Assurance of Student Learning Reflection 2024-2025	
Gordon Ford College of Business	*Analytics & Information Systems*
Cybersecurity Certificate, 1754#	
Mark Ciampa / Ray Blankenship	
Is this an online program? ☒ Yes ☐ No	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)**

Instructions: 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	
Program Student Learning Outcome	Demonstrate understanding of the fundamentals of cybersecurity.
Evaluation	The program learning outcome is still relevant. It includes measurable verbs following Bloom's Taxonomy. There are sufficient SLOs to measure regularly.
Measurement Instruments	The measuring instruments continue to measure the outcome. The use of AI will affect the assignments but will not cause a change in the measurement. The rubric should continue to work but will be examined.
Criteria & Targets	The criteria for success does not need to be changed.
Results & Conclusion	**Results**: Are the results what was expected or not? What stood out in the assessment cycle over the past three years? Explain **Conclusions**: The CYSA 520 and CYSA 524 courses have undergone changes and refinements during the 2024-2025 academic year. Based on the shift in cybersecurity to incorporating more data analytics and artificial intelligence (AI) in cyber defenses, these courses have likewise been adjusted to include more information and training in using AI tools. CYSA 520 focuses on generative AI tools for cybersecurity, while CYSA 524 focuses on analytical AI tools. AI topics in CYSA 520 include learning how prompt engineering can assist the cybersecurity professional, enhancements to AI platforms, and identifying issues with AI. CYSA 524 topics include analyzing output to determine if attacks can be predicted, using AI analytical tools to evaluate large data sets, and how to thwart adversarial AI. Feedback from students has been very positive with the inclusion of these topics.

	Going forward, students will work with even larger data sets to analyze them for predicting cyber attacks and will also learn how cybersecurity can use AI agents to automate cyber processes.
****IMPORTANT - Plans for Next Assessment Cycle**:	• Use **larger cybersecurity datasets** • Integrate **AI agents** for automated cybersecurity defenses

Program Student Learning Outcome 2	
Program Student Learning Outcome	Demonstrate understanding of the applicable policies, laws, and regulations in cybersecurity.
Evaluation	The program learning outcome is still relevant. It includes measurable verbs following Bloom's Taxonomy. There are sufficient SLOs to measure regularly.
Measurement Instruments	The measuring instruments continue to measure the outcome. The use of AI will affect the assignments but will not cause a change in the measurement. The rubric should continue to work but will be examined.
Criteria & Targets	The criteria for success does not need to be changed.
Results & Conclusion	**Results**: Are the results what was expected or not? What stood out in the assessment cycle over the past three years? Explain **Conclusions**: The CYSA 520 and CYSA 524 courses have undergone changes and refinements during the 2024-2025 academic year. Based on the shift in cybersecurity to incorporating more data analytics and artificial intelligence (AI) in cyber defenses, these courses have likewise been adjusted to include more information and training in using AI tools. CYSA 520 focuses on generative AI tools for cybersecurity, while CYSA 524 focuses on analytical AI tools. AI topics in CYSA 520 include learning how prompt engineering can assist the cybersecurity professional, enhancements to AI platforms, and identifying issues with AI. CYSA 524 topics include analyzing output to determine if attacks can be predicted, using AI analytical tools to evaluate large data sets, and how to thwart adversarial AI. Feedback from students has been very positive with the inclusion of these topics. Going forward, students will work with even larger data sets to analyze them for predicting cyber attacks and will also learn how cybersecurity can use AI agents to automate cyber processes.

**IMPORTANT - Plans for Next Assessment Cycle:	• Integrate **AI agents** for helping develop cybersecurity policies and regulations

Program Student Learning Outcome 3	
Program Student Learning Outcome	Perform vulnerability management activities and analyze output from common vulnerability tools.
Evaluation	The program learning outcome is still relevant. It includes measurable verbs following Bloom's Taxonomy. There are sufficient SLOs to measure regularly.
Measurement Instruments	The measuring instruments continue to measure the outcome. The use of AI will affect the assignments but will not cause a change in the measurement. The rubric should continue to work but will be examined.
Criteria & Targets	The criteria for success does not need to be changed.
Results & Conclusion	**Results**: Are the results what was expected or not? What stood out in the assessment cycle over the past three years? Explain **Conclusions**: The CYSA 520 and CYSA 524 courses have undergone changes and refinements during the 2024-2025 academic year. Based on the shift in cybersecurity to incorporating more data analytics and artificial intelligence (AI) in cyber defenses, these courses have likewise been adjusted to include more information and training in using AI tools. CYSA 520 focuses on generative AI tools for cybersecurity, while CYSA 524 focuses on analytical AI tools. AI topics in CYSA 520 include learning how prompt engineering can assist the cybersecurity professional, enhancements to AI platforms, and identifying issues with AI. CYSA 524 topics include analyzing output to determine if attacks can be predicted, using AI analytical tools to evaluate large data sets, and how to thwart adversarial AI. Feedback from students has been very positive with the inclusion of these topics. Going forward, students will work with even larger data sets to analyze them for predicting cyber attacks and will also learn how cybersecurity can use AI agents to automate cyber processes.
**IMPORTANT - Plans for Next Assessment Cycle:	• Emphasize more **analytical AI** for **predictive threat analysis**. • Students will use AI tools to evaluate large datasets and counter **adversarial AI**.

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