

GIS Module Descriptions
SDCCD CTE Community Collaborative
San Diego Mesa College
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Public Services Module

Activities in this module are designed to give students an understanding of the types of GIS data used and projects encountered in the Public Services profession. Students work with actual public data from government entities and create tables; research and download new data; analyze public data for crimes, schools, and health facilities; and learn to design professional level maps. Upon successful completion of the Public Services learning modules, students will be able to understand how to geocode/map addresses in GIS, use GIS analytical tools, join census demographic tables with GIS data, design and produce maps, and download and format data for use in a GIS.

GeoMapApp Module

GeoMapApp is a free and user-friendly computer mapping software that helps students explore and visualize a broad range of geoscience data: seafloor bathymetry, earthquake data, plate motion, hydrothermal vents, movements of tagged whales, and much more. This earth science module takes participants through an underwater adventure to explore the ocean depths, using a wealth of data from a broad variety of scientific sources. The studies culminate in the mapping and analysis of whale migration and feeding routes and potential environmental hazards such as shipping lanes, oil drilling and mining, and coastal water pollution.

Virtual Schools Module

Two modules make up this geospatial "package": SketchUp and Panoramic/360 degree scene creation. Both utilize Google Earth as the platform on which to build virtual models of a school, neighborhood, or other feature of interest. A series of lessons walk students through use of free online software SketchUp to build 3D models of their school. These can be elaborate models incorporating real-world photography of the school exteriors as well as interior features, or simpler 3D models of schools buildings and other features that define a student's neighborhood. Incorporating the panoramic photography (the lesson includes inexpensive sources for equipment) into the Google Earth model allows students to document panoramic scenes viewable from all directions.