

## **Bachelor of Applied Science in Allied Health (BASAH)**

**Division or Department: School of Allied Health (SAH)** 

**Assessment Year: 2021** 

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**Northwestern State University Mission Statement**: Northwestern State University is a responsive, student-oriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, state, and nation.

College of Nursing and School of Allied Health Mission Statement: Northwestern State University College of Nursing and School of Allied Health serves an increasingly diverse student population while advancing the mission of the University by offering excellent and innovative undergraduate, graduate, certificate, and continuing education programs that are designed to assist individuals in achieving their goals to become responsible and contributing members of an interprofessional global community that improves the health of our region, state, and nation.

### **Bachelor of Applied Science in Allied Health Purpose and Objectives:**

**BASAH Program Purpose** 

To provide students with the education and skills to function as an integral part of the health care community and the opportunity for advancement in the allied health professions.

- To provide opportunities which will enhance the development of roles in the allied health professions
- To provide a foundation for allied professionals to become lifelong learners and to strive for continued professional growth

# **BASAH Program Objectives**

Graduates of the BASAH program should be able to:

- Provide patient-centered care.
- Work as part of interdisciplinary teams.
- Synthesize communication strategies in a healthcare environment.
- Utilize informatics.
- · Apply quality improvement.
- Demonstrate the ability to utilize research skills for the practice of evidence-based healthcare.
- Utilize critical thinking skills to resolve healthcare-related problems.

# Methodology

- 1. Data from assessment tools are collected and sent to the program coordinator.
- 2. The program coordinator enters the data into the tables for each SLO.
- 3. The results are shared with the BASAH Assessment Committee. The committee discusses data analysis, interpretation, actions, trends, results, and future plans.
- 4. The BASAH Assessment committee findings are discussed in the School of Allied Health faculty meetings. Additional insights and actions are added to the assessment plan as necessary.

Student Learning Outcome		Tool	Measure			Resu	lts		
I. S	ynthesize	A. Portfolio	100% of		2021	2020	2019	2018	2017
CC	ommunication	project (ALHE	students will	N	10	4	6	11	14
	trategies in a	4900) spring	achieve a score	Mean	97.3	77.75	94.5	93.45	83.1
he	ealthcare environment.		of 70 or higher.	Range	83-	50-	87-	69-	0-
				_	100	91	100	100	100
				%	100	75	100	91	79
				#not	0	1	0	1	3
				meeting					
		D ALLIE 4040	4000/ 5		2021	2020	2019	2018	2017
		B. ALHE 4610	100% of	N	3	N/A	N/A	N/A	N/A
		Proposal	students will	Mean	90.3	N/A	N/A	N/A	N/A
		Presentation	achieve a score	Range	77-	N/A	N/A	N/A	N/A
		(Spring)	of 70 or higher.	_	99				
				%	100	N/A	N/A	N/A	N/A
				#not	0	N/A	N/A	N/A	N/A
				meeting					

# SLO 1: Synthesize communication strategies in a healthcare environment. Findings:

# Measure A: ALHE 4900 Portfolio Project

2021: Met- 100% of students achieved a 70% or higher 2020: Unmet—only 75% of students achieved a 70% or higher

2019: Met—100% of students achieved a 70% or higher 2018: Unmet—only 91% of students achieved a 70 or

higher

2017: Unmet—only 79% of students achieved a 77% or higher.

# **Measure B: ALHE 4610 Proposal Presentation**

2021: Met- 100% of students achieved a 70% or higher.

2020: N/A 2019: N/A 2018: N/A 2017: N/A

**Measure A: ALHE 4900 Portfolio Project:** Based on the analysis of the 2020-2021 results, the faculty made the following changes in 2021 to drive the cycle of improvement. First, the faculty would continue to provide brief videos to help students understand the quality and quantity of work required and expected for this assignment. Additionally, faculty would provide examples of projects to give students a better idea of their submission. Finally, several virtual meetings would be held to answer student questions and provide assistance throughout the course. This measure is obtained from student portfolio project in ALHE 4900 and is used to assess written communication skills in a healthcare environment.

