

New York State Student Learning Objective: Living Environment

All SLOs MUST include the following basic components:

Population	<p><i>These are the students assigned to the course section(s) in this SLO - all students who are assigned to the course section(s) must be included in the SLO. (Full class rosters of all students must be provided for all included course sections.)</i></p> <p>3 sections of Living Environment, heterogeneously grouped, 70 total students</p>
Learning Content	<p><i>What is being taught over the instructional period covered? Common Core/National/State standards? Will this goal apply to all standards applicable to a course or just to specific priority standards?</i></p> <p>Critically analyze both quantitative and qualitative scientific data from multiple scientific sources in order to cultivate personal mental models and working relationships between domain specific vernacular and real life experiences.</p> <p>Make both written and verbal arguments to support/refute claims regarding controversial scientific topics using valid reasoning and relevant scientific research in order to convey a persuasive view point.</p>
Interval of Instructional Time	<p><i>What is the instructional period covered (if not a year, rationale for semester/quarter/etc)?</i></p> <p>2012-2013 school year</p>
Evidence	<p><i>What specific assessment(s) will be used to measure this goal? The assessment must align to the learning content of the course.</i></p> <p><u>Diagnostic Assessment:</u> Students will read and analyze an array of scientific literature including professional journal articles, scientific magazines excerpts, textbook excerpts, and other non-fiction sources in order to make written conclusions or summaries ascertained from the readings. Also, students will demonstrate basic understanding of scientific laboratory procedures through the use of multiple lab instruments and measuring devices followed by the construction of mathematical representations of the data collected.</p> <p style="text-align: center;">* will use last years Earth Science Regents Exam as well to guide instruction and compare results to *</p> <p><u>Summative Assessment:</u> 2013 NYS Living Environment Regents Exam</p>

<p>Baseline</p>	<p>What is the starting level of students' knowledge of the learning content at the beginning of the instructional period?</p> <p>On last years NYS Earth Science Regents Exam students who scored:</p> <p><75% = 35/102</p> <p>75-100% = 67/102</p> <p>Diagnostic Assessment: After reading and analyzing an array of scientific literature, 75/102 of the students were able to achieve an 80% or better on their written responses as to what they read. Also, 90/102 of the students were able to demonstrate a basic use of multiple lab instruments and measuring devices. Of these, 80 of them were able to construction mathematical representations of the data collected.</p>																																																																																			
<p>Target(s)</p>	<p>What is the expected outcome (target) of students' level of knowledge of the learning content at the end of the instructional period?</p> <p>80% of students score at or above mastery level (85%) on the 2013 NYS Living Environment Regents Exam</p> <p>90% of students score at or above passing level (65%) on the 2013 NYS Living Environment Regents Exam</p>																																																																																			
<p>HEDI Scoring</p>	<p>How will evaluators determine what range of student performance "meets" the goal (effective) versus "well-below" (ineffective), "below" (developing), and "well-above" (highly effective)?</p> <p>See percentages below (% of students who are at or above mastery level (85%) and who passes (greater than 65%) the 2013 NYS Living Environment Regents Exam). The two HEDI scores will be averaged for the final HEDI score.</p> <table border="1" data-bbox="363 885 2016 1203"> <thead> <tr> <th colspan="3">HIGHLY EFFECTIVE</th> <th colspan="9">EFFECTIVE</th> <th colspan="5">DEVELOPING</th> <th colspan="3">INEFFECTIVE</th> </tr> <tr> <th>20</th> <th>19</th> <th>18</th> <th>17</th> <th>16</th> <th>15</th> <th>14</th> <th>13</th> <th>12</th> <th>11</th> <th>10</th> <th>9</th> <th>8</th> <th>7</th> <th>6</th> <th>5</th> <th>4</th> <th>3</th> <th>2</th> <th>1</th> <th>0</th> </tr> </thead> <tbody> <tr> <td>100%</td> <td>99-98%</td> <td>97-95%</td> <td>94-92%</td> <td>91-89%</td> <td>88-85%</td> <td>84-81%</td> <td>80-75%</td> <td>74-70%</td> <td>69-65%</td> <td>64-50%</td> <td>49-45%</td> <td>44-40%</td> <td>39-35%</td> <td>34-30%</td> <td>29-25%</td> <td>24-20%</td> <td>19-15%</td> <td>14-10%</td> <td>9-5%</td> <td><5%</td> </tr> <tr> <td>>97%</td> <td>96%</td> <td>95%</td> <td>94%</td> <td>93%</td> <td>92%</td> <td>91%</td> <td>90%</td> <td>89%</td> <td>88%</td> <td>87%</td> <td>86%</td> <td>85%</td> <td>84%</td> <td>83%</td> <td>82%</td> <td>81%</td> <td>80%</td> <td>75-79%</td> <td>70-74%</td> <td><70%</td> </tr> </tbody> </table>	HIGHLY EFFECTIVE			EFFECTIVE									DEVELOPING					INEFFECTIVE			20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	100%	99-98%	97-95%	94-92%	91-89%	88-85%	84-81%	80-75%	74-70%	69-65%	64-50%	49-45%	44-40%	39-35%	34-30%	29-25%	24-20%	19-15%	14-10%	9-5%	<5%	>97%	96%	95%	94%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	75-79%	70-74%	<70%
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<p>Rationale</p>	<p>Describe the reasoning behind the choices regarding learning content, evidence, and target and how they will be used together to prepare students for future growth and development in subsequent grades/courses, as well as college and career readiness.</p> <p>Students in today's 21st century need to be active members in the scientific community in order to make educated decisions regarding controversial topics. With that being said too many students are passive absorbers of information and lack determination to truly understand the enormous subtleties that make the scientific community gel and prosper as a group. The learning content will enable students to be hands-on, cognitively engaged learners who are able to take foreign and sometimes complex information and turn it into beneficial, workable concepts thus allowing them to be an asset to future societal concerns. Lastly, this approach offers students the</p>																																																																																			

opportunity to make the often unapproachable world of science tangible and relevant to their lives, possibly persuading them to find joy and solitude in what science can offer them in their future endeavors.