Job Class Profile:

Clinical Radiography Instructor

Pay Level:LX-34Point Band:927-961

						Accountability		Development	Environmental	
		Interpersonal				& Decision		and	Working	Total
Factor	Knowledge	Skills	Physical Effort	Concentration	Complexity	Making	Impact	Leadership	Conditions	Points
Rating	6	6	4	5	6	6	5	3	5	
Points	280	100	25	24	180	130	103	64	54	960

JOB SUMMARY

The Clinical Radiography Instructor performs instructional and technical work in serving as a clinical radiographic instructor for students in Medical Radiography Programs. The work involves supervising and delivering academic and clinical instruction, skills training and competency based evaluation of students enrolled or re-entering the Medical Radiography Program, and acting as an invigilator/advisor for staff enrolled in various post-diploma related courses. Participates in the design and ongoing development of the Medical Radiography Program.

Key and Periodic Activities

- Plans, develops and co-ordinates the overall clinical radiographic teaching program and instructs second and third year students in the performance of medical radiographic techniques.
- Prepares, conducts, and evaluates an orientation program for first year Medical Radiography students and advises students regarding academic standards and regulations.
- Develops and prepares courses of instruction, examinations, lectures, progress reports, and student evaluations; and develops teaching materials such as overheads, slides and other educational aids.
- Conducts classroom lectures based on the national syllabus for certification and provides clinical and instruction in special procedures, and related guidance services.
- Conducts labs (simulations) and actual clinical demonstrations.
- Plans and co-ordinates students clinical experience; demonstrates safe standards of radiation protection while maintaining high quality radiographs; and critiques finished radiographs.
- Advises students with respect to policies, procedures, codes, and incident reports.
- Interacts with all levels of clinical staff to effectively interface the activities of the student within the clinical setting.
- Co-ordinates professional development activities for students (i.e. lectures, rotation through various areas of radiography).
- Monitors student radiation exposure; changes film badges; and forwards to appropriate institute for review and findings.
- Determines student competence; ensures students maintain a "Clinical Experience Record" book; supervises or reviews students clinical work or work supervised under a registered technologist; reviews clinical experience log book entries to ensure student activities meet national standards; provides tutorials as needed; certifies student examinations and readiness

Key and Periodic Activities

for national certification examination; conducts formal assessments; maintains clinical and academic student records as specified by the Canadian Medical Association; and forwards to the co-ordinator of the Medical Radiography Program.

- Provides written and verbal evaluation of students at the end of each semester.
- Assists with retraining technologists re-entering the profession and certifies their competence.
- Invigilates exams for all Medical Radiation programs including specialty areas and conducts training sessions to resident radiologist preparing for fellowship exams.
- Attends and represents the department on faculty meetings with the training institute; participates as a member of the institute's accreditation committee for the program's overall design and development.
- Assists diagnostic imaging staff in maintaining and improving skills relating to student supervision and mentoring.
- Conducts exit interviews as students move to new training sites.
- Orders books and resource material for clinical program; and maintains a library of reference tests, resources, audio-visual aids, periodicals and journals.
- Provides student counseling, as requested by student or if indicated by a student's behaviour.
- Participates in orientation of new staff technologists and medical students.
- Provides input into program structure and content through sub-committee representation to the Medical Technology Advisory Committee and liaison with the Canadian Association Medical Radiation Technologists (CAMRT) through membership in the Atlantic Faculty Liaison Committee.
- Completes continuous education and training for professional development.

SKILL

Knowledge

General and Specific Knowledge:

Specific knowledge of:

- Diagnostic Imaging processes and body positioning techniques.
- Advanced, technical and complex machines and procedures.
- Human anatomy and physiology.
- Adult learning principles.
- Radiation and Workplace Health and Safety standards.
- Universal Precautions.
- Quality assurance practices and guidelines.
- Organizational and department policies and procedures.
- Knowledge of the organization's databases such as Meditech and PACS.

Formal Education and/or Certification(s):

- Minimum: 3 Year Diploma in Medical Radiography.
- Post diploma: Diploma/Degree/Instructor's Certificate from the Department of Education or a combination of a Bachelor of Science or Technology in Health Sciences.
- BLS (Basic Life Support) certifications

- Registration as a Registered Technologist (RT) with the Canadian Association Medical Radiation Technologists (CAMRT)s
- Continuous medical education credits for certifications

Years of Experience:

— Minimum: 4-5 years of experience with some experience in special areas (i.e. angiography, mammography, or computer tomography).

