

SAMPLE: Table 4. Program Design Alignment, Assessment Alignment and Assessment Results

The information on this page provides details needed for each row and column for Table 4.

- Each **row** should indicate **one course or one specific experience** that is used in your program to teach and evaluate student competency.
- The columns should provide examples related to the course or experience, based on the column titles.
- The bold column headings will be used on subsequent pages. Please refer to this page for explanation of the heading titles.

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Name the course or experience</p> <p>Indicate by Course: or Experience:</p> <p><i>Use a separate row for each course/ experience.</i></p>	<p>Identify the guideline by number (e.g. 1.2).</p> <p>Describe what methods (e.g., lecture, discussion, field trips) are used by faculty to teach the content that matches this guideline.</p> <p>Indicate by Methods:</p> <p>Describe the applicable topics taught related to this guideline (e.g., differentiated instruction, history of EE, instructional strategies).</p> <p>Indicate by Topics:</p>	<p>How program participants are assessed: Describe the assignments that indicate how students demonstrate competency related to the guideline (e.g., written lesson plan, exam, peer teaching, journaling).</p> <p>Indicate by Assignments:</p>	<p>List the tools (e.g., rubrics, scoring guides, exam grades) that are used to assess assignments and indicate what level determines competency. Add the tool(s) that your program uses to the appendices.</p> <p>Indicate by Tool: and Competency =</p> <p>Add the tool that your program uses to the appendices.</p>	<p>Identify the percentage and number of students who demonstrated competency. Include the year the assessment took place (e.g., Spring 2017 100% of students at 80% or above, n = 12)</p> <p>Spring 2016 90% of students at 80% or above, n = 10).</p>

Theme 1. Environmental literacy: Educators must be competent in the skills and understandings outlined in *Excellence in Environmental Education–Guidelines for Learning (K-12)*.

- 1.1 Questioning, analysis, and interpretation of skills
- 1.2 Knowledge of environmental processes and systems
- 1.3 Skills for understanding and addressing environmental issues
- 1.4 Personal and civic responsibility

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Sustainability Issues Investigation</p>	<p>1.1 Methods: Lecture; discussion; project-based learning</p> <p>Topics: Knowledge of processes and systems Issue investigation skills and dispositions; skills pertaining to questioning, analysis and interpretation paper and presentation that focuses on the investigation of a sustainability-related issue.</p>	<p>Assignment: Course embedded assessment: written paper and presentation that focuses on the investigation of a sustainability-related issue</p>	<p>Tool: Issues Investigation Rubric (Appendix 1-A)</p> <p>Competency = acceptable or target on rubric</p>	<p>Spring 2017 100% of students at acceptable or target on rubric, n = 8</p> <p>Spring 2016 90% of students at acceptable or target on rubric, n = 15</p>

Theme 1. Environmental literacy: Educators must be competent in the skills and understandings outlined in *Excellence in Environmental Education–Guidelines for Learning (K-12)*.

- 1.1 Questioning, analysis, and interpretation of skills
- 1.2 Knowledge of environmental processes and systems
- 1.3 Skills for understanding and addressing environmental issues
- 1.4 Personal and civic responsibility

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Natural History</p>	<p>1.2 Methods: Fieldwork, blogs, lecture, exploration and peer teaching.</p> <p>Topics: A study of the plants and animals and the ecosystems in which they are found. Emphasis on ecosystem interrelationships, function of ecosystems, and organism identity.</p>	<p>Assignment: Quizzes, exams and ecosystem project (tour).</p>	<p>Tool: Graded quizzes and exams, ecosystem project tour rubric (Appendix 1-B)</p> <p>Competency = 80% or above</p>	<p>Spring 2017 100% of students at 80% or above, n = 12</p> <p>Spring 2016 90% of students at 80% or above, n = 10</p>
<p>Course: Environmental Issues</p>	<p>1.3 Methods: Seminar format</p> <p>Topics: Varied local, regional, and global issues chosen from a pre-approved list</p>	<p>Assignment: Students research topic and prepare a research paper followed by class presentation and facilitation of class discussion in the seminar format.</p>	<p>Tool: Research paper and class facilitation rubric (Appendix 1-C)</p> <p>Competency = Pass or higher on rubric</p>	<p>Spring 2017 80% of students pass or higher on rubric, n = 20</p> <p>Spring 2016 90% of students pass or higher on rubric, n = 15</p>

Theme 1. Environmental literacy: Educators must be competent in the skills and understandings outlined in *Excellence in Environmental Education–Guidelines for Learning (K-12)*.

