

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

Course Title and Number: BET200-Field Biology I	Academic Term and Year of Assessment Activity (Ex: Fall, 2014) Fall 2018
Report Submitted By Amo Oliverio	Number of Students Assessed: 1
Date Report Submitted: 6/4/19	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 restrictive technical core course for the Biological and Environmental Technology program (BET) and sister course to BET 210 – Field Biology II.

Previous Assessment Reports and Results

Date of Previous Assessment: *Never*

List of Outcomes Not Met:

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

This is a newly created course for the BET program and is still under development.

Assessment Methods

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

Field Biology I is a non-traditional course in the fact that most of the curriculum and assessments occur in the field. Unfortunately, the first offering of the course only contained one student and the usual analysis of success rates would not apply. Besides a few certifications attained via other organizations, assessment was done primarily in a verbal fashion and repeated until the student mastered the material.

For example, a primary focus of the course is to learn how to use field guides to identify trees in the field. After explaining the layout and procedure of using various field guides, I took the student around to various tree species. I would explain and point out the various characteristics of a species in which to identify it. Then, I would guide the student through the dichotomous key in the field guide until the species of tree is identified. I would also tell the student the natural history and ecology of the species. After doing this procedure for several times, I would then give the student an unknown species and time to identify it using the field guide. If the student was successful, I would review the major identifiable characteristics and natural history and then move to the next species. If the student was unsuccessful, I would ask a series of questions about the prominent characteristics of the specimen to ensure they could correctly identify them. Then I would give them a second attempt to use the field guide to identify the species. If still unsuccessful, I would guide them through the key until the species was correctly identified. This teaching method was repeated every class outing. Once the student attained several familiar species, I would begin the outing with verbal quizzing on what characteristics were present in a specimen they have seen before and the specimen's name. If they answered incorrectly, I would have them use their field guide identify it. In this way, I would be ensuring the student mastered the use of the field guide while increasing their mental data bank of familiar species.

The method described was used for all fauna and flora species encountered during class. When the course contains more students, the procedure would be the same, except that I would also have daily quizzes in which several

specimens in the field are numbered. Then the students would have to identify the specimen and/or distinguish various characteristics of the specimen and write it down. After the quiz, I would review each species while verbally questioning individual students to ensure each student had mastered the activity. Every class would have species to be identified that would be a review and new species.

Besides identifying species, students are trained to use various tools to survey species in the field. As numbers remain low, I will be setting up a survey or species to be measured using the tools and have the students perform the survey. Directly after completion, I will review their results, discuss the error, and review and demonstrate correct procedures. When the student roster increases, I will collect and grade their results and then review common mistakes and demonstrate correct procedures during another class.

Another assessment that came into existence during the course after attaining access to the Poppy Bean Preserve is a forestry survey and management plan. The report would need the students to recall skills learned in BET 160 – Intro to GIS/GPS to collect data and map the area. Then students will have to correctly identify species and use tools to collect descriptive data. The data will be analyzed and management suggestions made. The final report will follow a specific set of guidelines and graded via a grading rubric.

The final type of assessment is the completion of various certifications given by the WV Department of Forestry and the Health Department. Students must successfully complete 1st Aid, Best Management Plans in Forestry, and Chainsaw Safety and Tree Falling. Students are trained by experts from the appropriate organization and then tested to attain certification.

Assessment Results: Course Overview

Due to only one student was in the class, the student repeated activities and assessments until mastery of material/skill.

Student successfully completed all offered certifications.

Student successfully completed the forestry survey and management plan while partnered and guided by adjunct instructor, Bruce McClelland.

* Please note if using a different minimum performance standard.

Detail By Goal

Course Outcomes:

1. Identify fauna and flora in the field using dichotomous keys and field guides.
The student successfully used dichotomous keys and field guides throughout the semester for various fauna and flora, focusing on woody species.
2. Perform common sampling methods of fauna and flora.
Student successfully completed a forestry survey and management plan report.
3. Describe basic natural history and ecology of common local fauna and flora.
Over the course of the semester, student successfully recalled basic natural history and ecology of common local fauna and flora verbally.

Conclusions

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".

During the inaugural offering, I have solidified several aspects of this course. BET 200 will have a strong dendrology and silviculture component and continue to require the three certifications discussed. Based off the feedback from the lone student, I will continue the described teaching and quizzing method in the field.

I did not cover as many groups of fauna/flora or survey methods as I initially planned, primarily due to not having many species located in the field, established pre-surveyed sites for use of surveying tools, and availability of survey tools.

Other assessment methods need to be created to accurately capture the understanding of natural history, tool use, and survey methods.

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".

Course outcomes are presently very vague, which was by design until the focus for the fall's BET 200 and spring's 210 was determined. Now the course outcomes for BET 200 and BET 210 should be edited to more effectively reflect the focus of each course. Also, a list of species and survey methods should be included in the explained course description of the master course record form.

More time needs to be devoted to scouting sites for specific species and survey activities. This includes field exploration over the summer and during the fall semester. Without this prep work, many species may go unseen by the students and reduce their overall exposure to vast numbers of species to learn. When the species available a specific sites are known, the quizzes can be planned with specific new species or ones that the class have frequently misidentified in the past.

A written exam needs to be created to assess individual students of their knowledge of the natural histories of primary species. Also, a formal demonstration of students' ability to use various tools and survey methods.

**Assessment Committee Recommendation/Approval
(To be posted by Assessment Committee Chair)**

- Approved as presented
- Approved with recommendations for future reports (Explanation Required)
- Resubmission Required. Reason for Resubmission:

Date: 9/13/19