As a result of these changes, in 2021, the target was met, 100% of students scored 70% or higher on the portfolio project, indicating that all students were able to synthesize communication strategies in a healthcare environment. These changes had a direct impact on the student's ability to communicate in the healthcare environment. This measure had a significant increase from the previous year.

**Measure B: ALHE 4610 Proposal Presentation:** This is a new measure for the 2021-2022 AC. As such we have no data to compare. Based on the results of the 2020-2021 assessment cycle, this measure was changed to allow for some stability. The previous measure was dependent on students being allowed to complete a service-learning activity. Due to COVID-19, service-learning opportunities were limited. The ALHE 4610 proposal presentation involves students presenting a quality management project to an imaginary board of directors. Students create the proposal and present it using a narrated PowerPoint or other presentation software. This project will be a good measure for the SLO and allow for some stability since it is not dependent upon students participating in service learning. This measure was met for the AC 2021-2022.

This is a new measure for this assessment cycle. It is used to assess verbal communication skills and appears to be a good measure to assess students' ability to synthesize communication strategies in a healthcare setting.

**Decisions:** After changes were made for both measures, they were both met in the 2021-2022 AC. To improve student outcomes for this student learning outcome, faculty will continue to implement strategies to help students understand the expectations for these assignments.

In terms of students' ability to synthesize communication strategies in the healthcare environment, evidence shows students met both targets. Based on the results of the 2021-2022 AC results, the following actions will be implemented in the 2022-2023 AC:

- Collect data in the fall and spring semesters for measure A to provide more evidence for decisions to improve the program and student learning.
- Conduct the virtual meeting in ALHE 4900 to answer student questions and provide assistance throughout the course.
- Provide example projects for students to review in ALHE 4900.
- Continue to monitor ALHE 4610 proposal presentation as it is a new measure.

These actions will maintain or improve students' ability to synthesize communication strategies in the healthcare environment.

Student Learning Tool Outcome		Measure	Results						
II. De	emonstrate the	A. Research	100% of		2021	2020	2019	2018	2017
ab	oility to utilize	Proposal	students will	N	9	N/A	N/A	N/A	N/A
re	search skills for	(ALHE 4520)	achieve a	Mean	98.6	N/A	N/A	N/A	N/A
ev	e practice of vidence-based	fall	score of 70 or higher.	Range	95- 99	N/A	N/A	N/A	N/A
he	ealthcare			%	100	N/A	N/A	N/A	N/A
				#not	0	N/A	N/A	N/A	N/A
				meeting					
		D 14 1 1 0	4000/ 5						
		B. Module 2	100% of		2021	2020	2019	2018	2017
		Quiz:	students will	N	9	10	11	15	11
		"Introduction	achieve a	Mean	97.8	97	97.3	83.3	78.6
		to Quantitative	score of 70 or	Range	90-	90-	90-	70-	0-
		& Qualitative	higher.		100	100	100	100	100
		Research"		%	100	100	100	100	64
		(ALHE 4520)		#not	0	0	0	0	4
		fall		meeting					

# SLO 2: Demonstrate the ability to utilize research skills for the practice of evidence-based healthcare. Findings:

# Measure A: ALHE 4520 Research Proposal

2021:Met—100% of students achieved a 70% or higher

2020: N/A 2019: N/A 2018: N/A 2017: N/A

# Measure B: ALHE 4520 Quiz— Qualitative/Quantitative Research

2021: Met—100% of students achieved a 70% or higher 2020: Met—100% of students achieved a 70% or higher 2019: Met—100% of students achieved a 70% or higher 2018: Met—100% of students achieved a 70% or higher 2017: Unmet—only 64% of students achieved a 77% or higher.

