

## GEC Learning Outcomes (GLOs) Assessment Critical Thinking– Aggregate Results

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**Assessment Type:** GEC

**Year/Term:** AY18

**Course:** BIOL 101

**Learning Outcome:** Critical Thinking

**Assessment Method/Tool:** Common Rubric-EPCC

**Measurement Scale:** 3-1

**Sample Size:** 92

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|   | Proficient<br>(# of students) |       | Adequate<br>(# of students) |       | Developing<br>(# of students) |       |
|---|-------------------------------|-------|-----------------------------|-------|-------------------------------|-------|
| <b>Identifies and explains issues</b>                 | 17                            | 74%   | 4                           | 17%   | 2                             | 9%    |
| <b>Recognizes contexts and assumptions</b>            | 5                             | 22%   | 9                           | 39%   | 9                             | 39%   |
| <b>Acknowledges multiple perspectives</b>             | 4                             | 17.4% | 12                          | 52.2% | 7                             | 30.4% |
| <b>Evaluates evidence to reach conclusions</b>        | 9                             | 39%   | 13                          | 57%   | 1                             | 4%    |
| <b>Median %<br/>(based on 92 student sample size)</b> |                               | 39%   |                             | 46%   |                               | 20%   |

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**Benchmark:**

**85%** Institutional benchmark goal for median percentage of students to meet “Proficient” or “Adequate” levels in the GEC

**Percent Achieving Benchmark:**

**85%** Actual median percentage of students meeting “Adequate” or “Proficient” levels

## Closing the Loop:

In BIOL 101, I give 7 homework assignments, on each assignment I asked critical thinking questions, we start small and build up to more in depth critical thinking questions. After each assignment is graded, I take time to talk about ways the students could improve their answers from developing to adequate to proficient. I used their last homework assignment for the final assessment.

The benchmark for GEC courses is 85% scoring a 2 or 3. This sample has an 85% mean.

- How do you account for that? One of the issues with the low mean is that only 23 of 36 students did the assignment; I think if the entire class completed the assignment the mean would have been higher.
- How might the program address this issue? I do not know how to get students to do their homework; they already lose points for not doing the work. Make it a greater penalty for not turning work in as an option.

The mean for "Identifies and explains issues" and for "Evaluates evidence to reach conclusions" are very strong at 91% and 96% respectively.

- How do you account for those strengths? What is working well? We worked on this aspect all term. During each class period, I gave them a question that addresses this idea. This is the first term I tried this and it seemed to have really worked well.

There is a noticeable drop for the mean for "Recognizes contexts and assumptions" and for "Acknowledges multiple perspectives" at 61% and 69.6% respectively.

- How do you account these gaps? What recommendations do you have for improvement? On this assignment, I changed these questions slightly from last year's assignment. The students that I gave a 1 to, all copied answers from last year's question which of course was different but they did not realize it so their answer did not address the question. Other students a "googled" answer and I did not give them credit for their work and they also received a low score. If I threw those students out of the assessment, I would have reached my benchmark.

## Action Plan:

I will be sharing these results with my Biology colleagues, and ask for suggestions on ways to improve my benchmark scores.