

Merit Badge College 2018 Prerequisites

Aviation:

Req 5: Find out about three career opportunities in aviation. 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.

Chemistry: none

Citizenship in the Nation:

Req 2: The scout should bring a synopsis of their visit to one of the locations described in a, b, or c. The scout would have needed to make this visit while he was in Boy Scouting.

a. Visit a place that is listed as a National Historic Landmark or that is on the National Register of Historic Places. Tell your counselor what you learned about the landmark or site and what you found interesting about it.

b. Tour your state capitol building or the U.S. Capitol. Tell your counselor what you learned about the capitol, its function, and the history.

c. Tour a federal facility. Explain to your counselor what you saw there and what you learned about its function in the local community and how it serves this nation.

Req 8: The Scout can (but isn't required to) bring a mobile device that can access the internet to find the websites of their senators and representatives of Congress, then type a letter on a feedback/comment webpage. Scout needs to know their mailing address including the zip code.

Crime Prevention:

Req 4b. Using the checklist in the merit badge pamphlet (http://meritbadge.org/wiki/images/0/07/Crime_Prevention.pdf), conduct a security survey of your home and discuss the results with your family.

Req 7. Do ONE of the following:

a. Assist in the planning and organization of a crime prevention program in your community such as Neighborhood Watch, Community Watch, or Crime Stoppers. Explain how this program can benefit your neighborhood.

b. With your parent's and counselor's approval, visit a jail or detention facility or a criminal court hearing. Discuss your experience with your counselor.

Electronics: none

Emergency Preparedness:

Req 1: Earn First Aid merit badge.

Req 2c: The scout should meet with their family and develop a family plan for the situations described in 2b.

List of situations in 2.b:

- Home kitchen fire
- Home basement/storage room/garage fire
- Explosion in the home
- Automobile crash
- Food-borne disease (food poisoning)

- Fire or explosion in a public place
- Vehicle stalled in the desert
- Vehicle trapped in a blizzard
- Flash flooding in town or in the country
- Mountain/backcountry accident
- Boating or water accident
- Gas leak in a home or a building
- Tornado or hurricane
- Major flood
- Toxic chemical spills and releases
- Nuclear power plant emergency
- Avalanche (snowslide or rockslide)
- Violence in a public place

Req. 6c: Find out who is your community's emergency management director and learn what this person does to **prepare for, respond to, recover from, prevent, and mitigate** emergency situations in your community. Discuss this information with your counselor and apply what you discover to the chart you created for requirement 2b.

Req. 7a: Take part in an emergency service project, either a real one or a practice drill, with a Scouting unit or a community agency.

Req 7b: If the scout's troop already has a plan for mobilizing the troop, they should bring a copy of it

Req. 8b: Prepare a personal emergency service pack for a mobilization call. Prepare a family kit (suitcase or waterproof box) for use by your family in case an emergency evacuation is needed. Explain the needs and uses of the contents.

Engineering: none

Environmental Science Merit Badge Prerequisites

These are the requirements to be completed before the class in order to complete the merit badge on February 3:

You may choose to use the Environmental Science Merit Badge Workbook found at Meritbadge.org, but it is not required. You must read the Merit Badge Pamphlet in order to complete the prerequisites. Most of this merit badge requires reading and preparation at home before the class.

If you have not completed any requirements, or need more time, especially on requirement 4, I will sign a merit badge partial indicating what you have completed.

- 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.**
- 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.**

3. Complete one each of the items in a) Ecology, b) Air Pollution, c) Water Pollution, d) Land Pollution, e) Endangered Species, f) Pollution Prevention, Resource Recovery, and Conservation, g) pollination. See your merit badge pamphlet for the options under each heading. These will be discussed in class.

4. Complete either option a or b for requirement 4. I will require a very thorough description of your study area, the living and non-living parts of your area, and a comparison of your two areas. I would like to see you describe to the best of your ability the species of plants and animals that you observe (I do not expect you to try to key out things like grass species.)

Be sure to choose two areas that are very different from each other. You will need to describe the differences, and why they are different. If you choose option b for this requirement, be sure to space your three visits out so that you will be able to see the changes that occur in the areas as the seasons change, at least two weeks between visits will probably be needed to see changes.

5. Review the information in the merit badge pamphlet for requirement 5, the environmental impact statement. We will discuss this in class.

6. Review the information for requirement 6, careers in Environmental Science. We will discuss this in class.

Remember, where the requirements call for a report, you must write a report. Where they call for a discussion, we will discuss those items in class.

We will spend class time reviewing and discussing your timeline, the definitions in requirement 2, the activities you performed in requirement 3, your observations in your two study areas, the information required for an environmental impact statement, and the many careers related to Environmental Science.

Fish and Wildlife Management:

Req 8: Using resources found at the library and in periodicals, books, and the Internet (with your parent's permission), learn about three different kinds of work done by fish and wildlife managers. Find out the education and training requirements for each position.

Programming:

Please bring your fully up-to-date Cyber Chip (Requirement 1a).

The three programming languages we will be using are Python (version 3.5), C++ (most recent version), and Java (most recent version). If you want to get a head start on these languages you can. They are all free to download.

Radio: none

Robotics: none