COURSE TITLE:

TREES: Inside and Out

NO. OF CREDITS: 3 QUARTER CREDITS [semester equivalent = 2.00 credits] WA CLOCK HRS:30OREGON PDUs:30PENNSYLVANIA ACT 48:30

INSTRUCTOR: Peter Chausse walkportland@msn.com

COURSE DESCRIPTION:

Trees are all around us. We enjoy the shade they provide on hot summer days, the shelter they give us when the rains come, and we benefit from all that they produce: oxygen, lumber, paper, fruit, and nuts. But how much do our students really know about trees? This course provides ideas to energize teachers and motivate students. You will focus on tree identification, uses of trees, and dozens of lesson ideas that can be adapted for teachers of grades K-12 to integrate with writing, literature, math, science, art, and social studies curriculum to provide real-life learning experiences for students.

You will begin by learning fun and effective ways to identify the trees around your school and in the neighborhood surrounding your school. You will also learn more about native Northwest trees and their uses. Then, you'll be presented with lesson ideas that can take place inside the classroom or outside, and you may include visits from guest speakers, or field trips to local parks, forests, or natural areas.

This class is applicable to teachers of students in grades K-12, and the strategies and lesson ideas included can be implemented in any community.

The Co-Instructor for this course is Jake Gordon, M.S. Ed.

LEARNING OUTCOMES: Upon completion of this course, participants will have:

1. How to identify dozens of tree species. Handouts and recommended tree identification texts will serve as resources for identifying both native and introduced trees by recognizing leaves, flowers, fruit, nuts, bark, tree color and shape. The instructor will also answer questions and to aid in tree identification.

2. How to make tree study come alive for students in K-12 grades. Focus on writing, math, science, art and social studies ideas applicable to work on state benchmarks and district academic goals.

3. How to use local organizations and members of the community as resources in teaching about trees. A resource section will be provided in the handout material.

4. Effective methods of involving students in community service projects. This section focuses on adopting trees and parks, planting trees, maintaining trails and green spaces, and education outreach programs.

5. Ideas for field trips to visit trees in a variety of habitats and to study the inter-relationship of trees with local plant, animal and human populations.

6. How to identify books of tree study information for developing activities for students.

COURSE REQUIREMENTS:

Completion of all specified assignments is required for issuance of hours or credit. The Heritage Institute does not award partial credit.

HOURS EARNED:

Completing the basic assignments (Section A. Information Acquisition) for this course automatically earns participant's their choice of CEUs (Continuing Education Units), Washington State Clock Hours, Oregon PDUs, or Pennsylvania ACT 48 Hours. The Heritage Institute offers CEUs and is an approved provider of Washington State Clock Hours, Oregon PDUs, and Pennsylvania ACT 48 Hours.

UNIVERSITY QUARTER CREDIT INFORMATION

REQUIREMENTS FOR UNIVERSITY QUARTER CREDIT

Continuing Education Quarter credits are awarded by Antioch University Seattle (AUS). AUS requires 75% or better for credit at the 400

level and 85% or better to issue credit at the 500 level. These criteria refer both to the amount and quality of work submitted.

- 1. Completion of Information Acquisition assignments 30%
- 2. Completion of Learning Application assignments 40%
- 3. Completion of Integration Paper assignment 30%

CREDIT/NO CREDIT (No Letter Grades or Numeric Equivalents on Transcripts)

Antioch University Seattle (AUS) Continuing Education Quarter credit is offered on a Credit/No Credit basis; neither letter grades nor numeric equivalents are on a transcript. 400 level credit is equal to a "C" or better, 500 level credit is equal to a "B" or better. This information is on the back of the transcript.

AUS Continuing Education quarter credits may or may not be accepted into degree programs. Prior to registering determine with your district personnel, department head, or state education office the acceptability of these credits for your purpose.

ADDITIONAL COURSE INFORMATION

REQUIRED TEXT

None. All reading is online.

MATERIALS FEE

\$35 additional fee is for materials: a 200 page handbook of lesson ideas and information, and the course text, 'Trees to Know In Oregon.' Please pay this amount by check directly to the instructor, after registration. Peter Chausse, PO Box 3043, Gresham, OR.97030. Please include your name, address, phone and email.

ASSIGNMENTS REQUIRED FOR HOURS OR UNIVERSITY QUARTER CREDIT

A. INFORMATION ACQUISITION

Assignment #1: Review handout

- Review the handout packet. It includes information on tree identification, lesson ideas and a listing of possible community resources.
- Decide how this information might prove valuable to you and your students.
- Summarize your learning in a 1-2 page paper or a concept map.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #1'

Assignment #2: Read books

- Read two books from the bibliography, or read two books of your own choice with the instructor's prior approval.
- Decide how these books will assist you in your teaching.
- Comment (in a 1-2 page paper) on the effectiveness of these books in teaching students about trees, or in preparing meaningful experiences for students.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #2'

Assignment #3: Identify trees near your school or neighborhood

- Take a tree walk.
- Identify and map a variety of trees near your local school, in your school's local neighborhood, or at a favorite local park or natural area.
- · Determine areas that students could visit.
- Submit your map.