**Measure A: ALHE 4520 Research Proposal:** This is a new measure for the 2021-2022 AC. Due to continued changes intended to help improve student learning, the previous measure was adapted to a written research proposal. Since this is a new measure, we have no data to compare. This measure is used to assess students' ability to utilize research skills for the practice of evidence-based healthcare. This measure was met for the 2021-2022 AC. This measure is used to assess the students' ability to utilize research skills for the practice of evidence-based healthcare.

This is a new measure for the 2021-2022 assessment cycle and this target was met with 100% of students scoring 70% or higher. These changes show a direct increase in students' ability to utilize research skills for the practice of evidence-based healthcare.

**Measure B: ALHE 4520 Quiz—Qualitative/Quantitative Research:** This measure has been met for the last four years. Based on these results and to drive continuous improvement, faculty redesigned the course in 2020-2021 and new learning materials were added, and this has increased student engagement and student learning. This measure is derived from a quiz in which student's are tested on their ability to utilize research skills for the practice of evidence-based healthcare.

As a result of these changes, in 2021, the target was met; 100% of students scored 70% or higher on the qualitative/quantitative research project. While there is always room for improvement, these changes had a direct impact on the student's ability to perform research.

**Decisions:** For the 2021-2022 assessment cycle, the results for measure B remained consistent with last year's results. Measure A was a new measure, and all students met the benchmark. The BASAH Assessment Committee carefully reviewed these results and determined that no major modifications were needed for this SLO. Since this course is being used by Nursing for assessment purposes, this course will continue to be revised. Faculty are closely evaluating this course from semester to semester to make additional improvements.

In terms of students' ability to utilize research skills for the practice of evidence-based healthcare, evidence shows positive results with both measures met. Based on the analysis of the 2020-2021 AC results, the following actions will be implemented in the 2022-2023 AC:

- Continue to refine ALHE 4520 based on faculty assessment and student feedback. This course is interdisciplinary for nursing and allied health majors, and substantial data is being collected and assessed due to the number of students in the course.
- Incorporate interactive activities to assist students in meeting course objectives.
- Use additional online open resources.

These actions will improve students' ability to utilize research skills for the practice of evidence-based healthcare.

Student Learning		Tool	Measure	Results					
	Outcome			1		•	-		, ,
III.	Utilize critical	A. Case study	100% of		2021	2020	2019	2018	2017
	thinking skills to	assignment	students will	N	8	10	22	31	21
	resolve healthcare-	(ALHE 4630)	achieve a	Mean	97.6	90.3	92.72	93.45	82.0
	related problems	spring	score of 70	Range	90-	78-	75-	72-	0-
			or higher.		100	99	100	100	100
				%	100	100	100	100	81
				#not	0	0	0	0	4
				meeting					
		B. Leadership	100% of		2021	2020	2019	2018	2017
		challenge	students will	N	9	10	15	14	37
		assignment	achieve a	Mean	88.3	85.6	87.5	91.9	71.3
		(ALHE 4600)	score of 70	Range	23.33-	70-	75-	83-	0-98
		fall	or higher.		100	98	97	100	
				%	89	100	100	100	70
				#not	1	0	0	0	11
				meeting					

SLO 3: Utilize critical thinking skills to resolve healthcare-related problems.

## Findings:

# Measure A: ALHE 4630 Case Study

2021: Met—100% of students achieved a 70% or higher. 2020: Met—100% of students achieved a 70% or higher 2019: Met—100% of students achieved a 70% or higher 2018: Met—100% of students achieved a 70% or higher 2017: Unmet—only 81% of students achieved a 77% or higher.

# Measure B: ALHE 4600 Leadership Challenge

2021: Unmet—only 89% of students achieved a 70% or higher.

2020: Met—100% of students achieved a 70% or higher 2019: Met—100% of students achieved a 70% or higher 2018: Met—100% of students achieved a 70% or higher 2017: Unmet—only 70% of students achieved a 77% or higher.

**Analysis:** For the previous three years, both measures have been met. In the 2021-2022 AC, measure A was met and measure B was unmet. Faculty have continued to implement changes to ensure student success. Video conferences have been implemented and research resources have been added to assist students.

