## III. LEARNING EVIDENCES:

As evidence of attaining the course outcomes, the student has to do and submit the following:

| | Learning Evidence | Description and other Details | Course Outcomes it represents |
|---|---|---|---|
| LE1 | Data-Driven Computing Solution | A computing solution developed through research using data science techniques and strategies. This must be submitted and presented on or before the last day of the semester. | CO1 |

## IV. MEASUREMENT SYSTEM:

**Learning Evidence:** **LE1: Data-Driven Computing Solution**

| Criteria | Beyond Expectation (100 points) - High | Expected (90 points) – Moderate | Needs Improvement (80 points) - Limited | Below Expectation (70 points) - Low |
|---|---|---|---|---|
| **Understanding of Data Science Techniques and Strategies** | Demonstrates an in-depth and comprehensive understanding of data science techniques and strategies. | Demonstrates a good understanding of data science techniques and strategies with minor gaps. | Demonstrates a basic understanding of data science techniques and strategies but with significant gaps. | Demonstrates little to no understanding of data science techniques and strategies. |
| **Application of Data Science Techniques** | Accurately and effectively applies data science techniques with no errors | Correctly applies data science techniques with minor errors. | Applies data science techniques but with several errors or inconsistencies. | Incorrectly or inappropriately applies data science techniques, leading to flawed results. |
| **Quality and Accuracy of Data Analysis** | Analysis is highly accurate, thorough, and coherent, demonstrating deep insight. | Analysis is mostly accurate, coherent, and relevant, with minor inaccuracies. | Analysis is partially accurate but contains significant inaccuracies or lacks depth. | Analysis is flawed, with many inaccuracies and lacks coherence. |



| | | | | |
|---|---|---|---|---|
| **Innovation and Creativity in the Solution** | Solution is highly innovative and creative, providing a unique and effective approach. | Solution demonstrates good creativity and innovation, offering a fresh perspective. | Solution shows some creativity but is largely derivative or uninspired. | Solution lacks innovation and creativity, following a basic or common approach. |
| **Presentation and Documentation of the Solution** | Presentation and documentation are exceptionally clear, well-organized, and comprehensive. | Presentation and documentation are well-organized, clear, and mostly complete. | Presentation and documentation are somewhat organized but lack clarity or completeness. | Presentation and documentation are poorly organized, unclear, and incomplete. |

## OTHER REQUIREMENTS AND ASSESSMENTS (AA)

Aside from the final output, the student will be assessed at other times during the term by the following:

| | Assessment Activity | Description and other Details | Course Outcomes it represents |
|---|---|---|---|
| AA1 | Machine Problems | Data science machine problems per module that the student must perform as summative module assessment. These can be accessed submitted via the UVE on a periodic basis. | CO1 |
| AA2 | Problem Sets | Data science problems per lesson that the student must perform to assess their understanding of the lessons delivered. These can be accessed submitted via the UVE on a periodic basis. | CO1 |

## V. GRADING SYSTEM:

The final grade in this course will be composed of the following items and their weights in the final grade computation:

| Assessment Item | Grade Source (Score or Rubric Grade) | Percentage of Final Grade |
|---|---|---|
| LE1 | Rubric on Data-Driven Computing Solution (Normalized Score) | 60% |
| AA1 | Machine Problems Scores | 30% |
| AA2 | Problem Set Scores | 10% |

**Normalized Score:**

$$G_s = \frac{\sum_{i=1}^{N}(g_i - min_i)}{\sum_{i=1}^{N}(max_i - min_i)}$$

Passing Grade: 75% (Equivalent to 3.0) and above (base 50)
Passing Grade conditions: Obtain passing grade