

Historic Huntley | Huntley Meadows Park

Architecture and Landscape Architecture

- This program lasts 4 hours and covers requirements for TWO badges: Architecture and Landscape Architecture.
- In class covers requirements 1a, 2, 4 for Architecture and 1 & 2 for Landscape Architecture.
- Pework covers requirements 1b, 3c., and 5 for Architecture and 3, 4, and 5 for Landscape Architecture.
- Please bring your **authorized blue card**, snack, drink, and merit badge workbook.

Important information about how to prepare for a merit badge program at Huntley Meadows Park.

Parents, please review the content of a merit badge prior to registering your scout: some badges may be challenging for younger scouts. Also, the class discussions are more interesting if scouts review *all* the requirements for the badge before the program. The chances of your scout completing all the work for the badge increases dramatically when he is properly motivated and the badge content is age-appropriate.

Merit badges are not designed to be completed in a day and require independent work on the part of the scout outside of the workshop. We call this PREWORK. We suggest this is done prior to the badge program date, but we realize this is not always practical or possible, in these cases we will sign partial cards and accept the assignments after the program.

Also, our policy, in compliance with scouting policies, is that the program should have 2 or more adults present. *Please consider attending the program with your scout.* There is never a fee for adults and you are sure to learn something. Also, the instructor will be able to concentrate more fully on the task of imparting all the required information and assisting the boys individually if necessary, while other adults keep the atmosphere calm and productive.

Merit badge programs can be from 3 to 5 hours long, so be sure to pack a snack and water for your scout and that he is dressed appropriately for being outdoors for some or all of the program.

Though not required, Scout workbooks are very useful and we prefer that scouts use the workbook during the program. Workbooks can be found at: http://meritbadge.org/wiki/index.php/Merit_Badge_Worksheets .

About blue cards: WE DO NOT HAVE BLUE CARDS. Please bring an *authorized* blue card with you to the program. Your troop scout master should be consulted prior to attending any merit badge program and he or she will sign the front of the card. When the badge is completed the unit leader will again sign the applicant's record portion of the card.

The following is what we will be doing during the Architecture badge, if it is in RED it is prework!

Architecture Requirements (Landscape Requirements follow below)

1. Do the following:

IN CLASS a. Tour your community and list the different types of buildings you see. Try to identify buildings that can be associated with a specific period of history or style of architecture. Make a sketch of the building you most admire.

AT HOME b. *Select an architectural achievement that has had a major impact on society. Using resources such as the Internet (with your parent's permission), books, and magazines, find out how this achievement has influenced the world today. Tell your counselor what you learned.*

2. **IN CLASS** In the Outdoor Code, a Scout pledges to "be conservation minded." Discuss the following with your counselor:

a. The term *sustainable architecture*. Identify three features typical of green buildings.

b. The difference between *renewable building materials* and *recycled building materials*, and how each can be used in construction.

c. The relationship of architecture with its surrounding environment and the community. (*Virginia gentlemen built their houses upon hills.*)

d. How entire buildings can be reused rather than torn down when they no longer serve their original purpose.

3. **AT HOME** Do ONE of the following: (we recommend you chose “c” unless you know an architect)

a. With your parent’s and counselor’s permission and approval, arrange to meet with an architect. Ask to see the scale model of a building and the drawings that a builder would use to construct this building. Discuss why the different building materials were selected. Look at the details in the drawings and the model to see how the materials and components are attached to each other during construction.

b. With your parent’s and counselor’s permission and approval, arrange to meet with an architect at a construction site. Ask the architect to bring drawings that the builder uses to construct the building. While at the site, discuss why the different building materials being used were selected. Discuss how the different building materials and components are attached to each other during construction.

Note: To visit a construction site will require advance planning. You will need permission from your parents, counselor, the architect, and the construction site manager. A construction site is a very dangerous place. While there, you will need to closely follow the site manager’s directions and comply with all the safety procedures, including wearing a hard hat, protective eye wear, and proper footwear. Be aware of the changing conditions at the site, and stay with the architect or site manager.

c. Interview someone who might be your client (such as a prospective homeowner or business owner) if you were an architect. Find out what your client’s requirements would be for designing a new home or business building. Write a short program including a list of requirements for the project, the functions of the building and site, how the functions relate to one another, and the goals of the project.