Competencies:

- Oral and written communication skills.
- Technical and computer skills.
- Critical thinking and problem solving skills.
- Maintenance and calibration of radiographic and processing equipment.
- Ability to prioritize tasks and activities.

Interpersonal Skills

- A range of interpersonal skills are used to listen; ask questions; gather and provide information; explain routine and complex information and procedures to students, patients, and occasionally healthcare providers. Also gives formal presentations and lectures; instructs, teaches, or trains students and occasionally new staff; coaches and mentors students; and has to gain the co-operation and participation of patients and sometimes employees, in order to give students a successful learning experience. Provides care/comfort/nurturing to students and patients. Occasionally may be required to deal with angry or upset students and patients. Skills are most frequently used to teach, communicate, and provide support to students, and to communicate information to staff, patients and members of the healthcare team.
- Communications occur with students, patients and their families, employees, physicians (i.e. radiologist and other specialists), manager, and professional advisors. May also include internal department executives, and educational institutions (i.e. radiographic program co-ordinator, administrator or executives with the education institute).
- The most significant contacts are with students and members of the healthcare staff.

EFFORT

Physical Effort

- The demands of the job occasionally result in considerable fatigue, requiring the need for strength and endurance.
- Constantly lifts or moves objects (i.e. supplies, books, resource materials), less than 10 lbs. and regularly between 10-50 lbs. (i.e. equipment, lead plates and vests, etc.), when assisting students in the clinical setting performing radiography procedures and when demonstrating radiography procedures and techniques in simulated labs. Occasionally pushes and pulls objects (i.e. cameras, portable diagnostic imaging machines, and examining tables), or transports patients over 50 lbs. in wheelchairs or stretchers. Gross motor skills are required to move patients in wheelchairs or stretchers, to assist them with mobility to the examining tables and repositioning, or to operate heavy machinery and equipment.
- Constantly stands or walks when demonstrating proper radiology techniques or positioning to students, and when giving lectures. These activities include performing scans, viewings scans

or monitors, or performing work on the computer. Regularly sits for extended periods, either preparing course material, invigilating exams, reviewing students work, or working on the computer.

— Fine finger or precision work is constantly required to manipulate or work monitors, controls, keyboard, mouse, and to control this with steady movements. Regularly works in awkward or cramped positions using machines that require controlled as well as rapid physical movement.

Concentration

- Visual concentration is required to monitor and evaluate student activities to ensure they are performing scans according to standards and to view and capture images in order to determine student's competency and to ensure quality imaging is being performed by the student. It is also required for patient identification purposes, to observe patients during examination to ensure their health and safety, to review and interpret instructions on supplies, equipment, and physician requisitions, and to relay that information to students.
- Auditory concentration includes relaying information and listening to students, patients, technologists, and healthcare professionals as well as to listen to beeps or signals on equipment, or alarms on machines to ensure both the health and safety of patients and staff, and to ensure machines and equipment are working properly.
- During the course of demonstrating procedures, the clinical instructor may be required to touch patients to perform procedures, reposition them during procedures, to feel for landmarks to properly center and position a body part for optimal positioning and imaging, to palpate for lumps/masses/veins or to assist patients in their mobility.
- The tasks that are **repetitive** and require **alertness** is demonstrating radiology techniques to students, viewing, performing images on screens to detect changes, abnormalities, etc., and to observe patients during examination. A high level of alertness and **attentiveness** is required when students are performing scans/procedures to ensure that scans are being properly performed for the safety of patients.
- Does not have control over their work pace when students require assistance, run into emergencies, equipment failure, or non-cooperative patients. There are time pressures and deadlines due to the number of students that require training, as well, there are deadlines for courses of instruction, lectures, and exam preparation. Interruptions can be critical when demonstrating skills to students which often occur from equipment failure and from staff (i.e. technologists, physicians, nurses), requiring information regarding patients, procedures, etc.
- Eye/hand coordination is required when assisting or explaining to students how to perform scans, in order to capture images accurately and to detect abnormalities. Uses instruments or operates machines that require a high level of eye/hand coordination requiring vigilance and attentiveness.
- Exact results and precision are high and are required when monitoring students performing procedures to ensure they are completed according to national standards and to certify the student's competency and when obtaining correct patient identification, and performing scans and procedures as per protocols and standards.

