



## AED150 Service-Learning Project

### Two Mini Lessons

Topics – Relate to Nature’s Notebook Service-Learning project; select **two different** topics

#### Topic Suggestions

- How-to video about phenology observation methods
  - Video: Observation Methods length = 2-3 minutes for use in National Observation Video Guide
  - In-class talk: Remaining time spent giving more detailed information about observation steps or teaching class about how to create the video
- How-to video about using the map to find plants in Krutch Garden
- Video - Commercial for using NN in a higher education course at UofA
- Video - Commercial for using NN to increase citizen science participation (audience = Tucson public; UofA students)
- Interview UofA National Phenology Network staff here on campus (coordinate through LoriAnne Barnett). Share interview Q&A via video or on slides discussed in class
- Video of short teaching segment about NN or phenology in the community (in Krutch Garden)
- Discussion facilitation around teaching/learning topic as it relates to NN and phenology
- Discussion facilitation around *College Success Guide* topic as it relates to NN and phenology Activity facilitation based around phenology or NN theme
- Active learning technique talk with content based on phenology of NN theme; i.e. problem-based learning, debate, role play, case study, simulation, cooperative learning, dramatic play, experiential learning

#### Format

- ✓ Work as individual, in pairs, or with team of 3-5 students
- ✓ Members of group can be outside team
- ✓ Length = ~ 5 minutes

#### Components

- Mini Lesson plan – template available in D2L; see rubric
- Teaching lesson presentation

Possible Points = 200 each; 100 per mini-lesson

Submission – Bring printed copy of mini-lesson plan to class on day you present

Due Date – varies by student sign-ups

- Mini-Lesson #1 to be completed by 3/24/16
- Mini-Lesson #2 to be completed by 4/21/16

Meets Expected Learning Outcomes - *Students will be able to:*

- 🐾 Research and apply effective learning and teaching methods
- 🐾 Practice goal setting, critical thinking, and time management strategies
- 🐾 Demonstrate the ability to write in a clear and organized manner and conduct teaching lessons effectively
- 🐾 If work done in group - Improve teamwork skills for enhanced workplace readiness - communication, listening, problem solving, leadership, and collaboration

## Individual Data Collection

Topic – Weekly data collection

Format –on iPhone or Android phone app, tablet, laptop, or desktop computer; paper observation templates may also be used and later entered in observer’s online account

Components – Ten weekly data collections during the semester. Up to 20 bonus points available two extra collections over two additional weeks






Possible points = 120; 100 = standard + up to 20 bonus points

Submission – Log in to your NN account, go to My Observation Deck, Select Download My Data, submit printed copy on due date

Due Date

- 4/26/16

Meets Expected Learning Outcomes - *Students will be able to:*

-  Research and apply effective learning and teaching methods
-  Develop a deeper understanding of one’s own learning style and organizational management skills through exploration and application
-  Practice goal setting, time management, motivation strategies
-  Demonstrate the ability to read with comprehension, write in a clear and organized manner, and conduct teaching lessons effectively
-  Improve skills for enhanced workplace readiness – communication (recordkeeping), listening, problem solving

## Two Social Media Write-ups

Topic – Phenology

Topic Suggestions

- How NN is being used in our course
- Impressions of NN as service-learning project
- Applications of NN in our course
- Applications of NN as part of citizen scientist movement

Format – Social media write-ups about phenology and NN

- ✓ Small groups of 2-3
- ✓ Members of group can be outside course team
- ✓ Length = 1 page each

Format Suggestions

- Facebook post – Tucson Phenology Trail or National US-NPN, depending on topic covered and quality
- Instagram – series of pictures with separate 1-page narrative
- Nature’s Notebook e-newsletter article - Tucson Phenology Trail or National US-NPN, depending on topic covered and quality
- Set up a team blog site or wiki and create content equivalent to two pages

Possible points = 100; 50 points per write-up

Submission – Upload to Dropbox as .pdf, .doc, or .docx

Due Date

- Write-up #1 due 3/29/16
- Write-up #2 due 4/28/16

Meets Expected Learning Outcomes - Students will be able to:

- 🐾 Develop a deeper understanding of one's own learning style and organizational management skills through exploration, application, and reflection
- 🐾 Practice critical thinking and time management strategies
- 🐾 Demonstrate the ability to write in a clear and organized manner
- 🐾 Improve skills for enhanced workplace readiness – communication, listening, problem solving, and leadership

**Team Teaching Lesson #2**

Topic – Nature's Notebook related theme, *subject to instructor approval*

Topic Suggestions

- Learning about phenology in the classroom
- Learning about phenology in the outdoors
- Visit with NASA intern on UA campus to learn then share about what Tucson Phenology Trail data are telling us
- Develop a research question for data being collected along Tucson Phenology Trail
- Implementing NN in different settings – formal, nonformal, informal with higher ed students as audience
- Service-learning and citizen science – through lens of educator
- How-to process for effective observations in NN
- Pheno-phases for plants within your team – compare, contrast
- Self-guided or virtual tour of plants in Krutch Garden with phenology content

Format

- ✓ Work with self-selected team of 4-5 students
- ✓ In person delivery of lesson
- ✓ Length = 15-20 minutes

Components

- Lesson plan – template available in D2L; see rubric
- Teaching lesson presentation: 15 -20 minutes; see rubric
- Evaluation - Team-Based Learning Peer Feedback; available in D2L

Possible Points = 400

Submission – One/team; Submit lesson plan & teaching material to Dropbox by class start on day of presentation; bring printed copy of lesson plan to class on presentation day

Due Date - two teams will teach each day; you must be present ALL THREE DAYS to receive your individual teaching presentation score

- April 28, May 3, May 10

Meets Expected Learning Outcomes - Students will be able to:

- 🐾 Research and apply effective learning and teaching methods
- 🐾 Develop a deeper understanding of one's own learning style and organizational management skills through exploration, application, and reflection
- 🐾 Practice goal setting, critical thinking, time management, and motivation strategies
- 🐾 Demonstrate the ability to write in a clear and organized manner and conduct teaching lessons effectively
- 🐾 Improve teamwork skills for enhanced workplace readiness - communication, listening, problem solving, leadership, and collaboration

## **Wrap-up, mini e-presentation**

Topic – Nature’s Notebook service-learning project reflection

### Format

- ✓ Work with self-selected team of 4-5 students
- ✓ Creative e-delivery of reflection such as video blog; .PPT with voice-overs; Prezi with voice-overs or screen capture w/video
- ✓ Length = ~ 5 minutes

### Components

- Introduction
- Individual reflections on project
- Graphics of data collected per person and how data are similar/different between plants
- Conclusion – leave audience with tip about being a citizen scientist, learning in the outdoors, or participating in this active learning project

Possible Points = 150

Submission – One/team; check technology works first then submit virtual presentation file to Dropbox

### Due Date

- 4/26/16

Meets Expected Learning Outcomes - *Students will be able to:*

- 🐾 Research and apply effective learning and teaching methods
- 🐾 Develop a deeper understanding of one’s own learning style and organizational management skills through exploration, application, and reflection
- 🐾 Practice goal setting, critical thinking, time management, and motivation strategies
- 🐾 Demonstrate the ability to write in a clear and organized manner and conduct teaching lessons effectively
- 🐾 Improve teamwork skills for enhanced workplace readiness - communication, listening, problem solving, leadership, and collaboration