

GENERAL EDUCATION ASSESSMENT
Narrative Report

GE Element: Element 4

Course: Anthropology 201 Introduction to Physical Anthropology (renamed Introduction to Biological Anthropology)

GE Objectives & SLOs: <https://gened.eku.edu/syllabus-requirements>

Person Completing This Report: Dr. Benjamin Z. Freed, Assistant Professor and Program Coordinator, Anthropology

1. Please provide a brief description of the assessment activity.

Element 4 Gen Ed Goals and Course SLOs: Five ANT 201 sections (three face-to-face, two online) were taught in Spring 2019 Semester by two instructors (tenured faculty and adjunct PhD). Ninety-nine students took the final exam, completed at least 75% of assessment questions, and submitted more than 50% of labs and exams before one week of the final exam. Of these students, 67% were randomly selected in each of section. Sample size was 67 students. Final exams were given to online sections Sunday-Thursday during Finals Week. All other sections had finals on Tuesday-Wednesday of Finals Week. Questions were administered on a cumulative final exam that was weighted more towards material in the last four weeks of the course. The question forms varied by GenEd Goals and Course SLOs, but contained at least 2 objective and 1 short written question for each GE Goal.

QEP: In Spring 2019 Semester, three face-to-face ANT 201 sections were taught critical reading skills (comprehension, evaluation, and synthesis) in three labs during the semester. In the last unit of the course, Human Fossil Record, the QEP lab activity was administered on 4/15-18/2019. QEP assessment questions were worth 16 out of a possible 45 points for the lab. Sixty-three students did all phases of the QEP lab activity. Of these, thirty-two students (51%) were randomly selected for this assessment. Reading questions centered on two articles: one was a popular piece about a longer technical article; the second piece was that technical article. The first piece was read by each student. The technical piece was a group read, in which each student read one section of the technical article, and then discussed it before the rest of the group. The question forms varied by criterion:

- a. Comprehension: Main arguments of the articles: 2 short written
- b. Comprehension: Recognizing relevant supporting data: 2 short written
- c. Analysis: 2 short written
- d. Synthesis: 1 short written
- e. Evaluation: Do you support the conclusion(s) of this article? 1 short written

As this was a trial assessment to evaluate the QEP Lab Activity's overall effectiveness, it was not offered online, pending revisions from this initial trial activity.

2. Describe both the strengths and challenges of integrating critical reading into the course. For comprehension and evaluation, the integration of critical reading into the course was not difficult, as the course had in the previous two years already integrated activities that required group reading, discussion, and individual participation. Likewise, reading samples have always been a part of course midterms and final exams. Analysis and synthesis components, however, were significantly more difficult to integrate in labs leading up to the final QEP Lab Activity. These had not previously been a part of the course. The QEP Lab Activity itself fit in very well at the end of the semester, as it forced students to integrate core class concepts, evaluate and compare their own data with data they had initially collected, and forced them to reflect on biases and conclusions from

two vastly different forms of writing. Analysis posed great difficulty for several students, as ANT 201 does not have a mathematics competency built in as a course prerequisite.

3. Based on the data collected from the assessment activity in 2018-19, describe the changes/improvements that were implemented to the course in 2019 – 2020?

GE Goals & Course SLOs: Overall, based on the results of the assessment activity in 2018-19, we did not make many changes or improvements for 2019-2020. We maintained competency levels while changing the structure of the face-to-face class, from dedicated lecture/lab into a flipped format and with a smaller classroom. In terms of critical thinking and quantitative reasoning, students scored slight increases in drawing valid scientific conclusions. Unfortunately, the flipped format had to be abandoned for an asynchronous online/remote format in Spring 2020 with the outbreak of the novel coronavirus.

QEP: Almost 75% or more of the students achieved or exceeded competency when it came to evaluation and comprehension of both main arguments and of relevant data. From these results, we kept each of the reading components from earlier labs and exams in Academic Year 2019. These lab activities seem to be working in getting the students practice in reading through scientific material, both in popular and technical formats.

