



Merit Badge University Parent Packet

Thank you for registering your scout(s) for the History Museum on the Square's Merit Badge University in partnership with the Discovery Center of Springfield! We are so excited to see you and your scouts on Saturday, January 18th, 2025.

Included in this packet is:

- Registration Check-list
- Drop Off and Pick Up details
- MBU Schedule and Information
- List of Prerequisites for the Merit Badges offered

Parents are welcome, but not required to attend, and they are not required to be actively engaged with the badge program. Younger Scouts may benefit from parental assistance when navigating the Museum to find their next program.

Please contact Jill Hodge, Civics Education Coordinator, with any questions about the Merit Badge University at jill@historymuseumonthesquare.org or call 417-831-1976.

See you then!

Registration Checklist

- Purchase admission to the MBU on website at <https://historymuseumonthesquare.org/product/mbu/>
- Fill out MBU Registration Form on website at <https://historymuseumonthesquare.org/mbuform/>
- Print, read, and sign MBU Permission Form. *This will be sent to you in a follow-up email prior to the event.*
- Bring signed MBU Permission Form to drop-off OR Email scan of signed form to info@historymuseumonthesquare.org
- Make sure your scout completes the Badge Prerequisites prior to attending the MBU
- (Required) Scouts must bring Blue Cards. These will not be provided.**
- (Optional) Print out Merit Badge Workbooks and bring them to MBU if you would like to use them, as these will not be provided by the History Museum.

Drop off and Pick Up

Badge programs are happening at both the History Museum on the Square and the Discovery Center of Springfield. Please ensure that your scout is dropped off at the site of their first badge program and picked up at the site of their last program.



History Museum Drop off and Pick up:

- Address: 154 Park Central Square, Springfield, MO 65806
- Badge programs begin at 9:00 AM
- Entrance doors are located on the downtown square. Parking is north of the square on the corners of Olive and Booneville.
- MBU drop-off begins at 8:45 and will end promptly at 9 AM so scouts can begin their activities. **Please call the museum (417) 831-1976 for any late arrivals.**
- Pick up runs from 5:00-5:30 pm. When you arrive, a museum staff member will greet you and you need to have a photo ID ready to show them.

Discovery Center Drop off and Pick up:

- Address: 438 E St Louis St, Springfield, MO 65806
- Badge programs begin at 9:00 AM
- Entrance doors are located under the green awning, closest to St. Louis Street. Follow the signs that point to the School Entrance.
- MBU drop-off begins at 8:45 and will end promptly at 9 AM so scouts can begin their activities. **Please call the Discovery Center's Director phone, (417) 689-7975 for any late arrivals.**
- Pick up runs from 5:00-5:30 pm. When you arrive, at the school doors a director will greet you and you need to have a photo ID ready to show them.

MBU Schedule and Information

MBU Schedule January 18, 2025					
Drop Off 8:45 - 9:00	Drop off at History Museum		Drop off at Discovery Center		
Morning Session 9:00 - 12:00	Citizenship in the World	Citizenship in the Community	Archaeology	Chemistry	Chess
Lunch 12:00 - 1:00	Lunch				
Afternoon Session 1:00 - 5:00	Citizenship in the Nation	Indian Lore	Radio	Environmental Science	
		Collections	Mining in Society		
Pick Up 5:00 - 5:30	Pick up at History Museum		Pick up at Discovery Center		

Morning Session (9 AM - 12 PM)

- Citizenship in the World at the History Museum
- Citizenship in the Community at the History Museum
- Archaeology at the History Museum
- *Chemistry at the Discovery Center*
- *Chess at the Discovery Center*

Lunch (12 - 1 PM)

Afternoon Session (1 - 5 PM)

- 1-5 PM
 - Citizenship in the Nation at the History Museum
 - *Environmental Science at the Discovery Center*
- 1-3 PM
 - Indian Lore at the History Museum
 - Radio at the History Museum
- 3-5 PM
 - Collections at the History Museum
 - Mining in Society at the History Museum

*Scouts registered for the afternoon session must participate in programs from 1-5 PM.

*Make sure to double check the location of your scouts first and last badge programs for pick-up and drop-off.

Blue Cards: Scouts must bring Blue Cards. Blue Cards will not be provided.

