

Lamar State College-Orange  
 Core Curriculum Assessment  
 Natural Sciences 2004  
 Response from Review Panel

COMPONENT	EXEMPLARY EDUCATIONAL OUTCOMES	BENCHMARKS	REVIEW PANEL FINDINGS
<b>BIOL 1407 McClure</b>	1. To understand and apply the method and appropriate technology to the study of the natural sciences.	70% of all students completing each course in the designated core curriculum component will give acceptable responses to the course embedded discussion questions.	<u>Panel was able to identify:</u> McClure Course embedded question/lab assignment <u>was found</u> . Unable to determine if benchmark was met.
<b>BIOL 1407 McClure</b>	2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.	70% of all students completing courses in the designated core curriculum component will meet minimum acceptable standards.	<u>Panel was able to identify:</u> McClure Course embedded questions/lab assignment <u>was found</u> . <b>Video of oral presentation. Great to include!</b> Unable to determine if benchmark was met.
<b>BIOL 1407 McClure</b>	3. To identify and recognize the differences among competing scientific theories.	70% of all students will give acceptable responses to the course embedded word problems.	<u>Panel was able to find.</u> McClure Course embedded short essay question was found. Able to determine that only 67.1% was the class average. Benchmark was not met.

<p><b>BIOL 1409 R SENTER</b></p>	<p>1. To understand and apply the method and appropriate technology to the study of the natural sciences</p>	<p>70% of all students completing each course in the designated core curriculum component will give acceptable responses to the course embedded discussion questions.</p>	<p>R. Senter states students did not complete the microscope assignment. Benchmark was not met.</p> <p>Only four folders were submitted.</p>
<p><b>BIOL 1409 R.SENTER</b></p>	<p>2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.</p>	<p>70% of all students completing courses in the designated core curriculum component will meet minimum acceptable standards.</p>	<p>R. Senter No oral presentations. Unable to determine if benchmark was met.</p> <p>No Oral Presentations</p>
<p><b>BIOL 1409 R. SENTER</b></p>	<p>3. To identify and recognize the differences among competing scientific theories</p>	<p>70% of all students will give acceptable responses to the course embedded word problems</p>	<p>R. Senter Unable to determine if benchmark was met. See attached R. Senter comment page.</p>
<p><b>BIOL 1409 R. SENTER</b></p>	<p>4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policy.</p>	<p>70% of all students completing each course designated in the core curriculum will achieve a score of 70% or higher.</p>	<p>Research paper/project was included in portfolios. Benchmark was met per R. Senter comment page. Appears 86% met benchmark.</p>
<p><b>BIOL 1409 R. SENTER</b></p>	<p>5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.</p>	<p>70% of all students will achieve a score of 70% or higher.</p>	<p>Research paper/project was included in portfolios. Benchmark was met per R. Senter comment page. Appears 86% met benchmark.</p>

<p><b>BIOL 2401 SENER</b></p>	<p>1. To understand and apply the method and appropriate technology to the study of the natural sciences</p>	<p>70% of all students completing each course in the designated core curriculum component will give acceptable responses to the course embedded discussion questions.</p>	<p><u>Panel was able to identify P. Senter</u> Course embedded question/lab assignment. Benchmark was met 74% see attached EEO Evaluation sheet for P. Senter's class.</p>
<p><b>BIOL 2401 P. SENTER</b></p>	<p>2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.</p>	<p>70% of all students completing courses in the designated core curriculum component will meet minimum acceptable standards.</p>	<p><u>Panel was able to identify: P. Senter</u> Course embedded question/lab assignment was found. Benchmark met 100% see attached EEO Evaluation sheet for Phil Senter's class.</p> <p>No Oral Presentations</p>
<p><b>BIO 2401 P. SENTER</b></p>	<p>3. To identify and recognize the differences among competing scientific theories</p>	<p>70% of all students will give acceptable responses to the course embedded word problems</p>	<p><u>Panel was unable to identify.</u> See attached comment sheet from P. Senter it states this was not met.</p>
<p><b>BIOL 2401 P.SENTER</b></p>	<p>4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policy.</p>	<p>70% of all students completing each course designated in the core curriculum will achieve a score of 70% or higher.</p>	<p>Research paper/project was included in portfolios. Benchmark was NOT met per P. Senter comment page. Appears only 44% met benchmark.</p>
<p><b>BIOL 2401 WILMORE</b></p>	<p>1. To understand and apply the method and appropriate technology to the study of the natural</p>	<p>70% of all students completing each course in the designated core curriculum component will</p>	<p>Panel was unable to identify embedded question information. Unable to determine if benchmark was met or not.</p>