However, changes are needed in analysis and synthesis, as nearly 30% or more of students had developing or beginning competencies. Combined with results on the final exams, these results did force us to develop several new lab activities in Spring 2020. First, students gained some practice in synthesizing materials in two activities, one an early activity about genes, and another in which the students were asked to make sense of several categories of information about nonhuman primates. Secondly, students were going to be given more analysis work while evaluating cranial features in human fossils, but this was not accomplished, due to the interruption of the Spring Semester 2020. To address this issue, the QEP lab activity will be revised so that students will practice and discuss analysis as soon as they collect their data, early in the semester.

4. How well does the course satisfy GE Goals and SLOs? In what areas might the course need improvement?

I believe the course meets and surpasses the GE Goals and course SLOs for Element 4. In this assessment, the students also showed strong competencies in critical reading skills. They showed good competencies in understanding major concepts covered in course SLOs, and in integrating knowledge and informing their own choices about issues of personal and public importance. Since the previous assessment, competencies declined slightly in methods.

The students need improvement in quantitative analysis (especially in seeing patterns in data) and in critical thinking about methods. Students are often very shy about arithmetic, learning basic descriptive statistics, and understanding graphs. Although students can pair up with people who are more confident, the students need more interaction with instructors on these tasks. In Academic Year 2020-21, we will incorporate more time on these skills while revising our early human variation lab, and our later primatology observation lab.

5. Describe how faculty or other stakeholders participated in this process (e.g., who participated in the scoring process, who contributed to the narrative, how/when the information was shared, etc.)

In Spring 2019, Dr. Benjamin Freed was the only full-time instructor of the face-to-face course. Dr. Kerry Dore instructed two online sections of the course. Through discussions with Dr. Dore, it was decided that the QEP Lab Activity was not conducive to the online format, as student attendance and participation varied greatly, and implementation would have been too different.

Dr. Freed developed the QEP critical reading components, by examining and modifying one of the lab activities. QEP critical reading components included examination of the Program's QEP assessment developed by Dr. Amanda Green, and was later modified after discussion with Dr. Erin Presley. In April 2019, Dr. Freed administered and evaluated the QEP lab activity in its first version.

During Final Exam period of Spring Semester 2019, Drs. Freed and Dore administered the General Education Assessment questions that have been offered in previous semesters. On May 10, 2019, both instructors tallied results, and Dr. Freed evaluated the combined data.

On May 14, 2019, both Drs. Freed and Dore discussed on Skype the trends, observations, and effects on future versions of the class. From the analysis and discussions, Dr. Freed wrote the narrative. Spring Semester 2019 was Dr. Dore's last semester instructing with Eastern Kentucky University, as she took a governmental position in St. Kitts and Nevis.

6. What future changes/revisions are being considered for this course? Topics can include assessment activity, process of data collection and evaluation, course content, course assignments, course offerings/availability, and/or faculty teaching.

Assessments: While the assessment on the final exam gives us good information about the course SLOs, we need better integration of the Gen Ed Goals and the QEP activity. The assessment activities will be revised for the next assessment in 2021. First, the Final Exam activity questions will be revised to include more direct measures of quantitative reasoning and analysis related to human variation, as well as analysis and synthesis of the human fossil record. Secondly, the QEP Lab Activity in face-to-face will also change, so that students can practice more analysis and synthesis. This will involve observations of the foot mechanics of people jogging, which integrates human biology, health, and with anthropological perspectives of how humans interacted with their environment.

Faculty teaching and assessment activity: During the last year, we successfully brought on Natalia Reagan as the online instructor. We have been unable to secure a part-time instructor for face-to-face sections. Dr. Freed and Reagan have begun revision of the QEP activity so that we can analyze online student performance. Reagan will be responsible for modifying the face-to-face version for online use, administering the online QEP Activity, and collecting the online assessment data.

Course Content: We will revise an activity on human variation so that it includes more practice with analyzing data, appreciating descriptive statistics, and synthesizing it with lecture content on human biological diversity. Due to the novel coronavirus, the Fall 2020 face-to-face format will be Web-Blended (both face-to-face and remote instruction), and labs will be restructured so that they can be done online or outdoors. More lecture and discussion will take place; labs will be more problem/project-based.

Online format: Natalia Reagan has revamped the online format to include more discussion, and is revising the sequencing of the units, to mesh better with student interests. Although the same four units will appear, Reagan has seen and worked with a revised structure elsewhere in which evolutionary biology and genetics appear later in the semester. Dr. Freed and Reagan are also examining a free online textbook that may coordinate well with our current course material.