

The Houston Museum of Natural Science is pleased to announce its badge class schedule for the Fall of 2016 and renew its commitment to the advancement of Boy Scouts and Girl Scouts in the Houston metropolitan area.

Classes will take place on nine Saturdays from September through December. Boy Scout Merit Badge classes will occur from 9:30 a.m. to 1:30 p.m. All other classes, including those for Cub Scouts, Webelos, and all Girl Scouts will last two hours and begin at either 10 a.m. or 1 p.m.

## CLASS DESCRIPTIONS & MORE INFORMATION

### CUB SCOUTS

Cub Scout classes are designed for Scouts currently in grades 1-3. Class times are 10 a.m.-12 p.m. or 1-3 p.m. Chaperones should stay with the Scouts.

Tiger Cub classes are designed for Scouts currently in the 1st grade.

**Curiosity, Intrigue, and Magical Mysteries** – Discover some new magic tricks and the awesome science behind them!

**Sky is the Limit** – Take a tour of the night sky, exploring planets, stars, and constellations.

**Stories in Shapes** – Explore abstract art and create your own masterpieces.

**Team Tiger** – Learn how to be a member of a team.

**Tiger Tales** – Explore tall tales, learn games and songs from the past.

Wolf Cub classes are designed for Scouts currently in the 2nd grade.

**Adventures in Coins** – Become a junior numismatist as you learn all about coins. (STEM NOVA)

**Collections and Hobbies** – Learn all about making a collection and explore the museum's gem and mineral collection. (STEM NOVA)

**Digging the Past** – Take your dinosaur adventure to the next level with the largest paleontology hall in North America! (STEM NOVA)

**Germs Alive** – Explore the world of germs, mold and snot to keep you healthy. (STEM NOVA)

**Motor Away** – Learn different ways to make and propel vehicles. (STEM NOVA)

Bear Cub classes are designed for Scouts currently in the 3rd grade.

**Forensics** – Explore the science used to solve crimes. (STEM)

**Make It Move** – Learn about simple machines and how to make everyday tasks even easier. (STEM NOVA)

**Marble Madness** – Play and discover different kinds of marble games. (STEM NOVA)

**Robotics** – Learn about robots in our world and build your own. (STEM NOVA)

**Super Science** – Do experiments on density, static electricity and others while exploring the world of science. (STEM NOVA)

### WEBELOS

Webelos classes are designed for Scouts currently in grades 4-5. Class times are 10 a.m.-12 p.m. or 1-3 p.m. Chaperones should stay with the Scouts.

**Adventures in Science** – Design your own experiment, explore some chemical reactions, and build a rocket to test Newton's Laws of Motion! (STEM NOVA)

**Art Explosion** – Discover your inner artist with activities in sculpting, photography, and illustration.

**Earth Rocks** – Explore the fascinating world of geology by examining the world around you. (STEM NOVA)

**Engineer** – Explore different engineers and create some engineering projects. (STEM NOVA)

**Into the Wild** – Study a variety of animals and their habitats, and tour the Farish Hall of Texas Wildlife! (STEM NOVA)

**Into the Woods** – Discuss the importance of plants and trees and examine their impact on your everyday life. (STEM NOVA)

**First Responder** (Class fulfills the requirements of the badge and provides participants with Red Cross First Aid Certification) – Learn what to do in the case of emergencies of all kinds and how to administer First Aid from American Red Cross certified instructors.

### BOY SCOUTS

Boy Scout Merit badge classes are designed for boys who are 11 years old, are at least ten years old and have finished the fifth grade, or are at least ten years old and have earned the Arrow of Light rank as a Webelos. These classes aim to fulfill the requirements of the badge, but outside work may be required in some instances. Classes are from 9:30 a.m.-1:30 p.m. Scouts will need to bring a sack lunch.

**Archaeology** – Learn about human cultures through the clues they left behind, all while examining actual Museum artifacts!

**Astronomy** – Study how activities in space affect our own planet and bear witness to the wonders of the night sky. (STEM NOVA) (Prerequisite 4c, 5d & 6b)

**Chemistry** – Explores how substances react with each other and change, how certain forces connect molecules, and how molecules are made.

