School of Technology and Engineering
2022 Outcomes Assessment

College	Dept.	Program	Objective Description	Outcome	Outcome Description	Measure Title	Measure Type/Method	Measure Level	Details/Description	Acceptable Target	Ideal Target	Findings Title	Summary of Findings	Acceptable Target Achievement	Ideal Target Achievement	Recommendations	Rationale	NU Institutional Learning Outcomes ; 1	NU Institutional Learning Outcomes ; 2	NU Institutional Learning Outcomes ; 4	NU Institutional Learning Outcomes ; 5	NU Institutional Learning Outcomes ; 6	NU Institutional Learning Outcomes ; 7
School of Technology and Engineering	Department of Computer Science and Cybersecurity	Bachelor of Science in Computer Science	Bachelor of Science in Computer Science Overview	Program Learning Outcome	Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.	CS1100 - Data Structures and Algorithms	Exam - Final	Course	Exam covers six chapters, each	70% of students receive 80% or above	75% of students score 80% or above	CS1100 - Data Structures and Algorithms	Summary of Findings Assessment results for all 70 students, which all students in the class were required to take, the average score was 85.7 out of 100 points. The standard deviation was 12.4 points. Students were required to achieve a score of 70% or higher to pass the course. Students were required to achieve a score of 80% or above to receive a grade of "A" in the course. Students were required to achieve a score of 70% or higher to receive a grade of "B" in the course. Students were required to achieve a score of 60% or higher to receive a grade of "C" in the course. Students were required to achieve a score of 50% or higher to receive a grade of "D" in the course. Students were required to achieve a score of 49% or below to receive a grade of "F" in the course. Assessment results for the 70 students in the class, by letter grade, are as follows: Grade "A" (80-100%): 45 students Grade "B" (70-79%): 15 students Grade "C" (60-69%): 5 students Grade "D" (50-59%): 3 students Grade "F" (49% or below): 2 students Assessment results for the 70 students in the class, by letter grade, are also represented in the following pie chart: Pie chart, sections and percentages: "A", 64.3% "B", 21.4% "C", 7.1% "D", 4.3% "F", 2.9% Pie chart, sections and percentages, clockwise starting at 12 o'clock: "A", 64.3% "B", 21.4% "C", 7.1% "D", 4.3% "F", 2.9% Pie chart, sections and percentages, clockwise starting at 12 o'clock, with letter grades and percentages in parentheses: "A" (64.3%) "B" (21.4%) "C" (7.1%) "D" (4.3%) "F" (2.9%) Pie chart, sections and percentages, clockwise starting at 12 o'clock, with letter grades and percentages in parentheses, and with the Greek letter Sigma (Σ) in the center: Σ "A" (64.3%) "B" (21.4%) "C" (7.1%) "D" (4.3%) "F" (2.9%)	Met	Exceeding	Continue the current curriculum, which fully covers the material required to achieve the ideal target. No changes are needed at this time. Continue to include a section on Big-O notation in the curriculum, since it is a fundamental concept in computer science.	Continue to provide students with a challenging curriculum, since this is what employers want from graduates and what students want from their education.						
School of Technology and Engineering	Department of Computer Science and Cybersecurity	Bachelor of Science in Computer Science	Bachelor of Science in Computer Science Overview	Program Learning Outcome	Design computer systems or software components to meet desired needs, within realistic constraints such as time, money, and equipment.	CS1100 - Database Design	Exam - Final	Course	Exam covers six chapters, each	70% of students receive 80% or above	75% of students score 80% or above	CS1100 - Database Design	Summary of Findings Assessment results for all 70 students, which all students in the class were required to take, the average score was 78.2 out of 100 points. The standard deviation was 14.1 points. Students were required to achieve a score of 70% or higher to pass the course. Students were required to achieve a score of 80% or above to receive a grade of "A" in the course. Students were required to achieve a score of 70% or higher to receive a grade of "B" in the course. Students were required to achieve a score of 60% or higher to receive a grade of "C" in the course. Students were required to achieve a score of 50% or higher to receive a grade of "D" in the course. Students were required to achieve a score of 49% or below to receive a grade of "F" in the course. Assessment results for the 70 students in the class, by letter grade, are also represented in the following pie chart: Pie chart, sections and percentages: "A", 57.1% "B", 28.6% "C", 8.6% "D", 4.3% "F", 1.4% Pie chart, sections and percentages, clockwise starting at 12 o'clock: "A", 57.1% "B", 28.6% "C", 8.6% "D", 4.3% "F", 1.4% Pie chart, sections and percentages, clockwise starting at 12 o'clock, with letter grades and percentages in parentheses: "A" (57.1%) "B" (28.6%) "C" (8.6%) "D" (4.3%) "F" (1.4%) Pie chart, sections and percentages, clockwise starting at 12 o'clock, with letter grades and percentages in parentheses, and with the Greek letter Sigma (Σ) in the center: Σ "A" (57.1%) "B" (28.6%) "C" (8.6%) "D" (4.3%) "F" (1.4%)	Met	Exceeding	Continue the current curriculum, which fully covers the material required to achieve the ideal target. No changes are needed at this time. Continue to include a section on Big-O notation in the curriculum, since it is a fundamental concept in computer science.							
