BC is on PARR with Assessment

REFINE

Assess

Biological Science
Assessment
Example
Milena Lilles
Bio 16 General
Microbiology,
Spring 2018

REFLECT

PLAN

Plan: Assess SLO #7

SLO #7: Apply the scientific method by stating a question; researching the topic; determining appropriate tests; performing tests; collecting, analyzing, and presenting data; and finally proposing new questions about the topic.

Plan: Assessment tool - The Unknown Project



• Assignment:

- Students are given unknown bacterial sample and hypothetical patient scenario
- Assess the patient's condition and formulate differential diagnosis from the history
- Determine the necessary tests for a definitive diagnosis
- Identify the etiologic agent infecting the patient
- Propose a treatment and long-term care for the patient
- Present findings in a paper and propose new findings

Rubric for Unknown Paper

Criteria	1	2-3	3-4	5-6	Points
Writing & Scientific Terminology	The report shows evidence of spelling and grammar errors.	Few spelling and grammar errors.	The report displays uniform formatting, proper grammar and spelling.	The report displays no errors, proper formatting, excellent references and a high level of appropriate scientific vocabulary.	
Analysis of Patient History	The patient history is included.	The patient history is analyzed with regards to significant factors.	The patient history is analyzed using outside sources and relevant data.	The patient history is thoroughly analyzed integrating excellent supportive resources, encompassing a holistic view of the patient's condition, symptoms, emotional and immunologic status.	
Diagnosis	A diagnosis is provided.	included.	A reasonable list of potential <u>differential</u> diagnoses is evaluated. The final diagnosis is supported.	A differential diagnosis, evaluative criteria to eliminate unlikely agents or causes, and a final diagnosis are explained and supported with data & sources.	
Lab Tests	Inappropriate or inaccurate lab tests were used.	Only appropriate tests were used but insufficient tests were done.	All appropriate tests were done.	The report displays a good understanding of all the appropriate tests which were used in the identification.	
	Normal flora was identified as pathogens.		Appropriate normal flora were discussed& the specimen was properly evaluated.	Normal flora were discussed and identified if present in the culture. The specimen was thoroughly reviewed and evaluated with references.	
Immune Status	No discussion of the immune status of the patient.	Incorrect or inadequate discussion of the patient immune status.	Discussion of the immune status of the patient in light of pathogenic capabilities of etiologic agent.	Discussion of the immune status of the patient and integration into the diagnosis and treatment including a flow chart of this particular agent with regards to this patient.	
	A patient strategy and treatment are included.	included sensitivity results	A viable holistic patient care strategy & treatment is suggested and based upon sensitivity results.	A long term, holistic patient care strategy and treatment is based on sensitivity results and considers various options and effectiveness is developed with references.	
Prognosis	The report assumes a prognosis with no research.		A prognosis is stated with relevant supporting references.	The prognosis shows integrated thinking and use of resources and data to justify conclusions and incorporation of immunologic information.	
Total	Add 2 points for correct identification				

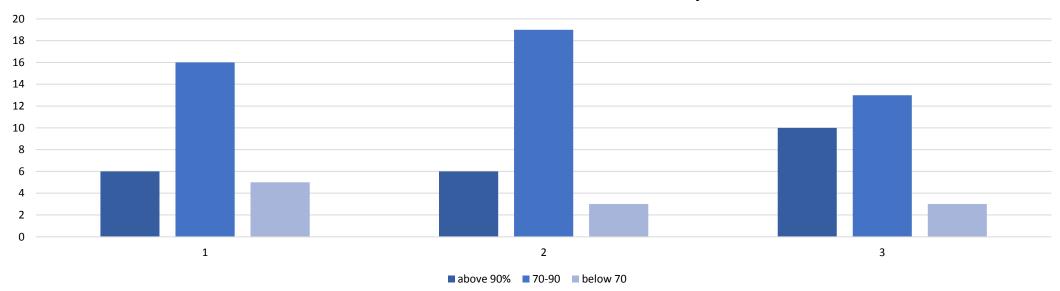
Assess: Data for 3 sections

SLO #7	Class 1	Class 2	Class 3
Above			
90%	6	6	10
70-90	16	19	13
below 70	5	3	3
Total	27	28	26

- Exceeded expectations (90% or higher)
- Met expectations (70%-90%)
- Did not meet expectations (below 70%)

Reflect: Most students met the expectations of this assignment or exceeded them.





Refine: Introduce assignment early in semester and incorporate library research workshops

Introduce assignment early in semester, not at the end.

Put up library research workshop schedule and clearly identify all aspects of assignment.

Allow time for writing, and recommend writing center to students.