Assignment #4: Gathering tree teaching materials

- Determine ways to bring the trees to your students (slides, tree leaves, twigs, bark, seeds, bark rubbings, tree "cookies" etc).
- Create and submit a concept map showing at least 5 different possibilities.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #4'

Assignment #5: Books about trees

- Research 10 available books in current children's literature (fiction and/or non-fiction) that focus on trees as the theme.
- Design an interactive visual display that features these books.
- Submit the design plans along with a brief explanation of how you plan to use it in your classroom.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #5'

Assignment #6: Resources to teach about trees

- · Consider outside resources when teaching about trees.
- Consider guest speakers, educational kits, field trips and community service projects.
- Decide how you can tie classroom learning experiences to the school or the community.
- Compile a directory of a minimum of 5 outside resources including contact information such as contact person, phone number, address, web address, etc. to be used when teaching your tree theme.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #6'

Assignment #7: Web sites about trees

- Conduct an Internet search for 5 or more websites containing information on trees, environmental education, and related topics.
- One must be Project Learning Tree: http://www.plt.org/.
- Create an annotated bibliography of the sites found.
- The annotation should include Title, Author, URL, length of article, year of publication and your review of information contained.
- Include how these websites can be used with students to stimulate learning.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #7'

ADDITIONAL ASSIGNMENTS REQUIRED FOR UNIVERSITY QUARTER CREDIT

B. LEARNING APPLICATION

In this section you will apply your learning to your professional situation. This course assumes that most participants are classroom teachers who have access to students. If you are not teaching in a classroom, please contact the instructor for course modifications. If you are a classroom teacher and start or need to complete this course during the summer, please try to apply your ideas when possible with youth from your neighborhood, at a local public library or parks department facility, (they will often be glad to sponsor community-based learning), or with students in another teacher's summer classroom in session.

Assignment #8: Create & implement lessons

NOTE ABOUT LESSONS:

The lessons you create (see instructions below) should be designed to meet your learning objectives and can focus on a variety of indoor and/or outdoor activities that can be tied together as part of a unit on trees, or as individual lessons, or they may be integrated with other academic areas. Use your district's approved lesson plan format, or include the following information:

- Your grade level
- Student learning outcomes for each lesson.
- The in-class and out-of class activities that will take place.

- Materials and texts, student projects and additional personnel that might be needed.
- Evaluation criteria indicating how learning will be assessed, including rubrics, performance standards, etc.

The packet will detail a variety of lesson ideas. Possible lessons will include: tree identification, tree labeling, adopting a tree to study throughout the year, planting trees, measuring trees to determine tree diameter and height, studying tree growth in a variety of soils and growing conditions, writing essays (narrative, imaginative, descriptive) or poetry based on tree walks and observations, analyzing tree parts (leaves, flowers, nuts, fruit, bark) and writing reports.

Other ideas include creating collages, making tree drawings or leaf presses, designing maps of tree locations, conducting community service at local parks or on your school grounds, or studying the uses of trees by people and animals. You may have a variety of additional ideas that would be suitable for your students.

Assignment #8A:

- Create two lessons or adapt existing ones to reflect what you've learned in this course.
- Implement your lesson with students in your classroom.
- Write a 250-500 word commentary on what worked well and what could be improved.
- Include any student feedback on your lesson.
- Share what you've learned with other teachers taking our courses by also contributing your Lesson to The Heritage Institute Lesson Library <u>here</u>.
- Send your modified lesson and your commentary via email to your instructor.
- Send to instructor: walkportland@msn.com. Subject line to read 'Trees #8A'

OR

Assignment #-B:

Use this option if you do not have a classroom available.

- Create two lessons or adapt existing ones to reflect what you've learned in this course. (Do not implement it.)
- Share what you've learned with other teachers taking our courses by contributing your Lesson to The Heritage Institute Lesson Library <u>here</u>.
- Write a 500+ word article concerning any noteworthy success you've had as a teacher with one or more students.
- Please refer to the guidelines on our blog What Works: Teaching at its Best prior to writing your article.
- When you submit your article to your instructor, please also email a copy to Renee Leon THI blog curator and media specialist.
- Indicate whether or not you are OK with having your article considered for publishing on our website.
- Submit your modified lesson along with your article via email to your instructor.
- · Send to instructor: walkportland@msn.com. Subject line to read 'Trees #8B'

Assignment #9: (500 Level ONLY) Option A)

- Invite another teacher to visit your classroom.
- Teach one of the three lessons to your students, ask your colleague for feedback regarding the lesson and possible follow-up activities in other curricular areas.
- Summarize their feedback in a 2-page paper.

