Assignments and Grading

1. Personal Story presentation (prepare prior to the workshop) (10 points)
2. Background reading notes and questions for each session (10 total)
3. Daily journal including notes on background reading assignments, reports and
   reflections on daily discussions and activities, observations (2 points per day, 10 total)
4. Active participation in daily discussions and activities (2 points per day, 10 total)
5. Unique teaching lesson and assessment plan (in pairs) 5 points for plan, 5 points for
   peer review of another pair’s plan (10 total)
6. Presentation of unique lesson plan (10 points)
7. Implementation evaluation (online) (20 points)

\[
90-100\% = \text{A}, \ 80-90\% = \text{B}, \ 70-80\% = \text{C}
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Tentative Schedule

Session 1: Saturday, 18 July 2020 AM
Introduction to Teaching and Learning
ASSIGNED READINGS:
   Final Report of the U.S. Commission on Ocean Policy”.
   a Course for Sea Change.
3. Ocean Literacy: Essential Principles and Fundamental Concepts (pamphlet)
ACTIVITIES: Aloha Lines, Ice Cubes, String Theory, The Watershed Connection

Session 2: Saturday, 18 July 2020 PM
The Nature and Process of Science
ASSIGNED READING:
1. The Nature of Science and Habits Of Mind, from Benchmarks for Science Literacy,
   American Association for the Advancement of Science Project 2061 (1993).” 1993,
   Oxford University Press. Read - introduction and chapter 1.
   of a Curious Character. WW Norton & Co.
   Zealand perspective. The Royal Society of New Zealand, V50, 59-75.
ACTIVITIES: Beach Bucket, Beach Finds Curiosity, Sand Activity
LESSON PREPARATION: With a partner; discuss target audience (formal or informal education). Brainstorm where you will do your teaching.
PRESENTATIONS Personal Story: This could be poster, powerpoint, short video clip, an activity table (for an informal setting), or something of your choice. Remember to tell your story: what or who inspired you, what is your work really like, what are you studying or researching, why is it important, what might be some implications of global environmental changes on your work?

Session 3: Sunday, 19 July 2020 AM
Teaching and Learning: Designing Activities and Contexts Motivations for Learning
ASSIGNED READING:
3. National Science Education Standards – recommendations for more/less emphasis

ACTIVITIES: Tide Pool Survival and Observations, Habitats

Session 4: Sunday, 19 July 2020 PM
Inquiring Minds
ASSIGNED READING:

ACTIVITY: Fish Wheel
LESSON PREPARATIONS

Session 5: Monday, 20 July 2020 AM
Blank Slates or Clever Minds: Building Ocean Knowledge
ASSIGNED READING:

ACTIVITIES: Fish Observations, Fish Features and Habitats

Session 6: Monday, 20 July 2020 PM
Questioning Strategies and Interaction
ASSIGNED READING:

**ACTIVITIES:** Got Seaweed?, Exploration Tank, Shrimp and Crab Investigation

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**Session 7: Tuesday, 21 July 2020 AM**

Maui Ocean Center

**Designing an Activity and Assessment and Evaluation in Formal and Informal Settings**

**ASSIGNED READING:**


**ACTIVITIES:** Skin, Scales and Skulls; Marine Skull Cart; Shark Cart; Whale Cart

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**Session 8: Tuesday, 21 July 2020 PM**

Maui Ocean Center

**ASSIGNED READING:**


**ACTIVITIES:** Questioning Strategies, Activity Tables

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**Session 9: Wednesday, 22 July 2020 AM**

**Social & Cultural Impacts; Other Audiences: Media & Government; and Broader Impacts in Science**

**ASSIGNED READING:**

4. National Science Foundation RFP Broader Impacts Section.
6. Sample science research proposal broader impacts section.

ACTIVITY: Guest Speakers:

Session 10: Wednesday, 22 July PM
Reflecting on Practice
ASSIGNED READING: Reflecting on Practice.
PRESENTATIONS: You will present on the design and implementation of your lesson, including changes and alterations that you made based on peer feedback as well as assessment information that you collected from your audience during or after the lesson. A written, one page abstract of your presentation is due at the time you present. You are encouraged to use powerpoint or other visual means of sharing your lesson.
ACTIVITY: Reflective strategies