

# CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS

<b>COURSE NAME: CHEM 120 and CHEM 150</b>			
<b>FACULTY NAME: Michael Hughes</b>		<b>DATE SUBMITTED: 7/10/2023</b>	
COURSE COMPONENT	PREVIOUS VERSION DESCRIPTION	CULTURALLY REPNOSIVE CHANGES DESCRIPTION(S)	CULTURES or LEARNING STYLES ADDRESSED THROUGH THESE REVISIONS
<b>Syllabus</b>	Includes statement about the importance of inclusivity in the classroom “regardless of race, ethnicity, religion, national origin, immigration status, age, gender identity, sexual orientation, language, socioeconomic status, medical status or disability”	I feel that I have already addressed the CRC ideals in my syllabus and so did not make changes	All cultures will continue to be supported through the language in my syllabus
RESOURCES USED and where to find more information: n/a			
<b>Course Units</b>	CHEM 120: 4.0 CHEM 150: 5.0	No changes	No changes
RESOURCES USED and where to find more information: n/a			
<b>Reading Assigned/Textbook</b>	CHEM 120: Introduction to Chemistry, N. Tro CHEM 150: The Molecular Approach to Matter, Silberberg	No changes	No changes
RESOURCES USED and where to find more information: n/a			
<b>Instructional Methods</b>	Primarily lecture accompanied by slides, weekly lab experiments using department lab manual	Added new activities (Mendeleev’s Pursuit, X Marks the Spot) and demos (Nitrol wire demo) for both CHEM 150 and CHEM 120 , increased representation of minority groups in slides and added example problems that are culturally relevant	A Multi-media approach will help students of all learning types be more successful, all cultures were addressed and considered in adding slide images
RESOURCES USED and where to find more information: see slides for citations of research and added images			
<b>Assignments</b>	Homework quizzes for every chapter	Added new assignment (Mendeleev’s Pursuit Handout) as a follow-up on the new in-class activity (Mendeleev’s Pursuit). Added a syllabus quiz in Canvas to help students understand what is crucial for them to be successful in the class	Students who specifically benefit from visual and tactile learning or enjoy working in groups
RESOURCES USED and where to find more information: Microsoft team’s folder contains assignments. Contact Michael ( <a href="mailto:Michael.hughes2@hancockcollege.edu">Michael.hughes2@hancockcollege.edu</a> ) for X Marks the Spot cards, Mendeleev’s Pursuit cards or Nitrol wire			
<b>Activities</b>	Students participate in weekly labs	Added in lecture activities for CHEM 120 (X Marks the Spot, Mendeleev’s Pursuit 120) and CHEM 150 (Mendeleev’s Pursuit 150) <b>X Marks the Spot:</b> Students choose a note card with an atomic symbol that is missing crucial information (the name of the element) and must determine the missing information using the given information about charge, mass number or atomic number. It adds a game-like motivation for making the connections between these important concepts students need to master to fulfill the course learning objectives	Students who specifically benefit from visual and tactile learning or enjoy working in groups

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		<p><b>Mendeleev's Pursuit:</b> Students work as an entire class to "build" the periodic table, each of them has been given a clue or series of clues that can help them identify their individual element, but they must work together to also determine where they belong relative to the other elements. This activity promotes team work and problem solving, and helps students make important connections between topics which support the learning objectives of the course. <b>120 version goal:</b> To better understand/ visualize the composition of the periodic table. To understand better the historical motivations of Mendeleev and others to group elements by chemical behavior. Finally, to observe trends in electron configuration to predict placement on the table. <b>150 version goal:</b> To visualize the periodic table with a similar method Mendeleev (he used cards to visualize the elements). Practice identifying elements using atomic trends such as: size, IE, subsequent IE trends, metallic nature, condensed electron configuration, quantum numbers, electronegativity, bond length. Observe trends in atomic behavior to predict placement on table.</p>	
<p>RESOURCES USED and where to find more information: Microsoft team's folder contains assignments. Contact Michael (<a href="mailto:Michael.hughes2@hancockcollege.edu">Michael.hughes2@hancockcollege.edu</a>) for X Marks the Spot cards, Mendeleev's Pursuit cards or Nitrol wire</p>			
<b>Instructional Methods</b>	n/a	n/a	n/a
<p>RESOURCES USED and where to find more information:</p>			
<b>Classroom Environment</b>	Encourage inclusion of all students regardless of race, ethnicity, religion, national origin, immigration status, age, gender identity, sexual orientation, language, socioeconomic status, medical status or disability	No changes	No changes
<p>RESOURCES USED and where to find more information:</p>			
<b>Grading Policies</b>	Allow for late submission of assignments for extenuating circumstances.	No changes	No changes
<p>RESOURCES USED and where to find more information:</p>			
<b>Learning Goals</b>	No changes were made to the learning objectives	No changes	No changes
<p>RESOURCES USED and where to find more information:</p>			

**\*\*\*Things to keep at the forefront of your mind while modifying curriculum to be culturally responsive and humanizing:**

## CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS

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| <ul style="list-style-type: none"><li>• Seek-out, recognize, and address bias within the curriculum components.</li></ul>                                   |
| <ul style="list-style-type: none"><li>• Highlight representations from the cultures that reflect the students we serve.</li></ul>                           |
| <ul style="list-style-type: none"><li>• Seek insights from students to assist in the designing of curriculum and accuracy of portrayals.</li></ul>          |
| <ul style="list-style-type: none"><li>• Bring real-world and community issues into the curriculum and seek ideas from students regarding actions.</li></ul> |
| <ul style="list-style-type: none"><li>• Highlight power dynamics, privilege, and historical oppression.</li></ul>                                           |
| <ul style="list-style-type: none"><li>• Utilize multiple perspectives from different cultural groups.</li></ul>                                             |
| <ul style="list-style-type: none"><li>• Seek to reach multiple learning styles / intelligences.</li></ul>                                                   |