

# **The Community College of Baltimore County**

## **Course Outline**

### **GEOA 250**

#### **Advanced Geospatial Applications**

**3 Semester Hours (2 lecture, 3 lab)**

#### **Description**

Advanced Geospatial Applications draws student experience together in the capstone course in Geospatial Applications. Students complete several assigned projects and develop appropriate maps and other supporting materials. A student-selected/instructor-approved project is a major component of the course. The course utilizes primarily ESRI ArcGIS software.

Prerequisites: GEOA 150 and GEOA 210 or consent of instructor

#### **Overall Course Objectives**

Upon completion of this course the student will be able to:

1. utilize all techniques from previous GEOA courses in a comprehensive context;
2. explain to a non-GIS professional how GIS can assist in analysis and decision making;
3. initiate a comprehensive GIS project;
4. develop a comprehensive GIS project;
5. analyze a comprehensive GIS project;
6. document and present a comprehensive GIS project;
7. obtain and incorporate appropriate multi-spectral imagery in a GIS project;
8. obtain and incorporate multiple tabular data in a GIS project;
9. establish Quality Control and Quality Assurance QC/QA measures;
10. describe the capabilities and limitation of GIS; and
11. present progress and final briefings on a GIS project.

## **Major Topics**

- I Collaborate with non-GIS professionals
- II Development of project objectives
- III Data sources, selection and evaluation
- IV Incorporation of quality assurance/quality control measures
- V Analysis tools and applicability
- VI Comprehensive project presentation
- VII Presentation of conclusions

## **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

- A. Two map evaluations with in class presentations
- B. Development of a minimum of four map projects

Writing: The individual faculty member will determine specific writing assignments.

## **Other Course Information**

This course is a GEOA core course.

This course is taught in a computerized environment.

This course is the final course in a required five course sequence.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in this Outline.

2 lecture hours

3 laboratory hours