# **GEOINT Online Course Descriptions**

#### **GGS 501**

In this two week course you will come to understand topics related to online learning such as time commitment, expectations, technical matters, and communication styles. The topics explored in this course will prepare you to be a successful online student. You will not receive a grade for this course. However, the instructor will give you feedback on the six assignments that you submit.

# **GGS 553 Geographic Information Systems**

This course provides an introduction to Geographic Information Systems – a set of hardware, software, and methods for the capture, storage, management, manipulation, analysis, modeling, and display of geographic information, used to solve complex spatial planning problems. Specific GIS methods are covered for use in a variety of applications, areas, and disciplines including cartography, demographics, site selection, marketing analysis, transportation studies, land use applications, spatial statistics, and environmental applications. Industry standard GIS software tools are used to apply these methods. There are lecture and lab components to each weekly module.

# **GGS 684 Selected Topics in Geospatial Intelligence**

In this course, you will gain an understanding of the scope of geospatial intelligence and relevant processes. You will also explore emerging trends, focused intelligence applications, and relevant technological advances. This course is comprised of lectures, guest presentations, reading assignments, and a class project.

#### GGS 692 WebGIS

Course description not yet available.

### **GGS 650 Introduction to GIS Programming and Algorithms**

In this course, you learn to program using object-oriented languages, Python (an integrated programming language for ArcGIS 10.x). A comprehensive programming training process including computer programming, programming syntax, data types, data structure, control structures, and an integrated programming environment (such as Pythonwin) will be introduced within ½ of the whole course.

#### **GGS 685 Capstone Course in Geoinformatics**

The capstone project aims to provide you with an opportunity to integrate and apply core knowledge and skill components in Geoinformatics to a complex, real-world, project driven setting. The problems we will address in this course will be related to the general theme of Geo-Intelligence; therefore, they will include extensive use of various geospatial data sources and analysis tools. In this environment, you will be required to define possible scenarios, identify key challenges, explore possible solutions, and deliver an effective solution. Given its nature, a capstone project often goes beyond a single discipline and requires the application of varied disciplines to the solution of a single large-scale problem. In addition, a capstone project may require analysis at different scales, from local to regional or national.

# **GGS 686 Spatial Analysis of Social Media Content**

Course description not yet available.