WITC General Studies Course Assessment report form Assessment year/time-period: 2015-16

Course Assessed	Microbiology 10-806-197
Dates(s)	First assessed 2013-14 year
Participating faculty members	Lori Cypher, Mary Goldsmith, Jodie Karr, Dave Stanley, and Wendy Dusek (Summer 2015 and Fall 2015 data)
Assessment Process/Design	All of the health science faculty members worked collaboratively to design the common assessment. This assessment addresses all of the course competencies and learning objectives using carefully designed multiple choice or true/false type questions. Therefore, it is consistent for all students, regardless of which instructor they had, or which campus they attended. All WITC students taking this course were expected to take the assessment, regardless of learning mode. Ed. Assess software was not utilized with this rendition of data. Statistical analysis on a question by question basis was calculated allowing instructors to identify specific areas where teaching/learning improvement may be needed.
Results and Analysis – 2015-16 year	Total number of students in 2015 -16 assessment:
	# Online students:O_ Average test score for Online students: _N/A
	# Face-to-face students: _24_ Average test score for face to face students: _80.3%
	# Blended students: _93 Average test score for web-blend students: _84.4%
	Student average across the board (all learning modes) is:82.4%
	Results indicate that students excelled at the following competencies: 2. Use safe laboratory practices. 10. Summarize pathogenic and non-pathogenic host-microbe interactions. 11. Analyze patterns of microbial disease transmission using principles of epidemiology.
	The results obtained for these competencies ranges 90-98%.
	Results indicate that students need improvement with the following competencies:
	7. Classify bacteria based on differentiating characteristics.12. Summarize host defense mechanisms.
	14. Correlate select bacteria with human infectious disease.
	The results obtained for these competencies is <80%.
	In particular, we noticed particular strengths regarding pathogenic and non-pathogenic host-microbe interactions.

Action Plan relative to results

Based upon this assessment of Microbiology in the Fall 2015/Spring 2016 semesters:

Keep doing what we are doing – in general. Where students excelled, best practices were shared and our success was celebrated.

This happened in particular with regard to these particular competencies:

- 1. Use safe laboratory practices.
- 2. Assess the impact of microbial genetics on humans and the environment.
- 3. Summarize pathogenic and non-pathogenic host-microbe interactions.
- 4. Analyze patterns of microbial disease transmission using principles of epidemiology.

For each of the following competencies, students demonstrated poor mastery (i.e., less than 80% correct). Best practices were shared and new strategies developed to enhance student learning. These competencies include:

- 1. Classify bacteria based on differentiating characteristics.
- 2. Summarize host defense mechanisms.
- 3. Correlate select bacteria with human infectious disease.

Summary

Overall --- The average score across the board is 82.4%, compared to 85.1% for the past semester (Spring 2015). This is a little lower than expected. We will keep a close watch on these numbers. Passing for this class is 80% so this average is still acceptable. It was decided not to alter the assessment.

Best practices were shared throughout the review of Microbiology. Videos were discussed as a wonderful means to enhance student learning, as were worksheets and various activities.

Analyzing data manually worked very well. As we work through the next year, we expect to use the same Bb tools for assessment.

\gs\science\Course Assessments\Microbiology\Microbiology – 10-806-197 – sp16