CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS

COURSE NAME: Math 105- Math for Teachers

FACULTY NAME: Amanda Lombard **DATE SUBMITTED**: 1/24/24

COURSE COMPONENT	PREVIOUS VERSION DESCRIPTION	CULTURALLY REPONSIVE CHANGES DESCRIPTION(S)	CULTURES or LEARNING STYLES ADDRESSED THROUGH THESE REVISIONS
Syllabus	Nothing about diversity and inclusion	Added a diversity statement to the beginning of my syllabus to let students know their unique culture and background is valued in this classroom	
RESOURCES USED and where to find more information: Updated syllabus included in files on Teams			
Course Units			
RESOURCES USED and where to find more information:			
Reading Assigned/Textbook			
RESOURCES USED and where to find more information:			
Instructional Methods	Powerpoint lecture to present integer operations	Small groups teach each other and use hands on manipulatives to practice integer operations; encourage use of language of origin to interact with each other	Students who speak Spanish, Mixteco, etc as their first language are celebrated
RESOURCES USED and where to find more information:			
Assignments	Research a mathematician and present to the class Present the solution to a homework problem on the board each unit	Research a BIPOC, female, or other minoritized mathematician to present to the class. Discuss a challenge or barrier the mathematician had to overcome. What is one way you resonate with this mathematician? Present the solution to a homework problem each unit either on the board, in a video posted on Flip for classmates to watch, or in a step-by-step PowerPoint presentation posted on Canvas for classmates to follow	Women, BIPOC, or any other minoritized group Students are showing competency in presenting the solution to a problem as they will need to do this in their future careers, but can choose from multiple modalities.
RESOURCES USED and where to find more information: Mathematician Project included in files on Teams			
Activities	Learn about ancient numeration systems (Egyptian, Mayan, Babylonian, Roman)	Highlight the contributions of different cultures. Have each group research a different ancient numeration system to learn about the history and how different civilizations influenced one another. Who gets credit for the numeration system? Who doesn't get credit?	Students can choose a culture that is interesting to them, perhaps one of their ancestry.
RESOURCES USED and where to find more information: Watch video to introduce the history of numeration systems from different cultures https://youtu.be/cZH0YnFpjwU			
Instructional Methods	Lecture to present different arithmetic methods	Students rotate through stations to learn arithmetic strategies from around the world	Japanese Multiplication model, Korean addition and subtraction, cultures that use different bases, Switzerland addition starting from the left, Russian multiplication of large numbers and "peasant algorithm", division from Laos
RESOURCES USED and where to find more information: New models discussed in article "Multicultural Mathematics" in files on Teams			

CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS

Classroom Environment	Class begins very teacher centered with me going over homework questions	Class begins with a slide up on the board to encourage a "Math Talk" with students in groups	Cooperative learning and discussion about different ways to solving the same problem meets the needs of multiple intelligences
RESOURCES USED and where to find more information: "Week 1" is an example of the Math Talk slides in files on Teams			
Grading Policies			
RESOURCES USED and where to find more information:			
Learning Goals			
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.

CULTURALLY RESPONSIVE CURRICULUM MODIFICATIONS

COURSE NAME: Math 105- Math for Teachers

FACULTY NAME: Amanda Lombard **DATE SUBMITTED**: 8/11/23

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RESOURCES USED and where to find more information:			
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RESOURCES USED and where to find more information: Mathematician Project included in files on Teams			
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