

Camp Turrell

The Rising Star of Northern New Jersey Council



2019 Merit Badge Prerequisites Guide



Prepared. For Life.™



Program Workshops & Activities

AQUATICS

- Swimming
- Lifesaving
- Canoeing
- Small Boat Sailing
- Rowing
- Kayaking
- Polar Bear Swim ♣
- BSA Stand-Up Paddle Board ♣
- BSA Snorkeling ♣
- BSA Mile Swim ♣
- BSA & Red Cross Lifeguard ♣
- Key Log Rolling ♣

OUTDOOR SKILLS

- Pioneering
- Camping
- Cooking
- Wilderness Survival
- Orienteering
- Backpacking
- Signs, Signals, and Codes

STEM

- Photography
- Electricity
- Electronics
- Programming (recommendation 14+ y/o)
- Nuclear Science (recommendation 14+ y/o)
- Nova Award – Shoot!

HEALTH LODGE

- First Aid
- Emergency Preparedness
- Search & Rescue*

RELATED ARTS

- Public Speaking
- Music

EXTREME SPORTS

- Climbing
- Cycling
- Athletics
- Sports
- Personal Fitness
- Mountain Biking ♣
- 3-Stage Zip Line ♣*

HANDICRAFT

- Basketry
- Leatherwork
- Sculpture
- Art
- Woodcarving
- Indian Lore
- Painting
- Space Exploration*

NATURE

- Fishing
- Environmental Science
- Bird Study*
- Weather
- Nature
- Sustainability
- Plant Science
- Reptile and Amphibian Study*
- Astronomy
- Mining in Society*
- Forestry

SHOOTING SPORTS

- Rifle Shooting
- Shotgun Shooting (14+ y/o)
- Archery
- Tomahawk Throwing ♣
- Action Archery ♣

* **New Additions**
♣ **Camp Activities**



Merit Badge Registration

We believe that every Scout should have the opportunity to pursue any merit badge offered in our camp, regardless of demand. We offer several merit badges at multiple times to accommodate your Scouts and their merit badge pursuits. We will also use a pre-registration program for merit badges so that we may accommodate our Scouts and plan accordingly.

Adult Leaders should copy and use the Program Planning Form for helping Scouts plan their merit badge and program schedule this year. ***Please be sure to review the Merit Badge Prerequisites Guide for any program requirements that should be addressed before or after camp in order to satisfy completion.*** Please keep in mind these general guidelines as you prepare your Scouts:

- 1.** Preview the requirements for all of our merit badge workshops, as per the most recent BSA Merit Badge Requirements book. Be sure to carefully review your Scouts' schedules to avoid scheduling conflicts. Scouts should have equal opportunities to pursue merit badges as well as engage in open programs and other activities in camp.
- 2.** Help your Scouts choose merit badges that are age/rank appropriate. Merit badges like Environmental Science and Lifesaving should be pursued by older Scouts with a minimum of second class rank.
- 3.** Encourage your Scouts to acquire and read their merit badge pamphlets prior to camp. We would like to help your Scouts earn the merit badges they have chosen to pursue, so please ***Be Prepared.***
- 4.** Some merit badges require additional supplies that can be purchased at the Trading Post. Be sure to review each Scout's merit badge workshops and let parents know approximately how much money will be needed for the program. We recommend each scout brings approximately \$50 to camp for merit badge supplies, snacks in the trading post, and souvenirs.
- 5.** For Scouts electing merit badge programs that are by appointment only, please schedule them for 1.5 merit badge slots per merit badge; e.g. two merit badges by appointment requires three available slots during the day. There are no evening slots for by appointment merit badges.

Please note that some of our merit badges will result in partials only. Examples of these merit badges that will result in partials include Shotgun, Sustainability, and Orienteering. Our goal here is provide scouts solid foundations in these merit badges so that they may complete them more easily at home. Should a Scout be in camp two weeks, we will work with motivated Scouts to complete these badges.

All Merit Badge Sign-Ups will be done on-line. Registration will begin on May 1st.

[CLICK HERE](#) to register!



