

NOTICE OF UNIVERSITY ORAL

GEODESY AND GEOMATICS ENGINEERING Master of Science in Engineering

Katalin Komjathy

July 11, 2007 @ 3:00 pm Room E-11 - Head Hall

Board of Examiners: Supervisor: Dr. Susan Nichols, GGE

Examining Board: Dr. Peter Dare, GGE

Dr. Michael Ircha, Civil Engineering

David Monahan, UNH

Chair: Dr. Yun Zhang, GGE

A SYSTEMS ENGINEERING APPROACH TO DESIGNING AN OCEAN AND COASTAL INFORMATION MANAGEMENT STRATEGY

ABSTRACT

With the enactment of the *Oceans Act* [1996], Canada made a commitment towards the sustainable development of its ocean and coastal resources. This new approach is based on the principles of collaborative and integrated management. The implementation of modern ocean management objectives must take place in an environment surrounded by a complex legal and institutional framework, changing economic priorities, escalating resource use conflicts, and increasing pressure to address problems at the ecosystem level.

The examination of major legislative and policy directions, technological and conceptual background, and information management initiatives contributed to the formulation of a set of information requirements. A review of the existing information services in support of the ocean and coastal stakeholder community revealed a sporadic, disconnected collection of regional and sectoral initiatives without capacity for interaction while often duplicating efforts and expenses. These results are in conflict with the desired all-inclusive, systematically organized information framework that would better position the stakeholder community to address present and future challenges.

Based on the principles of systems engineering, this research provides a conceptual design for an ocean and coastal information management strategy. The proposed design is iterative, and is built on an extensive information requirements analysis.

Faculty Members and Graduate Students are invited to attend this presentation.