**Measure A: Case Study:** This measure was met for the past 4 years. However, based on these results and a need to drive continuous improvement, this course has continued to undergo significant changes. In 2020, faculty included more resources and interactive activities to engage students. A video was also added to describe the case study and provide students with a better understanding of the expectations for the assignment. This measure focuses on assessing student's ability to utilize critical thinking skills to resolve healthcare related problem.

As a result of changes, in 2021, the target was met, 100% of students scored 70% or higher on the case study assignment, indicating that all students were demonstrating critical thinking skills to resolve healthcare-related problems. These changes had a direct impact on the student's ability to demonstrate critical thinking skills through completion of a case study.

**Measure B: Leadership Challenge:** This measure was met for the previous three years. However, to drive continuous improvement, the course project description was revised, and more examples were provided. Despite these changes, however, this measure was unmet in the 2021-2022 AC. In examining students who scored lower on this measure, it was found that there were two main reasons for their low scores: late assignment submissions and submissions with missing components. This measure evaluates student's ability to utilize critical thinking skills to resolve healthcare related problems.

As a result of continuous improvement, this measure was met with 100% of students achieving a score of 70% or higher demonstrating the student's ability to use critical thinking skills to resolve healthcare problems.

**Decisions:** Based on the results of the 2020-2021 AC results and to drive continuous improvement in this SLO, faculty will continue to monitor student progress on both assignments. The BASAH Assessment Committee determined some changes were needed for improvement. First, for measure A, videos will be updated to ensure student understanding of the assignment, and the guidelines and rubric will be evaluated. Second, for measure B, the guidelines and rubric will be revised again to be more descriptive to help students understand the expectations for the assignment. Also, the rubric will

be revised to correlate more closely with the guidelines for the assignment. Finally, more exemplars will be provided for student guidance.

Evidence shows that both measures were Measure A is met and measure B was unmet, demonstrating students did not meet this SLO in terms of students' ability to utilize critical skills to resolve healthcare-related problems. Based on the analysis of the AC 2021-2022 results, the following actions will be implemented in the AC 2022-2023:

- Include more resources and interactive activities in ALHE 4630 to engage students.
- Review guidelines and rubric for ALHE 4630 Case Study to assure congruence and clarify expectations.
- Revise guidelines and rubric for ALHE 4600 Leadership Challenge to be more descriptive of the expectations for the assignment.
- Correlate the rubric for ALHE 4600 Leadership Challenge with guidelines for the assignment.
- Provide ALHE 4600 Leadership Challenge exemplars

These actions will continue to allow students to demonstrate their ability to utilize critical skills to resolve health-related problems.

Student Learning Outcome		Tool	Measure	Results					
IV.	Utilize informatics	A. Informatics	100% of		2021	2020	2019	2018	2017
	and its role within	project (ALHE	students will	N	11	15	12	28	29
	healthcare arenas	4230) spring	achieve a	Mean	92.8	87.3	95.25	95.32	89.3
			score of 70 or	Range	45-	37-	71-	75-	30-
			higher.	_	100	100	100	100	100
				%	91	87	100	100	94
				#not	1	2	0	0	2
				meeting					
		D D: .	4000/ 5						
		B. Discussion	100% of		2021	2020	2019	2018	2017
		Forum #5 "The	students will	N	11	15	13	26	29
		role of	achieve a	Mean	100	98.6	100	99.81	98.4
		technology	score of 70 or	Range	100	79-	100	95-	85-
		within health	higher.			100		100	100

care fields"	%	100	100	100	100	100
(ALHE 4230)	#not	0	0	0	0	0
spring	meeting					

SLO 4: Utilize informatics and its role within healthcare arenas.