	sciences.	give acceptable responses to the course embedded discussion questions.	
<b>BIOL 2401 WILMORE</b>	2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.	70% of all students completing courses in the designated core curriculum component will meet minimum acceptable standards	Panel was able to determine embedded question. Unable to determine if benchmark was met!  No Oral Presentation!
<b>BIOL 2401 WILMORE</b>	3. To identify and recognize the differences among competing scientific theories	70% of all students will give acceptable responses to the course embedded word problems	Panel was unable to identify any information for this exemplary educational outcome.
<b>BIOL 2401 WILMORE</b>	4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policy.	70% of all students completing each course designated in the core curriculum will achieve a score of 70% or higher.	Panel was able to identify writing project, unable to identify if benchmark was met or unmet.
<b>BIOL 2401 WILMORE</b>	5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.	70% of all students will achieve a score of 70% or higher.	Panel was able to identify writing project, unable to determine if benchmark was met or unmet.
<b>CHEM 1407 DUNN</b>	1. To understand and apply the method and appropriate technology to the study of the natural sciences.	70% of all students completing each course in the designated core curriculum component will give acceptable responses to the course embedded discussion questions.	Panel was unable to determine what the information was in portfolios.

<b>CHEM 1407 DUNN</b>	2. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.	70% of all students completing courses in the designated core curriculum component will meet minimum acceptable standards	Panel was unable to determine what the information was in portfolios.
<b>CHEM 1407 DUNN</b>	3. To identify and recognize the differences among competing scientific theories	70% of all students will give acceptable responses to the course embedded word problems	Panel was unable to determine what the information was in portfolios.
<b>CHEM 1407 DUNN</b>	4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policy.	70% of all students completing each course designated in the core curriculum will achieve a score of 70% or higher.	Panel was unable to determine what the information was in portfolios.
<b>CHEM 1407 DUNN</b>	5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.	70% of all students will achieve a score of 70% or higher.	Panel was unable to determine what the information was in portfolios.
<b>GEOL 1404 COOPER</b>	1. To understand and apply the method and appropriate technology to the study of the natural sciences.	70% of all students completing each course in the designated core curriculum component will give acceptable responses to the course embedded discussion questions.	Panel was unable to determine what the information was in portfolios.
<b>GEOL 1404 COOPER</b>	2. To recognize scientific and quantitative methods and the	70% of all students completing courses in the designated core curriculum	Panel was unable to determine what the information was in portfolios.

	differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.	component will meet minimum acceptable standards	
<b>GEOL 1404 COOPER</b>	3. To identify and recognize the differences among competing scientific theories	70% of all students will give acceptable responses to the course embedded word problems	Panel was unable to determine what the information was in portfolios.
<b>GEOL 1404 COOPER</b>	4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policy.	70% of all students completing each course designated in the core curriculum will achieve a score of 70% or higher.	Panel was unable to determine what the information was in portfolios.
<b>GEOL 1404 COOPER</b>	5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.	70% of all students will achieve a score of 70% or higher.	Panel was unable to determine what the information was in portfolios.

The panel would like to make the following observations:

1. Faculty needs additional instructions for completing the portfolios. These instructions should include the importance of the portfolios, specifics about what is to be included, **HOW TO LABEL WHAT IS PLACED IN THE PORTFOLIOS**, and the fact that compiling portfolios is not optional—it is mandatory. And the effort expended compiling the portfolios will be reflected in the faculty performance evaluation.
2. Faculty need to identify embedded questions by highlighting them on the final examination, by putting them in chart form, or even by noting the embedded questions on the checklist --some how the embedded questions **NEED TO BE IDENTIFIED/LABELED FOR THE PANEL.** The panel does not know what each piece of paper in the portfolios is representing unless faculty labels each as it relates to the exemplary educational outcomes. It is difficult to determine if the

benchmarks have been met. A chart or some kind of documentation would be very helpful!

3. The checklist needs to be the first item of the instructions given to the faculty. The faculty needs to generate an objective specific checklist. Because there was not one objective specific checklist included in the portfolios reviewed, the panel did not feel that the faculty understood the need for the checklist.
4. The assessment tool should be refined.
5. Panel would like to be present when faculty is given instructions on compiling necessary portfolio contents.

In conclusion, the panel feels that the portfolios reviewed were somewhat better quality than those from previous reviews. Some instructors included a comment page which documented statistical information so that benchmarks could be determined by the panel. This was helpful.

Phil Senter included a folder with embedded question which made his review a bit smoother for the panel.

Some portfolios submitted continue to reflect a poor understanding of the importance of core curriculum evaluation. The panel assumes the above observations will help make the faculty aware of the necessity of cooperating with the core curriculum evaluation. Cooperation is not optional –it is mandatory and should be reflected in the faculty performance evaluation. The panel completed this assignment to the best of its ability with the information supplied by the faculty. The panel wasted time searching for information in incomplete portfolios. Future portfolios should contain a table of contents so that panel members can look for specific information.

Panel Members:       Gina Simar-Chair  
                              Carolyn Mello  
                              Leah Anne McGee