## CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS

| COURSE NAME: CHEM 120: Introductory General Chemistry   |  |  |   |  |  |
|---|--|--|---|--|--|
| FACULTY NAME: Katie Hughes  | <b>DATE SUBMITTED:</b> 3/28/2024   |  |   |  |  |
| COURSE COMPONENT  | PREVIOUS VERSION DESCRIPTION   | CULTURALLY REPONSIVE CHANGES DESCRIPTION(S)  | CULTURES OF LEARNING STYLES<br>ADDRESSED THROUGH THESE<br>REVISIONS   |  |  |
| Syllabus  | Not addressed  | Not addressed  |   |  |  |
| RESOURCES USED and where to find more int   |  |  | I.  |  |  |
| <b>Course Units</b>   | Not addressed  | Not addressed  |   |  |  |
| RESOURCES USED and where to find more information:  |  |  |   |  |  |
| Reading Assigned/Textbook   | The lab manual the CHEM department had previously created has good content and experiments, but lacked engagement and diversity of learning styles                                       | A complete CHEM 120 lab manual was redesigned to have active engagement curriculum, requiring students to fill in the details of each experiment on an "image guide" which serves as the students procedure, rather than the traditional text-heavy "cookbook" style manuals   | Increasing engagement will help students of all cultures, but specifically this addresses visual learners, colorblind students (all images were redesigned to have good contrast in gray scale), ESL students (as they write the procedure in their own words during their professor's lecture) |  |  |
| RESOURCES USED and where to find more information: The PDF of the lab manual and the instructor's guide will be available through AHC's Culturally Responsive Modified Curriculum |  |  |   |  |  |
| <b>Instructional Methods</b>  |  |  |   |  |  |
| RESOURCES USED and where to find more int   | formation:   |  |   |  |  |
| Assignments   |  |  |   |  |  |
| RESOURCES USED and where to find more information:  |  |  |   |  |  |
| Activities  | 14 lab experiments designed to compliment a typically CHEM 120 lecture schedule  | The actual lab experiments were kept exactly the same, only the presentation of the manual was edited  |   |  |  |
| RESOURCES USED and where to find more information:  |  |  |   |  |  |
| Instructional Methods   | Students were required to read prelaboratory material, complete a prelab assignment, come to lab and complete the experiment via a written procedure, then complete a postlab assignment | The only part that we have changed is that students will now come to lab without knowing the details of what the procedure will be (or having it in their manual). The "big picture" of the experiment is presented in writing. This active engagement curriculum is designed to get students thinking about what they are doing and why they are doing it and prevent students from participating passively | Increasing engagement will help students of all cultures, but specifically this addresses visual learners, colorblind students (all images were redesigned to have good contrast in gray scale), ESL students (as they write the procedure in their own words during their professor's lecture) |  |  |
| RESOURCES USED and where to find more information:  |  |  |   |  |  |
| Classroom Environment   | Students listed to a brief 10-15 minute prelab lecture, then conducted the experiment in pairs based on the steps written in their lab manual  | Students will need to be more involved in the prelaboratory discussion, ask questions when they miss a detail and will need to show their instructor this completed page before beginning the experiment   | Increasing engagement will help students of all cultures, but specifically this addresses visual learners, colorblind students (all images were redesigned to have good contrast in gray scale), ESL students (as they write the procedure in their own words during their professor's lecture) |  |  |
| RESOURCES USED and where to find more information:  |  |  |   |  |  |

## **CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS**

| <b>Grading Policies</b>                            | Not addressed | Not addressed |  |  |
|--|---------------|---------------|--|--|
| RESOURCES USED and where to find more information: |               |               |  |  |
| <b>Learning Goals</b>                              | Not addressed | Not addressed |  |  |
| RESOURCES USED and where to find more information: |               |               |  |  |

## \*\*\*Things to keep at the forefront of your mind while modifying curriculum to be culturally responsive and humanizing: Seek-out, recognize, and address bias within the curriculum components. Highlight representations from the cultures that reflect the students we serve. Seek insights from students to assist in the designing of curriculum and accuracy of portrayals. Bring real-world and community issues into the curriculum and seek ideas from students regarding actions. Highlight power dynamics, privilege, and historical oppression. Utilize multiple perspectives from different cultural groups. Seek to reach multiple learning styles / intelligences.