MUSEUM OF ARTS & SCIENCES
In Association with the Smithsonian Institution

Summer Learning Institute
Program Course Outline

Science Mania

STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators. Your camper will enjoy learning about biology, geology, astronomy, physics, and more as they build familiarity and understanding of these important academic sciences. The Museum has many fantastic hands-on science kits and resources to help form an excellent base of knowledge.

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 15-19

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

Exhibits/Galleries that correspond with camp:

- Children's Museum
- Prehistory of Florida
- Lohman Planetarium
- Sensory Garden
- Megalodon: The Largest Shark that Ever Lived (Presented by Wagner the Lawyer Dude)
- Tide Pools (Presented by Expert Reserve Services)

Course Objectives:

Students will:

- Learn about the core base sciences and their principles that define them.
- Learn about the history of scientific discoveries, famous scientific figures, and the scientific method.
- Conduct experiments and form hypotheses on biology, geology, physics, and more.
- 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 the different sciences and what they're used for. Talk about the scientific method. Do an experiment.
- Day Two: Lesson on biology, what defines it and "life" and how it is studied. Activities in the medical area in the Kid's Wing. Arts/crafts.
- Day Three: Lesson on Geology. Talk about Earth and the different layers, stratigraphy, and minerals found on Earth. Can take the lesson outside.
- Day Four: Lessons on physics and its importance. Egg drop experiment potentially or bottle rockets.
- Day Five: Lesson on astronomy. Talk about important astronomers and constellations. Planetarium visit.

Assessment:

Student's ability to demonstrate the following:

1= Below Expected Outcome 3= Meets Expected Outcome 5=Exceeds Expected Outcome

The Student Has:	**1**	**2**	**3**	**4**	**5**
Demonstrated familiarity with the scientific method.					
Demonstrated knowledge of the various sciences and their principles.					
Demonstrated a recognition of important figures.					
Demonstrated a desire for continued learning.					