Merit Badge Prerequisites

Program Year -2019

The following is a listing of the merit badges for which some items should be completed **BEFORE** arrival at camp. In addition, some merit badges also require some additional work to be completed **AFTER** camp with your merit badge counselor. It is the responsibility of the Scout and Scoutmaster to review all requirements for selected merit badges. Please refer to the most current merit badge guide for any workshops you are registering for.

AQUATICS

Lifesaving:

1. Before doing requirements 2 through 17:
 - a. Complete 2nd Class requirements 5a - 5d and 1st Class requirements 6a, 6b, and 6e.

OUTDOOR SKILLS

Wilderness Survival:

5. Put together a personal survival kit and explain how each item in it could be useful

Camping:

- 4b. Help a Scout patrol or a Webelos Scout unit in your area prepare for an actual campout, including creating the duty roster, menu planning, equipment needs, general planning, and setting up camp.
 - 5e. Present yourself to your Scoutmaster with your pack for inspection. Be correctly clothed and equipped for an overnight campout.
 - 7b. Pack your own gear and your share of the patrol equipment and food for proper carrying. Show that your pack is right for quickly getting what is needed first, and that it has been assembled properly for comfort, weight, balance, size, and neatness.
 - 8d. Cook at least one breakfast, one lunch, and one dinner for your patrol from the meals you have planned for requirement 8c. At least one of those meals must be a trail meal requiring the use of a lightweight stove.
 - 9a. Camp a total of at least 20 days and 20 nights. Sleep each night under the sky or in a tent you have pitched. The 20 days and 20 nights must be at a designated Scouting activity or event. You may use a week of long-term camp toward this requirement. If the camp provides a tent that has already been pitched, you need not pitch your own tent.
- b. On any of these camping experiences, you must do TWO of the following, only with proper preparation and under qualified supervision.
- (1) Hike up a mountain, gaining at least 1,000 vertical feet.



- (2) Backpack, snowshoe, or cross-country ski for at least 4 miles.
- (3) Take a bike trip of at least 15 miles or at least four hours.
- (4) Take a non-motorized trip on the water of at least four hours or 5 miles.
- (5) Plan and carry out an overnight snow camping experience.
- (6) Rappel down a rappel route of 30 feet or more.

Orienteering:

7. Do the following:
 - a. Take part in three orienteering events. One of these must be a cross-country course.
 - b. After each event, write a report with **(1)** a copy of the master map and control description sheet, **(2)** a copy of the route you took on the course, **(3)** a discussion of how you could improve your time between control points, and **(4)** a list of your major weaknesses on this course. Describe what you could do to improve.
10. Teach orienteering techniques to your patrol, troop or crew.

Backpacking:

- 8c. Prepare at least three meals using a stove and fuel you can carry in a backpack.
10. Using Leave No Trace principles, participate in at least three backpacking treks of at least three days each and at least 15 miles each, and using at least two different campsites on each trek. Carry everything you will need throughout the trek.
11. Do the following:
 - a. Write a plan for a backpacking trek of at least five days using at least three different campsites and covering at least 30 miles. Your plan must include a description of and route to the trek area, a schedule (including a daily schedule), a list of food and equipment needs, a safety and emergency plan, and a budget.
 - b. Using Leave No Trace principles, take the trek planned and, while on the trek, complete at least one service project approved by your merit badge counselor.
 - c. Keep a daily journal during the trek that includes a day-by-day description of your activities, including notes about what worked well and thoughts about improvements that could be made for the next trek.

Cooking:

4. **Cooking at home.** Using the MyPlate food guide or the current USDA nutrition model, plan menus for three full days of meals (three breakfasts, three lunches, and three dinners) plus one dessert. Your menus should include enough to feed yourself and at least one adult, keeping in mind any special needs (such as food allergies) and how you kept your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals. Then do the following:
 - a. Create a shopping list for your meals showing the amount of food needed to prepare and serve each meal, and the cost for each meal.
 - b. Share and discuss your meal plan and shopping list with your counselor.
 - c. Using at least five of the 10 cooking methods from requirement 3, prepare and serve yourself and at least one adult (parent, family member, guardian, or other responsible adult) one breakfast, one lunch, one dinner, and one dessert from the meals you planned. *



d. Time your cooking to have each meal ready to serve at the proper time. Have an adult verify the preparation of the meal to your counselor.

e. After each meal, ask a person you served to evaluate the meal on presentation and taste, then evaluate your own meal. Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how better planning and preparation help ensure a successful meal.

