A. Course Description

Credits: 4

Prerequisites:

MATH 098 Introduction to Mathematical Thinking

OR

MATH 102 Mathematics of Sustainability OR Placement at/above College Algebra on the University's assessment test.

Lab Hours/ Weeks:

Corequisites: None

Lecture Hours/ Week :

MnTC Goals: Goal 03 - Natural Science

This course introduces students to scientific practices and to biological concepts (including genetics, physiology, and evolution) through the perspective of past and current research related to race. The biological basis for human differences will be clarified and distinguished from racialized traits. Environmental effects on human biology and health will be addressed within the context of racial disparities. The influence of cultural assumptions on scientific research and the misuse of science to support racist claims (e.g., the eugenics movement, The Bell Curve) will be evaluated. Course includes significant online content and lab. Intended for students preparing for BIOL 111 General Biology and students seeking a general education science course with lab.

B. Course Effective Dates: 01/09/2017 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Summarize current scientific facts and theories in biology related to human diversity and race as well as how they differ from disproven hypotheses in the same field;
2. Critique how race and racism have been socially constructed in the United States and how they have changed over time using a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies;
3. Describe and discuss the dual nature of science and technology as both contributing to and revealing legacies and impacts of racism and unequal power relations between groups in the United States;
4. Describe and discuss the experience and scientific contributions of the many groups that shape American society and culture, in particular racial groups that have experienced discrimination and exclusion;
5. Explain collective and/or institutional responses and responsibilities of science and scientists to address racism;
6. Formulate and test hypotheses by performing lab, simulation, or field experiments, and communicate the outcomes and scientific interpretation both orally and in writing;
7. Use appropriate methods for the collection, statistical analysis, and graphical analysis of data, and identify sources of error and uncertainty in data;
8. Analyze their own attitudes, behaviors, concepts and beliefs regarding diversity, racism, and bigotry through the application of online communications skills.

E. Learning Outcomes (MN Transfer Curriculum)
Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.
2. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
3. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

G. Special Information

Note: First day attendance required except by instructor permission.
Racial Issues Graduation Requirement