- 1.1 Questioning, analysis, and interpretation of skills
- 1.2 Knowledge of environmental processes and systems
- 1.3 Skills for understanding and addressing environmental issues
- 1.4 Personal and civic responsibility

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Experience: Environmental Community Action Project</p>	<p>1.4 Methods: Faculty mentor students as they conduct a community action project</p> <p>Topics: Environmental issues of local concern</p>	<p>Assignment: Students conduct a community action partnership in their home community that meets the state EE certification standards.</p>	<p>Tool: Environmental Community Action Project Rubric (Appendix 1-D)</p> <p>Competency = Completed action project accepted by the State Department of EE and meets all state objectives.</p>	<p>Spring 2017 80% of completed action project at acceptable level, n = 12</p> <p>Spring 2016 90% of completed action project at acceptable level, n = 10</p>

Theme 2. Foundations of environmental education: Educators must have a basic understanding of the goals, theory, practice, and history of the field of environmental education.

2.1 Fundamental characteristics and goals of environmental education

2.2 How environmental education is implemented

2.3 The evolution of the field

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Fundamentals of EE</p>	<p>2.1 - 2.3 Methods: Lecture, discussion, examples, guest speakers, observations</p> <p>Topics: History of EE, future directions/trends; Goals, objectives, frameworks, NAAEE Environmental Literacy Assessment Framework; research-based guidance for quality EE; non-formal, formal, and informal settings and differences across settings (program requirements, funding, audience, etc.)</p>	<p>Assignment: Oral final examination at end of program</p>	<p>Tool: Oral final examination scoring rubric (Appendix 2-A)</p> <p>Competency = acceptable or target on rubric</p>	<p>Spring 2017 100% acceptable or target on rubric, n = 15</p> <p>Spring 2016 90% acceptable or target on rubric, n = 10</p>
<p>Course: Theories and Models</p>	<p>2.2 Methods: Lecture, discussion, reading of research</p> <p>Topics: Logic models, EE outcome frameworks,</p>	<p>Assignment: Student writes analysis of an at least 3 programs from a variety of setting by creating logic models,</p>	<p>Tool: Scoring guide for program analysis (Appendix 2-B)</p> <p>Competency =</p>	<p>Spring 2017 100% scored 83% or higher, n = 15</p> <p>Spring 2016 90% scored 83% or</p>

Theme 2. Foundations of environmental education: Educators must have a basic understanding of the goals, theory, practice, and history of the field of environmental education.

2.1 Fundamental characteristics and goals of environmental education

2.2 How environmental education is implemented

2.3 The evolution of the field

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
	learning theories, EE/REB theories	articulating and analyzing the program.	Score of 83% or higher	higher, n = 10
Course: EE Essentials	2.3 Methods: Discussion based on assigned readings. Students role-play the views of key historical figures. Topics: History of field through the eyes of the key historical figures; key environmental organizations, environmental issues and topics through history.	Assignment: Students create a timeline that explains the evolution of the field.	Tool: Evolution of the field of environmental education scoring guide (Appendix 2-C) Competency = Score of 83% or higher	Spring 2017 100% scored 83% or higher, n = 15 Spring 2016 90% scored 83% or higher, n = 10

Theme 3. Professional responsibilities of the environmental educator: Educators must understand and accept the responsibilities associated with practicing environmental education.

3.1 Exemplary environmental education practice

3.2 Emphasis on education, not advocacy

3.3 Ongoing learning and professional development

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Environmental Issues</p>	<p>3.1 Methods: Issue investigations, discussions, readings</p> <p>Topics: National, state and local environmental issues, issue investigation techniques, natural and social systems</p>	<p>Assignment: Environmental issues investigation and action plan unit</p>	<p>Tool: Environmental Issue Investigation and Action Plan Rubric (Appendix 3-A)</p> <p>Competency = 80% or higher</p>	<p>Spring 2017 100% received a score of 80% or higher on rubric n = 13</p> <p>Spring 2016 90% received a score of 80% or higher on rubric n = 13</p>
<p>Course: EE Pedagogy</p>	<p>3.2: Methods: Lecture, cooperative jigsaw readings and discussion, peer teaching, classroom teaching experience, teacher interview</p> <p>Topics: Education v. advocacy; bias in teaching</p>	<p>Assignment: Students will review curriculum based on the Guidelines for Excellence</p>	<p>Tool: Curriculum Review Assignment and Rubric (Appendix 3-B)</p> <p>Competency = A score of 9 (out of 10) is considered competency</p>	<p>Spring 2016 100% received 9 out of 10, n = 19</p> <p>Fall 2015 80% received 9 out of 10, n = 20</p>

Theme 3. Professional responsibilities of the environmental educator: Educators must understand and accept the responsibilities associated with practicing environmental education.

