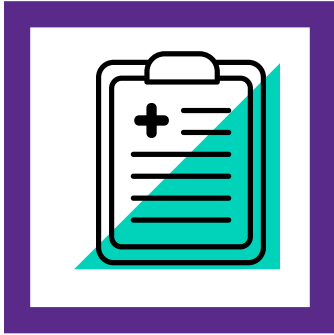


College of Allied Health Sciences

Actions Taken to Improve Student Learning Based on Analysis of Results



Undergraduate

*Programs included:

- Health Services Management (BS)

Undergraduate Examples

- Delivered lectures revolving around mission statements and their importance when in a leadership role through daily activities or when implementing a strategic plan
- Encouraged students to become better leaders through emphasizing the importance of a personal mission statement
- Provided students with examples of conflict in the workplace and then worked through the examples in order to gain knowledge of how to manage conflict effectively

Graduate Examples

- Refined methods of delivery for conducting ratio analysis and variance analysis through providing examples to students
- Increased focus on data interpretation by making evaluations and drawing conclusions of research results in the absence of author commentary
- Reviewed exam components in which students struggled and reviewed curriculum to ensure relevant content is covered
- Moved the preparation course for the exam to earlier in the year so students have test materials earlier and allow them more time to prepare

Graduate

*Programs included:

- Health Care Administration (Certificate)
- Nutrition (MS)
- Physical Therapy (DPT)

Program name	Health Services Management (BS)
Delivery mode	Face to Face and Online
Outcome being summarized	Leadership: Students in HSM will demonstrate their knowledge about leadership.
Program level example	<p>The BS in Health Services Management provides health care practitioners and others with the skills and competencies to function as supervisors and managers in health care settings. Graduates will be prepared for mid-level management positions or for entrance into master's programs in allied health as the courses of study have been created to meet the pre-requisites. The program assesses outcomes around Effective Communication, Knowledge of Health Services Management, Leadership, Relationship Management, Business Skills, Teamwork, and Professionalism.</p> <p>From 2010-2016, leadership was assessed by 5 leadership performance areas: problem solving skills, flexibility, displays self-confidence, displays an enthusiastic attitude, and follows professional ethics. The means of assessment used was the Internship preceptor survey. The criterion has been met consistently over time.</p> <p>For example, in 2014-15, students met or exceeded expectations in the following 5 leadership related performance areas: Problem Solving Skills [53 of 53 (100%)]; Flexibility - deals effectively with unanticipated events [53 of 53 (100%)]; Displays Self-Confidence [52 of 53 (98%)]; Displays an Enthusiastic Attitude [53 of 53 (100%)]; and Follows Professional Ethics [53 of 53 (100%)].</p> <p>In 2015-16, students met or exceeded expectations again. Specifically, Problem-solving Skills – 65 of 67 (97%), Flexibility – 66 of 67 (98.5%), Displays Self-Confidence – 66 of 67 (98.5%), Displays an Enthusiastic Attitude – 67 of 67 (100%), and Follows Professional Ethics – 67 of 67 (100%).</p> <p>Thus, the faculty decided to assess students' leadership knowledge from a different lens, i.e., via students' professional activities in which they explain their self-knowledge of managing conflict in the leadership domain. This aligns with the Association of University Programs in Health Administration's (AUPHA) accreditation review of the undergraduate B.S. program. Starting from 2017-18, faculty assess students' leadership skills using two means of assessment:</p>

(1) Students in HSMA 3050 will complete a personal mission statement. In the mission statement, students are required to discuss their key values and how their life is connected to those key values. They also need to discuss where they excel and how to apply to work environment. A rubric will be used to assess their written personal mission statement on a 10-point scale. The criterion for success is 90% of the students will earn an 8.5 or above on a ten-point scale.

(2) Student will demonstrate knowledge of managing conflict via their responses to case study questions. The criterion for success is 70% of the students will earn a 9 on a 9-point scale.

In 2017-18, the instructor delivered lectures regarding mission statements of healthcare organizations and elaborated upon their purpose to help remind stakeholders of its mission when conducting their daily work or planning or implementing or assessing actions related to strategic plans. The instructor emphasized that a quality of leadership is that students also have developed their understanding of their own personal mission statement. Through lectures and question and answer period, students identify their own personal mission statement components. They then submit their mission statement on the final exam.