Scout Workbooks: If you would like to use any workbooks, please bring your own. The History Museum will not supply Scout Workbooks for the program. These are optional.

Prerequisites: Full completion of any of these merit badges is possible IF Scouts complete prerequisites before class. If a Scout does not finish all requirements, they can work with their counselor to list and initial requirements completed on their blue card for later completion with the counselor.

Buddy System: Scouts should follow the buddy system with 2-deep adult leadership for all merit badge sessions and for all meetings with Counselors.

Clothing: Scouts are expected to wear their field uniform ("Class A" uniform) with Scout pants and shirt to demonstrate participation as a Scout and to reinforce Scouting values and behavior during the course. Scouts must wear closed-toe shoes or boots (not sandals) with socks to classes for safety. Neckerchiefs and merit badge sashes and medals are not expected or required.

Cell Phones: Scouts may have cell phones with them during the course, but cell phones should be turned completely off during all class sessions. If a Scout chooses to send text messages or talk on their cell phone during class, they will be expected to loan their cell phone to the instructor or to their parent or to a Scout leader for safe keeping during the rest of the day, to be returned when the class ends.

Badge Prerequisites

Archeology Prerequisites:

Requirement 4: Learn about a combined total of five archaeological sites located both within and outside the United States.

a. For EACH site you research, point it out on a map and explain how it was discovered. Describe some of the information about the past that has been found at each site. Explain how the information gained from the study of these sites answers questions that archaeologists are asking and how the information may be important to modern people. Compare the relative ages of the sites you research.

b. Choose ONE of the sites you picked and give a short presentation about your findings to the class at the HMS MBU.

Chemistry Prerequisites:

The following requirements should be completed prior to the Merit Badge program and brought with the Scout as proof of completion:

- **Requirement 1C:** Obtain an SDS for both a paint and an insecticide. Compare and discuss the toxicity, disposal, and safe-handling sections for these two common household products.
- **Requirement 4a:** Cut a round onion into small chunks. Separate the onion chunks into three equal portions. Leave the first portion raw. Cook the second portion of onion chunks until the pieces are translucent. Cook the third portion until the onions are caramelized, or brown in color. Taste each type of onion. Describe the taste of raw onion versus partially cooked onion versus caramelized onion. Explain what happens to molecules in the onion during the cooking process.
- **Requirement 6a:** Name two government agencies that are responsible for tracking the use of chemicals for commercial or industrial use. Pick one agency and briefly describe its responsibilities.
- **Requirement 6d:** Briefly describe the purpose of phosphates in fertilizer and in laundry detergent. Explain how the use of phosphates in fertilizers affects the environment. Explain why phosphates have been removed from laundry detergents.

Chess Prerequisites:

Requirement 3: Demonstrate to your counselor that you know each of the following. Then, using Scouting's Teaching EDGE, teach someone (preferably another Scout) who does not know how to play chess:

- a. The name of each chess piece
- b. How to set up a chessboard
- c. How each chess piece moves, including castling and en passant captures

Citizenship in the World Prerequisites:

Requirement 7. Do TWO of the following (with your parent or guardian's permission) and share with your counselor what you have learned:

- (a) Visit the web site of the U.S. State Department. Learn more about an issue you find interesting that is discussed on this web site.
- (b) Visit the web site of an international news organization or foreign government, OR examine a foreign newspaper available at your local library, bookstore, or newsstand. Find a news story about a human right realized in the United States that is not recognized in another country.
- (c) Visit with a student or Scout from another country and discuss the typical values, holidays, ethnic foods, and traditions practiced or enjoyed there.
- (d) Attend a world Scout jamboree.
- (e) Participate in or attend an international event in your area, such as an ethnic festival, concert, or play.

Citizenship in the Nation Prerequisites:

Requirement 3: Watch the national evening news five days in a row OR read the front page of a major daily newspaper five days in a row. Discuss the national issues you learned about. Choose one of the issues and explain how it affects you and your family.

Citizenship in the Community Prerequisites:

Requirement 3. Do the following:

- a. Attend a meeting of your city, town, or county council or school board; OR attend a municipal, county, or state court session.
- b. Choose one of the issues discussed at the meeting where a difference of opinions was expressed and explain to your counselor why you agree with one opinion more than you do another one.

