

**Common Course Outline**  
**GEOA 250**  
**Advanced Geospatial Applications**  
**3 Credits**

**Community College of Baltimore County**

**Description**

**GEOA 250 - Advanced Geospatial Applications** draws student experience together in this Geospatial Applications capstone course. 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.

**3 Credits:** 2 lecture and 3 laboratory hours

**Prerequisites:** GEOA 210 or consent of instructor

**Overall Course Objectives**

Upon completion of this course students 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. Collaboration 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 procedures will be determined by the individual faculty member but will include the following:

**Grading/exams**

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

Written Assignments: Students are required to use appropriate academic resources. The individual faculty member will determine specific writing assignments.

**Other Course Information**

This course is taught in a computerized environment.