In addition, through lecture, the instructor discussed how conflict is pervasive in the workplace and may be functional or dysfunctional. The instructor also gave examples and case scenarios of real life in class and worked through with students, so students could have the working knowledge of how to manage conflict effectively.

The 2017-18 results show that the criterion for success was met for the first means of assessment, and not met for the second means of assessment.

Regarding personal mission statement, 100% of the students earned an 8.5 or above. In fact, the lowest scores were earned was a 9.3 (by 5 of the 82 students).

For students' responses to case study questions, 67% of the 82 students earned a 9 on the 9 point scale. There were four answers the students had to select to earn all 9 points in the three questions. The correct responses varied by question asked as 51% (n=42) supplied the correct response for item one, 68% (n=56) for the second, 86% (n=71) supplied the correct response for the third and 97% (n=80) supplied correctly the fourth.

	<p>Faculty's actions taken for the first means of assessment was effective. The lowest score for the personal mission statement was a 93. For the five students who scored the 93, they were scored lower because they did not sufficiently make the connections of their identified strengths to the work environment.</p> <p>Faculty's actions taken for the second means of assessment did not work very well. Only two of the responses were answered correctly by 70% or more of the 82 students. Upon closer examination, the students were more likely to understand strategies for managing conflict [86% (n=71) and 97% (n=80)]of the students responded correctly to this section), but missed the questions that asked them to relate theory to their recommended course of action [only 51% (n=42) answered correctly] and identify the importance of professionalism in conflict management [only 68% (n=56) answered this correctly].</p> <p>In the upcoming year, for the first means of assessment, the instructor will review the rubric in class at least two times and underscore the importance of addressing all factors noted. Moreover, some examples from previous students' personal mission statements (who have given permission for the instructor to use their mission statements) will be shared with the students.</p> <p>For the second means of assessment, to address the deficiency, the instructor will review theory more in depth in lecture and note the importance of understanding how to apply theory to real life situations. Also, the lectures are recorded, and the instructor will remind students that they may watch the recordings to go over what was discussed in class.</p>
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Program name	Health Care Administration (Graduate Certificate)
Delivery mode	Face to Face and Online
Outcome being summarized	Knowledge of Financial concepts & Tools in Health Care: Students were able to analyze and evaluate financial statements to assess financial performance.
Program level example	<p>The Health Care Administration graduate certificate program was created to increase skill sets and position students for advancement within management of a health care facility. The program assesses outcomes around Knowledge of Financial Concepts and Tools, Global and Local Issues, and Strategic Direction in Health Care.</p> <p>Healthcare administrators must possess the business skills to analyze and evaluate financial statements so that they may assess financial performance. Moreover, healthcare administrators are responsible to numerous reporting of financial transactions, including insurance reimbursements, pay of employees, and general operating costs. Reports are required at the federal, state, and local levels, and the task of compiling the relevant information falls to the competent administrator.</p> <p>In order to analyze and evaluate financial statements to assess financial performance, the instructors chose two means of assessment.</p> <ol style="list-style-type: none"> 1) An instructor-administered objective assignment which measures students' ability to identify procedures in calculations of ratio analysis. The assignment includes two parts. The first part requires students to perform a ratio analysis. Students can conduct the analysis as many times as need to get the correct answers. The second part requires students to answer 8 questions based upon the results of the ratio analysis they get from part one. Students can answer these questions only once. The total point for each part is 100 points. The criterion for success is that at least 75% of students achieve a passing score of 70% or above. 2) An instructor-administered objective assignment which measures students' ability to identify necessary procedures in calculations of variance. The assignment has three parts. The first two parts focus on calculations of variance. Students can try multiple times. The third part requires students to answer 5 questions based on the results they get from the first two parts. The Faculty provides students an excel template to aid their calculations of variances. Each part worth 100 points. The criterion for success, was that at least 75% of students achieved a passing score of 70% or above.