**Citizenship in the Community** – Scouts will explore how our local governments work within their community. (Prerequisite 3 & 7)

**Citizenship in the Nation** – Scouts will learn how to become active citizens and explore *The Bill of Rights: Amending America* limited-engagement exhibit. (Eagle) (Prerequisite 2, 3 & 8)

**Citizenship in the World** – Discuss international relations and politics around the world. (Eagle)

**Coin Collecting** – Explore the world of numismatist as you learn all about coins. (Bring coins from Requirements 6, 7, & 9 to class)

**Communications** – Learn effective communication skills. (Eagle) (Prerequisite 4, 5 & 8)

**Electronics** – Learn about electrical devices and how they work, exploring circuits, soldering, and Ohm's Law. (STEM NOVA)

**Geology** – Learn about the Earth, its materials, and the processes that change it over time, and the history of how these things happened.

**Indian Lore** – Using the John P. McGovern Hall of the Americas as a lens into history, learn all about the groups that called the Americas home.

**Reptile and Amphibian Study** – Learn about reptiles and amphibians, their similarities and differences, with the Museum's live animal collection! (Prerequisite 8 & 9)

**Weather** – Study the Earth's atmosphere and learn about the water cycle, predicting the weather, and discuss extreme weather. (STEM NOVA)

### GIRL SCOUTS

*Daisies & Brownies classes are designed for Scouts currently in grades K-3. Class times are 10 a.m. to 12 p.m. or 1 to 3 p.m.. A chaperone must stay with the Scouts.*

**Butterflies** – Explore the Cockrell Butterfly Center with real entomologists and learn about rainforest habitats and the animals they support!

**Dinos and Gems** – Take a trip back in time and explore the depths of the Earth with the Museum's renowned collection of fossils and gems.

**Space** – Discover important landmarks in the night sky and learn more about outer space with Museum astronomers.

Brownies classes are for Girl Scouts currently in Grades 2-3.

**Bugs** – Explore the world of bugs.

**Inventor** – Find creative solutions to problems.

**Making Games** – Create new games and share them with others

**Painting** – Discover painting techniques and styles.

Juniors classes are for Girl Scouts currently in Grades 4-5.

**Animal Habitats** – Explore wild animals and how to protect their habitats.

**Detective** – Learn the science in detection and forensics.

**Flowers** – Explore flowers from seed to bloom.

**Jeweler** – Create different types of jewelry with different mediums.

**Product Designer** – Explore the world of product design.

Cadettes classes are for Girl Scouts currently in Grades 6-8.

**Animal Helpers** – Explore how animals help people and improve our emotional health

**Netiquette** – Discover how to make positive choices in the online world.

Careers in Science classes are designed for Scouts currently in grades 4 and up. Class times are 10 a.m. to 12 p.m. or 1 to 3 p.m.. A chaperone must stay with the Scouts.

**Archaeology** – Learn the ins and outs of a variety of cultures with the Hall of Ancient Egypt and the John P. McGovern Hall of the Americas.

**Astronomy** – Take a trip to the stars with a Museum astronomer and discover the techniques used to decipher the mysteries of the universe.

**Biology** – Learn about habitats and ecosystems as you explore the Cockrell Butterfly Center with Museum entomologists.

**Chemistry** – Try out some chemical reactions and learn about how everyday objects interact with each other using the scientific method.

**Geology** – Discover the composition and chemistry of the Earth and its history by using evidence from rock layers all over the world.

**Paleontology** – Explore the world-class Morian Hall of Paleontology to learn about the fossil record with Museum paleontologists.

