

## Scientific Literacy Evaluation Rubric

**Scientific Literacy: Graduates can apply fundamental scientific principles and methods of inquiry to understand the impacts of scientific research and technology.**

<b>A. Demonstrates an understanding of core scientific concepts and appropriate terminology.</b>						
<b>Behavior Emerging</b>		<b>Behavior Developing</b>		<b>Behavior Present</b>		
Uses core concepts and appropriate terminology: <ul style="list-style-type: none"> <li>• Never or rarely</li> <li>• Many errors</li> <li>• Ambiguous explanations and / or improper usage</li> </ul>		Uses core concepts and appropriate terminology: <ul style="list-style-type: none"> <li>• Sometimes</li> <li>• Some errors</li> <li>• Incomplete explanations or usage</li> </ul>		Uses core concepts and appropriate terminology: <ul style="list-style-type: none"> <li>• Consistently / Always</li> <li>• Few or no errors</li> <li>• Clear and complete explanations and usage</li> </ul>		
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N/A</b>

<b>B. Demonstrates the ability to collect or examine information and data.</b>						
<b>Behavior Emerging</b>		<b>Behavior Developing</b>		<b>Behavior Present</b>		
Able to collect and examine information and / or data: <ul style="list-style-type: none"> <li>• Utilizes irrelevant information and / or data</li> <li>• Omits relevant information and / or data</li> <li>• Unable to examine information and / or data</li> </ul>		Able to collect and examine information and data: <ul style="list-style-type: none"> <li>• Utilizes some irrelevant information and / or data.</li> <li>• Omits some relevant information and / or data</li> <li>• Incomplete examination of information and / or data</li> </ul>		Able to collect and examine information and data: <ul style="list-style-type: none"> <li>• Consistently / always identifies relevant information and / or data</li> <li>• Complete examination of data and information</li> </ul>		
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N/A</b>

<b>C. Demonstrates the ability to evaluate, analyze and interpret data.</b>						
<b>Behavior Emerging</b>		<b>Behavior Developing</b>		<b>Behavior Present</b>		
Evaluates, analyzes and interprets: <ul style="list-style-type: none"> <li>• Never or rarely</li> <li>• Many errors in analysis</li> <li>• Unable to evaluate data and / or results</li> <li>• Many errors in interpretation</li> </ul>		Evaluates, analyzes and interpret: <ul style="list-style-type: none"> <li>• Sometimes</li> <li>• Some errors in analysis</li> <li>• Incomplete evaluation of data and / or results</li> <li>• Some errors in interpretation</li> </ul>		Evaluates, analyzes and interprets: <ul style="list-style-type: none"> <li>• Consistently / always</li> <li>• Few or no errors</li> <li>• Clearly and completely</li> </ul>		
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N/A</b>



OAKLAND COMMUNITY COLLEGE

Note: This is a college-wide rubric, however, faculty expectations may differ within specific courses. Approved by SOAC May, 2010. Next major review and approval by SOAC May 2013.

<b>D. Demonstrates the ability to synthesize both information and data in drawing conclusions.</b>						
<b>Behavior Emerging</b>		<b>Behavior Developing</b>		<b>Behavior Present</b>		
Synthesizes and concludes: <ul style="list-style-type: none"> <li>• Never or rarely able to formulate valid, well supported conclusions</li> <li>• Ambiguous conclusions</li> <li>• Never or rarely constructs logical connections to other related concepts</li> </ul>		Synthesizes and concludes: <ul style="list-style-type: none"> <li>• Sometimes able to formulate valid well supported conclusions</li> <li>• Sometimes provides clear and concise conclusions</li> <li>• Sometimes constructs logical connections to other related concepts</li> </ul>		Synthesizes and concludes: <ul style="list-style-type: none"> <li>• Consistently / Always formulates valid well supported conclusions</li> <li>• Provides clear and concise conclusions</li> <li>• Constructs logical connections to other related concepts</li> </ul>		
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N/A</b>

<b>E. Demonstrates the ability to apply acquired knowledge to scientific aspects of personal and global issues.</b>						
<b>Behavior Emerging</b>		<b>Behavior Developing</b>		<b>Behavior Present</b>		
Applies acquired knowledge: <ul style="list-style-type: none"> <li>• Never or rarely</li> <li>• Never or rarely identifies scientific aspects of issue</li> <li>• Never or rarely recognizes ethical implications</li> </ul>		Applies acquired knowledge: <ul style="list-style-type: none"> <li>• Sometimes</li> <li>• Sometimes identifies scientific aspects of issue</li> <li>• Sometimes recognizes ethical implications</li> </ul>		Applies acquired knowledge: <ul style="list-style-type: none"> <li>• Consistently / always</li> <li>• Identifies scientific aspects of issue</li> <li>• Recognizes ethical implications</li> </ul>		
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N/A</b>