School of Technology and Engineering	Department of Computer Science and Cybersecurity	Bachelor of Science in Computer Science	Bachelor of Science in Computer Science Overview	Program Learning Outcome	Design computer systems or software components to meet desired needs, within realistic constraints such as time, money, and equipment.	CS1400	Exam - Final	Course	Exam covers six chapters, each	70% of students receive 80% or above	75% of students score 80% or above	CS1400 Learning Journal Week 1	Summary of Findings Assessment results for all 70 students, which all students in the class were required to take, the average score was 81.1 out of 100 points. The standard deviation was 13.7 points. Students were required to achieve a score of 70% or higher to pass the course. Students were required to achieve a score of 80% or above to receive a grade of "A" in the course. Students were required to achieve a score of 70% or higher to receive a grade of "B" in the course. Students were required to achieve a score of 60% or higher to receive a grade of "C" in the course. Students were required to achieve a score of 50% or higher to receive a grade of "D" in the course. Students were required to achieve a score of 49% or below to receive a grade of "F" in the course. Assessment results for the 70 students in the class, by letter grade, are also represented in the following pie chart: Pie chart, sections and percentages: "A", 57.1% "B", 28.6% "C", 8.6% "D", 4.3% "F", 1.4% Pie chart, sections and percentages, clockwise starting at 12 o'clock: "A", 57.1% "B", 28.6% "C", 8.6% "D", 4.3% "F", 1.4% Pie chart, sections and percentages, clockwise starting at 12 o'clock, with letter grades and percentages in parentheses: "A" (57.1%) "B" (28.6%) "C" (8.6%) "D" (4.3%) "F" (1.4%) Pie chart, sections and percentages, clockwise starting at 12 o'clock, with letter grades and percentages in parentheses, and with the Greek letter Sigma (Σ) in the center: Σ "A" (57.1%) "B" (28.6%) "C" (8.6%) "D" (4.3%) "F" (1.4%)	Met	Exceeding	Continue the current curriculum, which fully covers the material required to achieve the ideal target. No changes are needed at this time.							
School of Technology and Engineering	Department of Computer Science and Cybersecurity	Bachelor of Science in Computer Science	Bachelor of Science in Computer Science Overview	Program Learning Outcome	Design computer systems or software components to meet desired needs, within realistic constraints such as time, money, and equipment.	CS1400 - Exercise Project	Exam - Final	Course	Exercise project consists of a single, big exam	70% of students receive 80% or above	75% of students score 80% or above	CS1400 Exercise Project	Summary of Findings Assessment results for all 70 students, which all students in the class were required to take, the average score was 83.4 out of 100 points. The standard deviation was 11.9

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Fall 2022	School of Technology and Engineering	Construction Management	Bachelor of Science in Construction Technology Management	Bachelor of Science in Engineering Management	Degree Learning Outcomes	Ability to communicate effectively with a diverse set of stakeholders, including technical, managerial, and non-technical audiences. (ABET)	Ability to apply knowledge of mathematics, science, and engineering. (ABET)	ABET - Student Survey	Online	Kaczmarek, J., Ferguson, M., Kaczmarek, M., Ellis, M., Kaczmarek, K., & Ellis, M. (2022).