Eastern West Virginia Community and Technical College COURSE ASSESSMENT REPORT (Blackboard Data)

Course Title and Number: BIO 215 Plant	Academic Term and Year of Assessment Activity (Ex:		
Taxonomy	Fall, 2014) Summer 2020		
Report Submitted By Amo Oliverio	Number of Students Assessed: 2		
Date Report Submitted: 9/30/20	Number of Sections Included: 1		
Course Delivery Format (list all modalities used in sections assessed. Ex: web based, VDL, traditional section,			
hybrid course, etc.): traditional			

Course Role in the Curriculum

Provide a description of the role the course serves in the curriculum (i.e. general education requirement, program technical core, restricted elective, etc.). Note all as appropriate.

This course is a natural science elective and serves as part of the technical core for the BET program.

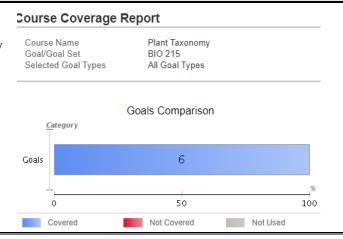
Previous Assessment Reports and Results

Date of Previous Assessment: N/A – first offering

List of Outcomes Not Met: 100% met

Summary of Actions Taken to Address Unmet Learning Outcomes: Append additional pages if necessary. If appending, include notation in box to "See attached".

For the inaugural offering of BIO 215, all course learning outcomes were covered by various assessments. See Detail by Goal for individual breakdown of learning outcome, assignment, and performance.



Assessment Methods

Provide a description of the assessment process used. Include description of instrument and performance standards in description. Note all methods.

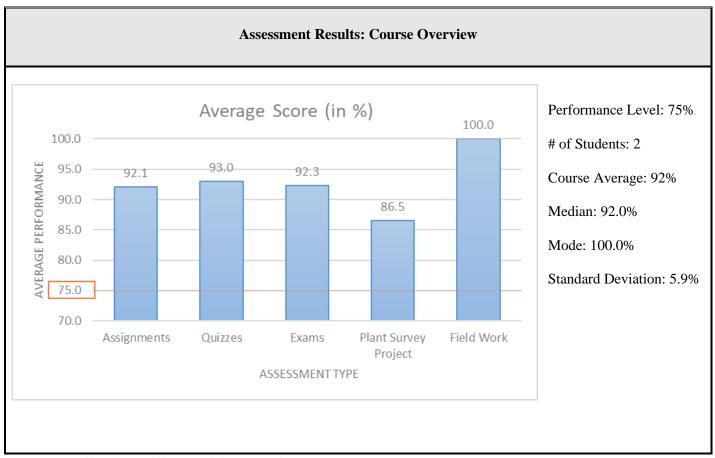
Assignments – There were six assignments, which were groups of exercises modified from the required textbook. **Quizzes** – Two quizzes were assigned. Quizzes consisted of fill-in-the-blank, labeling and short answer questions conducted in the field relating to plant identification, classification, structure, etc.

Exams – Two exams and one final exam were assigned. Question type ranged from multiple choice, true/false, fill-in-the-blank, matching, labeling, and short answer questions. All exams were cumulative.

Project – Students were to perform a plant survey and create a report that included GIS maps of survey region and study area, data gathered, and mathematical analysis.

Fieldwork – Two assessed fieldwork days were assigned. Students had to demonstrate safe and ethical plant sampling methods, plant ID, and data collection.

Approved Assessment Committee: 11/16/2020



^{*} Please note if using a different minimum performance standard.

Approved Assessment Committee: 11/16/2020

Detail By Goal				
Detail by Goal				
	Overall Average	Assignments	Other	
		Average by Type (Count)		
BIO 215 Goals				
01. Identify selected species in lab and field situations, focusing on species of the Appalachia region and wetland habitats.	93.6%	95.5% (<u>3)</u>	91.7% (<u>3</u>)	
02. Demonstrate safe and ethical identification and sampling of herbaceous plants in various habitats using current and relevant tools.	90.4%	86.5% (1)	91.7% (<u>3</u>)	
03. Recall basic plant structure and anatomy and implement this knowledge to identify common plant species.	93.9%	95.3% (<u>5)</u>	91.7% (<u>3</u>)	
04. Employ traditional and digital botanical and taxonomic keys to identify unknown plant species.	94.4%	95.3% (<u>5)</u>	93.0% (<u>3</u>)	
05. Apply knowledge of plant families and plant communities to characteristics of specific plants.	94.4%	95.3% (<u>5)</u>	93.0% (<u>3</u>)	
06. Explain the process of plant classification.	89.3%	<u>83.8%</u> (<u>2</u>)	93.0% (<u>3</u>)	

Assessment Performance by Outcome

01. Identify selected species in lab and field situations, focusing on species of the Appalachia region and wetland habitats.

Item Name	Average	Median	Mode
Exam 2	92.0%	92.0%	
Field Work 1	100%	100%	100%
Field Work 2	100%	100%	100%
Final Exam	91.0%	91.0%	
Plant Survey Project	86.50%	86.50%	86.50%
Quiz 2	92.0%	92.0%	

02. Demonstrate safe and ethical identification and sampling of herbaceous plants in various habitats using current and relevant tools.

Item Name	Average	Median	Mode
Exam 2	92.0%	92.0%	
Final Exam	91.0%	91.0%	
Plant Survey Project	86.50%	86.50%	86.50%
Quiz 2	92.0%	92.0%	

03. Recall basic plant structure and anatomy and implement this knowledge to identify common plant species.

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Item Name	Average	Median	Mode	
Exam 2	92.0%	92.0%		
Field Work 1	100%	100%	100%	
Field Work 2	100%	100%	100%	
Final Exam	91.0%	91.0%		
Homework 05: Taxonomic Keys Part 1	95%	95%	95%	
Homework 06: Taxonomic Keys Part 2	95%	95%	95%	
Plant Survey Project	86.50%	86.50%	86.50%	
Quiz 2	92.0%	92.0%		

04. Employ traditional and digital botanical and taxonomic keys to identify unknown plant species.

Item Name	Average	Median	Mode]
Exam 1	94%	94%		
Field Work 1	100%	100%	100%	
Field Work 2	100%	100%	100%	
Final Exam	91.0%	91.0%		
Homework 05: Taxonomic Keys Part 1	95%	95%		Ĩ
Homework 06: Taxonomic Keys Part 2	95%	95%	95%	
Plant Survey Project	86.50%	86.50%	86.50%	
Quiz 1	94%	94%		

05. Apply knowledge of plant families and plant communities to characteristics of specific plants.

Item Name	Average	Median	Mode	
Exam 1	94%	94%		
Field Work 1	100%	100%	100%	
Field Work 2	100%	100%	100%	
Final Exam	91.0%	91.0%		
Homework 03: Families Part 1	95%	95%	95%	
Homework 04: Families Part 2	100%	100%	100%	
Plant Survey Project	86.50%	86.50%		
Quiz 1	94%	94%		

06. Explain the process of plant classification.

Item Name	Average	Median	Mode	
Exam 1	94%	94%		
Final Exam	91.0%	91.0%		
Homework 01: Botanical Nomenclature	85%	85%		
Homework 02: Phylogenic Classification	82.50%	82.50%		
Quiz 1	94%	94%		

Conclusions

Approved Assessment Committee: 11/16/2020

Provide a brief summary of conclusions derived based on analysis of data. Append additional pages if necessary. If appending, include notation in box to "See attached".

Both students performed above the performance level on all assignments and learning outcomes. Outcome 6 had the lowest performance. This is understandable because the abundance of Latinized terms. The lowest assessments associated with Outcome 6 were the homework exercises. These exercises provide me an insight on what to review in class before quizzes and exams. By the student performance on those assessments, it looks like this strategy should continue.

Action Plan and Date for Reassessment

Identify action plan for improvement or maintaining current performance levels including outcomes identified for re-assessment, curriculum revision, LOT proposal, new or revised course activities to reinforce learning outcomes, etc. Append additional pages if necessary. If appending, include notation in box to "See attached".

The format and curriculum for the lab portion will basically remain the same except for activity improvements and further development of additional exercises. Special planning may be required for field activities as the roster number increases.

Students expressed that they liked learning while in the field, which included lecture presentations. This type of teaching works well with a small class size but would need to be reassessed if class size increases above 10 students.

Assessment Committee Recommendation/Approval (To be posted by Assessment Committee Chair) □ Approved as presented □ Approved with recommendations for future reports – Specifically mentioned outcomes that have been identified as having the lowest performance should also be specifically addressed in the action plan for future reports. □ Resubmission Required. Reason for Resubmission: Date: 11/16/2020

Approved Assessment Committee: 11/16/2020