

## PEO 412 - Leading in Nature Lesson Plan Documents

### LESSON PLAN CONTENT AND ORGANIZATION OF YOUR TEACHING TOPIC

Through you, your classmates have a unique opportunity to learn something special about the natural world. Please take this assignment seriously and invest an appropriate amount of time and energy preparing to deliver an informative, enjoyable, creative and interactive lesson.

I suggest approaching your lesson from a holistic perspective. Rattling off a bunch of facts about the physical characteristics, human uses, etc. of your topic is low on the interactivity scale and limiting in terms of having your students acquire an understanding of your specimen's place in its environment and how it interacts with, and depends upon, the rich contributions of other species and forces of nature for its health and existence.

Craft your lesson plan around the categories of information outlined in the '*Information Sheet Template*'. It's up to you to structure an interactive, interesting lesson however you chose. In an effort to place your specimen into its environment as richly as possible, your lesson **MUST** include, in as much detail as is reasonable, the following topics:

- *Key Identifying Characteristics*
- *Preferred Environmental Conditions* - successional role, forest ecology and fire ecology.
- *Associated Animal Species* - What life forms (birds, insects, animals, etc.) utilize this species for shelter, food, etc.? How does this species benefit other life forms? Describe any unique relationships.
- You **MUST** also utilize a **MINIMUM** of 5 sources when researching your teaching topic. Sources must also be fully cited in your lesson plan. Web sources are acceptable.

It is important to understand that the above topics are by no means the only content that should be included in your lesson, but they should be focal points.

You have 25 minutes to teach the group about your topic. Please consider how to best use your time so that students come away from your lesson intrigued and curious about what you have taught them.

## PEO 412 - Leading in Nature Lesson Plan Template

Include the following categories in your lesson plan.

Your Name

Lesson Title

Time Limit - 25 minute lesson maximum and 15 minutes for questions, discussion and feedback.

Learning Outcomes -must be stated in performance terms. As a teacher you must be able to evaluate whether or not your objectives have been met. BE SPECIFIC AND THOROUGH! Refer to the example LP for guidance.

Progression -a DETAILED account of the progression you intend to follow for lesson delivery. Specify a time frame for each step in the progression. Total time must add up to the length of intended delivery. Attempt to limit your talking.

Some ideas to help you actively engage students in your lesson include:

- Have students list out the leaf characteristics of your tree or shrub;
- Have students key out your tree or shrub;
- Have stations that allow students to examine key features of the tree or shrub;
- Play a game that tests their knowledge of the information provided;
- Write and teach a song that helps with information (using the tune of a familiar song like twinkle-twinkle or row your boat helps to make the song stick);
- Have students write a rhyming poem that talk about the facts, then have a poetry slam;
- Have students take a quiz;
- Help students to draw the key features of the tree or shrub (cones, flowers, leaves, bark, general form)

Information sheet – Refer to the Information Sheet document for details.

Additional Guidelines

- The lesson plan AND the information sheet must be word processed and printed for distribution to class participants, as follows:
  - One copy of the lesson plan provided to the course instructor IMMEDIATELY PRIOR TO your teaching event.
  - One copy of the information sheet to each student AND the course instructor. Present the information sheet to the instructor immediately prior to your lesson, and to the students after you finish teaching.

NOTE: AFTER THE TEACHING EVENT EXPECT TO RECEIVE FEEDBACK ON YOUR PERFORMANCE!

## PEO 412 - Leading in Nature - Lesson Plan Example

Name - \_\_\_\_\_

Lesson Title - Arbutus menzeisii

Time Limit - 25 minute lesson maximum and 15 minutes for questions and discussion - 40 minutes total.

Learning Outcomes - by the end of the lessons students should be able to:

- State the Latin name of the Pacific Madrone;
- Describe the leaf characteristics and arrangement on the stem;
- Describe the unique bark, flowers and fruits of the madrone;
- Explain the climate/soil requirements for the madrone;
- Explain the fire ecology of the madrone;
- Explain the successional role the madrone plays in its ecosystem.

### Progression

1. Students will rotate through five stations to learn specific information about the Madrone. The time limit for each station is 4 minutes. (20 minutes)

- Station 1 - Climate/soil requirements - Write out the scientific name of Pacific Madrone - Students read a poem that describes the climate and soil requirements. Each student reads the poem aloud once, then individuals write down what they can remember. Read the poem again and fill in any missing pieces
- Station 2 - Bark, flower, leaf and fruit characteristics - Write out the scientific name of Pacific Madrone - Students describe the bark, flowers and fruit (from a picture) and write a description of the leaf shape and arrangement on the stem.
- Station 3 - Fire ecology - Write out the scientific name of Pacific Madrone - Students will listen to a brief description about the fire ecology of the madrone, followed by a question/answer session to reinforce the main points.
- Station 4 - Associated animal species - students read an excerpt on the role of birds in distributing seeds.
- Station 5 - Successional role - Write out the scientific name of Pacific Madrone - puzzle pieces. Each student gets a piece of a short story. Pieces are not in order and need to be put together to make sense.

2. Review activity: Stand in a circle and throw a ball around the circle. Each time the ball changes hands, I ask a different question to reinforce important points. (5 minutes)

3. Questions, discussion and quick evaluation of teaching. (15 minutes)