12TH ICCRTS
"Adapting C2 to the 21st Century"

Teaching Network Science to Future Military Practitioners:
Educating Network Analysis at the United States Military Academy

Track 1

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Abstract

In this early stage of research and development in network science, there is not an accepted curriculum for social network analysis. Given the growing scope and applications of network science to the global war on terror, the United States Military Academy has initiated the first undergraduate-level course in social network theory and analysis in Fall 2006. Adopting a net-centric view of command and control, the course challenges students to understand their own chain of command systems and organizational behavior through a foundation in network science. This paper explains the systematic design of instruction applied to the construction of social network education. We explain how training differs from network science education. Further, we cover the interdisciplinary nature of the field and the broad background of prerequisites for students entering this field. In defining the common core set of concepts and means for teaching those concepts, we review what did and what did not work in the classroom.