4. **IN CLASS** Measure a room such as one where you live or where your troop meets. Make an accurately scaled drawing of the room’s floor plan showing walls, doors, closets, windows, and any built-in furniture or cabinets. Neatly label your drawing with the following: your name, the date, what room you drew, and the scale of the drawing. (Drawing scale: 1/4 inch = 1 foot)

5. **AT HOME** Find out about three 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 Requirements

1. **IN CLASS:** 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. **IN CLASS:** After completing requirement 1, discuss the following with your merit badge counselor:
 - (a) Tell whether the design had separate spaces, a defined point of entry, a clear path system, and sun and shade variety.
 - (b) Discuss how any structures, the designated seating, eating, or parking areas suited the overall design.
 - (c) Explain how the design reflected consideration for the comfort, shelter, and security of the users.
 - (d) Discuss how the choice of trees, shrubs, and ground covers used in the project contributed to its appeal and function.
3. **AT HOME:** Identify five shrubs, five trees, and one ground cover, being sure that you select examples of different shapes, sizes, and textures. With the help of your counselor** or a local nursery, choose plants that will grow in your area. Bring pictures of the different planting materials or, if possible, examples of their branches, leaves, or flowers to a group such as your troop or class at school. Be

prepared to tell how you might use each in the design of a landscape and the maintenance that would follow.

AT HOME: 4. After obtaining permission from the appropriate authority, look at and study a place of worship, school grounds, or a public building and identify where most people arrive by bus or car. Then do the following:

(a) Using a measuring tape, *measure and draw* the main site entry and its nearby area. *Define the scale* of your drawing. Be sure to *include the driveway and sidewalk or path that leads to the building's main entry*. Indicate any sidewalks, structures, trees and plants, lights, drains, utilities, or other site furnishings within the study area. Make two copies of this plan and save the original, then do 4b and 4c using the copies.

(b) On one copy of your site plan, use directional arrows to indicate where the water drains across the site, where ditches occur, and where water stands for a longer period of time.

(c) Decide how you can make the place safer and more comfortable for those using it. Redesign the area on another copy of the plan. You may want to include new walks, covered waiting areas, benches, space-defining plantings of trees and shrubs, and drainage structures.

AT HOME: 5. Find out about three career opportunities in landscape 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.

**Below are resources to assist you in selecting 5 shrubs, 5 trees, and 1 ground cover. Be Conservation Minded! Plant natives! You are not required to select native plants to meet this requirement. However, you should know something about native plant choices. Native plants are part of the community of plants and animals (the ecosystem) in an area. By using native plants in your landscape designs you know, first, that you have chosen plants will grow in your area. In addition, it is likely that these plants will be healthier than many non-native plants. Some non-native plants, however, thrive in new environments and can rapidly spread and out-compete native plants. These "invasive" plants such as honeysuckle or kudzu, can damage the ecosystem by changing soil composition and altering habitats and food chains. Planting native is a good way to avoid introducing destructive invasive plants into your community.

Native Shrubs: <http://www.fairfaxcounty.gov/parks/greenspring/infosheets/nativeshrubs.pdf>

Native Trees: <http://www.fairfaxcounty.gov/parks/greenspring/infosheets/nativetrees.pdf>

Native Ground Covers: <http://www.fairfaxcounty.gov/parks/greenspring/infosheets/groundcover.pdf>

select examples of different shapes, sizes, and textures:

Google photos of native plants or use illustrated guides such as:

<http://nebula.wsimg.com/e4e149a621e7fe59916869e61a84dbce?AccessKeyId=3787409C771EB71DC1CC&disposition=0&alloworigin=1>

<http://plants.usda.gov/java/>

How you might be prepared to use each in a design of a landscape:

Use of plants can be visual: you can create a living painting with plants that will change seasonally.

Or it can be more practical: to provide shade or to feed wildlife or even to help manage water flow and improve water quality.

Here are resources on some practical plant uses:

<http://www.fairfaxcounty.gov/parks/greenspring/infosheets/nativeplantsforbirds.pdf>

<http://www.fairfaxcounty.gov/parks/greenspring/infosheets/butterfliesandmoths.pdf>

https://pubs.ext.vt.edu/426/426-043/426-043_pdf.pdf