A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course is designed to prepare graduate students with practical analytical and communications skills for research and professional environments, whether that's a research lab, a classroom, a parks system, a fish hatchery, or anything in between. The goal is to help students develop skills that will facilitate achievement of their professional and intellectual goals.

B. COURSE EFFECTIVE DATES: 08/15/2020 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. How is science communicated?
2. Reading and writing about research
3. Data Visualization
4. Posters and Talks
5. Professional Communication

D. LEARNING OUTCOMES (General)

1. find, organize, analyze, annotate, and cite a variety of primary and secondary sources clearly, concisely, and logically.
2. create compelling written and oral communications with clearly defined goals and appropriately scaled information content and complexity.
3. critique and improve their own and others' work effectively and generously.
4. use software to increase productivity and efficiency, and improve document style, consistency, readability, and navigation.
5. assess the ways in which the practice of science is both dependent and independent of the society in which it functions, and recognize instances where the scientific enterprise can recapitulate institutional and cultural biases despite (or even because of) an emphasis on objectivity.
6. create clear, parsimonious, and rigorous data visualizations, and critically analyze published data visualizations from a variety of sources.
7. understand different models of scientific thinking and their strengths and limitations, and apply them to propose testable scientific hypotheses to extend existing knowledge.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus
G. SPECIAL INFORMATION

None noted