



GIS Activities at the U.S. Coast Guard Academy



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Coast Guard Academy's Geospatial Sciences Program

Overall goal of program is not to develop GIS technicians fully proficient in the use of GIS. Rather, aim of course is to introduce future Coast Guard decision-makers to theory & use of geospatial technologies for emergency planning & response, facilities management, & operational resource management & decision-making.

GIS Courses

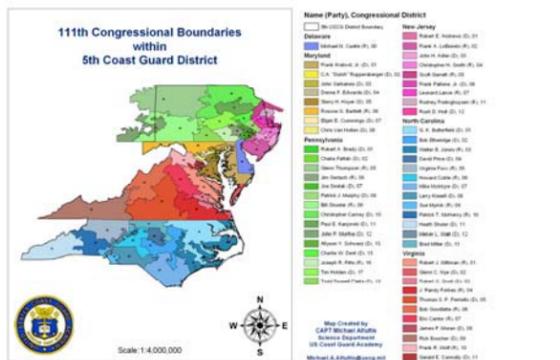
- **Introduction to Geospatial Sciences**
 - Elective course for all non-Marine Science Majors
 - No lab portion to course. Course alternates between a "lecture" introducing a topic & hands-on in-class exercises
 - First taught in Spring 2008
- **Geospatial Sciences I**
 - Required course for all Marine Science Majors
 - Lecture (3x/week) & Lab (1x/week)
 - First taught in Spring 2003
- **Geospatial Sciences II**
 - Elective course open to all Majors
 - Lecture (3x/week) & Lab (1x/week)
 - Students are expected to apply ALL GIS principles learned to completion of end-of-semester "capstone" GIS project for a "client."
 - First taught in Spring 2008



Cadets in Geospatial Sciences Computer Lab

GIS Research Projects

- Optimal Routing of USCG Buoys Tender
- Geostatistical Analysis of Communicable Diseases in New London County
- Biological Survey and Mapping of Mitchell College Beach
- Conversion of Sector Portland, OR, Geographic Response Plan to GIS format
- Conversion of Sector New York's Area Contingency Plan (ACP) Geographical Annex into GIS format
- Conversion of Sector Long Island Sound's Area Contingency Plan (ACP) Geographical Annex into GIS format
- Geospatial Analyses of Maritime Drug Seizures
- Maps of Congressional Districts for each USCG District
- Geospatial Display of USCG Auxiliary and Citizen Action Network Volunteer Assets

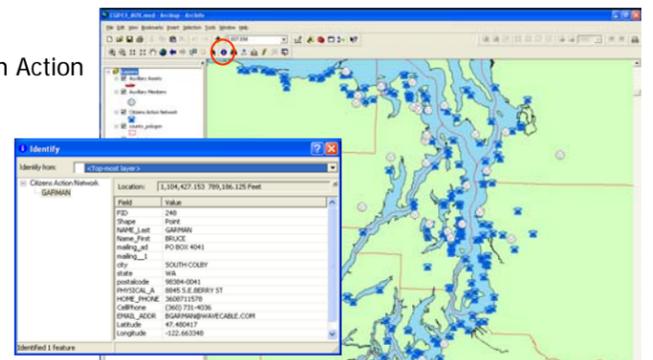


Maps of Congressional Districts for each USCG District



Geospatial Analyses of Maritime Drug Seizures

Geospatial Display of USCG Citizen Action Network Volunteer Assets



Converting Sector Portland, OR, Geographic Response Plan to GIS Format