6. Trail and backpacking meals. Do the following:

a. Using the MyPlate food guide or the current USDA nutrition model, plan a menu for trail hiking or backpacking that includes one breakfast, one lunch, one dinner, and one snack. These meals must not require refrigeration and are to be consumed by three to five people (including you).

Be sure to keep in mind any special needs (such as food allergies) and how you will keep your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.

b. Create a shopping list for your meals, showing the amount of food needed to prepare and serve each meal, and the cost for each meal.

c. Share and discuss your meal plan and shopping list with your counselor. Your plan must include how to repackage foods for your hike or backpacking trip to eliminate as much bulk, weight, and garbage as possible.

d. While on a trail hike or backpacking trip, prepare and serve two meals and a snack from the menu planned for this requirement. At least one of those meals must be cooked over a fire, or an approved trail stove (with proper supervision).**

e. After each meal, have those you served evaluate the meal on presentation and taste, then evaluate your own meal. Discuss what you learned with your counselor, including any adjustment that could have improved or enhanced your meals. Tell how planning and preparation help ensure successful trail hiking or backpacking meals.

f. Discuss how you followed the Outdoor Code and no-trace principles during your outing. Explain to your counselor how you cleaned any equipment, utensils, and the cooking site after each meal. Explain how you properly disposed of any dishwater and packed out all garbage.

Signs, Signals, & Codes

7. On a Scout outing, lay out a trail for your patrol or troop to follow. Cover at least one mile in distance and use at least six different trail signs and markers. After the Scouts have completed the trail, follow no-trace principles by replacing or returning trail markers to their original locations



FIELD SPORTS

Personal Fitness:

1. Do the Following

a. Before completing requirements 2 through 9, have your health-care practitioner give you a physical examination, using the Scout medical examination form. Explain the following:

- (1) Why physical exams are important
- (2) Why preventive habits (such as exercising regularly) are important in maintaining good health, and how the use of tobacco products, alcohol, and other harmful substances can negatively affect your personal fitness
- (3) Diseases that can be prevented and how
- (4) The seven warning signs of cancer
- (5) The youth risk factors that affect cardiovascular health in adulthood

b. Have a dental examination. Get a statement that teeth have been checked and cared for.

6. Before doing requirements 7 and 8, complete the aerobic fitness, flexibility, and muscular strength tests along with the body composition evaluation as described in the Personal Fitness merit badge pamphlet. Record your results and identify those areas where you feel you need to improve.

7. Outline a comprehensive 12-week physical fitness program using the results of your fitness tests. Be sure your program incorporates the endurance, intensity, and warm-up guidelines discussed in the Personal Fitness merit badge pamphlet. Before beginning your exercises, have the program approved by your counselor and parents.

8. Complete the physical fitness program you outlined in requirement 7. Keep a log of your fitness program activity (how long you exercised; how far you ran, swam, or biked; how many exercise repetitions you completed; your exercise heart rate; etc.). Repeat the aerobic fitness, muscular strength, and flexibility tests every two weeks and record your results. After the 12th week, repeat all of the required activities in each of the three test categories, record your results, and show improvement in each one. For the body composition evaluation, compare and analyze your preprogram and post program body composition measurements. Discuss the meaning and benefit of your experience and describe your long-term plans regarding your personal fitness.

9. Find out about three career opportunities in personal fitness. Pick one and find out the education, training, and experience required for these professions. Discuss what you learned with your counselor and explain why this profession might interest you.

Sports:

4. Take part for one season (or four months) as a competitive individual or as a member of an organized team in **TWO** of the following sports: baseball, basketball, bowling, cross-country, field hockey, football, ice hockey, lacrosse, soccer, softball, table tennis, tennis, volleyball, water polo.

5. With guidance from your counselor, establish a personal training program suited to the activities you chose for requirement 4. Then do the following:

a. Organize a chart to track your training, practice, and development in these sports for one season (or four months).



Athletics:

5. Complete the activities in FOUR of the groups listed in Req. 5 & show improvement over a 3-month period.
6. Do the following
 - a. Prepare plans for conducting a sports meet or field day that includes 10 activities, at least five of which must come from the groups mentioned in requirement 5. Outline the duties of each official needed and list the equipment the meet will require.
 - b. With your parent's and counselor's approval, serve as an official or volunteer at a sports meet to observe officials in action.

RELATED ARTS

Public Speaking:

4. Select a topic of interest to your audience. Collect and organize information about this topic and prepare an outline. Write an eight- to 10-minute speech, practice it, then deliver it in the conversational way.

Music:

3. Do TWO of the following:
 - a. Attend a live performance, or listen to three hours of recordings from any two of the following musical styles: blues, jazz, classical, country, bluegrass, ethnic, gospel, musical theater, opera. Describe the sound of the music and the instruments used. Identify the composers or songwriters, the performers, and the titles of the pieces you heard. If it was a live performance, describe the setting and the reaction of the audience. Discuss your thoughts about the music.
 - b. Interview an adult member of your family about music. Find out what the most popular music was when he or she was your age. Find out what his or her favorite music is now, and listen to three favorite tunes with him or her. How do those favorites sound to you? Had you ever heard any of them? Play three of your favorite songs for your relative, and explain why you like these songs. Ask what he or she thinks of your favorite music.
 - c. Serve for six months as a member of a school band, choir, or other local musical group; or perform as a soloist in public six times.
 - d. List five people who are important in the history of American music and explain to your counselor why they continue to be influential. Include at least one composer, one performer, one innovator, and one person born more than 100 years ago.



NATURE

Sustainability:

2. Do the following:

Water. Do A AND either B OR C.

A. Develop and implement a plan that attempts to reduce your family's water usage. As a family, discuss water usage. To aid in your discussion, if past water bills are available, you may choose to examine a few. As a family, choose three ways to help reduce water consumption. Implement those ideas for one month. Share what you learn with your counselor and tell how you think your plan affected your family's water usage.

Food. Do A AND either B OR C.

A. Develop and implement a plan that attempts to reduce your household food waste. Establish a baseline and then track and record your results for two weeks. Report your results to your family and counselor.

Energy. Do A AND either B OR C.

B. Develop and implement a plan that attempts to reduce consumption for one of your family's household utilities. Examine your family's bills for that utility reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption and be a better steward of this resource. Implement those ideas for one month. Share what you learn with your counselor, and tell how your plan affected your family's usage.

C. Evaluate your family's fuel and transportation usage. Review your family's transportation-related bills (gasoline, diesel, electric, public transportation, etc.) reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption and be a better steward of this resource. Implement those ideas for one month. Share what you learn with your counselor, and tell how your plan affected your family's transportation habits.

Stuff. Do A AND either B OR C.

A. Keep a log of the "stuff" your family purchases (excluding food items) for two weeks. In your log, categorize each purchase as an essential need (such as soap) or a desirable want (such as a DVD). Share what you learn with your counselor.

5a. After completing requirements 1 through 4, have a family meeting. Discuss what your family has learned about what it means to be a sustainable citizen. Talk about the behavioral changes and life choices your family can make to live more sustainably. Share what you learn with your counselor.

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.

Plant Science:

5. Tell how to propagate plants by seeds, roots, cuttings, tubers, and grafting. Grow a plant by ONE of these methods.

7. Name and tell about careers in agronomy, horticulture, and botany. Write a paragraph about a career in one of these fields that interests you.



Environmental Science:

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.
6. Find out about three career opportunities in environmental science. 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.

Weather:

- 9a. Make one of the following instruments: wind vane, anemometer, rain gauge, hygrometer. Keep a daily weather log for one week using information from this instrument as well as from other sources such as local radio and television stations, NOAA Weather Radio All Hazards, and Internet sources (with your parent's permission). Record the following information at the same time every day: wind direction and speed, temperature, precipitation, and types of clouds. Be sure to make a note of any morning dew or frost. In the log, also list the weather forecasts from radio or television at the same time each day and show how the weather really turned out.
11. Find out about a weather-related career opportunity that interests you. Discuss with and explain to your counselor what training and education are required for such a position, and the responsibilities required of such a position.