In 2016-2017, the criteria for success were met for both means of assessment. For the first means of assessment, ratio analysis, 96% and 92% of the students scored 70% or above respectively on the two parts of the assignment. For the second means of assessment, variance analysis, 97%, 93%, and 100% of the students scored 70% or above respectively on the three parts of the assignment.

For both means of assessment, the results were seen as an improvement over the 2015-2016 year. Faculty further reviewed the results and found that:

Students who scored less than 70% on the first means of assessment were unable to adequately use financial ratios to answer questions about an organizations financial position:

- * Does the hospital have a problem with its long-term debt posture?

- * Can the hospital meet its current liabilities?

- * Does this hospital have a problem with revenue cycle management?

- * The hospital is the public hospital for a county in the Pacific Northwest state. As such a significant portion of the nonoperating revenues listed in the Income Statement are generated by taxes. Discuss the advantages and disadvantages of being supported by taxes.

Students who score less than 70% on the second means of assessment were not be able to identify:

- *Which of the variance results contributes most significantly to the Total Laboratory Revenue Variance outcome?

- *Which of the variance results contributes most significantly to the Total Laboratory Expense Variance outcome?

- *Or did not submit their calculations on an Excel spreadsheet.

To improve upon the good work performed in the 2016-2017 year, in 2017-2018 the instructor refined the methods of delivery for the two concepts. This more nuanced approach resulted in two changes within COHE 6310 (Health Care Accounting and Financial Administration). For the first means of assessment, the faculty detailed to the students how to conduct ratio analysis. Additional examples were provided to the students by the faculty to help calculate ratio analysis. For the second means of assessment, the instructor gave examples to the students of variance analysis.

	<p>In 2017-2018, the criteria for success were met again for both means of assessment. For the first means of assessment, 100% and 80% of the students scored 70% or above respectively on the two parts of the assignment. For the second means of assessment, 100%, 91%, and 100% of students scored 70% or above respectively on the three parts of the assignment.</p> <p>For both means of assessment, the results as compared to the 2016-2017 year were both an improvement for some parts, and a decrease for other parts. All passing rates are within the 90% to 100% range for both the 2016-2017 and 2017-2018 years with one exception. The exception is the second part of the 2017-2018 year's CFS1 means of assessment, which saw a decrease in pass rate from 92% to 80% (related to ratio analysis). In the upcoming year, faculty will provide more examples and guidance in class to help students to fully grasp the correct ways to calculate ratio analysis.</p>
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Program name	Nutrition (MS)
Delivery mode	Face to Face and Online
Outcome being summarized	Critical Thinking: Students will demonstrate critical thinking as evident in a writing assignment.
Program level example	<p>The mission of the MS in Nutrition is to offer students diverse learning opportunities through course work, knowledge of research methods, opportunities for research through thesis or independent study and selected course work, and to acquaint them with recent developments in research, trends, and issues in the field of nutrition. The program assesses student learning outcomes around Core Knowledge, Scholarly Activity, Critical Thinking, Oral Communication in Professional Practice, Written Communication Skills, and Leadership in Professional Practice.</p> <p>To assess critical thinking, students are required to develop and present critical analysis of a published primary research article or original data assigned by the instructor as an end of course assignment. The analysis is delivered in the format of a series of questions that students will answer. Student responses are evaluated by at least two instructors using a modified version of the AAC&U Inquiry and Analysis Rubric on the following four attributes: Views (study purpose), Design Process (integration of methods in answering hypothesis), Limitations, and Implications. The criterion for success before 2016-17 was 80% of students will score a 3 out of 4 in each of the four attributes used to evaluate the course-embedded writing assignment. The criterion for success starting from 2016-17 is 100% of students will score a 3 out of 4 in each of the four attributes used to evaluate the course embedded writing assignment.</p> <p>In 2015-16, students did not meet the criteria for success. Less than 50% of the students scored at least 3 out of 4 on all four of the modified AAC&U critical thinking rubric attributes. The program director reviewed and discussed the results of AY 2015-2016 with the Nutrition Science faculty as a whole. Faculty recommended expanding the critical thinking component into the second semester of study. Faculty also identified that 2015-16's results demonstrated inability of students to evaluate data sets independent of conclusions drawn by study authors, which greatly limited their critical evaluation of the data themselves.</p> <p>To address this deficiency, in 2016-17, students were provided data in the absence of the study authors' evaluations and conclusions and challenged to both describe as well as critically evaluate these results in the context of human nutrition. This approach was intended to promote focus on data alone, in the absence of author commentary, conclusions, and potential</p>

bias. The students again were provided the final manuscript for review and were evaluated using the modified AAC&U rubric described in the means of assessment.

