0: Not Meeting—No evidence of routine expertise or acquiring scientific literacy
1: Approaching—Shows evidence of routine expertise and acquiring scientific literacy (first-year students)
2: Meeting—Shows evidence of adaptive expertise, uses scientific literacy in communicating hypothesis driven inquiry and research (second-year students)
3: Exceeding—Transfer ready, uses adaptive expertise in communicating to community and public audiences (interns, ready for third-year work)

| CATEGORY and Ranking | 0 | 1 | 2 | 3 | na |

Communication  Kapiʻolani Community College General Education Outcomes
A.S. N.S. Degree Outcomes
- Articulate essential underlying facts, concepts, principles, theories, and applications relating to chosen areas in life science or physical science.
- Employ the language and techniques of mathematics that are used in life science or physical science.
- Assess information using scientific theories and concepts from a range of sources in order to make sound judgments.
- Apply terms, conventions and units of measurement appropriate to life science or physical science.

Critical Thinking  Kapiʻolani Community College General Education Outcomes
A.S. N.S. Degree Outcomes
- Explain the natural and technological world using reflection and quantitative analysis to prepare a plan; to collect, process, and interpret data; to communicate conclusions; and to evaluate the plan, procedures and findings.
- Relate scientific knowledge and understanding to address familiar and unfamiliar situations in order to plan and carry out project work.
- Design safe, practical, investigative work in life and/or physical science that reflects risk management and appropriate style, purpose, and audience awareness.
- Apply appropriate qualitative and quantitative methods to acquire, record and analyze data from laboratory and field observations and measurements, and to interpret and report results in terms of underlying theory, practical issues and relevant information from other sources.
- Work collaboratively with others to explore aspects of life science or physical science.

Disciplinary Integration  Kapiʻolani Community College General Education Outcomes
A.S. N.S. Degree Outcomes
- Apply scientific knowledge, skills, and understandings to issues in daily life.
- Apply contributions made by life or physical science to informed debate, including some of the limits of current scientific knowledge.
- Apply mathematical language and techniques to understand phenomena and solve problems in life science or physical science.

Self and Community  Kapiʻolani Community College General Education Outcomes
A.S. N.S. Degree Outcomes
- Express scientific knowledge and understanding to different audiences for a range of purposes.
- Articulate the ethical issues of the impact on people and on the local and global environment of the processes and likely products of science.
- Relate how the physical environment of Earth and its position in the universe impacts the way we live.
- Relate the scientific concept of energy to our existence and quality of life.

| Totals |  |  |  |  |

For FIRE-UP Faculty Math/Science ASNS Learning Outcomes Assessment