NOTICE OF
UNIVERSITY ORAL

GEODESY AND GEOMATICS ENGINEERING

Master of Science in Engineering

Samyar Sepehr

Thursday, December 5, 2013 @ 11:00 am

Head Hall – Room E-11

Board of Examiners: **Supervisor: Dr. Emmanuel Stefanakis, Geodesy and Geomatics Eng.**
Examining Board: Dr. Peter Dare, Geodesy and Geomatics Eng.
Dr. Vassilis Gikas, National Tech University of Athens

Chair: To Be Announced

Development of A Geospatial Reference Framework
A Case Study for the UNB-GGE Survey Camp

ABSTRACT

This thesis describes the development of a geospatial reference framework for categorizing, organizing, validating, browsing, and representing survey camp topographic data. This topographic data is collected annually by the Geodesy and Geomatics Engineering (GGE) students at the University of New Brunswick (UNB) as part of the requirements for a UNB course. ESRI ArcGIS 10 was used to build the information products associated with the geospatial framework. The information products were employed for analyzing, organizing, and managing the past and future topographic map collections. In order to make the geospatial reference framework easily accessible, a Web-GIS application was developed using ArcGIS Server on the server side and ArcGIS JavaScript API on the client side.

This thesis represents the establishment of an appropriate geodatabase model that has been designed and built to satisfy the requirements and characteristics defined by the spatial reference framework. The project contributed in designing and producing geospatial information products including a geographical repository of UNB campus, geospatial data validation tools, repository maintenance methods, and the Web-GIS service. These geospatial information products constitute a geospatial reference framework. This framework allows for organization, storage, and representation of past survey camp data collections and provides the specifications and standards for the future collections.

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