

**Assurance of Student Learning
2019-2020**

Ogden College of Science & Engineering

School of Engineering and Applied Sciences

Architectural Science - 518

Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages.

Student Learning Outcome 1: Graduates will possess/ demonstrate the ability to identify, formulate strategies and solve technical problems

Instrument 1 Analysis of pre-design of capstone project (comprehensive design)

Instrument 2 Analysis of design development and construction documents of capstone project (Senior project)

Instrument 3

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.

Met

Not Met

Student Learning Outcome 2: Graduates will demonstrate an ability to possess effective oral and graphic communication skills.

Instrument 1 Appraisals from industry professionals of capstone projects

Instrument 2 Analysis of 2nd and 3rd project in design studio II

Instrument 3 Appraisal of student presentations by jurors at WKU Research Conference

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.

Met

Not Met

Student Learning Outcome 3: Graduates will demonstrate the knowledge and capacity to manage a project through the different design phases.

Instrument 1 Analysis of schematic design of capstone project

Instrument 2 Appraisals from industry professionals of capstone projects

Instrument 3 Student Portfolio

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.

Met

Not Met

Program Summary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.)

Changes have been made to pre-requisite courses in the program to improve the outcomes. Courses which changes have been made are AMS 251, AMS 363, AMS 369 and AMS 469. In addition, curriculum changes are being worked on by faculty on pre-requisites for AMS 363. New software technology is being introduced in the classroom to improve student graphic communication outcomes. A thesis book has been added to the capstone to improve written communication. Faculty in the program are also working on improving the rubric that is being currently utilized for assessments. These changes could not be implemented due to COVID-19 but are currently being worked on and will be implemented in the 2021-2022 and 2022-2023 assessment cycles.

Student Learning Outcome 1

Student Learning Outcome	Graduates will possess/ demonstrate the ability to identify, formulate strategies and solve technical problems		
Measurement Instrument 1	Direct: Analysis of pre-design of capstone project (comprehensive design) Senior AS students work on a year-long capstone (fall and spring semesters). The students were assessed on the first phase of the capstone to evaluate their competency in pre-design tasks in a given design project.		
Criteria for Student Success	students will have a 3.0 satisfaction rating on a 4 point scale		
Program Success Target for this Measurement	75 % of senior students	Percent of Program Achieving Target	78 % of senior students
Methods	Students assessed 20. Student work on their project proposal, case-study, site analysis, program and code-review were analyzed based on a rubric. The rubric was completed by faculty in the AS program as well as industry professionals.		
Measurement Instrument 2	Direct: Analysis of design development and construction documents of capstone project (Senior project) Senior AS students work on a year-long capstone (fall and spring semesters). The students were assessed on the design development drawings and the set of construction drawings at the end of the spring semester.		
Criteria for Student Success	students will have a 3.0 satisfaction rating on a 4 point scale		
Program Success Target for this Measurement	75 % of senior students	Percent of Program Achieving Target	81 % of senior students
Methods	Students assessed 21. Student work on design development and construction drawings were analyzed based on a rubric. The rubric was completed by faculty in the AS program as well as industry professionals.		
Measurement Instrument 3			
Criteria for Student Success			
Program Success Target for this Measurement		Percent of Program Achieving Target	

Methods			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.			Met
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)			
<p>The program has begun implementing changes to pre-requisite courses. These changes are moving through the curriculum process currently. Faculty were aiming to introduce a programming component in design studio – AMS 369 in Spring 2020 But due to Covid-19 this was delayed. This will be implemented in Spring 2021 with the possibility of assessment in 2022-2023 assessment cycle.</p> <p>Due to changes in course offering modalities in Fall 2020 plans to implement additional technical assignments in upper level courses have been delayed. Additional assignments to cover areas of site analysis and code review will be introduced in two courses AMS 363 and AMS 469 to improve pre-design outcomes in Fall 2022.</p>			
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)			
Follow up will occur in the 2022-2023 assessment period due to the difficulty of implementing proposed changes during COVID 19.			

