|  |
| --- |
| **Program/Discipline Learning Outcomes** |
| **Academic Year: 2018-2019** |
| **Program/Discipline: Environmental Science – Certificate (ENSC.CERT)** |
| **PROGRAM/DISCIPLINE CONTACT** |
| **FACULTY: Steven Albee-Scott, PhD** | **OFFICE: JM111** |
| **EMAIL: albeescsteven@jccmi.edu** | **PHONE: (517) 976-8568** |
| **Learning Outcome:****(Successful students will be able to)** | **Course(s) in which the assessment will be performed** | **Semesters the outcome will be assessed** | **Assessment tools used for learning outcome** |
| 1 | *Identify, understand, and formulate environmental and ecological hypotheses.* | BIO158 Environmental Science | Fall | Formative assessment using a portfolio rubric. |
| 2 | *Recognize, generate, and record empirical data.* | GEL109 Earth Science | Fall, Winter, Summer | Laboratory practical |
| 3 | *Communicate the outcomes of applied experiments.* | BIO158 Environmental Science; BIO258 Field Ecology | Fall, Winter | Written manuscript |
| 4 | *Understand and discuss applications of environmental science and scientific theories of biology.* | BIO158 Environmental Science; BIO258 Field Ecology | Fall, Winter | Formative assessment using a portfolio; summative exams with essay; written manuscript |
| 5 | *Contextually understand and evaluate societal issues pertaining to ecology, evolution, and applied environmental science.* | BIO158 Environmental Science; BIO258 Field Ecology | Fall, Winter | Summative exam essay using rhetorical argumentation style |
| 6 | *Consider the ethical and moral implications of the role of humans and their activities in the environment.* | BIO158 Environmental Science | Fall | Summative exam essay using rhetorical argumentation style |
| 7 |  |  |  |  |
| 8 |  |  |  |  |