



2021-2022 STEAM and CTE Capstone Project Proposal Form

Name _____ Date _____

Gulf Shores High School STEAM and CTE Capstone Project Proposal form. Due: October 22, 2021

1. Which Seal of Excellence are you interested in pursuing?

_____ STEAM only

_____ CTE only

_____ Both CTE and STEAM Seals

2. Do you meet the Seal of Excellence GPA and course requirements (thus far) for item(s) checked off in #1?

Yes _ / No (circle one)

3. In which class/es are you planning to do your Capstone Project?

4. Project Description:

A. Project Title (this may change later as you get more involved in your project)?

B. RATIONALE: Include a brief synopsis of the background that supports your research problem and explain why this research is important and if applicable, explain any societal impact of your research.

C. RESEARCH QUESTION(S), HYPOTHESIS(ES), and/or ENGINEERING GOAL(S), EXPECTED OUTCOMES:

D. Describe the following in detail (write on the back or use more pages if necessary):

- a. Procedures: Detail all procedures and experimental design including methods for data collection. Describe only your project. Do not include work done by a mentor or others, if applicable.

b. Risk and Safety: Identify any potential risks and safety precautions needed.

c. Data Analysis: Describe the procedures you will use to analyze the data/results.

5. STEAM and CTE Capstone Project Checklist

Use this checklist to determine if the project can be considered an integrated STEAM and/or CTE Capstone project. If the answer to any of the questions is No, the project will need to be redesigned.

Criteria Question	Yes/No	Evidence/Reasoning
Does the project:		
address scientific concepts? (STEAM)		
address concepts in your chosen CTE area? (CTE)		
incorporate scientific practices? (STEAM)		
apply appropriate technologies? (STEAM)		
incorporate engineering practices? (STEAM)		
use relevant mathematical concepts and practices? (STEAM)		
incorporate the arts? (STEAM)		
integrate S, T, E, A, and M as part of one project? (STEAM)		
allow each STEAM competency to be addressed? (STEAM)		
allow for the completion of a paper, plan, product, and presentation?		
Will you be able to get all materials and/or equipment needed for your project?		

Do you have enough time to do your experiment more than once, with multiple trials, before the final due date?		
If your project requires you to travel to gather data, did you confirm that you have transportation?		
Can you find an Outside Adult Mentor? This is a requirement for all participants. This person should be knowledgeable or have experience in the area of your topic so he/she can provide guidance and feedback on your research plan/project summary. You will conduct the experiment. The role of the Adult Sponsor may include, but is not limited to: allowing you to use their facilities/equipment; giving feedback on your Research Plan/Project Summary; and providing supervision when conducting your investigation/trials.		

6. Agreements & Signatures

Student: I have discussed the project and the checklist with my parent(s) and I understand that it is my responsibility to follow through with this project and ensure that I conduct my experiment/project following all safety procedures and policies. I understand that failure to meet due dates found in the 2021-2022 STEAM Capstone Project Timeline document may result in dismissal from Gulf Shores High School's Capstone Project, a requirement to receive Gulf Shores High School's Seal of Excellence in STEAM.

Signature: _____

Parent/Guardian: I have discussed the project and the checklist with my child, and I believe that my child can follow through with this project. I understand that my role is to support and supervise my child's safety, and it is NOT my responsibility to do the project for my child. I also understand that if my child does not meet the due dates found in the 2021-2022 STEAM Capstone Project Timeline document, he/she will not be able to fulfill the requirements of Gulf Shores High School's Seal of Excellence in STEAM.

Signature: _____