Q1 What is the name of the course you are evaluating?

Dev BI 101 16.0

Q2 Describe the background, expertise, experience, qualifications and education that make you qualified as a Subject Matter Expert to review this course.

B.S. in Biology and Chemistry, PhD in Molecular Virology and Microbiology, taught Introduction to Microbiology for 5 years, and Pathogenic Microorganisms Laboratory course for three years.

Q3 Are the outcomes for the course appropriate to what students should be able to do or know to be successful in the profession and/or field?

Yes,

Explain.: Yes, for the most part. The outcomes are common and have timely relevance to students, as having a clear understanding of the topics presented will help students contribute to policy discussions happening in society, and provide them with an understanding of their own interdependence with their environment. The course outcome “Discuss biological community interactions” doesn’t seem to encompass all of the sub-outcomes from CU1, e.g. one of the sub-outcomes is “Evaluate and discuss community interactions” which is more than the course outcome. Perhaps the course outcome could be “Evaluate, describe, and graph community interactions” so that all of the sub-outcomes are encompassed by the course outcome? The taxonomy outcome language may or may not need to be tweaked, but I do recommend a little shift toward the idea of training the students to be able to find and apply taxonomy information rather than trying to memorize the taxonomies and characteristics, e.g. rather than remembering that fungal cell walls have chitin and plant cell walls have carbohydrates, they should remember than the substance of the cell wall is meaningful for classification. Then they can research what that substance is for the new organism, research what the substance is for classified organisms with cell walls, and place the new organism in a matching classification group.
Q4 Do the skills taught in the course prepare students for the profession? Yes, 
Explain: Some really great application activities throughout the course for students, especially in the first half of the course. I was impressed with how many activities that the student engaged with where the results were not static responses, but rather based on some experimentally-derived values and interpretations of those results.

Q5 Does the course holistically contain appropriate content related to the profession? Yes

Q6 What recommendations so you have for improvement that would make the course better align with the profession? I would like to see more application questions, rather than memorization questions, for the CU4 content. Generally that information is crammed into the student's head just long enough to take the exam and quickly forgotten afterward. Consider providing students with general classification rules/characteristics and asking more applied questions (Where would this newly discovered organism go? Explain your reasoning for classifying it the way you did. What if we discovered X, Y and X – are we allowed to blur/change/throw away the lines of classification? What is the purpose of classification? Should we be trapped in the traditional way of classification, or can we challenge the traditional with a new model? What would we need to challenge the traditional?)

Q7 What content needs to be developed to meet upcoming industry needs? Some other relevant topics in biology today that weren't mentioned in this course are GMOs and the human microbiome. I don't know if this course is designed to be the 'one biology course' that a non-science student would take, or if this course is just one in a series of courses that the student is expected to take...so these topics may fit better in some other course.