

## ASSESSMENT PLAN

**Department/Program: Data Science**  
**Student Learning Objectives (SLO) for MAJORS**

- 1. Students will demonstrate the ability to communicate effectively about mathematical and statistical concepts, as well as complex data analysis, in both written and verbal formats.**
- 2. Students will be able to implement solutions to mathematical and analytical questions in language(s) and tools appropriate for computer-based solutions, and do so with awareness of performance and design considerations.**
- 3. Students will be able to apply the skills and methods of the major for problem solving in data-intensive fields such as economics, meteorology, and biology among others.**
- 4. Students will be aware of and engaged with the use and misuse of analytical and statistical data-derived conclusions in the wider world.**

Outcome Measure	SLO's	Description of Departmental Use of Data
Each senior will give a fifty minute capstone presentation and a written report in a capstone course (DS-499) on a topic related to their concentration subject.	1,3	Presentations are evaluated by three or more faculty members initially and then reviewed by a departmental committee annually, which makes recommendations to the department for action.
A departmentally approved set of projects and conceptual common final exam questions for Algorithms and Abstract Data-Types (CS 158) and Data Mining (DATA-353)	2	Data is reported to the program director/department chair after each semester and reviewed annually by the instructors of the course, which makes recommendations to the department for further action
Departmentally approved case study on data-related ethics included in capstone courses (DS-299/399/499).	4	Instructors of capstone courses will report student's grades on this case-study, including long-term tracking. Instructors will make recommendations on changes to the program director or chair as appropriate.
Senior Exit Interviews	1-4	Chair gathers student responses to several questions, reports to department

1. **Results**—Briefly discuss assessment activities and findings during this cycle and describe what recent programmatic changes, if any, were made in response to the findings? Discuss the rationale for any changes by referencing the SLO # and the findings from your assessment program.

**Assessment Activities Table**

<p><b>This year we assessed SLO(s)...</b> (list each SLO in its own row)</p>	<p><b>...using Outcome Measure(s) (OMs).</b> (See Report Instructions for description and example)  Direct OM(s):  Indirect OM(s):</p>	<p><b>Findings:</b>  <b>program-performance for these SLOs, as indicated by these OMs, is:</b> <b>Excellent/Satisfactory/Needs Improvement</b> (See Report Instructions for description and example)</p>	<p><b>Strategies for Improvement</b>  <b>(in selected areas):</b> (See Report Instructions for description and example)</p>
SLO1			
SLO2			
SLO3			
SLO4			
SLO5			
SLO6			

**Discussion (Optional):**

2. What **revisions**, if any, to current SLOs and/or outcome measures did you make from previous plan? Provide the rationale for any change(s).

3. **Plans**- What learning objectives will you be assessing in the next cycle?