**Department of Human Resources**

**OPSEU Job Description**

**Job Title:** Cartographic/Photographic Technician

**Job Number:** SS-010

**NOC:** 4012

**Band:** 7

**Department:** Science

**Supervisor Title:** Associate Dean, Science

**Last Reviewed:** January 2, 2001

**Job Purpose**

Provides graphic, cartographic and photographic services, assistance and advice to science faculty, staff, and students taking science courses.

**Key Activities**

1. Provides graphic, cartographic and photographic services to the members of the science departments by producing finished, print ready artwork, graphics, maps and photographs for inclusion in various departmental publications and research papers.
2. Demonstrates cartographic and graphic concepts and software to students in a 2nd year geography course (GO211) by guiding them through examples, advising them on how best to approach a specific problem, how to avoid common problems and troubleshooting some of the more unusual and unexpected problems that tend to arise with some of the more complex software.
3. Instructs members of the science departments in areas that coincide or overlap with field of expertise by advising them and/or demonstrating equipment and techniques.
4. Maintains a current and up to date knowledge in fields of expertise to keep abreast of new techniques and technology while also expanding capabilities in associated fields.
5. Maintains the geography department photographic equipment, performing such low level maintenance and repairs as may be required. Evaluates prospective photographic and cartographic equipment and software purchases and makes recommendations as to which should be purchased. Maintains a stock of photographic and cartographic supplies, deciding on what needs to be purchased and from which supplier it is purchased.
6. Keeps records and reports monthly on jobs done and time spent on such jobs to the Associate Dean (Science) Office for cost- recovery purposes.

**Education**

Honours University Degree (4 year) in a related discipline.

**Experience Required**

Two to four years’ related experience.

**Communication**

Internal:

* Associate Dean (Science), discuss general aspects of work.
* Science Faculty, to discuss specifications of job requests and assess progress
* Geography Department Chair, discuss major purchases and recommend specific types or suppliers
* Department Secretary, daily work related information and to receive messages from other department members
* Students, instruction and assistance with technical matters, trouble shooting
* Other Technicians, very specific technical assistance and information
* Suppliers, information on pricing and new products

External:

* Geography Teachers at various schools across Ontario, information re: Trent University map making competition
* Ministry of Natural Resources, information regarding maps, graphics equipment, digital imaging
* Various school representatives, information on equipment loans or use
* Various publishers and equipment suppliers, regarding donations for the map making contest

**Motor/ Sensory Skills**

* Fine motor skills, dexterity, coordination - Manual drawing of maps and graphs, Digitizing map information, Photography, Darkroom work - printing and enlarging, Computer graphics, word processing
* Smell - Identification of phytochemicals
* Visual - Critical focussing on photography, Colour differentiation and matching in graphic work, Colour balance in photographic results, accuracy of rendition, Usability of phytochemicals based on colour of solutions, Line weight matching in manual and computer assisted drawing and cartography

**Effort**

Mental:

* Sustained Concentration, Sensory effort seeing - Digitizing map information - an error here can be incredibly difficult to undo later if overlooked, Preparing graphs and charts for publication - must be checked against original data for accuracy
* Sustained Concentration, Seeing - Creation of maps, charts, artwork to a specific size in preparation for photographic reduction and reproduction, measurement of maps or map features for calculations of area and scale, focusing cameras and enlargers, optical surveying equipment, assisting and advising students during lab exercises, especially when confronted with unforeseen errors and problems, instructing students and faculty (outside of lab exercises) on the operations of specific equipment or processes

Physical:

* Walking, bending, standing - Required during lab demos
* Lifting, carrying, walking - Moving equipment to locations in preparation for labs and displays
* Repetitive hand/wrist movements - Required of any computer work

**Working Conditions**

Physical:

* Temperature - Erratic heating/air conditioning
* Dust - Air quality is poor, a lot of dust due to type of construction of the work location building.
* Work space - Cramped work space

Psychological:

* Frustrated people - Responding to frustrated students when computer systems fail to perform as specified (or crash)
* Interruptions - Interruptions/conflicting work priorities
* Multiple competing demands - Multiple competing demands particularly during fall/winter (GO 211)