



## Insect Study Merit Badge

Saturday, August 11<sup>th</sup> 2018

9-4pm

Bring all written homework with you to class to receive credit.

### **Insect Study Merit Badge Preparation before class:**

1. Scouts must **Be Prepared** by working on and completing requirements **1 through 4**, and bringing their answers to class.
2. Scouts must **Be Prepared** by working on and completing requirements **11 through 13** and bring their answers to class
3. Scouts must Be Prepared by working on **requirement 5** at home. Scouts must observe 10 different live species of insects in their habitat. Make a scrapbook of these 10 insects before class.
4. Scouts must Be Prepared by bringing their scrapbook to class.
5. Scouts must Be Prepared by working on **requirements 6, 7, 8, 11, 12, 13** at home.

### **Insect Study Merit Badge Preparation during class:**

1. Scouts will complete **requirement 5** during class.
2. Scouts will complete requirements **6, 7, 8, 10, 11, 12 & 13** during class.

### **Insect Study Merit Badge Preparation after class:**

1. Complete **requirement 9**. Schedule a follow-up visit with your Merit Badge Counselor to review your notes about your experiences and relevant photos to confirm completion and to sign off your blue card.



## Astronomy Merit Badge

Saturday, January 13<sup>th</sup> 2018

Saturday, February 10<sup>th</sup> 2018

Saturday, November 10<sup>th</sup> 2018

Time: 9:00 am to 4:00 pm

### Before class:

1. Scouts are to **complete requirements** 1(abc), 2, 3(ab), 4(cd), 7(abc), & 9 before coming to class.

### During Class:

1. We will review requirements 2, 3ab, 4d, and 7abc as a class.
2. Work on requirements 1abc, 4c, and 9 will be collected and graded.
3. We will **complete requirements** 3(cd), 5(abc) & 6(ac) in class.
4. Instructions will be given on how to complete 4ab, 5d, & 6b.
5. Time in the Planetarium dome will be used to help scouts practice finding stars & constellations with sky set to different dates & times with light pollution so scouts will be to practice night observations 4ab at home.

### After Class:

1. A night will be set up for observations and completing requirements 4(ab).
2. **Complete** 5d, 6(bd), & 8

Recommend that scouts have a flash light with a red lens, so they will be able to use a star chart while practicing identifying the stars and constellations in the Planetarium. (*color with a red marker or use a red transparently to cover the lens*)

Before taking the **Astronomy merit badge**, Scouts should have completed these requirements from the following Scout ranks

Tenderfoot: 4abc, 5ab,

Second Class: 3ad, 6ac,

First Class: 5bc



## Environmental Science Merit Badge

Saturday, March 10<sup>th</sup>, 2018

Saturday, June 9<sup>th</sup>, 2018

Saturday, October 13<sup>th</sup>, 2018

Saturday, December 8<sup>th</sup>, 2018

Time 9:00am to 4:00 pm,

### Before class:

1. Scouts must Be Prepared by completing **requirement 2** at home and by bringing written results with them to class. The workbook contains the terms:  
[https://meritbadge.org/wiki/images/3/3a/Environmental\\_Science.pdf](https://meritbadge.org/wiki/images/3/3a/Environmental_Science.pdf)
2. Scouts must Be Prepared by completing **requirements 3b, 3d and 3e** before class and must bring their completed work to class. Here is some information on endangered animals in North Carolina: [http://www.fws.gov/raleigh/es\\_tes.html](http://www.fws.gov/raleigh/es_tes.html)
3. Scouts must Be Prepared by completing **requirement 3f** at home and must bring their completed work to class. Here is some information on reducing pollution at home: [http://epa.gov/oaqps001/peg\\_caa/reduce.html](http://epa.gov/oaqps001/peg_caa/reduce.html)
4. Scouts must Be Prepared by completing **requirement 6** at home and must bring their completed work to class. Here is some information on career opportunities in environmental science: <http://www.collegexpress.com/interests/science-and-engineering/articles/studying-sciences/environmental-science-majors-and-potential-careers/>

### During class:

1. Scouts will cover requirements: 1, 3a1, 3c2, 3g1, 4a, and 5

Before taking the **Environmental Science merit badge**, Scouts should have completed these requirements from the following Scout ranks; Tenderfoot:4b, SecondClass:1b, First Class:1b, 5



## Geocaching Merit Badge

Saturday, March 24<sup>th</sup>, 2018

Time 9:00 am to 4:00 pm

Scouts must bring all written homework to class to receive credit.

### Before class:

1. Scouts must Be Prepared by **completing requirements** 1(abc), 2(abc), 3, 5ab at home, including writing definitions of the terms from the requirements 3 and 5. The merit badge book will be helpful for your work. Scouts must bring their notes to class.
2. Scouts should be able to describe the four steps to finding your first cache. (requirement 6)
3. For completion of requirements 7 and 8, Scouts will need to obtain parent permission and help and will need to set up a free user account with [www.geocaching.com](http://www.geocaching.com).
4. For requirement 8a, scouts need to identify 3 Cache to Eagle sites. Hint: go to Mecklenburg Council & pick the sites found with Discovery Place Nature.
5. Scouts must Be Prepared by working on **requirement 4, 6, and 7** at home. Make notes on the **EDGE** method of teaching in Scouting. Bring your written results with you to class.

See <http://www.scouting.org/filestore/pdf/26-242.pdf> pages 11-13.

The Boy Scout Handbook is another resource.