- 3.1 Exemplary environmental education practice
- 3.2 Emphasis on education, not advocacy
- 3.3 Ongoing learning and professional development

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: EE Capstone</p>	<p>3.3 Methods: Presentation of professional development activities at seminar; discussion prompts for reflective learning after teaching experiences, presentations, etc. Topics: Program expectation, guided by advisor, is for students to participate in professional development (conferences, workshops, etc.)</p>	<p>Assignment: Oral Final Examination</p>	<p>Tool: Oral Final Exam Rubric (Appendix 3-C) Competency = acceptable or target in all categories on rubric</p>	<p>Spring 2017 95% acceptable or target in all categories on rubric, n = 20 Spring 2016 80% acceptable or target in all categories on rubric, n = 18</p>
<p>Course: Teaching EE</p>	<p>3.3 Methods: Active participation in a wide variety of EE activities, reflections, practical teaching experience Topics: Appropriate use of EE teaching methodologies in appropriate setting</p>	<p>Assignment: Professional Growth Plan</p>	<p>Tool: Environmental Education Professional Growth Plan Template and Rubric (Appendix 3-D) Competency = Score of 80% or greater</p>	<p>Spring 2017 95% Score of 80% or greater on rubric, n = 16 Spring 2016 80% Score of 80% or greater on rubric, n = 25</p>

Theme 4: Planning and implementing environmental education: Educators must combine the fundamentals of high-quality education with the unique features of environmental education to design and implement effective instruction.

- 4.1 Knowledge of learners
- 4.2 Knowledge of instructional methodologies
- 4.3 Planning for instruction
- 4.4 Knowledge of environmental education materials and resources
- 4.5 Technologies that assist learning
- 4.6 Settings for instruction
- 4.7 Curriculum planning

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Environment and Society</p>	<p>4.1-4.4, 4.6, 4.7 Methods: Experience, evaluate and model activities, techniques and approaches for integrating environmental education in urban or rural settings.</p> <p>Topics: Focus on investigation and problem solving of community issues in building a meaningful place-based curriculum.</p>	<p>Assignment: Environmental education implementation plan</p>	<p>Tool: Environmental Education Implementation Plan Rubric (Appendix 4-A)</p> <p>Competency = Rating of Strong or better in all elements</p>	<p>Fall 2016 100% Strong or better in all elements, n = 19</p> <p>Fall 2015 80% Strong or better in all elements, n = 20</p>
<p>Course: Foundations of Environmental Education</p>	<p>4.4 and 4.5 Methods: Readings, reflections, projects</p>	<p>Assignments: EE Toolkit</p>	<p>Tool: EE Toolkit Scoring Guide (Appendix 4-B)</p> <p>Competency = Pass</p>	<p>Fall 2016 100% passed, n = 19</p> <p>Fall 2015</p>

Theme 4: Planning and implementing environmental education: Educators must combine the fundamentals of high-quality education with the unique features of environmental education to design and implement effective instruction.

- 4.1 Knowledge of learners
- 4.2 Knowledge of instructional methodologies
- 4.3 Planning for instruction
- 4.4 Knowledge of environmental education materials and resources
- 4.5 Technologies that assist learning
- 4.6 Settings for instruction
- 4.7 Curriculum planning

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
	Topics: Philosophies, historical events, and issues			89% passed, n = 20
Course: Foundations of Environmental Education	4.1 and 4.2 Methods: Readings, reflections, projects Topics: Philosophies, historical events, and issues	Environmental Issues Pedagogy Paper	Environmental Issues Pedagogy Paper Rubric (Appendix 4-C) Competency = B or higher	Fall 2016 80% received a B or higher, n = 19 Fall 2015 80% received a B or higher, n = 20
Experience: Teaching Experience in Local Schools	4.1-4.4, 4.6, 4.7 - Methods: Lecture; Discussion; Examples Topics: Teaching strategies, positive and inclusive learning environments, differentiated instruction, assessment,	Assignments: Lesson plans and teaching experience in local schools	Tool: Teacher Feedback Form (Appendix 4-D) Competency: Majority of “yes” considered competency on feedback form Tool: Lesson Plan Rubric (Appendix 4-E)	Spring 2016 80% received a majority of “yes”, n = 19 Fall 2015 received a majority of “yes”, n = 20

Theme 4: Planning and implementing environmental education: Educators must combine the fundamentals of high-quality education with the unique features of environmental education to design and implement effective instruction.

