

# North Hennepin Community College

## NSCI 1020: Science of Disaster Workshop II

### A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

These courses examine the scientific mechanisms and basis of hazards that are of local, regional, national and global concern for public health, safety and environmental impact. Scientific background of distributions, risks, and case histories for each major hazard will be presented. Topics are divided as follows: 1010 Disasters related to the Lithosphere (rigid portion of earth's surface); 1020 Disasters related to the Hydrosphere (water) and Atmosphere (air); 1030 Disasters related to the Biosphere (realm where life exists), including those societally-induced. This course includes a lab-like experience. Take-home final exam and/or paper/projects required.

**B. COURSE EFFECTIVE DATES:** 08/27/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Allow the student to become aware of the physical and societal nature of disasters. The physical principles involved in both natural and man-made disasters will be explained and video examples will be presented. Topics relating to disasters related to the atmosphere (thunderstorms, lightning, tornadoes, hurricanes, heat waves and fire) and hydrosphere (floods, storm surge) are presented in this course.

### D. LEARNING OUTCOMES (General)

1. Students improve the effectiveness of their critical thinking skills through the challenge of investigation of phenomena that are in the real world all around them. Particular attention will be paid to the disaster safety aspect of all natural disasters. The mitigation of all of the individual disasters will be discussed and options outlined given to improve the social aspects of disasters.

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

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.

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted