| Assurance of Student Learning Reflection 2024-2025 | | |
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| College of Health and Human Services | Public Health | |
| Health Informatics Certificate- 1740 | | |
| Jan Hunt-Shepherd | | |
| | Please make sure the Program Learning Outcomes listed match those in CourseLeaf. Indicate verification here Yes, they match! (If they don't match, explain on this page under Evaluation) | |

<u>Instructions</u>: For the 2024-25 assessment, we are asking you to reflect on the last three-year cycle rather than collect data. It's important to take time to look over the results from the last assessment cycle and really focus on a data-informed direction going forward. In collaboration with your assessment team and program faculty, review each submitted template from 2021-2024 and consider the following for each Program Learning Outcome, add your narrative to the template, and submit the draft to your ASL Rep by May 15, 2025.

| Program Student Learning Outcome 1 | |
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| Program Student Learning Outcome | Apply information technology to meet health care needs |
| Evaluation | Using the last three assessment cycles, is this program learning outcome still relevant, or should it be changed? If it has recently changed, please explain. Other things to examine: Is the outcome measurable? Is it double or triple barreled? Does it include measurable verbs following Bloom's Taxonomy? Do you have the appropriate numbers of SLOs to measure regularly? Please consider choosing the most important. |
| | The student learning outcome is still relevant, measurable, and aligned with Bloom's taxonomy verbiage, and will not be modified during the next three-year cycle. The SLO has three measurable instruments listed, but there are many other available measurable instruments that would apply, as well. While the certificate is not nationally accredited, the SLO aligns with Competency Unit 4 "Data Management" in the 2026 Commission on Accreditation of Health Informatics and Information Management (CAHIIM) Future Education Model of which the HIM BS Program revised curriculum to meet and successfully completed reaccreditation as a demonstration program in March 2025. |
| Measurement Instruments | Are the measurement instruments actually measuring the outcome? If you change the SLO, is this still the best instrument to use? Is this a direct or indirect measure? Is your artifact appropriate? If not, what other options are there? Will the rise in the use of AI affect the assignment and measurement? If there are rubrics, do they need to be altered to better fit the learning outcome? Does the rubric (if using) work or does it need to be adjusted? |
| | Measurement instruments are relevant, direct measures for evaluating the outcome. Under Unit 4 "Data Management" there are 21 distinct performance indicators that can fall within this overall SLO, these performance indicators are incorporated in multiple measurement instruments, any of which can be utilized for the SLO. Within Unit 4 there are also competency performance indicators related to the use of advanced technologies and artificial intelligence. |
| Criteria & Targets | Does Criteria for Success (level of performance students will have achieved for your program to have been successfulex., students will have earned 4/5 for documentation and citation on capstone essays) need to be changed? What about targets? If you have successfully made your targets consistently, consider a more challenging target. |

Criteria for Success and targets are appropriate. Results: Are the results what was expected or not? What stood out in the assessment cycle over the past three years? Explain **Results & Conclusion** In all three of the cycle years, 2021-2024, the ASL was met. Conclusions: What worked? What didn't? Why do you think this? For example, maybe the content in one or more courses was modified; changed course sequence (detail modifications); changed admission criteria (detail modifications); changed instructional methodology (detail modifications); changed student advisement process (detail modifications); program suspended; changed textbooks; facility changed (e.g. classroom modifications); introduced new technology (e.g. smart classrooms, computer facilities, etc.); faculty hired to fill a particular content need; faculty instructional training; development of a more refined assessment tool. All instruments are appropriate for continued tracking. During the 2022-2023 assessment cycle, the plan for Measurement Instrument I was to modify questions to require Pivot Tables to be provided in Excel so that if errors occur, appropriate feedback can occur. This was completed, but a few students still provided Word Documents with results in 2023-2024. This was addressed in 2024-2025. In 2022-2023 Measurement Instrument 2 was just below target at 79.3%. This improved to 95% for the assessment year 2023-2024. The certificate made course changes through the Undergraduate Curriculum review process during the 2023-2024 cycle. occurred due to the discontinuation of one course and changes made in the Business Data Analytics Program. HIM 230 was added as a replacement for the discontinued course. In addition, CIT courses are now restricted to CIT students, so the CIT course is no longer an option in the certificate. No changes were needed at that time for the Student Learning Outcomes or the Instrument Measures. The certificate went through the university review process in 2024-2025. The CHHS college committee recommended continuation and identified strengths and weaknesses of the certificate with strengths including strong enrollment numbers, great collaboration with business Data Analytics Department, and other strengths. A weakness identified was the high number of hours in the certificate. Recommendation included reducing the number of hours in the program, maintain enrollment, and as planned, changing the certificate name to Health Informatics and Data Analytics, which was supported by the Data Analytics program. As we work hard to improve our assessment practices and make them more meaningful and effective, it's important each program craft a three-year plan for the following assessment cycle (2025-26, 2026-27, 2027-28) – this process assists in "closing the loop." For example, **IMPORTANT - Plans for **Next Assessment Cycle:** you may decide to: collect a more appropriate artifact create new program outcomes adjust targets because they are consistently exceeded or not met need to reconstruct your curriculum map sequencing of classes might need to be adjusted, or additional class(es) provided Whatever your plan is, provide a narrative, in future tense, that indicates how you will approach future assessments. You will be expected to implement any changes needed before the next assessment cycle.

| | 2025-2026- Complete certificate curriculum review process to change the title of the certificate to Health Informatics and Data Analytics (as supported by the CHHS Certificate Review Committee in Spring 2025 and the Data Analytics Department Chair). Reduce hours from 19-22 to 15 to appeal to more students (recommended by the CHHS Certificate Review Committee in Spring 2025 and supported by the HIM External Advisory Committee Spring 2025). Monitor current Measurements Instrument. 2026-2027- Revise Measurements Instruments if meeting targets in 2025-2026. 2027-2028- Monitor new Measurement Instruments and modify teaching methods and/or assessments, as needed. |
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| Program Student Learning Outcome 2 | |
|-------------------------------------|---|
| Program Student Learning Outcome | Explore database management and analytics to manage healthcare clinical pathways, clinical outcomes, quality initiatives, and departmental and administrative workflow |
| Evaluation | Using the last three assessment cycles, is this program learning outcome still relevant, or should it be changed? Other things to examine: Is the outcome measurable? Is it double or triple barreled? Does it include measurable verbs following Bloom's Taxonomy? |
| | The student learning outcome is still relevant, measurable, and aligned with Bloom's taxonomy verbiage, and will not be modified during the next three-year cycle. The SLO has three measurable instruments listed, but there are many other available measurable instruments that would apply, as well. While the certificate is not nationally accredited, the SLO aligns with Competency Unit 4 "Data Management" and Unit 5 "Informatics and Data Analytics" in the 2026 Commission on Accreditation of Health Informatics and Information Management (CAHIIM) Future Education Model of which the HIM BS Program revised curriculum to meet and successfully completed accreditation as a demonstration program in March 2025. |
| Measurement Instruments | Are the measurement instruments actually measuring the outcome? If you change the SLO, is this still the best instrument to use? Is this a direct or indirect measure? Is your artifact appropriate? If not, what other options are there? Will the rise in the use of AI affect the assignment and measurement? If there are rubrics, do they need to be altered to better fit the learning outcome? Does the rubric (if using) work or does it need to be adjusted? |
| | Measurement instruments are relevant, direct measures for evaluating the outcome. |
| Criteria & Targets | Does Criteria for Success (level of performance students will have achieved for your program to have been successful (ex., students will have earned 4/5 for documentation and citation on capstone essays) need to be changed? What about targets? |
| | Criteria for Success and targets are appropriate. |
| Results & Conclusion | <u>Results</u> : Are the results what was expected or not? What stood out in the assessment cycle over the past three years? Explain |
| | In all three of the cycle years, 2021-2024, the ASL was met. |

<u>Conclusions</u>: What worked? What didn't? Why do you think this? For example, maybe the content in one or more courses was modified; changed course sequence (detail modifications); changed admission criteria (detail modifications); changed instructional methodology (detail modifications); changed student advisement process (detail modifications); program suspended; changed textbooks; facility changed (e.g. classroom modifications); introduced new technology (e.g. smart classrooms, computer facilities, etc.); faculty hired to fill a particular content need; faculty instructional training; development of a more refined assessment tool.

