

**GEarea****Delivery Mode:****Submitted by:****Participating Faculty and Staff:****Outcome Assessed:****Courses Used:****Course or degree outcomes to be added/changed/removed:****Course Level Assessments:**

## Assessment Reporting

**Area A - Natural Sciences**

(Choose one)

R-EUREKA\Diqui-LaPenta on 3/29/2021

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1 - Communicate scientific ideas.

AG-17, AG-23, ASTRO-11, BIOL-1, BIOL-3, BIOL-15, BIOL-8, CET-10, CHEM1A, CHEM-10, ENVSC-10, GEOL-1, PHYS-2A, PHYS-4A

1 course was not successful at conveying this outcome.

7 courses were generally successful at conveying this outcome.

5 courses were definitely successful at conveying this outcome to most of the students.

19 courses were not included in this report.

**Findings/Results:**

Total number of students assessed= 386  
Percent Not Successful= 17.35%  
Percent met expectations= 25.65%  
Percent exceeded expectations= 43.79%  
Percent not assessed= 13.21%

A recurring theme was that assessments done at the end of the semester run the risk of having more students not assessed. One assessment had poor results due to students running out of time to complete an exam. Another was at the end of the semester and not worth enough points to impact the students' final grades. Without having a comparison to other GE Area outcomes, it is difficult to determine if a ~17% failure to meet expectations is comparable to results for other GE outcomes. Science is a notoriously difficult subject, and students taking science for GE credit alone are often underprepared for the level of rigor required not only in scientific reasoning but also in math and reading.

Regarding PHYS-2A where 45% were successful using a single exam question as the assessment tool, improved to 60% a year later after a redesign of lab assignments addressing the skill for this assessment.

Regarding GEOL-1, Instructors felt that students got what they needed, but the method and the timing for assessments can be and since have been improved (most of the no-shows were in a section where they did not receive the announcement regarding the assessment). Demonstrable quality improvement has occurred now that we avoid end-of-semester low-point-value summative assessments (which students were ignoring or not putting forth best efforts).

There was a mention of considering incentives for students to show up for assessments (announcements, higher point values)

**Actions/Changes To Be Implemented:****Course Mapping:**

14 courses (1 outcome per course). This is a sufficient number of outcomes across 8 disciplines.