

The purpose of this document is to explore possible lesson plans for the Cubs and Boy Scouts of Starkville, Mississippi and the surrounding county to fulfill badge requirements at the Oktibbeha County Heritage Museum and Garden. Each level is included with the most relevant accompanying lesson plan(s) and badge requirements and a short description explaining the specific possibilities the museum can offer. This is a preliminary document. Lesson plans will need further refinement before testing.

Tiger Scouts

Requirement:

Tiger Elective Adventure: Family Stories

1. Discuss with your adult partner and/or family where your family originated. Discuss their history, traditions, and culture—your family heritage. Share a story or bring something to share with your den about yourself and your family.
2. Make a family crest.
3. Visit your public library to find out information about your heritage.
4. Interview one of your grandparents or another family elder, and share with your den what you found.
5. Make a family tree.
6. Share with your den how you got your name or what your name means.
7. Share with your den your favorite snack or dessert that reflects your cultural heritage.
8. Learn where your family came from, and locate it on a map. Share this information with your den. With the help of your adult partner, locate and write to a pen pal from that location.

With this lesson plan, we could do a lot inside the museum in teaching about the history and heritage of Starkville. We could have supplies for making the family crest or a family tree and learn about historic Starkville individuals and families as well as the scouts' own families. We could also have snacks that reflect Starkville's heritage (i.e. dairy products from the Borden Plant plus other options considering allergies) and talk about how those things have changed over time.

Wolf Scouts

Requirement:

Wolf Elective Adventure: Grow Something

1. Select a seed, and plant it in a small container. Care for it for 30 days. Take a picture or make a drawing of your plant once each week to share with your den.
2. Find out the growing zone for your area, and share the types of plants that will grow best in your zone.
3. Visit or research a botanical or community garden in your area, and learn about two of the plants that grow there. Share what you have learned with your den.
4. Make a terrarium.
5. Do one of the following:
 - a. Using a seed tray, grow a garden inside your home. Keep a journal of its progress for 30 days. Share the results with your den.
 - b. Grow a sweet potato plant in water. Keep a journal of its growth for two weeks. Share it with your den.

Being outdoors in the garden would be most beneficial with this lesson. We can take them through the garden and look at the plants, touch them and feel them and look at them to help identify the differences in certain ones. Then we can talk a little about growing zones and why certain plants grow better in some regions than others. We can also look a little about the parts of the plant like roots, stem, flowers, leaves, and maybe how they grow (i.e. light, soil, water requirements)

For an activity, we can provide soil, seeds, and cups and have them plant the seeds to take them home and watch them grow for the 30 days.

Bear Scouts:

Requirement:

Bear Elective Adventure: Beat of the Drum

1. Learn about the history and culture of American Indians who lived in your area at the time of European colonization.
2. Write a legend.
3. Make a dream-catcher.
4. Make a craft similar to one made by American Indians.
5. Make a drum. Once your drum is complete, create a ceremonial song.
6. Visit an Order of the Arrow dance ceremony or American Indian event within your community.
7. Learn and demonstrate ceremonial dance steps.
8. Create a dance.

This lesson is also geared more towards the inside of the Heritage Museum. Learning about American Indian artifacts in our area and their culture or history by going through the museum would be very beneficial. We can even talk about how American Indians settled on the land, finding the high ground which is where the museum is located now. Hopefully, we could also include artifacts for viewing and include a map of where Indian artifacts have been found in

Starkville. As an activity, we can make drums or dreamcatchers and perform ceremonial dances.

Webelos/AOL

Requirement 1:

Webelos/AOL Elective Adventure: Art Explosion

Do all of these:

1. Visit an art museum, gallery, or exhibit. Discuss with an adult the art you saw. What did you like?
2. Create two self-portraits using two different techniques, such as drawing, painting, printmaking, sculpture, and computer illustration.
3. Do two of the following:
 - a. Draw or paint an original picture outdoors, using the art materials of your choice.
 - b. Use clay to sculpt a simple form.
 - c. Create an object using clay that can be fired, baked in the oven, or air-dried.
 - d. Create a freestanding sculpture or mobile using wood, metal, papier-mâché, or found or recycled objects.
 - e. Make a display of origami or kirigami projects.
 - f. Use a computer illustration or painting program to create a work of art.
 - g. Create an original logo or design. Transfer the design onto a T-shirt, hat, or other object.
 - h. Using a camera or other electronic device, take at least 10 photos of your family, a pet, or scenery. Use photo-editing software to crop, lighten or darken, and change some of the photos.
 - i. Create a comic strip with original characters. Include at least four panels to tell a story centered on one of the points of the Scout Law. Characters can be hand-drawn or computer-generated.
4. Choose one of the following methods to show your artwork:
 - a. Create a hard-copy or digital portfolio of your projects. Share it with your family and members of your den or pack.
 - b. Display your artwork in a pack, school, or community art show.

Outdoors at the museum we can take photos of the museum and garden talking about photography and paint or draw original pictures and then display them at the museum for a certain number of weeks or months. We could alternately, collect recycled materials and create sculptures at the museum of things they see or what inspires them at the museum as it relates to the history, the landscape design, the building, Starkville and many other things.