All instruments are appropriate for continued tracking. From 2021-2024, all learning outcomes and instrument measurements were met. HIM faculty recommended in 2023-2024 adding a third Instrument Measurement to Student Learning Outcome 2 from HIM 430. This was completed. When assessing the results, the measure was met, but it was determined that an additional question needed to be added to the assignment to assess student learning.

The certificate made course changes through the Undergraduate Curriculum review process during the 2023-2024 cycle. The changes occurred due to the discontinuation of one course and changes made in the Business Data Analytics Program. HIM 230 was added as a replacement for the discontinued course. In addition, CIT courses are now restricted to CIT students, so the CIT course is no longer an option in the certificate. No changes were needed at that time for the Student Learning Outcomes or the Instrument Measures.

The certificate went the university review process in 2024-2025. The CHHS college committee recommended continuation and identified strengths and weaknesses of the certificate with strengths including strong enrollment numbers, great collaboration with business Data Analytics Department, and other strengths. A weakness identified was the high number of hours in the certificate. Recommendation included reducing the number of hours in the program, maintain enrollment, and as planned, changing the certificate name to Health Informatics and Data Analytics, which was supported by the Data Analytics program.

**IMPORTANT - Plans for Next Assessment Cycle:

As we work hard to improve our assessment practices and make them more meaningful and effective, it's important each program craft a three-year plan for the following assessment cycle (2025-26, 2026-27, 2027-28) – this process assists in "closing the loop." For example, you may decide to:

- collect a more appropriate artifact
- create new program outcomes
- adjust targets because they are consistently exceeded or not met
- need to reconstruct your curriculum map
- sequencing of classes might need to be adjusted, or additional class(es) provided

Whatever your plan is, provide a narrative, in future tense, that indicates how you will approach future assessments. You will be expected to implement any changes needed before the next assessment cycle.

- 2025-2026- Complete certificate curriculum review process to change the title of the certificate to Health Informatics and Data Analytics (as supported by the CHHS Certificate Review Committee in Spring 2025 and the Data Analytics Department Chair). Reduce hours from 19-22 to 15 to appeal to more students (recommended by the CHHS Certificate Review Committee in Spring 2025 and supported by the HIM External Advisory Committee Spring 2025). Monitor current Measurements Instrument.
- 2026-2027- Revise Measurements Instruments if meeting targets in 2025-2026.
- 2027-2028- Monitor new Measurement Instruments and modify teaching methods and/or assessments, as needed.

Program Student Learning Outcome 3

| Program Student Learning | New SLO for 2025-2026- |
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| Outcome | |
| | Analyze the credibility and reliability of the data generated by advanced technologies |
| Evaluation | |
| Measurement Instruments | There will be two direct measurement instruments |
| | |
| Criteria & Targets | |
| | |
| Results & Conclusion | |
| | 2025-2026- Revise SLOs in Courseleaf. Track two measurement instruments (one in HIM 350-Research Methodology course assignment- |
| **IMPORTANT - Plans for | Research Project Literature Search and HIM 422- Clinical Outcomes and Evaluation Assignment - Artificial Intelligence in Healthcare). |
| Next Assessment Cycle: | Assignments and assessments began in 2024-2025. |
| | 2026-2028- Monitor new Measurement Instruments and modify teaching methods and/or assessments, as needed. |

To add more outcomes, if needed, select the table above and copy & paste below.