

CO-ORDINATOR - GRAPHICS AND IMAGE ANALYSIS**NATURE OF WORK**

This is responsible professional work in co-ordinating the activities of the Graphics and Image Analysis Section for the Department of Earth Sciences.

The employee of this class is responsible for planning, organizing and co-ordinating the activities of the Graphics and Image Analysis Section in support of teaching and research. Work involves ensuring that computer analysis applications, photography, graphics and display production services are provided; scheduling the use of related computer facilities; developing and maintaining a cost recovery system; estimating budgetary operating requirements; evaluating and recommending capital equipment purchases and maintaining departmental computerized inventory records of hardware and software facilities. Work also includes designing and preparing maps and charts using graphics software packages. Work is performed with considerable independence under the direction of an administrative supervisor and is reviewed through discussion and observation of results obtained.

ILLUSTRATIVE EXAMPLES OF WORK

Co-ordinates the scheduling of computerized data analysis, photography, graphics and display service activities; discusses requirements with faculty and/or staff members; determines technical support required and establishes priorities; reviews work performed to ensure that requirements have been met; discusses work results with faculty and/or staff member; and forwards materials to appropriate staff member for revisions as necessary; discusses unusual problems with immediate supervisor.

Receives requests for the scheduled use of computer facilities; evaluates request to determine time, equipment or policy constraints; discusses request with potential user to determine staff requirements; provides estimate of working time and user charges involved; ensures that service is provided in accordance with request.

Analyzes current expenditures as well as replacement cost of related computer support facilities; prepares estimate of costs related to usage and depreciation as well as replacement schedule; develops and revises rates of user fees for specific equipment as well as for staff support; discusses cost recovery system with immediate supervisor and implements user fees, upon approval.

Prepares budget estimates for graphics and image analysis function; determines materials and supplies required; contacts supplier and obtains information regarding availability and price quotes; submits estimates to immediate supervisor for discussion; revises estimates, as required.

Evaluates current capital equipment and develops appropriate replacement schedule; contacts suppliers to obtain purchase information; advises immediate supervisor on equipment

innovations; recommends the replacement of equipment and/or the purchase of additional equipment to immediate supervisor.

Develops computerized inventory of computer hardware and software; ensures that records are revised as appropriate; provides inventory information, as requested.

Develops and conducts sessions on drafting techniques and related computer software for faculty and staff.

Provides advice to faculty members regarding equipment and software available and related capabilities.

Prepares computer plotted maps, graphs and diagrams from data base files using a variety of graphics computer packages.

Develops computer programs in a number of computer languages to create data base files of geographic and geologic information in digital form and to read, retrieve, manipulate and display maps and diagrams from data base information.

Digitizes maps and diagrams to store information in data base using new or existing computer programs.

Assists students in the operation and use of microcomputers including the digitizing and storing of information and the use of graphics packages; illustrates drafting techniques for the preparation of maps and diagrams.

Performs related work as required.

REQUIREMENTS OF WORK

Considerable experience in computer aided drafting/graphics and geological data analysis; graduation with a degree from a four-year college or university with major course work in cartography, supplemented by course work in computer-aided graphic design; or any equivalent combination of experience and training which provides the following knowledge, abilities and skills:

Considerable knowledge of the operating capabilities of data analysis, photographic and graphic equipment.

Considerable knowledge of the recent developments, current literature and sources of information in the field of graphics and image analysis.

Knowledge of budget preparation, purchasing and accounting procedures.

Knowledge of the terminology, methods, practices and techniques of geographical and geological mapping and cartography.

Knowledge of University organization, policies, rules and regulations.

Ability to plan, schedule and reschedule work and to co-ordinate activities.

Ability to evaluate and analyze graphics and image analysis equipment and software packages and to make recommendations on suitability.

Ability to analyze specific problems related to graphics and image analysis requirements and to recommend appropriate actions.

Ability to prepare a variety of regular and special costing reports, analyses and detailed studies.

Ability to tactfully and diplomatically solve a variety of problems.

Ability to instruct and train staff and faculty in drafting techniques and related software.

Ability to apply computer methods to the production of visual materials for display and publication.

Ability to reduce, interpret and apply field collected data in the production of complex maps and drawings.

Ability to understand and follow complex oral and written instructions and base layouts.

Ability to establish and maintain effective working relationships with faculty, staff and students.

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Under Review: 2004 01 05