

## Appendix II

### B.S. in Computer Science Learning Outcome 1 Rubric

Graduates will demonstrate mastery of the foundational concepts of computing and problem solving

	<b>Below Expectation 0 - 1</b>	<b>Satisfactory 2 - 3</b>	<b>Exemplary 4 - 5</b>	<b>Score</b>
a. Has mastered the foundational concepts of computing including: <ul style="list-style-type: none"> <li>• Data type</li> <li>• Data structure</li> <li>• Algorithm</li> <li>• Object</li> </ul>	Does not understand many of the essential concepts of computing.	Has a basic understanding of the concepts of computing developed in the courses they have taken.	Has a thorough understanding of the concepts of computing and can work with them effectively.	3.7
b. Has mastered the foundational concepts of problem solving including: <ul style="list-style-type: none"> <li>• Abstraction</li> <li>• Divide and conquer</li> <li>• Stepwise refinement</li> </ul>	Cannot apply fundamental problem solving concepts.	Can use some problem solving concepts effectively	Can solve complex problems using a wide range of problem solving concepts.	3.6
Below Expectation = student work indicates no or marginal acquisition of the goals of the category Satisfactory = student work indicates acquisition and integration of the goals of the category Exemplary = student work demonstrates clear understanding of the category as a whole			Average	<b>3.6</b>

## **B.S. in Computer Science Learning Outcome 2 Rubric**

Graduates will demonstrate the ability to utilize design and implementation practices in traditional and emerging technology settings.

	<b>Below Expectation 0 - 1</b>	<b>Satisfactory 2 - 3</b>	<b>Exemplary 4 - 5</b>	<b>Score</b>
a. Able to utilize design practices in traditional and emerging technology settings.	Few of the selected structures are appropriate. Program elements are not well designed.	Not all of the selected structures are appropriate. Some of the program elements are appropriately designed.	The program design uses appropriate structures. The overall program design is appropriate.	3.7
a. Able to utilize implementation practices in traditional and emerging technology settings.	An incomplete solution is implemented on the required platform. It does not compile and/or run	A completed solution is tested and runs but does not meet all the specifications and/or work for all test data.	A completed solution runs without errors. It meets all the specifications and works for all test data.	3.6
Below Expectation = student work indicates no or marginal acquisition of the goals of the category Satisfactory = student work indicates acquisition and integration of the goals of the category Exemplary = student work demonstrates clear understanding of the category as a whole			Average	<b>3.6</b>

**B.S. in Computer Science Learning Outcome 3 Rubric**

Graduates will be able to present technical information in both oral and written formats

	<b>Below Expectation 0 - 1</b>	<b>Satisfactory 2 - 3</b>	<b>Exemplary 4 - 5</b>	<b>Score</b>
a. Able to present technical information in both oral and written formats	Unable to use computer science terminology correctly. Has difficulties verbally expressing computer science ideas accurately. Cannot write code that is correct.	Can use computer science terminology correctly but with some hesitancy. Can write programs that are correct but not properly documented or easy to read.	Is fluent in the use of computer science language and terminology. Can write programs that are correct, properly documented and easy to read.	3.6
Below Expectation = student work indicates no or marginal acquisition of the goals of the category Satisfactory = student work indicates acquisition and integration of the goals of the category Exemplary = student work demonstrates clear understanding of the category as a whole			Average	<b>3.6</b>