In AY 2016-17, students did not meet the criteria for success. Less than 50% of the students scored at least 3 out of 4 on each of the four modified AAC&U critical thinking rubric attributes. Specifically, students did not meet criteria for success on Limitations and Implications/ Future research.

Faculty recommended expanding this learning outcome to encompass multiple semesters with multiple points of assessment rather than a single point in time evaluation. This would allow for additional time for academic growth in the subject area to strengthen understanding and identification of weaknesses within research. Students will be provided instruction on critical evaluation of data within Nutrition 6105, Nutrition 6200 (Research Methods), and Nutrition 6900. Topic appropriate manuscripts will be provided in each course. The faculty felt that repeated exposure combined with increases in core knowledge would improve success in identifying both limitations and future directions.

Program name	Physical Therapy (DPT)
Delivery mode	Face to Face
Outcome being summarized	Knowledge: DPT students will exhibit an in-depth knowledge of the principles taught in the program.
Program level example	<p>The mission of the Doctor of Physical Therapy (DPT) is to graduate clinically competent, highly professional practitioners who will serve North Carolina, particularly Eastern North Carolina. The program will foster critical thinking and scholarship through the conduct of an evidence based curriculum and dissemination of clinically oriented research with emphasis on health care problems common to the residents of Eastern North Carolina. The program also values the cultivation of strong leadership skills which will enhance the students' abilities to continue to grow within the profession and take an active role in moving the profession forward. It assesses outcomes around Knowledge, Communication Skills, Professional Behavior, Accountability, Quantitative skills, and Cultural Competence.</p> <p>For the Physical Therapy students in the DPT program, we looked at the Scorebuilders prep course and test package. It is critical that the students who complete the DPT also are able to pass the national-level certification, National Physical Therapy Exam (NPTE). The Scorebuilders package allowed us to focus on specific components of our own program to identify where the points of weakness in knowledge were. Students used the Scorebuilders package to exhibit an in-depth knowledge of the principles taught in the program. The criterion for success was that 100% of the students would score a 70% or above on topics addressed in the Scorebuilders exam. This outcome data were collected in PTHE 8801.</p> <p>In 2016-2017, 100% of students scored 70% or higher overall. 29/29 students passed the exam overall. However, 11 students did not reach 70% on all the individual (five) components of the exam. The criterion was not met.</p> <p>To address this deficiency, during the 2016-2017-year, faculty reviewed information contained especially in two areas of Scorebuilders exam where students struggle (Cardiopulmonary and "Other Systems") and reviewed curricular content to be sure all appropriate information is being covered. Also, the Scorebuilders prep course which students take each year was moved from April to December so that students will have test materials much earlier. This prep course prepares students for</p>

the structure of the test and provides a detailed study/review plan for them to follow. Moving it to an earlier point in the curriculum will allow them more time to prepare for the Scorebuilders exam.

2017-2018 results show that 100% of students (26/26) passed the Scorebuilders exam overall. Only 15% (4/26 students) did not reach 70% on all of the individual (five) components of the exam. The criterion was not met. This overall result is continuing to improve, better than previous years. Students were much more prepared and serious about the exam this year. Actions faculty took did improve performance of students but did not help all students in all areas. The most problematic area of the five components continued to be the Cardiopulmonary and "Other Systems" sections. Faculty solicited student-feedback, resulting in the suggestion to order prep books earlier so they have them available during Fall semester. In addition, faculty will continue to focus on these two areas to identify more reinforcement opportunities.

It should be noted that 100% of the students passed their NPTE during the 2016-2017 year. The test is only issued in July of each year, so the results for the 2017-2018 year are not available. It will be updated once such results are available.