Send to instructor: walkportland@msn.com. Subject line to read 'Trees #9-A'

OR

Option B)

- Create an original research or hands-on project for your students that focuses on some aspect of tree study. Discuss with the instructor beforehand what you would like to do.
- Then, explain the goals, implementation and results of the project.

C. INTEGRATION PAPER

Assignment #10: (Required for 400 and 500 Level)

SELF REFLECTION & INTEGRATION PAPER

(Please do not write this paper until you've completed all of your other assignments.)

- 1. What did you learn vs. what you expected to learn from this course?
- 2. What aspects of the course were most helpful and why?
- 3. What further knowledge and skills in this general area do you feel you need?
- 4. How, when, and where will you use what you have learned?
- 5. How and with what other school or community members might you share what you learned?

Send to your instructor at their email address. Subject line to read "(put course name here) Integration Paper"

INSTRUCTOR COMMENTS ON YOUR WORK:

Instructors will comment on each assignment. If you do not hear from the instructor within a few days of posting your assignment, please get in touch with them immediately.

QUALIFICATIONS FOR TEACHING THIS COURSE:

Peter Chausse, B.S. is a former elementary school teacher, who has specialized in teaching his students about trees, plants, urban parks and natural areas.

Before beginning his teaching career, Peter earned a degree in Forestry from the University of Maine. His training included coursework in Dendrology (tree identification), Forest Management and wood product usage.

In the early 1980's, Peter worked for the U.S. Forest Service in the state of Washington, where he focused on tree identification and scientific observations. Since 1994, Peter has taught a course through The Heritage Institute titled, 'Studying Portland's Trees' During the course, participants learn how to recognize several dozen tree species as they explore Portland's parks and historic neighborhoods on foot. Ideas for the integration of tree study with math, art, science, literature, writing and social studies activities are presented and discussed.

Peter has had a lifelong love of trees, and is eager to help you acquire more tree knowledge. He is also dedicated to helping you bring this information to your students in fun and meaningful ways.

Co-Instructor:

Melissa Juska, M.L.S., has worked in elementary education since 2013 as an art teacher and school librarian. She holds a Bachelor of Fine Arts, a Master of Library and Information Studies, and teaching certifications in PreK-12 Visual Arts, Library Media, and Integrated Science. In 2016, she joined the Master Naturalist volunteer program to pass on her knowledge and love of the natural world through citizen science, outreach, and community service. Melissa is excited to share her passion for nature, art, and education with teachers and their students.

BIBLIOGRAPHY

TREES: Inside and Out

TREE IDENTIFICATION RESOURCES

Brockman, Frank C. The Golden Book to Field Identification: Trees of North America. Golden Book Press, 2001, New York.

Coombes, Allen J. TREES, The Eyewitness Handbook and Visual Guide to more than 500 species of trees from around the world. 1992. New York.

Jensen, Edward C. & Charles R. Ross. Trees to Know in Oregon, 2005. Oregon State University Extension Service, Corvallis, OR.

Little, Elbert L. National Audubon Society Field Guide to North American Trees (Western and Eastern regions) 1998. Chanticleer Press, New York.

Plotnik, Arthur. 2000. The Urban Tree Book. An Uncommon Field Guide for City and Town. Three Rivers Press USA

Reynolds, Phyllis & Elizabeth Dimon. Trees of Greater Portland, 1993. Timber Press, Portland, Oregon.

Stuckey, Martha Maggie & George Palmer. Western Trees, A Falcon Guide. 1998. Falcon Publishing, Helena, Montana.

ACTIVITY RELATED RESOURCES

Carlson, Laurie. *Kids Create*, 1990. Williamson Publishing, Charlotte, Vermont.
Kohl, Maryann F. & Cindy Gainer. *Good Earth Art, 1991*. Bright Ring Publishing, Bellingham, WA.
Milford, Susan. *Kids Nature Book*, 1989. Williamson Press, Charlotte, Vermont.
NatureScope, *Trees Are Terrific*, 1992. National Wildlife Federation, Washington, D.C.
Sohi, Morteza. 1995. *Look What I did with a Leaf*. Naturecraft.

SCIENCE RELATED ACTIVITY BOOKS

(Although plants are focused, there are many tree study activities)
Evans, Joy & Jo-Ellen Moore. *Plants*, 1995, Grades 1-3)
Olian, Rebecca. *Exploring Plants (Grades 2-4)* Scholastic Books, 1997. New York.
Ortleb, Edward & Richard Cadice. *Plants, (Grades 5-9)* Milliken Publishing, 1986. St. Louis.
Ward, Pat & Barbara. *Plants, (Grades 5-8+)* Mark Twain Media Inc. 1998. USA.

LITERATURE RELATED BOOKS

Silverstein, Shel. The Giving Tree - 40th Anniversary Edition. 2004