- 4.1 Knowledge of learners
- 4.2 Knowledge of instructional methodologies
- 4.3 Planning for instruction
- 4.4 Knowledge of environmental education materials and resources
- 4.5 Technologies that assist learning
- 4.6 Settings for instruction
- 4.7 Curriculum planning

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
	reflective learning		Competency: 4.5 out of 5 = competency	<p>Spring 2016 100% received 4.5 out of 5, n = 19</p> <p>Fall 2015 80% received 4.5 out of 5, n = 20</p>
<p>Course: Programming for Schools</p>	<p>4.7 Methods: Lecture, readings, discussion, teaching experience, project-based learning, field site visits</p> <p>Topics: Curriculum models, program models, curriculum and program planning, standards-based programming, school reform</p>	<p>Assignments: Program Model Assignment and response to prompt on final written paper</p>	<p>Tool: Program Model Rubric (Appendix 4-F)</p> <p>Competency = 42 of 50 points or higher</p>	<p>Spring 2016 100% received 42 out of 50 points, n = 19</p> <p>Fall 2015 80% received 42 out of 50 points, n = 20</p>

Theme 5: Fostering learning and promoting inclusivity: Educators must enable all learners to engage in open inquiry and investigation, especially when considering environmental issues that are controversial and require students to seriously reflect on their own and others' perspectives.

5.1 A climate for learning about and exploring the environment

5.2 An inclusive and collaborative learning environment

5.3 Flexible and responsive instruction

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Introduction to Environmental Education</p>	<p>5.1 – 5.3 Methods: Faculty and field experts facilitate and model EE activities in real settings with a variety of topics.</p> <p>Topics: Teaching methods, various EE topics in a variety of settings.</p>	<p>Assignment: Reflective journal; students critically evaluate their experience of EE in different settings and consider how the setting, presenter, topic and other factors impacted their experience.</p>	<p>Tool: Reflective Journal Rubric (Appendix 5-A)</p> <p>Competency = acceptable or above</p>	<p>Fall 2016 100% acceptable or above on rubric, n = 19</p> <p>Fall 2015 89% acceptable or above on rubric, n = 20</p>
<p>Course: Teaching Methods</p>	<p>5.2 and 5.3 Methods: Faculty facilitate discussion</p> <p>Topics: Exploration of the “pedagogy of controversy” through research, current events analysis</p>	<p>Assignment: Students write an environmental issue pedagogy paper or debate</p>	<p>Tool: Environmental Issues Pedagogy Rubric (Appendix 5-B)</p> <p>Competency = B or above</p>	<p>Fall 2016 100% B or above on rubric, n = 19</p> <p>Fall 2015 89% B or above on rubric, n = 20</p>

Theme 5: Fostering learning and promoting inclusivity: Educators must enable all learners to engage in open inquiry and investigation, especially when considering environmental issues that are controversial and require students to seriously reflect on their own and others' perspectives.

5.1 A climate for learning about and exploring the environment

5.2 An inclusive and collaborative learning environment

5.3 Flexible and responsive instruction

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Experience: Practical teaching experiences</p>	<p>5.1 - 5.3 Methods: Structured teaching experiences in formal Setting and non-formal settings.</p> <p>Topics: Flexible and responsive instruction learning. EE Guidelines for Excellence, characteristics of quality EE.</p>	<p>Assignment: Students teach a variety of students in a variety of environments; assessments are conducted by peers, faculty and staff, including self-assessment.</p>	<p>Tool: Formal Observation Form Rubric (Appendix 5-C)</p> <p>Competency = 20/25 or above</p>	<p>Spring 2017 100% at least 20/25, n = 19</p> <p>Fall 2016 90% at least 20/25, n = 20</p>
<p>Experience: Field trip to a Native American or other cultural park/reservation</p>	<p>5.2 Methods: Faculty facilitate a trip to Native American or other cultural park/reservation.</p> <p>Topics: Inclusive and collaborative learning environments</p>	<p>Assignment: Students keep a reflective journal and critically evaluate and reflect on their observations and the role of native history and culture.</p>	<p>Tool: Journal Rubric (Appendix 5-D)</p> <p>Competency = acceptable or above on rubric</p>	<p>Fall 2016 100% acceptable or above on rubric, n = 19</p> <p>Fall 2015 90% acceptable or above on rubric, n = 20</p>

Theme 6. Assessment and evaluation of environmental education: Environmental educators must possess the knowledge, abilities, and commitment to make assessment and evaluation integral to instruction and programs.

