

**CLASS SPECIFICATION**  
**County of Fairfax, Virginia**

**CLASS CODE:** 1815

**TITLE:** GIS TECHNICIAN

**GRADE:** S-19

**DEFINITION:**

Under general supervision, constructs and maintains GIS database layers (e.g., property, zoning maps, street center-line, etc.) for tax assessment and agency planning purposes; creates graphic depictions of legal documents (e.g., deeds, Board Resolutions, survey plans) to comply with County and State requirements; develops map products for county residents and employees; and performs related work as required.

**DISTINGUISHING CHARACTERISTICS OF THE CLASS:**

This is technical work creating/maintaining GIS database layers and digital images, preparing, maintaining and updating a wide variety of county maps and related tasks. This class is distinguished from the GIS Technician Supervisor by the fact it is not supervisory and is not the primary contact for cartographic and engineering issues with user agencies and the public.

**ILLUSTRATIVE DUTIES:**

Creates and updates GIS database layers;  
Creates digital images of paper maps and photographic pictures using format scanners;  
Creates images using digital cameras;  
Develops database tables in conjunction with the database schema;  
Performs quality control checks on GIS data layers to ensure they meet specifications;  
Inspects graphic and attribute information to find logical inconsistencies with the data and to ensure data validity; performs updates to the GIS data;  
Creates displays and exhibits for County agencies;  
Prints map products;  
Reviews preliminary designs with agency staff to ensure correct display of map products;  
Schedules printing of maps;  
Performs quality checks on map products;  
Ensures cartographic correctness of elements on map products;  
Creates and maintains attribute files, data sets, and graphic coverages;  
Annotates and modifies graphics, performs geocoding on cartographic features;  
Utilizes geographic computer system hardware and software to construct and modify map content;  
Enters other relevant geographic data to the system database and edits the information as appropriate;  
Works in designing and preparing illustrative materials such as logos, charts, text, and photos;  
Assists other departments on GIS projects and problems, as well as serving as backup internally;  
Assists at the public service counter, responding to telephone, fax, and walk-in inquiries and requests;  
Provides assistance to other staff as needed.

**REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

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Knowledge of methods, principles and practices used in map preparation;  
Knowledge of basic principles of cartographic technology;  
Knowledge of the terminology, technical symbols, equipment, and instruments of cartographic drafting utilization and operation of geographic information system software and hardware to perform cartographic drafting;  
Ability to perform geometry and trigonometry math operations;  
Ability to communicate technical ideas clearly and effectively, both orally and in writing;  
Ability to read and interpret technical manuals used in GIS technology;  
Ability to maintain records and prepare reports.

**EMPLOYMENT STANDARDS:**

Any combination of education, experience, and training equivalent to the following:

A high school diploma or GED; PLUS

One year of work experience in one or more of the following disciplines: automated cartographic production, civil engineering, cadastral map drafting, thematic color separation, GIS data maintenance, geography, or related areas, or GIS production environment, or specialized training in areas such as ArcInfo, ArcView, AutoCAD, etc.

**CERTIFICATES AND LICENSES REQUIRED:**

None.

ESTABLISHED: May 24, 1999