



MUSEUM OF ARTS & SCIENCES  
In Association with the Smithsonian Institution

## Summer Learning Institute Program Course Outline

### Sensational Science

Explore a different science each day from paleontology to physics. One day we will spend time in our sensory garden near Tuscawilla Nature Preserve and another day we will visit the Lohman Planetarium for an in-depth look at the galaxy. Explore careers in science as well as the famous scientist who changed the world. This camp is an immersive and hands-on experience that sparks the excitement of scientific discovery through a variety of captivating activities and experiments.

All program classes are organized to address the following aspects:

- STEM/STEAM Education.
- Cultivate an interest in Art, Science, and History.
- Continued knowledge and comprehension regarding Volusia County School Standards.
- Develop interpersonal skills such as teamwork and problem solving.
- Foster curiosity and imagination of the world around us.

**Pre-requisites:** None

**Date:** July 8-12

**Software/Materials/Books/Media:** Handouts and materials provided in class.

*Exhibits/Galleries that correspond with camp:*

- Megalodon: The Largest Shark that Ever Lived (Presented by Wagner the Lawyer Dude)
- Tide Pools (Presented by Expert Reserve Services)
- Sensory Garden near Tuscawilla Nature Preserve
- Prehistory of Florida
- Root Family Museum
- Lohman Planetarium

### Course Objectives:

*Students will:*

- Learn about the history of scientific discoveries, famous scientific figures, and the scientific method.
- Learn about the core base sciences and their principles that define them.
- Conduct experiments and form hypotheses on biology, chemistry, and physics.
- Visit the Planetarium at least once during their time in this camp.

## 5 Day Course Outline Example:

*Schedules must consider, lunch time, snack time, free play, and lessons in the gallery. All movies/shows must be approved by MOAS staff prior to viewing.*

- Day One: Lesson on history of science, the scientific method, and famous historical figures of science. A trip to the Planetarium could happen on this day. Art/craft activities.
- Day Two: Lessons on chemistry and the importance of chemistry in everything. Art/craft activities. NISE Kit.
- Day Three: Lessons on biology, what defines biology or “life” and how it can be studied. Art/craft activities.
- Day Four: Lessons on physics and its importance. Egg drop experiment potentially or bottle rockets. A trip to the Planetarium could happen on this day. Art/craft activities.
- Day Five: Wrap up day, art/craft activities.

## Assessment:

*Student’s ability to demonstrate the following:*

1= Below Expected Outcome

3= Meets Expected Outcome

5=Exceeds Expected Outcome

<b>The Student Has:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Demonstrated knowledge of the various sciences and their principles.					
Demonstrated an understanding of the scientific method through all activities.					
Demonstrated a desire for continued learning.					