Last chance to earn SJGSC Native American Heritage Patch – Explore the culture of Native Americans. Patch is included. *Members – \$20 per Scout; Non-Members – \$30 per Scout*

## FALL 2016 SCHEDULE

### CLASSES AT HMNS HERMANN PARK

|                        |   |  |  |  |
|------------------------|---|--|--|--|
| <b>SEPT. 10</b>        | Boy Scouts – Wolf Cubs                  | Digging in the Past                      | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Forensics                                | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Make it Move                             | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Art Explosion                            | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Webelos                    | Into the Woods                           | 1-3 p.m.   |  |
|                        | Boy Scouts – Merit Badge                | Citizenship in the Nation                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Reptile & Amphibian Study                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Juniors                   | Detective                                | 1-3 p.m.   |  |
|                        | Girl Scouts – Juniors & Up              | Careers in Science: Biology              | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts STEM/Nova Day                |  | 9 a.m.-1 p.m.                                    |  |
| <b>SEPT. 24</b>        | Boy Scouts – Wolf Cubs                  | Collections & Hobbies                    | 1-3 p.m.   |  |
|                        | Boy Scouts – Bear Cubs                  | Super Science                            | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Adventures in Science                    | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Earth Rocks                              | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Into the Wild                            | 1-3 p.m.   |  |
|                        | Boy Scouts – Merit Badge                | Chemistry                                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Communications                           | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Weather                                  | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Daisies & Brownies        | Space Trails                             | 1-3 p.m.   |  |
|                        | Girl Scouts – Juniors                   | Flowers                                  | 1-3 p.m.   |  |
| <b>OCT. 8</b>          | Girl Scouts – Juniors & Up              | Careers in Science: Paleontology         | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Wolf Cubs                  | Germes Alive                             | 1-3 p.m.   |  |
|                        | Boy Scouts – Bear Cubs                  | Robotics                                 | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Webelos                    | Art Explosion                            | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Engineer                                 | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Merit Badge                | Citizenship in the Community             | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Citizenship in the Nation                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Daisies & Brownies        | Native American Heritage Patch           | 10 a.m.-12 p.m.                                  |  |
|                        | Girl Scouts – Juniors                   | Product Designer                         | 1-3 p.m.   |  |
|                        | Girl Scouts – Cadettes                  | Animal Helpers                           | 1-3 p.m.   |  |
| <b>OCT. 22</b>         | Girl Scouts – Juniors & Up              | Careers in Science: Chemistry            | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Tiger Cubs                 | Tiger Tales                              | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Wolf Cubs                  | Adventures in Coins                      | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Marble Madness                           | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Earth Rocks                              | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Webelos                    | Into the Wild                            | 1-3 p.m.   |  |
|                        | Boy Scouts – Merit Badge                | Citizenship in the World                 | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Communications                           | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Electronics                              | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Daisies & Brownies        | Dinos & Gems Trails                      | 10 a.m.-12 p.m.                                  |  |
| <b>NOV. 5</b>          | Girl Scouts – Brownies                  | Making Games                             | 1-3 p.m.   |  |
|                        | Girl Scouts – Juniors & Up              | Careers in Science: Geology              | 10 a.m.-12 p.m.                                  |  |
|                        | Girl Scouts – Juniors & Up              | Native American Heritage Patch           | 1-3 p.m.   |  |
|                        | Boy Scouts – 6-12 years old             | Boy Scout Overnight                      | 7 p.m.-8 a.m.                                    |  |
|                        | Boy Scouts – Merit Badge                | Astronomy                                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Citizenship in the Nation                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Geology                                  | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Daisies & Brownies        | Butterfly Trails                         | 10 a.m.-12 p.m.                                  |  |
|                        | Girl Scouts – Juniors                   | Jeweler                                  | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Tiger Cubs                 | Curiosity, Intrigue, & Magical Mysteries | 10 a.m.-12 p.m.                                  |  |