Forestry:

7. Visit one or more local foresters and write a brief report about the person (or persons). Or, write about a forester's occupation including the education, qualifications, career opportunities, and duties related to forestry.

Reptile and Amphibian Study:

8. Do ONE of the following:
 - a. Maintain one or more reptiles or amphibians for at least a month. Record food accepted, eating methods, changes in coloration, shedding of skins, and general habits; or keep the eggs of a reptile from the time of laying until hatching; or keep the eggs of an amphibian from the time of laying until their transformation into tadpoles (frogs) or larvae (salamanders). Whichever you chose, keep records of and report to your counselor how you cared for your animal/eggs/larvae to include lighting, habitat, temperature and humidity maintenance, and any veterinary care requirements.



b. Choose a reptile or amphibian that you can observe at a local zoo, aquarium, nature center, or other such exhibit (such as your classroom or school). Study the specimen weekly for a period of three months. At each visit, sketch the specimen in its captive habitat and note any changes in its coloration, shedding of skins, and general habits and behavior. Discuss with your counselor how the animal you observed was cared for to include its housing and habitat, how the lighting, temperature, and humidity were maintained, and any veterinary care requirements. Find out, either from information you locate on your own or by talking to the caretaker, what this species eats and what are its native habitat and home range, preferred climate, average life expectancy, and natural predators. Also identify any human-caused threats to its population and any laws that protect the species and its habitat. After the observation period, share what you have learned with your counselor.

Bird Study:

11. Find out about three career opportunities in insect study. 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.

HANDICRAFT

Wood Carving:

2a: Earn the Totin' Chip recognition.

Sculpture:

2c: With your parent's permission and your counselor's approval, visit a museum, art exhibit, art gallery, artist's co-op, or artist's studio. After your visits share with your counselor what you have learned. Discuss the importance of visual arts and how it strengthens social tolerance and helps stimulate cultural, intellectual, and personal development.

Art:

6: With your parent's permission and your counselor's approval, visit a museum, art exhibit, art gallery, artist's co-op, or artist's studio. Find out about the art displayed or created there. Discuss what you learn with your counselor.

Indian Lore:

(Optional) **3d:** Visit a museum to see Indian artifacts. Discuss them with your counselor. Identify at least 10 artifacts by tribe or nation, their shape, size, and use.

(Scouts may also do 3a, 3b, or 3c ahead of time, if they do not want to do those tasks during the week. They can also bring kits for these tasks if they have a specific craft they'd like to make.)

Space Exploration:

Scouts must either bring their own rocket kit or purchase one from the Trading Post. We will provide engines on the day of launch.



Health Lodge

First Aid:

1. Knowledge of all first aid requirements for Tenderfoot, 2nd Class, and 1st Class ranks.
5. Prepare a first aid kit for your home. Display and discuss its contents with your counselor.

Emergency Preparedness:

1. Earn the First Aid merit badge.
- 2c. Meet with and teach your family how to get or build a kit, make a plan, and be informed for the situations on the chart you created for requirement 2b. Complete a family plan. Then meet with your counselor and report on your family meeting, discuss their responses, and share your family plan.
- 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.
- 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.

STEM

Photography: **** Must bring own camera or phone for taking pictures and charging device****

8. Identify three career opportunities in photography. Pick one and explain to your counselor how to prepare for such a career. Discuss what education and training are required, and why this profession might interest you.

Electricity:

2. Complete an electrical home safety inspection of your home, using the checklist found in this pamphlet or one approved by your counselor. Discuss what you find with your counselor.
8. Make a floor plan wiring diagram of the lights, switches, and outlets for a room in your home. Show which fuse or circuit breaker protects each one.
- 9a. Read an electric meter and, using your family's electric bill, determine the energy cost from the meter readings.

Programming:

- 1a. Show your counselor your current, up-to-date Cyber Chip.