Requirement 5. With the approval of your counselor and a parent, watch a movie that shows how the actions of one individual or group of individuals can have a positive effect on a community. Discuss with your counselor what you learned from the movie about what it means to be a valuable and concerned member of the community.

Requirement 7c. With your counselor's and your parent's approval, contact the organization you chose for requirement 7b, and find out what young people can do to help. While working on this merit badge, volunteer at least eight hours of your time for the organization. After your volunteer experience is over, discuss what you have learned with your counselor.

Requirement 8. Develop a public presentation (such as a video, slide show, speech, digital presentation, or photo exhibit) about important and unique aspects of your community. Include information about the history, cultures, and ethnic groups of your community; its best features and popular places where people gather; and the challenges it faces. Stage your presentation in front of your merit badge counselor or a group, such as your patrol or a class at school.

Collections Prerequisites:

Requirement 1. Prepare a short written report or outline for your counselor, giving a detailed description of your collection,* including a short history, why you enjoy your collection, and what you have learned from collecting. Be sure to include why you chose that particular type of collection/collecting method.

Requirement 2. Explain the growth and development of your collection. Please bring photographs and/or 3-5 examples from your collection to share.

Environmental Science Prerequisites:

Requirement 1: Make a timeline of the history of environmental science in America. Identify the contribution made by the Boy Scouts of America to environmental science. Include dates, names of people or organizations, and important events.

Requirement 2: Define the following terms: population, community, ecosystem, biosphere, symbiosis, niche, habitat, conservation, threatened species, endangered species, extinction, pollution prevention, brownfield, ozone, watershed, airshed, nonpoint source, hybrid vehicle, fuel cell.

Requirement 4: Choose **TWO** outdoor study areas that are very different from one another (e.g., hilltop vs. bottom of a hill; field vs. forest; swamp vs. dry land). **For BOTH study areas, do ONE of the following:**

a. Mark off a plot of 4 square yards (about the area of a queen-sized bed) in each study area and count the number of species found there. Estimate how much space is occupied by each plant species and the type and number of non-plant species you find. Write a report that adequately discusses the biodiversity and population density of these study areas. Discuss your report with your counselor.

b. Make at least three visits to each of the two study areas (for a total of six visits), staying for at least 20 minutes each time, to observe the living and nonliving parts of the ecosystem. Space each visit far enough apart that there are readily apparent differences in the observations. Keep a journal that includes the differences you observe. Then, write a short report that adequately addresses your observations, including how the differences of the study areas might relate to the differences noted, and discuss this with your counselor.

Indian Lore: No Prerequisites for this Merit Badge.

Mining in Society Prerequisites:

Requirement 7. Do ONE of the following:

(a) Explore the anticipated benefits of interplanetary mining. Learn how NASA and private investors may search for, extract, and process minerals in outer space, and the primary reasons for mining the moon, other planets, or near-Earth asteroids. Find out how exploration and mineral processing in space differ from exploration on Earth. Share what you have learned with your counselor, and discuss the difficulties encountered in exploring, collecting, and analyzing surface or near-surface samples in space.

(b) Identify three minerals found dissolved in seawater or found on the ocean floor, and list three places where the ocean is mined today. Share this information with your counselor, and discuss the chief incentives for mining the oceans for minerals, the reclamation necessary after mining is over, and any special concerns when mining minerals from the ocean. Find out what sustainability problems arise from mining the oceans. Discuss what you learn with your counselor.

(c) Learn what metals and minerals are recycled after their original use has ended. List four metals and two nonmetals, and find out how each can be recycled. Find out how recycling affects the sustainability of natural resources and how this idea is related to mining. Discuss what you learn with your counselor.

(d) With your parent or guardian's permission, use the Internet and other resources to determine the current price of gold, copper, aluminum, or other commodities like cement or coal, and find out the five-year price trend for two of these. Report your findings to your counselor.

Radio Prerequisites:

Requirement 7. Visit a radio installation (an amateur radio station, broadcast station, or public service communications center, for example) approved in advance by your counselor. Discuss what types of equipment you saw in use, how it was used, what types of licenses are required to operate and maintain the equipment, and the purpose of the station.