# Minnesota State University Moorhead

## WS 406: DNA as Destiny: Genetics and Society

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 09 - Ethical/Civic Resp

This course examines the various ethical, legal and social implications (ELSI) of genetic research and the applications of current and future applications of new genetic technologies. It is designed to provide students in any major, with the necessary background to make informed decisions about these issues in a socially and civically responsible manner. MnTC Goal 9.

## B. COURSE EFFECTIVE DATES: 01/10/2011 - Present

## C. OUTLINE OF MAJOR CONTENT AREAS

- 1. Human Genome Project
- 2. Genetic Determinism
- 3. Human-centered biology
- 4. Reproductive Technology
- 5. Genetics and Race in Humans
- 6. Genetics and the Gender Spectrum
- 7. Genome-based Forensics
- 8. Genetic Discrimination and Protections
- 9. Gene Ownership by Groups or Individuals
- 10. Commercialization of Genes
- 11. Genetically Modified Organisms
- 12. Reproductive Cloning
- 13. Therapeutic Cloning & Regenerative Medicine
- 14. Large Population Assessments & Pharmacogenomics
- 15. Gene Therapy
- 16. Behavioral Genetics
- 17. Epigenetics

#### **D. LEARNING OUTCOMES (General)**

- 1. Examine, articulate, and apply their own ethical views.
- 2. Understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues.
- 3. Analyze and reflect on the ethical dimensions of legal, social, and scientific issues
- 4. Recognize the diversity of political motivations and interests of others
- 5. Identify ways to exercise the rights and responsibilities of citizenship.

## E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 09 - Ethical/Civic Resp

- 1. Examine, articulate, and apply their own ethical views.
- 2. Understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues.
- 3. Analyze and reflect on the ethical dimensions of legal, social, and scientific issues.
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#### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted