. Searching out a new textbook may be a viable change to the course.

CONS 4000/5000 - Advanced LEED and Lean Construction

Instructor: Scott Gross

ACCE SLO	SLO 18
Rating	Very High
Score	5

Improvements/recommendations (self-reflection) for next offering of course:

1. The Green Associate Study Guide was a very effective tool for the LEED portion of the class.
2. The Text for Lean Construction was decent, but I was not completely satisfied with the book. Searching out another option for Lean text is a good idea. There are many texts on lean manufacturing, but few to choose from for lean construction. This is why I settled on the book that I used.
3. The small group exercises were very effective. I would suggest searching out more lean case studies to introduce in the small group discussion.

CONS 4110 - Construction Safety and Health Management

Instructor: Mark Prenzlin

ACCE SLO	SLO 3
Rating	High
Score	4

Improvements/recommendations (self-reflection) for next offering of course:

1. I will encourage students to recognize the importance of creating written communications that are well-organized and include correct spelling, grammar, and punctuation.
2. I will continue to emphasize the importance of proof-reading written communication and making appropriate corrections prior to sending/submitting written work.
3. I will emphasize the importance of planning for safety and identifying and documenting specific procedures as they relate to safety in the Construction Project Safety Plan.

CONS 4350 - Construction Methods and Practices
Instructor: Alan Atalah

ACCE SLO	SLO 8	SLO 10
Rating	High	High
Score	4	4

Improvements/recommendations (self-reflection) for next offering of course:
1. For SLO 8, the students scored an average of 81.74% and 80.70% in TESTs 1 and 2, which is more than 70% threshold for the ACCE accreditation, and I consider it high. I consider more than 85% as an average score to be very high.
2. For SLO 8, I am considering adding the synchronization among several equipment/systems working simultaneously to achieve the highest possible productivity, but which content to take out needs more consideration.
3. For SLO 8, I am considering adding the content of how to measure the construction productivity, but the challenge what to take out.
4. We are implementing Procore for the first time this semester after learning the program during the summer. While the results are very good 96.97%, 71.52%, and 83.03% for the assignment General Contractor Courses Project Manager: Project Management (9374153), Procore - Submittals (9650336), and Documentation and Record Keeping at the Jobsite (9650412) respectively. I will update the assignments based on the gained experience.

CONS 4420 - Construction Scheduling
Instructor: Alan Atalah

ACCE SLO	SLO 5	SLO 16
Rating	Very High	High
Score	5	4

Improvements/recommendations (self-reflection) for next offering of course:
1. Have the same instructor teach both sections.
2. I recommend offering this course every semester with the lecture and the lab offered in a computer lab that have P6.
3. Ensure that the exams can be taken in the computer lab; therefore, reserve the computer lab is available during these exam sessions.
4. Allocate more time and practice on the schedule update portion.

CONS 4700 - Construction Capstone
Instructor: Scott Gross

ACCE SLO	SLO 2	SLO 9
Rating	High	Very High
Score	4	5

Improvements/recommendations (self-reflection) for next offering of course:
1. No major changes.
2. Finding another AIC online study guide would be helpful.

TECH 6200 - Project Management in Applied Engineering
Instructor: Brian Swope

SLO	**Demonstrate the critical skills necessary in project management and leadership**
Rating	Average
Score	3

Improvements/recommendations (self-reflection) for next offering of course:
To improve this course, I might suggest adding more in-person lectures, and providing students access to Microsoft Project.

TECH 6440 - Engineering Economics and Technical Strategic Management
Instructor: Alan Atalah

SLO	**Learn economic management concepts and their relationship to economic cycles**	**Learn & apply time-value of money concepts and principles**	**Evaluate buy/ lease scenarios**	**Risk management decisions and sensitivity analysis**
Rating	Very High	High	Average	Very High
Score	5	4	3	5

Improvements/recommendations (self-reflection) for next offering of course:
1. Assign the class in a computer lab because we use excel extensively. If the student does the illustrated action simultaneously with the instructor, the retention rate will be much higher.
2. Allocate more time to chapter 11 and its concepts.

SUMMARY OF SCORE / AVERAGE PER ACCE SLO:

ACCE SLO	AVERAGE
1	4.0
2	4.0
3	4.0
4	5.0
5	5.0
7	4.0
8	4.0
9	5.0
10	4.0
11	4.0
16	4.0
18	5.0
19	4.0

APPENDIX:

ACCE - STUDENT LEARNING OUTCOMES

1. Create written communications appropriate to the construction discipline.
2. Create oral presentations appropriate to the construction discipline.
3. Create a construction project safety plan.
4. Create construction project cost estimates.
5. Create construction project schedules.
6. Analyze professional decisions based on ethical principles.
7. Analyze construction documents for planning and management of construction processes.
8. Analyze methods, materials, and equipment used in construction processes.
9. Apply construction management skills as a member of a multidisciplinary team.
10. Apply electronic-based technology to manage the construction process.
11. Apply basic surveying techniques for construction layout and control.
12. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
13. Understand construction risk management.
14. Understand construction accounting and cost control.
15. Understand construction quality assurance and control.
16. Understand construction project control processes.
17. Understand the legal implications of contract, common, and regulatory law to manage a construction project.
18. Understand the basic principles of sustainable construction.
19. Understand the basic principles of structural behavior.
20. Understand the basic principles of mechanical, electrical and piping systems.