1. Lesson Title: Military Map Terrain Features

2. Grade/Age Level: Adult Learners age 18-45

3. Subject Area: Military Land Navigation

4. Time allotted for the lesson (express in number of class meetings and/or number of hours): 2 hours

5. Short description of lesson (write a brief, yet concise description of what occurs in this lesson):
   a. In this lesson, the learner will receive fundamental training on identifying terrain feature on a military map. This lesson will cover the four major terrain features, three minor terrain features, and two supplemental terrain features.

6. State Curriculum Standards met in this lesson: This lesson is derived from US Army Warrior Drill 12: Determine a Location on Ground (Terrain Association, Map, and GPS) requirements. It covers the following individual task:

   071-329-1000 Identify Topographical Symbols on a Military Map
   071-329-1001 Identify Terrain Features on a Map

7. Instructional Objectives (Each instructional objective [learning outcome] for this lesson):
   a. Identify 4 major terrain features on a map
   b. Identify 3 minor terrain features on a map
   c. Identify 2 supplemental terrain features on a map

8. Instructional Procedures
   a. Motivational Introduction: In the last two lessons you have learned the basics of reading a map by learning about it’s scale, color, and marginal data. Then you learned about using grid coordinates to find a location or to relate a location using a 4, 6, or 8-digit grid coordinate. Now in this lesson we are going to take it another step forward. We will be learning how to translate the contour lines you see on your map into 3D terrain features. It is important to be able to identify terrain features to better aid you in land navigation.
Knowing terrain features will allow you to identify areas that will not easily be traveled or where you will have the best cover against enemy attack. It will also allow you to travel using terrain association (navigating by the terrain that is around you rather than the use of a compass).

b. Techniques and activities
   i. The instructor will start off by explaining what a terrain feature is using the information located on http://edtech2.boisestate.edu/jasonclemens/506/mapreading/Lesson3/page2.html
   ii. The instructor will explain the four major terrain features using the images located on http://edtech2.boisestate.edu/jasonclemens/506/mapreading/Lesson3/page3.html. The instructor will explain each of the terrain feature and its corresponding sample contour lines
      1. The students will be instructed to find one of each major terrain feature on their map.
         a. The instructor will ask the students the review question.
   iii. The instructor will explain the three minor terrain features using the images located on http://edtech2.boisestate.edu/jasonclemens/506/mapreading/Lesson3/page4.html. The instructor will explain each of the terrain feature and its corresponding sample contour lines
      1. The students will be instructed to find one of each minor terrain feature on their map.
         a. The instructor will ask the students the review question.
   iv. The instructor will explain the two supplemental terrain features using the images located on http://edtech2.boisestate.edu/jasonclemens/506/mapreading/Lesson3/page5.html. The instructor will explain each of the terrain feature and its corresponding sample contour lines
      1. The students will be instructed to find one of each supplemental terrain feature on their map.
         a. The instructor will ask the students the review question.

c. Lesson Closure Map reading is a skill that takes practice. It must be practiced often to retain this skill. Combining what you have learned in this lesson and the previous lessons you are now ready to go out into a training area and develop your skills as a land navigator.

9. Adaptations for special learners: The students are broken in to pairs allowing peer instruction to help facilitate learning.
10. Supplemental Activities:
   a. Extension and remediation: Students can explore their maps and research areas that were not covered using their reference material.
   b. Remediation: Students will be given the opportunity to use classroom computers to directly interact with the Map Reading website and the reference materials.

11. Assessment/Evaluation: Practical Exercise
   a. Students will be given 20 minutes to create a terrain identification quiz on their map. Students will do this by identifying one of each terrain feature (9 total), circling them on their map, and placing a number by them.
   b. Students will then exchange maps and identify the marked terrain features by writing them down on a scratch piece of paper.

12. Learner Products: Terrain identification quiz with 9 terrain features marked (One of each terrain feature)

* Note for learners: This lesson plan template is adapted from the model that is recommended in the book Preparing to Use Technology: A Practical Guide for Technology Integration.