| <b>NOV. 19</b>         | Boy Scouts – Wolf Cubs                  | Motor Away                               | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Forensics                                | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Adventures in Science                    | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Into the Wild                            | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Merit Badge                | Archaeology                              | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Coin Collecting                          | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Communications                           | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Brownies                  | Inventor                                 | 1-3 p.m.   |  |
|                        | Girl Scouts – Cadettes                  | Netiquette                               | 1-3 p.m.   |  |
|                        | Girl Scouts – Juniors & Up              | Careers in Science: Archaeology          | 10 a.m.-12 p.m.                                  |  |
| <b>DEC. 3</b>          | Boy Scouts – Tiger Cubs                 | Sky is the Limit                         | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Wolf Cubs                  | Digging in the Past                      | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Robotics                                 | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Adventures in Science                    | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Art Explosion                            | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Webelos                    | First Responder                          | 9:30 a.m.-12 p.m.                                |  |
|                        | Boy Scouts – Webelos                    | First Responder                          | 1-3:30 p.m.                                      |  |
|                        | Boy Scouts – Merit Badge                | Chemistry                                | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Citizenship in the World                 | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Boy Scouts – Merit Badge                | Indian Lore                              | 9:30 a.m.-1:30 p.m.                              |  |
| <b>OCT. 15</b>         | Girl Scouts – Brownies                  | Painting                                 | 1-3 p.m.   |  |
|                        | Girl Scouts – Juniors                   | Animal Habitats                          | 1-3 p.m.   |  |
|                        | Girl Scouts – Juniors & Up              | Careers in Science: Astronomy            | 10 a.m.-12 p.m.                                  |  |
|                        | <b>CLASSES AT HMNS SUGAR LAND</b>       |  |  |  |
|                        | Boy Scouts – Tiger Cubs                 | Team Tiger                               | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Wolf Cubs                  | Digging in the Past                      | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Forensics                                | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Art Explosion                            | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Webelos                    | Engineer                                 | 1-3 p.m.   |  |
|                        | Boy Scouts – Merit Badge                | Archaeology                              | 9:30 a.m.-1:30 p.m.                              |  |
| Girl Scouts – Brownies | Bugs                                    | 10 a.m.-12 p.m.                          |  |  |
| Girl Scouts – Juniors  | Flowers                                 | 1-3 p.m.                                 |  |  |
| <b>DEC. 10</b>         | Girl Scouts – Cadettes                  | Netiquette                               | 1-3 p.m.   |  |
|                        | Boy Scouts – Tiger Cubs                 | Stories in Shapes                        | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Wolf Cubs                  | Adventures in Coins                      | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Bear Cubs                  | Super Science                            | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Adventures in Science                    | 1-3 p.m.   |  |
|                        | Boy Scouts – Webelos                    | Into the Woods                           | 10 a.m.-12 p.m.                                  |  |
|                        | Boy Scouts – Merit Badge                | Communications                           | 9:30 a.m.-1:30 p.m.                              |  |
|                        | Girl Scouts – Brownies                  | Inventor                                 | 10 a.m.-12 p.m.                                  |  |
|                        | Girl Scouts – Juniors                   | Jeweler                                  | 1-3 p.m.   |  |
|                        | Girl Scouts – Cadettes                  | Animal Helpers                           | 1-3 p.m.   |  |
| <b>HMNS</b>            | <b>EVENTS AT THE GEORGE OBSERVATORY</b> |  |  |  |
|                        | September 23-24                         | Girl Scouts – Cadettes                   | Cadette Night Owl Overnight                      | 7:30 p.m.-11:30 a.m. Girls – \$40, Adults – \$15 |
|                        | October 14-15                           | Girl Scouts – Juniors                    | Journey to the Stars Overnight                   | 7:30 p.m.-11:30 a.m. Girls – \$40, Adults – \$15 |
|                        | October 15                              | Girl Scouts – Brownies                   | Passport to the Universe                         | 1-2:30 p.m. Girls – \$15                         |
|                        | October 28-29                           | Girl Scouts – Juniors                    | Journey to the Stars Overnight                   | 7:30 p.m.-11:30 a.m. Girls – \$40, Adults – \$15 |
|                        | November 11-12                          | Girl Scouts – Cadettes                   | Cadette Night Owl Overnight                      | 7:30 p.m.-11:30 a.m. Girls – \$40, Adults – \$15 |
|                        | November 12                             | Girl Scouts – Brownies                   | Passport to the Universe                         | 1-2:30 p.m. Girls – \$15                         |
| December 2-3           | Girl Scouts – Juniors                   | Journey to the Stars Overnight           | 7:30 p.m.-11:30 a.m. Girls – \$40, Adults – \$15 |  |
| December 3             | Girl Scouts – Brownies                  | Passport to the Universe                 | 1-2:30 p.m. Girls – \$15                         |  |