Requirement 2:

Webelos/AOL Elective Adventure: Into the Woods

Do all of these:

1. Identify two different groups of trees and the parts of a tree.
2. Identify six trees common to the area where you live. Tell whether they are native to your area. Tell how both wildlife and humans use them.
3. Identify six plants common to the area where you live. Tell which animals use them and for what purpose.
4. Visit a nature center, nursery, tree farm, or park, and speak with someone knowledgeable about trees and plants that are native to your area. Explain how plants and trees are important to our ecosystem and how they improve our environment.
5. Develop a plan to care for and then plant at least one plant or tree, either indoors in a pot or outdoors. Tell how this plant or tree helps the environment in which it is planted and what the plant or tree will be used for.
6. Make a list of items in your home that are made from wood and share it with your den. Or with your den, take a walk and identify useful things made from wood.
7. Explain how the growth rings of a tree trunk tell its life story. Describe different types of tree bark and explain what the bark does for the tree.

Identifying deciduous vs. evergreen trees and the parts of a tree as well as identifying six common trees and plants in the area are all doable at and around the Heritage Museum. Involving the scouts in conversation about how people and wildlife use trees differently will be effective at this level. Everything from practical human needs like buildings to ecosystem needs like oxygen and critter habitats is important. Other discussions could be caring for our ecosystems and explaining some of the most important pieces in them such as trees, and ways that we can plan to take care of the earth in the future.

Boy Scouts

Architecture and Landscape Architecture Merit Badge

1. Go to a completed landscape project that a landscape architect has designed. Before you visit the site, obtain a plan of the design from the landscape architect if one is available.

2. Identify five shrubs, five trees, and one ground cover, being sure that you select examples of different shapes, sizes, and textures. Be prepared to tell how you might use each in the design of a landscape.
3. Find out about career opportunities in architecture. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Landscape Architecture and Architecture badges are both options that the Heritage Museum could help the Boy Scouts achieve. The property was designed by Landscape Architecture students and faculty at Mississippi State, so those plans are available and with architecture we can also study the pavilion and architectural examples in the area. Above are a few examples of requirements we could help the scouts achieve.

Soil and Water Conservation Merit Badge

1. Do the following
 - a. Tell what soil is. Tell how it is formed
 - b. Describe three kinds of soil. Tell how they are different
 - c. Name the three main plant nutrients in fertile soil. Tell how they can be put back when used up.
3. Do the following
 - a. Tell what is meant by "conservation practices"
 - b. Describe the effect of three kinds of erosion- control practices
 - c. Take pictures of or draw three kinds of erosion- control practices.
4. Do the following
 - a. Explain what a watershed is.
 - b. Outline the smallest watershed that you can find on a contour map.
 - c. Outline, as far as the map will allow, the next larger watershed that also has the smaller one in it.
 - d. Explain what a river basin is. Tell why all people living in a river basin should be concerned about land and water use in the basin.
5. Do the following
 - a. Make a drawing to show the hydrologic cycle.
 - b. Demonstrate at least two of the following actions of water in relation to soil: percolation, capillary action, precipitation, evaporation, transpiration.
 - c. Explain how removal of vegetation will affect the way water runs off a watershed. Tell how uses of forest, range, and farmland affect usable water supply.
 - d. Explain how industrial use affects water supply.
- 7d. Study a soil survey report. Describe the things in it. Using tracing paper and pen, trace over any of the soil maps and outline an area with three or more different kinds of soil. List each kind of soil by full name and map symbol.
- 7f. Carry out any other soil and water conservation project approved by your merit badge counselor.

This lesson plan includes a lot of different possibilities. Having a time of education and learning, then application might be an efficient way to teach it. We can teach about soil and water conservation at the museum using demonstrations and soil samples as well as having some maps of the areas so that the scouts can trace over the soils outlines. The museum garden was also planned as a BMP garden or best management practices so many types of water conservation techniques are demonstrated in the garden and are proven to actually work properly.

Sustainability Merit Badge

Community. Do A and either B or C

- A. Draw a rough sketch depicting how you would design a sustainable community. Share your sketch with your counselor, and explain how the housing, work locations, shops, schools, and transportation systems affect energy, pollution, natural resources, and the economy of the community.
 - B. With your parent's permission and your counselor's approval, interview a local architect, engineer, contractor, or building materials supplier. Find out the factors that are considered when using sustainable materials in renovation or building a home. Share what you learn with your counselor.
3. Do the following:
- a. Explain to your counselor, how the planetary life support systems (soil, climate, freshwater, atmospheric, nutrient, oceanic, ecosystems, and species) support life on Earth and interact with one another.
 - b. Tell how the harvesting or production of raw materials (by extraction or recycling) along with distribution of the resulting products, consumption, and disposal/repurposing, influences current and future sustainability thinking, and planning.
6. Learn about career opportunities in the sustainability field. Pick one and find out the education, training, and experience required. Discuss what you have learned with your counselor and explain why this career might interest you.

The cotton district is a great place for the scouts to study sustainable community building. A short walk through the cotton district and/or downtown could be a great way to teach community planning and sustainability but we can also hold more of a discussion about these things at the Heritage Museum. The museum can really begin to help with requirement three also. At the museum we can teach sustainability in water and plant life especially but also ecosystems as a whole and the climate that we are in as well as species that depend on these ecosystems and climate. Landscape Architecture is a field that relates directly to sustainability. If scouts are interested, we can have available students or faculty from the department who would be willing to be interviewed and talk about career opportunities.

Note: Per the revised Boy Scouting Handbook for 2015, a conservation or sustainability focused service project is now required. If you and your troop would be interested in making the Museum your service project, please contact Alicia Wood-Jones for further information at akw167@lalc.msstate.edu.

