

## CSS Georgia Unit Lesson Plans

STEM based plans for CSS Georgia Curriculum

### Georgia Performance Standards:

#### Social Studies - Grade 8

SS8H6 The student will analyze the impact of the Civil War and Reconstruction on Georgia

- State the importance of key events of the Civil War; include Antietam, the Emancipation Proclamation, Gettysburg, Chickamauga, ***the Union blockade of Georgia's coast, Sherman's Atlanta Campaign, Sherman's March to the Sea,*** and Andersonville.

#### Science - Grades 8 and 10

SPS8. Students will determine relationships among force, mass, and motion.

- Calculate velocity and acceleration.
- ***Apply Newton's three laws to everyday situations by explaining the following:***
  - ***Inertia***
  - ***Relationship between force, mass and acceleration Equal and opposite forces***
  - ***Relate falling objects to gravitational force***
  - ***Explain the difference in mass and weight.***
  - ***Calculate amounts of work and mechanical advantage using simple machines.***

#### ELA - Grade 9

ELAGSE9-10W2: Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

**Unit Objective:** The objective of a unit on the CSS Georgia is for students to use the CSS Georgia as a learning tool to teach Georgia Performance Standards in multiple subject areas, specifically for a STEM curriculum. In this unit students will learn the history of the CSS Georgia within the context of its importance to the defense of the city and port of Savannah. Students will also investigate the science behind the construction and sinking of the ship and use Newton's Laws to explain their reasoning. Students will then be asked to write an informative text combining their historical and scientific research.

**Lesson Targets:**

By the end of this lesson/unit students will:

- Explain the historical significance of the CSS Georgia within the context of the defense of the city and port of Savannah during Sherman's March to the Sea and the American Civil War
- Apply Newton's 3 Laws of Motion and Archimedes Principle to explain aspects of the CSS Georgia's construction, use, sinking, discovery, or raising from the Savannah River
- Summarize their learning in writing and other performance tasks

**Essential Questions:** What was the purpose and importance of the construction and placement of the CSS Georgia? What physically happened to the CSS Georgia over the course of her lifetime?

**Materials Needed:** Access to tech 1:1 or in pairs for students to explore provided resources, wifi access, teacher computer and overhead projector, printed out paper copies of primary and secondary resources for differentiation

**Performance Tasks:** Primary Source Analysis of the CSS Georgia, CSS Georgia Choice Board, Law's of Motion and the CSS Georgia assignment

**Extension Lesson Plans:** From Corrosion to Conservation (Electrolysis Lab); North Made New, South Made Do (DBQ)

**CSS Georgia Background**

The CSS Georgia was an ironclad vessel constructed in Georgia by the Confederacy in 1862. Ironclads were sheathed in iron in an attempt to protect them from enemy vessels firing upon them. Ladies from across the state and the south raised money to fund its construction. The vessel was built of wood and iron railroad rails. This made it too heavy to be propelled by its engine, so the CSS Georgia sat in the Savannah River defending the city until December 1864 when Union Major General William T. Sherman took the town on his March to the Sea. Confederate troops sunk the vessel so Union troops would not get it. Several years after the Civil War, and several times during the 20th century, attempts were made to salvage parts of the wreck. During this time, the U.S. Army Corps of Engineers (USACE) dredged the river repeatedly to make the channel deeper. In 2015, the USACE hired underwater archaeologists to excavate the CSS Georgia wreck.

This was done so that the Savannah River channel could be dredged five feet deeper to allow larger ships coming through the Panama Canal to enter Savannah's port.

Historic archaeologists use a variety of primary and secondary documents to learn more about sites they are studying. Archaeologists working on the CSS Georgia examined nineteenth

century newspapers, maps, images, and government records to learn more about the shipwreck, its construction, and details about who constructed it and why.

**Lesson Plan 1:**

What was the CSS Georgia and it's purpose?

Use the following primary and secondary resources to give to students

- Primary newspaper documents from the Museum of Underwater Archeology  
<http://www.themua.org/collections/files/original/99aa619fdc4f9e12c2470cc5939fdd3d.pdf>
- History of the CSS Georgia power point

Performance Task: Source Analysis- Students use the above resources to answer the following questions:

- 1) What was the CSS Georgia and it's purpose?
- 2) Who commissioned the CSS Georgia? How successful were they? Provide at least 2 examples from the PRIMARY texts to support your answer
- 3) What happened during Sherman's March to the Sea and invasion of Savannah? How does the CSS Georgia fit into this narrative? Use at least 2 examples from the primary or secondary texts.
- 4) What was the economic importance of the protection on the city and port of Savannah?

**Lesson Plan 2:**

Understanding the CSS Georgia

Using the resources from the previous lesson, assign the following choice board to students. Additional resources may be used at teacher’s discretion or student interest

How do boats float?

Why can boats made of steel float on water when a bar of steel sinks?

Ships and Boats- Explain that Stuff!

Performance Task:

**CSS Georgia Choice Board**

Students must pick a task from each row to complete:

Design and create a war propaganda poster for fundraising to construct the CSS Georgia	Write a sailor’s sea shanty about your experiences on the CSS Georgia (bonus if you sing it to the class!)	<b>Artistic</b>
Write a RAFT from the perspective of a Confederate soldier on the Georgia or from the perspective of a member of the Ladies Gunboat Society	Write a Choose Your Own Adventure... Imagine you are a: - Lady - Soldier - Citizen - Enslaved person The Union Army is about to invade Savannah.. What would you do? Flee? Fight? Write a paragraph detailing your plans on the imminent invasion of the enemy	<b>Writing</b>
Redesign the CSS Georgia- How could you redesign the CSS Georgia so she could be a seaworthy vessel used out on the open sea?	Write a paragraph evaluating the CURRENT environmental OR Economical impact of the Army Corps of Engineer’s raising of the CSS Georgia in the Savannah River	<b>Scientific/ Logical</b>

### **Lesson Plan 3:**

CSS Georgia and Physics

Resources:

[Why do ships float?](#)

[Newton's 3 Laws of Motion](#)

[Archimedes Principle](#)

In this lesson students should be familiar with Newton's Laws of Motion AS WELL AS the Archimedes Principle. Teachers and students should use the above the resources. Teachers can show these videos and articles and go over them as a class or assign them independently.

Performance Task:

Students may work in pairs for this task. Students should work together to complete these tasks rather than DIVIDE the work.

Using Newton's laws of motion- find ways Newton's 3 laws of motion apply to the construction, sinking, or discovery and raising of the CSS Georgia

- Students must deconstruct the language of Newton's 3 laws
- Students must find an example of each of the 3 laws in the ironside construction, use, sinking, or discovery and raising of the CSS Georgia
- Students must illustrate their CSS Georgia and Newton's Laws examples in a comic, cartoon, word web, or meme

Law examples could include: How effectively the CSS Georgia sailed, What force caused the CSS Georgia to sink, How the CSS Georgia was raised from the Savannah River