**Explain** how it is done.

**Demonstrate** the steps.

**Guide** learners as they practice.

**Enable** them to succeed on their own.

### During class:

1. Instructor will review and scouts will **complete requirements**: 4 & 5ab
2. **Scouts will complete** requirements: 5cd, 6, 7, 8a, 9

3. **Scouts will complete** requirements 6 & 7. Scouts will do the field work of marking & editing a waypoint (6) and finding a public cache (7).
4. For requirement 8a, scouts will find 3 Cache to Eagle sites they have identified in the pre-work.
5. Requirement 9: Scouts will plan a course at Discovery Place Nature, with at least 4 waypoints, teach another person how to use a GPS unit, and play the game.

Before taking the **Geocaching merit badge**, Scouts should have completed these requirements from the following Scout ranks

Tenderfoot: 1c, 4abc,

Second Class: 1b, 3acd, 6ac

First Class: 1b, 4a, 5bcd,



## Nature Merit Badge

Saturday, April 14<sup>th</sup>, 2018

Time: 9:00 am to 4:00 pm

Scouts must bring all written homework to class to receive credit.

### Before class:

1. Scouts must Be Prepared by completing **requirements 1, 2 and 3** at home and by bringing written results with them to class.

Check out:

<http://ncagr.gov/plantindustry/plant/plantconserve/plist.htm>

[http://www.fws.gov/raleigh/es\\_tes.html](http://www.fws.gov/raleigh/es_tes.html)

<http://www.ncwildlife.org/Conserving/Species.aspx>

2. **Make a list** of the following animals you can identify in the Mecklenburg area, which include eight species of birds (4a), 3 species of wild mammals, including tracks (4b), and 2 species of fish (4e1).

3. **Identify** 4 types of food that fish eat at this time of year (4e2).

4. **List** 15 plants you are able to identify in the Mecklenburg area.

### During class:

1. Scouts will work on **requirement 4(abceg)** during class.

### After class:

1. Scouts can schedule a follow up visit with a Merit Badge Counselor for any **requirement 4** that was not finished in class. **Counselor will review** notes and specimens to confirm completion and to sign off the blue card indicating completion.

Before taking the **Nature merit badge**, Scouts should have completed these requirements from the following Scout ranks; First Class: 5



## Mammal Study Merit Badge

Saturday, May 12<sup>th</sup>, 2018

*Time 9:00 am to 4:00 pm*

Scouts must bring all written homework to class to receive credit.

### **Mammal Study Merit Badge Preparation before class:**

1. Scouts must be prepared by completing **requirements 1, 2, and 3**(a, b, or c) at home and bringing their answers/documentation to class.

### **Mammal Study Merit Badge Preparation during class:**

1. Scouts will **complete requirement 4d and 5** in class



## Reptile and Amphibian Study Merit Badge

Saturday, August 25<sup>th</sup>, 2018

Time 9:00 am to 4:00 pm

Scouts must bring all written homework to class to receive credit.

### Before class:

1. Scouts must be prepared by **completing requirements** 1, 2, 3, 4, 5, 7, 10 at home and by bringing written results with them to class.
2. Each Scout must prepare his talk for **requirement** 9c before class and come prepared to give his talk to the class.

### During class:

1. During class, instructor will **review requirements** 2, 3, 4, 5, & 10
2. Scouts will **complete requirements** 6, 9b, and 9c. Scouts will deliver their presentations for 9c during class.
2. Scouts will discuss with their Merit Badge Counselor how they will complete **requirement 8** during the class. If scouts are already maintaining a reptile or amphibian for the expected life of that animal they can complete 8a. If not, they will be completing 8b. Arrangements will be made for them to study a specimen over a 3 month period at Discovery Place Nature.

### After class:

1. Scouts can complete **requirement 8** in cooperation with Discovery Place Nature staff.





## Bird Study Merit Badge

Saturday, September 8th, 2018

Time 9:00 am to 4:00 pm

Scouts must bring all written homework to class to receive credit

### Before class:

1. Scouts must Be Prepared by **completing requirement 2** at home and bringing their labeled sketch to class
2. Scouts must Be Prepared by **completing requirement 4 g** at home. Do research and make a list of “Nonnative bird (introduced to North America from a foreign country since 1800)”.
3. Scouts must be prepared by **working on requirement 5** at home. Prior to class, prepare a field notebook and observe and identify at least 10 bird species. **Bring field notebook to class**
4. Scouts must Be Prepared by **working on requirement 7 b** at home. Do your research and bring your written results with you to class.
5. For **requirement 8** Scouts must describe what birds they wish to attract and why.
6. Scouts are encouraged to bring **binoculars** if they have them

### During class:

1. Scouts will **cover requirements:** 1, 3, 4a-f, 5, 6, and 8

### After class:

1. If **requirement 5** is not completed during class, Scouts may schedule a follow up visit with their merit badge counselor to show completion of the requirement.

**Note from Discovery Place Nature:**

*Please be aware of the longevity of, and needs of, reptiles and amphibians (as well as other animals) before purchasing them for requirement 8a. Pets are a huge responsibility and should not be purchased to fill a short term requirement. In addition, ecosystems are delicate. Releasing of any animal into the wild can cause an imbalance that could be detrimental to the health of a habitat, area, or ecosystem. Discovery Place Nature does not condone the purchasing of a reptile or amphibian specifically for the short term observation requirement **UNLESS THAT ANIMAL WILL BE TAKEN CARE OF FOR THE LIFESPAN OF THE ANIMAL** (which, in case of turtles, could be 30 to 60 years). We also do not condone the release of purchased animals into the wild, nor the capture and release of native or wild species for the purpose of this requirement. Because of these concerns, Discovery Place Nature will be happy to work with Scouts to help them satisfy this requirement by granting temporary admission upon request for observation of our reptiles and amphibians (8b).*