

Assignment 1 (Weeks 1 and 2)

INTRODUCTION

In this assignment you will be exploring practical use of the essential skills that have been covered in this course to date. These skills include:

- Essential Skill #1: Field preparation, planning, and safety,
- Essential Skill #2: Effective note taking and data recording,
- Essential Skill #3: Measuring and estimating, and
- Essential Skill #4: Reading maps

The assignment is laid out as a series of tasks below, these will increase in complexity as you progress. Students are encouraged to complete as far as possible given their availability of time and access to sites to do the work.

This assignment is not mandatory to complete the program and will not be given a grade, but we invite you to submit for comment and suggestions from an experienced environmental professional.

TASKS

1. Field preparation, planning, and safety

Task 1: Describe a near miss:

Write a brief story to submit of an experience you've had that has resulted in an unsafe experience. This could be a near miss, being encouraged to work in an unsafe manner, an employer taking shortcuts, etc. Looking back on the experience, what could you have done to make it safer or remove the risk?

Task 2: Design a survival kit

A survival kit should be designed and built to reflect local conditions and needs. Think about the area that you live and the things that could happen to you while working outdoors. What items do you think would be valuable for you to carry with you? Create a list of the equipment that you would include in a survival kit for your area for submission to NRTG.

2. Effective note taking and data recording

Task 3: Field note taking (freeform)

Choose a location to go into the field to practice note taking. Ideally this is somewhere with features such as a bridge, waterbody, a meadow, or a place of interest to you. This could be your back yard, a nearby park, or other location that works for you.

Onsite begin your field notes. Include for submission:

- A) **Title page:** Complete your title page for this location. Remember to be as specific as possible so when you hand in your work to another person, they will be able to understand your project information.
- B) **Site description:** Set a timer on your phone for 15 minutes and walk around taking note of everything around you to use for a site description. What do you see, smell, hear? Describe your site, think about location, potential hazards, evidence of human or animal activity, the environment, the geography. Be as specific as you can, what species are the plants/animals? How many? Etc.
- C) **Sketch map:** Draw a sketch map of your area (not to scale). Remember all maps should include a north arrow and a title. You might include any features that stood out to you. If you are drawing symbols to represent these, include a legend.
- D) **Photo-documentation:** Take several photographs of your site. Make notes to yourself of what the photograph is and what you are trying to capture with it.

3. Measuring and estimating

Task 4: Stride Length

To determine stride length:

- i) On flat ground measure and mark out a straight line 30 m long. Mark the start and end by placing an object there (sticks in ground, rocks, even pieces of litter).
- ii) Walk the distance of the line using a regular walking pace and count each step. Record the number of steps in your notebook.
- iii) Repeat this two more times for three trials. You will have three separate measurements of the number of steps to walk 30 m.
- iv) For each of the three trials, calculate your stride length as: $\text{distance} \div \text{number of steps taken}$. In this exercise, if you measured 30 m, your stride will be $30 \div \text{number of steps}$.
- v) Determine the average (mean) of the three trials by adding all three stride lengths you calculated in step (iv) and divide by 3. This is your average stride length on level ground. Record this length below and in your field notebook for reference.

My average stride length is: _____ meters per step.

(hint, if you are less than 6'6" tall your stride should be less than 1.0 m. If your stride is longer than 1.0 m you have made a mistake).

To use your stride length in the field to estimate a distance:

Walk the straight line distance you want to determine while counting the number of steps. Then multiply that number of steps by your average stride length. This will give you a good estimate of the actual distance.

Task 5: Estimating distances and lengths

Choose a distance you want to measure, such as from where you are standing to a light pole or to a parked car.

- i) Start by visually estimating how far it might be, write that down in your notebook.
- ii) Then pace the straight line between you and the object, and Write down your step count.
- iii) Use your step count and your average stride length to calculate the paced distance.
- iv) Finally, measure the distance using a tape measure.

You can use the table below to record the three distances estimated.

Measurement Description:

Type of measurement	Distance (m)
Visual estimate	
Count of steps taken	
Paced distance (number of steps x stride length)	
Measured distance	

Questions

- Do your estimates get better the more you do?
- Is your calculated distance based on your stride length estimate reasonably close to the measured distance?

4. Map reading

There are no field exercises for map reading. Instead, the exercises are in Essential Skill #4 of the online course.

ASSIGNMENT SUBMISSION

Please submit those tasks that you have chosen to complete. We will accept submissions as hand written notes and documents, or typed in a word processing program, whichever you prefer.

You may send these as a word document or take photos of your assignment to submit. Please attach to an email and send to: amazon@nrtraininggroup.com

In the email subject line please include course name and assignment number.

For Example: **EFS Assignment 1**

Please send in your work in **one email only** with as few attachments as possible.

If submitting the photo-documentation of Task 3, please **submit only one photo** that captures the important features of the site. Include in your submission a comment on what you are showing in your photo. A general overview? A specific tree? Evidence of animals or humans?

End of Assignment 1
