## **GBC Class/Course Assessment Report**

Course Prefix, Number, and Title: SUR 495 Senior Capstone Department: Computer Technologies Department Instructor: Byron Calkins Academic Year: Spring 2024 Section Number(s): 1001 Is this a GenEd class? No\_x\_

Complete and submit your assessment report electronically to your department chair. As needed, please attach supporting documents and/or a narrative description of the assessment activities. You may use as many or as few outcomes as necessary.

Class/Course Outcomes	Assessment Measures	Assessment Results	Any Changes Made as a Result of Assessment
In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives.	In the boxes below, summarize the methods used to assess course outcomes during the last year. Include the criterion you'll use to judge whether or not students have achieved the expected outcome.	In the boxes below, summarize the results of your assessment activities during the last year. Include your judgement as to whether or not the criterion for student achievement has been met.	In the boxes below, summarize how you plan to use the results to improve student learning.
Outcome #1: Define Capstone Problem	Assessment Measure:	Results:8/8	Action Plan: No action required as all students participated.
Statement	Present project proposal in group setting with peer to peer evaluation and instructor feedback. Criterion for achievement: 80% of all students will score a 70% or better.	100% Criterion Met: Yes	Previous 2018 Action Plan: Two students did not attend the project proposal presentation. In the future, I should weight this more so students do not miss.
Outcome #2:	Assessment Measure:	Results: 8/8	Action Plan: No action required
Present Project Presentation	In the beginning of the semester, I ask students to define what is the basic problem, question, or hypothesis they are investigating. I ask them why it is	100%	
	important. I require them to state the rationale for the study briefly and with great clarity. I also request they explain what their research will accomplish in relation to testing their hypotheses or investigating their problem statement. Students will address the problem by discussing important previous research and publications. I require them to cite and analyze the MAJOR work that has been done on the topic, explaining the	Criterion Met: Yes	

	prevailing ideas about the subject, and		1
	show why the work they will do is		
	necessary and important. The purpose of		
	the literature review is to give the reader		
	the factual and conceptual background to		
	be able to understand the project. I ask the		
	students to describe verbally and visually		
	the study area they will work in. I ask		
	them to justify why that area and why that		
	size. Class members are also required to		
	explain what methods and techniques will		
	be used and why are they the most		
	suitable. All statistical methods need to		
	be specific and justified. A project		
	schedule is also developed to establish a		
	reasonable but brisk timetable for		
	completion of the project. This student		
	schedule Includes all phases of the		
	capstone, i.e. fieldwork, research, data		
	assembly, data analysis, graphics and		
	maps generation, writing, editing,		
	anticipated outcomes and their potential		
	significance, and presenting.		
	Criterion for achievement: 80% of all		
	students will score a 70% or better.		
Outcome #3:	Assessment Measure:	Results: 6/8	Action Plan: Action required – A
			border is a common cartographic
Present Project Poster	Poster artifacts must include:	100%	element. Somehow this is being missed
	• Title		as 6/8 posters had a border. Change
	Study Area		poster rubric to require border or
	Objectives		receive a zero. Currently it is only a 5-
	Methods/Results	Criterion Met: Yes	point deduction.
	• Border		
	Summary/Data Overview		
	• Include your name and date		
	produced		
	Criterion for achievement: 80% of all		Previous 2018 Action Plan: Remind
	students will score a 70% or better.		students they need to have a border
	students will score a 7070 of better.		around their poster.

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## Notes:

Students did excellent on all assignments with 100% of the students scoring above 70% on all measurable outcomes, including the proposal presentation.

The average length of each research paper was 29 pages. The average length of each presentation was 30 minutes. All final submitted work meets the minimum requirements for a senior capstone course.

Topics covered in this years' capstone include Bridging Boundaries: A Land Surveying Initiative for Safer and More Connected Mountain Bike Trails in Southern Nevada, Mineral Trespass on Federal Lands, Topographic Survey for St. Peter's Church, Data Accessibility a Cape Conundrum, Coke Coven Playground Remediation Retracement Survey, Photogrammetrically Derived Products in Support of the Travertine Hot Springs Trail Alignment, Accuracy of Single Beam Bathymetric Surveys, and Between a Rock and a Hard Place - Lagomarsino Canyon Petroglyphs.

I have no actionable assessment recommendations for this course, other than to do a better job conveying poster requirements, specifically adding a border to the poster. I will use the rubric to make sure every poster submitted has a border.

## **GBC Class/Course Assessment Report**

I have reviewed this report:

Department Chair

Dean

Date\_\_\_\_\_

Date\_\_\_\_\_

Vice President of Academic Affairs and Student Services

Date\_\_\_\_\_