



## Subject Matter Expert (SME)

### Curriculum Review

Program of Study: Technology Enabled Pathways to Healthcare (TEPH)

#### Environmental Science Technology

- A.A.S — 62 credit hours
- Certificate — 32 credit hours

Reviewed By: Melanie Lamb

Date of Review: April 9, 2017

### Review Scale Definitions:

**Exceptional:** Review component is a “best practice” and represents a model for replication.

**Very good:** Review component is complete and effective.

**Good:** Review component is adequate but presents opportunities for improvement.

**Ineffective:** Review component is weak and in need of significant improvement.

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Program/Student Learning Outcomes & Program Map	Exceptional	Very Good	Good	Ineffective
Program CIP code/s appropriate to program title & outcomes				X
Effective program structure ( prerequisites, course sequence, delivery methods, classroom/laboratory blend, stackable credential structure provides a clear, logical "map" to completion for adult students)		X		
Outcomes aligned to occupation focus (industry skills & standards)			X	
Outcomes clearly stated		X		
Outcomes introduced/reinforced effectively		X		
Evidence of capstone assessment (licensure, industry certification, capstone project or TSA)			X	

Comments or Recommendations

1. Not able to find CIP code in program title or outcomes.
2. The program structure seems to be organized and appropriate for the program. It was difficult to determine some course objectives, as it was not part of the grant program.
3. The outcomes should allow students to be qualified to work in the environmental industry at a technician level.
4. Outcomes were clearly stated
5. Outcomes were introduced and reinforced through labs, lecture, and exams.
6. The internship should allow students the hands on experience needed to work in the environmental industry.

Course Objectives	Exceptional	Very Good	Good	Ineffective
Appropriate to course level			X	
Clearly stated from student perspective			X	
Measurable		X		
Address/support one or more outcome(s)		X		
Outcomes introduced/reinforced effectively		X		
<u>Comments or Recommendations</u> <ol style="list-style-type: none"> <li>1. Course objectives were clearly stated and material supported the objectives and outcomes for full courses posted.</li> <li>2. Grant funding supported course material was measurable.</li> </ol>				

Module or Unit Objectives	Exceptional	Very Good	Good	Ineffective
Clearly linked to course objectives			X	
Address one or more course objective(s)			X	
Clearly stated from student perspective			X	
Measurable			X	
<u>Comments or Recommendations</u> <ol style="list-style-type: none"> <li>1. Of the material posted and included in the grant development, objectives were clearly linked to the course outcomes and measurable.</li> </ol>				



<b>Instructional Materials &amp; Lab Resources</b>	<b>Exceptional</b>	<b>Very Good</b>	<b>Good</b>	<b>Ineffective</b>
Support stated course & module or unit learning objectives			X	
Meet/reflect current industry practices & standards			X	
Provide options for multiple learning styles			X	
Resources/materials are cited properly			X	
Evidence of innovation to support adult learner success				X
<u>Comments or Recommendations</u> <ol style="list-style-type: none"> <li>1. The material developed using the grant funding reflected current industry standards and cited resources correctly.</li> <li>2. There was no evidence of innovation to support adult learner success. Not from the material presented online.</li> </ol>				

<b>Learning Activities</b>	<b>Exceptional</b>	<b>Very Good</b>	<b>Good</b>	<b>Ineffective</b>
Promote achievement of stated module or unit objectives		X		
Materials/resources (including equipment, tools and software) are presented in a way that students understand purpose and use in industry settings			X	
Provide opportunities for interaction & active learner			X	
Linked to current industry practices & standards		X		
Evidence of innovation to support adult learner success				X

Comments or Recommendations

1. Of the material developed with grant funds, activities promoted achievement of module or unit objectives.
2. Materials were presented in a manner that would meet industry needs.
3. Materials developed with grant funding did not provide innovation to support adult learners.

Assessment Tools/Criteria for Evaluation	Exceptional	Very Good	Good	Ineffective
Measure stated learning objectives & link to industry standards			X	
Align with course activities and resources			X	
Include specific and descriptive criteria for evaluation of student work/participation		X		
Sequenced through instruction period to enable students to build on feedback			X	
Varied and appropriate to content			X	
Provide opportunities for students to measure their own learning progress		X		

Comments or Recommendations

1. The course objectives are linked to industry standards and assessed and aligned with course activities (for material developed using grant funds).
2. Quizzes provided status of learning for students throughout the course. Hands on lab work also provided appropriate feedback.
3. Areas developed using grant funds detailed criteria for evaluation of student performance.
4. Content developed for the program using grant funds was appropriate and varied.
5. Opportunities were provided for students to gauge their progress through labs and quizzes.



Innovated or Enhanced Strategies	Exceptional	Very Good	Good	Ineffective
Evidence industry input/standards in program design and curricular components		X		
Evidence of program enhancements to support adult learners			X	
If program has run long enough, is there evidence that enhancements to it have improved pass rates?				

Comments or Recommendations

1. The program design has incorporated industry standards.
2. The internship should provide good on the job training for adult learners. Other areas of the curriculum designed using grant funds did not focus on support of adult learners. Labs and quizzes help provide feedback but overall the design supports traditional learning.
3. No statistics were provided to determine if enhancements have improved pass rates so this was not rated.

Additional Comments or Recommendations from SME

Recommend the soils class incorporate more information for remediation and how pollution moves through soil for the certificate program. Current class is more focused on the geology which works for the AA but the certificate should prepare students for field work and that should focus on clean up of pollution. All the material for the certificate should be more hands-on with specific industry requirements included in the curriculum.