Student Learning Outcome 2			
Student Learning Outcome	Graduates will demonstrate an ability to possess effective oral and graphic communication skills.		
Measurement Instrument 1	Direct: Appraisals from industry professionals of capstone projects presentations.		
Criteria for Student Success	Students will score a minimum 3.0 satisfaction on a 4 point scale		
Program Success Target for this Measurement	75% of Students	Percent of Program Achieving Target	90 % of senior students
Methods	<p>Students assessed 21.</p> <p>At the end of the semester students present their capstone work to industry professionals and faculty. Students are assessed on their graphic and oral skills. The rubric was completed by industry professionals.</p>		
Measurement Instrument 2	Direct: Analysis of 2nd and 3rd project in design studio II		
Criteria for Student Success	Students will score a minimum 3.0 satisfaction on a 4 point scale for project 2 and project 3		
Program Success Target for this Measurement	75% of Students	Percent of Program Achieving Target	76 % of students
Methods	<p>Students assessed 13.</p> <p>Student design work on project 2 and 3 were analyzed based on a rubric. At the completion of each project students create a</p>		

	power point and/or presentation board highlighting necessary components of the project. Students also give a verbal presentation of their projects. The rubric was completed by faculty in the AS program who attended student presentations for project 2 and 3. The assessments were completed during the presentation itself.				
Measurement Instrument 3	Appraisal of student presentations by jurors at WKU Research Conference				
Criteria for Student Success	Students will score a minimum 8 satisfaction on a 10 point scale during presentations at the WKU research conference				
Program Success Target for this Measurement	75%	Percent of Program Achieving Target	---		
Methods	No data could be collected this academic year due to COVID-19. While students had submitted abstracts for the conference due to COVID they could not participate due to lack of personal software.				
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.			<table border="1"> <tr> <td>Met</td> <td>Not Met</td> </tr> </table>	Met	Not Met
Met	Not Met				
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)					
Faculty in the As program have extended the assessment to include a written component. It was planned to add a thesis book to the capstone course but due to the current conditions this has been postponed to the 2020-2021 assessment cycle. Additional presentation opportunities have been created for students in design studios I (AMS 369) & II (AMS 469). Faculty are working to implement these aspects in the 2021-2022 assessment cycle.					
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)					
Follow up for communication will happen in the 2022-2023 assessment.					

Student Learning Outcome 3			
Student Learning Outcome	Graduates will demonstrate the knowledge and capacity to manage a project through the different design phases		
Measurement Instrument 1	Direct: Analysis of schematic design of capstone project		
Criteria for Student Success	Students will score a minimum 3.0 satisfaction on a 4 point scale		
Program Success Target for this Measurement	75% of Students	Percent of Program Achieving Target	78 % of senior students
Methods	Student work on design development and construction drawings were analyzed based on a rubric. The rubric was completed by faculty in the AS program as well as industry professionals.		
Measurement Instrument 2	Appraisals from industry professionals of capstone projects		

Criteria for Student Success	Students will score a minimum 3.0 satisfaction on a 4 point scale		
Program Success Target for this Measurement	75% of Students	Percent of Program Achieving Target	78 % of senior students
Methods			
Measurement Instrument 3	Student Portfolio		
Criteria for Student Success	Students will score a minimum 3.0 satisfaction on a 4 point scale		
Program Success Target for this Measurement	75% of Students	Percent of Program Achieving Target	-- of senior students
Methods	Due to Covid 19 we could not use this instrument for measurement		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.			Met
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)			Not Met
AMS 351 will be taught to the students in the spring semester of the sophomore year. It will be a pre-requisite for AMS 363 which will help students create an enhanced set of construction documents. This change is currently moving through the curriculum approval process.			
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)			
This will be assessed in the 2022-2023 academic year.			