6.1 Learner outcomes

6.2 Assessment that is part of instruction

6.3 Improving instruction

6.4 Evaluating programs

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
<p>Course: Curriculum, Instruction & Assessment</p>	<p>6.1 Methods: Class discussion, examples, small group work, internet research of standards, jig-saw a variety of assessment strategies, and guided practice doing task analysis.</p> <p>Topics: Standards, NAAEE Crosswalk w/NGSS, task analysis for knowledge and skills, linking assessment strategies to outcomes.</p>	<p>Assignment: Students complete a task analysis by selecting a state or national standard, identifying skills and knowledge that must be taught and align it to an EE standard.</p>	<p>Tool: Task Analysis & Assessment Rubric (Appendix 6-A)</p> <p>Competency = Proficient or above</p>	<p>Fall 2016 100% at proficient or above, n = 16</p> <p>Fall 2017 90% at proficient or above, n = 10</p>
<p>Course: Curriculum, Instruction, and Assessment</p>	<p>6.2 Methods: Faculty facilitate discussion and share examples, class discussion based on readings, group construction of a rubric.</p> <p>Topics: Assessment, rubric design, authentic performance</p>	<p>Assignment: Students create a rubric for an authentic Final Performance Task designed using the UBD framework.</p>	<p>Tool: Authentic Performance Task Rubric (Appendix 6-B)</p> <p>Competency = Proficient or above</p>	<p>Spring 2016 100% at proficient or above, n = 17</p> <p>Winter 2017 100% at proficient or above, n = 10</p>

Theme 6. Assessment and evaluation of environmental education: Environmental educators must possess the knowledge, abilities, and commitment to make assessment and evaluation integral to instruction and programs.

6.1 Learner outcomes

6.2 Assessment that is part of instruction

6.3 Improving instruction

6.4 Evaluating programs

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
	tasks, Understanding by Design (UBD “backwards design” approach), outcome based curriculum.			
Course: Curriculum, Instruction, and Assessment	6.1, 6.2, 6.3 Methods: Demonstration, lecture, and faculty-led practice. Topics: Looking at learner outcomes (UBD), Designing standards-based curriculum.	Assignment: Students design all aspects of a three-day EE integrated program. This could be a project-based program, Citizen-Science, Outdoor School, etc.	Tool: EE Dream Program Rubric (Appendix 6-C) Competency = Proficient (80 points) or above	Fall 2017 100% at proficient or above, n = 10 Fall 2016 100% at proficient or above, n = 16
Course: Program Administration of Environmental Education	6.1, 6.4 Methods: Class discussions, “specialty area” guest speakers, research other programs and annual reports and analysis of assessments and program evaluation design. Topics: Exploring evaluation	Assignment: Students research best practices and current tools for program evaluation and then design appropriate evaluation documents for both residential and non-residential programs.	Tool: Program Evaluation Rubric (Appendix 6-D) Competency = Proficient or above	Spring 2017 100% at proficient or above, n = 10 Summer 2016 100% at proficient or above, n = 16

Theme 6. Assessment and evaluation of environmental education: Environmental educators must possess the knowledge, abilities, and commitment to make assessment and evaluation integral to instruction and programs.

6.1 Learner outcomes

6.2 Assessment that is part of instruction

6.3 Improving instruction

6.4 Evaluating programs

Name of courses/ experiences	How the guidelines are taught	How program participants are assessed	How student competency is evaluated	Summary of assessment results
	tools, reviewing and critiquing past program evaluation tools, effective pre/post assessment aligned to standards and other content; administrative topics such as risk assessment, personnel, pre/post assessment plans, marketing, program reports, analysis of evaluation data.	Assignment: Students create a report based on field experience.	Tool: Final Report Rubric (Appendix 6-E) Competency = Proficient or above	
Experience: Teaching in Environmental Education Internship	6.1, 6.2, 6.3, 6.4 Methods: Faculty provide guidance as students take on leadership roles in the field residential and non-residential sites. Topics: Administrative responsibilities before, during, and after programs at field sites, from instruction to evaluation.	Assignment: Students prepare and manage all aspects of a field educational program. Students meet one-on-one with faculty for a leadership exit interview.	Tool: Leadership in Environmental Education Rubric (Appendix 6-F) Competency = Pass or above	Winter 2017 100% at pass or above, n = 10 Summer 2016 100% at pass or above, n = 16