## Findings:

**Measure A: ALHE 4230 Informatics Project** 

2021: Unmet—91% of students achieved a 70% or

higher

2020: Unmet—87% of students achieved a 70% or

higher

2019: Met—100% of students achieved a 70% or higher

2018: Met—100% of students achieved a 70% or higher

2017: Unmet—94% of students achieved a 77% or

higher

Measure B: ALHE 4230 Discussion 5

2021: Met—100% of students achieved a 70% or higher

2020: Met—100% of students achieved a 70% or higher

2019: Met—100% of students achieved a 70% or higher

2018: Met—100% of students achieved a 70% or higher

2017: Met—100% of students achieved a 77% or higher

**Analysis:** In 2020-2021, measure A was unmet and measure B was met. Similar results were reported in 2021-2022 AC with measure A unmet and measure B met.

Based on the results of 2020-2021 assessment cycle and to drive continuous improvement, faculty implemented video conferencing for more student interaction and provided project examples to help students understand the expectations for the assignments. In 2020-2021, measure A was unmet and measure B was met. Similar results are reported for 2021-2022 with measure A unmet and measure B met. Measure A showed a slight increase in scores with only one student not meeting the benchmark.

Measure A: ALHE 4230 Informatics Project: For the 2021-202 AC, this measure was unmet, with 91% of students meeting the benchmark. One student scored below the benchmark. The project consists of a paper and a presentation. The student failed to submit a portion of the assignment. Based on these results and to create improvement, the faculty decided upon several strategies. First, a video with an explanation of the project and expectations will be created. Next, a checklist for the assignment will be developed to help students ensure that all components of the assignment are included. Additionally, examples of projects will be included to help students understand the expectations. Finally, faculty will send reminders to help students meet the deadlines for submission.

As a result of these changes, in 2021, the target was still unmet; 100% of students did not score 70% or higher on the informatics project. Only 87% of the students scored 70% or higher, which is a decrease over the previous years. While there is still room for improvement, these changes had a direct impact on the student's ability to utilize informatics and its role in the healthcare arena.

**Measure B: ALHE 4230 Discussion 5:** This measure was met for the 5<sup>th</sup> year for the 2021-2022 AC. All students performed well on this measure. Based on these results, and in an effort for continuous improvement, faculty will post reminders to help students remember due dates.

As a result of these changes, in 2021, the target was met, 100% of students scored 70% or higher on the discussion of the role of technology within healthcare fields, indicating that all students were able to utilize informatics and understand its role in the healthcare arena. These changes had a direct impact on the student's ability to understand informatics in the healthcare arena.

**Decisions:** The results for the 2021-2022 assessment cycle show a decrease for this SLO. Therefore, based on these results, the faculty and the BASAH Assessment Committee have decided to implement several strategies to improve student learning for this SLO. Based on the analysis of the 2021-2022 AC assessment cycle, the faculty will implement the following strategies for the 2022-2023 AC:

- Create a video for measure A to fully explain the requirements for the project and expectations for student success.
- Develop a checklist for measure A to help students ensure that all components of the assignment are submitted.
- Post examples of good quality projects for measure A to help students understand the expectations.
- Post frequent reminders for all assignments in ALHE 4230 to assist students in meeting deadlines.

These actions will continue to allow students to demonstrate the ability to utilize informatics and its role within healthcare arenas.

## Comprehensive Summary of Key Evidence of Improvements Based on Analysis of Results.

Based on the analysis of the 2020 results, in the 2021 assessment year, the BASAH program implemented many plans to enhance student learning with the overall goals of students demonstrating student learning outcomes and graduating.

The 2021-2022 AC was an extraordinary year as we were coming out of a global pandemic. Nonetheless, the BASAH program continued and to make adjustments as the year progressed to address student learning. However, overall, there were some decreases in terms of achievement of the SLOs established by the program. Only SLO 2 was met this year. For SLO 1, one measure was unmet, and one had a significant increase in mean scores. SLO 2 had one new measure and both measures were met. For SLO 3, one was unmet and the other measure was met. Finally, for SLO 4 one measure was unmet, and the other measure was unmet.

While these results are disappointing, the faculty are confident that strategies can be implemented in 2022-2023 AC to improve all SLOs for the BASAH program. Additionally, the faculty felt that the strategies implemented in the 2021-2022 AC were not entirely unsuccessful. Although there were some decreases and unmet measures, there were many circumstances outside of faculty and student control that could have had a detrimental effect on student learning. Overall, the decreases were fairly small and could be improved with some changes to assist students. Faculty will continue to use the strategies that were implemented in 2021-2022 and add to those for continued improvement.

Continuous improvement is an emphasis for the BASAH program. The focus on continual improvement has brought forth many changes that have been executed, throughout the program, to positively affect student learning to meet the needs of the allied health student while preparing them for the future as allied health practitioners. Many of these changes were initiated during the assessment process.

The following reflects all of the changes implemented to drive the continuous process of seeking improvement in AC 2021-2022. These changes are based on the knowledge gained through the analysis of the AC 2020-2021 results:

- SLO 1: Synthesize communication strategies in a healthcare environment.
  - o Implemented strategies to improve student research in ALHE 4900.
  - Conducted virtual meetings to discuss expectations for portfolio project (measure A).
  - Used proposal presentation in ALHE 4610 for measure B.
- SLO 2: Demonstrate the ability to utilize research skills for the practice of evidence-based healthcare.
  - Revised ALHE 4520 to become an interdisciplinary course for nursing and allied health majors.
  - Used a new measure research proposal for measure A.
  - o Added additional online open resources.

- SLO 3: Utilize critical thinking skills to resolve healthcare-related problems.
  - Added video conferences throughout the course to ensure that students are fully aware of assignment expectations and allow more student engagement.
  - Implemented in ALHE 4600 and ALHE 4630 to assure continued student success.
  - Added additional clarification and links to ALHE 4600 for the leadership challenge to improve student understanding
- SLO 4: Utilize informatics and its role within healthcare arenas
  - Conducted periodic video conferencing to provide guidance to students and to allow for more student engagement.
  - o Provided project exemplars for students to have a better reference for quality projects.

## **Plan of Action Moving Forward**

Based on the evidence provided from the 2021-2022 assessment plan, the BASAH program will make the following changes for continuous program improvement in the 2022-2023 AC:

- SLO 1: Synthesize communication strategies in a healthcare environment.
  - Collect data in the fall and spring semesters for measure A to provide more evidence for decisions to improve the program and student learning.
  - Conduct virtual meetings in ALHE 4900 to answer student questions and provide assistance throughout the course.
  - o Provide example projects for students to review in ALHE 4900.
  - o Continue to monitor ALHE 4610 proposal presentation as it is a new measure.
- SLO 2: Demonstrate the ability to utilize research skills for the practice of evidence-based healthcare.
  - Continue to refine ALHE 4520 based on faculty assessment and student feedback. This course is
    interdisciplinary for nursing and allied health majors, and substantial data is being collected and assessed
    due to the number of students in the course.
  - o Incorporate interactive activities to assist students in meeting course objectives.
  - Use additional online open resources.
- SLO 3: Utilize critical thinking skills to resolve healthcare-related problems.
  - Include more resources and interactive activities in ALHE 4630 to engage students.
  - Review guidelines and rubric for ALHE 4630 Case Study to assure congruence and clarify expectations.
  - Revise guidelines and rubric for ALHE 4600 Leadership Challenge to be more descriptive of the expectations for the assignment.
  - o Correlate the rubric for ALHE 4600 Leadership Challenge with guidelines for the assignment.

- SLO 4: Utilize informatics and its role within healthcare arenas
  - Create a video for measure A to fully explain the requirements for the project and expectations for student success.
  - Develop a checklist for measure A to help students ensure that all components of the assignment are submitted.
  - o Post examples of good quality projects for measure A to help students understand the expectations.
  - o Post frequent reminders for all assignments in ALHE 4230 to assist students in meeting deadlines.