Complexity

- The tasks and activities occasionally are quite different, but allow the use of similar skills and knowledge.
- Problems requires analysis and assessment of broad clinical radiographic issues in order to deliver academic and clinical instruction, skills training and competency based evaluation of students. Plans, develops and co-ordinates the overall clinical radiographic teaching program.
- Typical complexities involve the instructor having to consider students' abilities, the learning environment, and instruction required to help students make radiography decisions and problem solve issues before, during, and after procedures given some of the some of the conditions/situations (i.e. critically ill, injured, upset, claustrophobic or a child) they will be involved in. Another challenging problem is to ensure all students receive the applicable experience (i.e. procedures) required to be competent and to successfully pass their clinical instruction and national exam.
- When addressing problems and solutions, follows procedures, policies, guidelines, code of ethics and competency profile of the CAMRT, reviews health and safety manuals, follows radiation safety code, national benchmarks, policies, practices and guidelines of the education institute and the accreditation committee.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are somewhat prescribed and controlled, however, work is selfdirected following the guidelines of the program and course objectives. Makes decisions related to planning, organizing, implementing, and co-ordinating the clinical component of the radiographic teaching program and preparing students for a national exam leading to certification in Medical Radiation Technology. Independently makes decisions related to student's instruction, training, exams, evaluation, advice and guidance that each individual student requires to perform successfully. Also orders books and resource material for the clinical program and participates in the design and ongoing development of the entire Medical Radiology program through the association with the Medical Technology Advisory Committee.
- Approval is required for changes to the clinical program, policies and procedures, purchasing non-standing supplies, products, or equipment, and approval for travel for education purposes.
- Within predetermined limits and procedures, this class can modify evaluation schemes, modify or change course content, provide extra coaching and mentoring to students having difficulty, assist students with scans, change or modify scans that students are performing.
- Situations where discretion and judgment are used to interpret directions and apply guidelines are in relation to a student's performance when performing scans, teaching methodology, and patients' health and safety.
- A high degree of independent discretion and judgement is exercised when evaluating students to ensure that they perform accurate scans.

Impact

- The work activities impact the immediate work area, the department, patients, and the public.
- The work can either negatively or positively impact students learning experience due to the instruction and guidance given and the clinical experience received. In addition, patients could

be impacted negatively, if students are not monitored appropriately during the procedures. The most significant impact would be on the student because of the clinical instruction given to them to perform procedures.

- Results of work tasks and activities directly impact equipment such as the diagnostic imaging machines, cameras, etc.; processes and systems such as the ability of students to perform safe and competent procedures; information such as the clinical instruction, course objectives, program guidelines; material resources in terms of books and resources given to students; finances such as the students tuition, cost of books, organization's cost for supplies; human resources; and corporate image for both the training institution and the organization.
- The type of errors that could occur are providing inaccurate information to students leading to students receiving inadequate orientation, practising inaccurate skills, and receiving low grades on exams. Other errors that could result include inaccurate evaluations and errors when working with students in the clinical setting such as patient identification, labeling of scans, improper exam performed, configuration of machines, or failure to detect abnormality on scans resulting in misdiagnosis or recognition of contra-indications for procedure.
- These errors are mitigated as the work tasks are somewhat prescribed or controlled within the course objectives and errors are detected immediately by other staff such as technologists, radiologist, physician or by students.

Development and Leadership of Others

- Not responsible for the supervision of staff, however, does supervise the activities of all students receiving clinical instruction in the Medical Radiography Program.
- Provides job advice/guidance, on the job training/instruction, counselling and support, orientation to students and is an advisor to staff training in specialized areas of Radiography. Co-ordinates the work of students, provides references for students, completes student evaluations, and may assist to retrain technologists re-entering the profession and resident radiologist preparing for fellowship exams. Also assumes responsibility for students from outside agencies (i.e. Co-op students, high school enrichment and elementary students job shadowing).
- Provides team lead activities such as acts as the technical resource or subject matter expert on radiography education and training for the department, represents the department with the training institution and works on teams or committees (i.e. Accreditation) in the development of the Medical Radiography Program.

WORKING CONDITIONS

Environmental Working Conditions

- Work is performed in the Diagnostic Imaging, Emergency, and Operating Room Departments as well on wards, outpatient clinics, or in a standard classroom and office setting. When demonstrating or assisting students in the performance of diagnostic imaging scans, required to use safety equipment such as radiation monitoring badge, lead vests/shields, gloves, gowns, goggles, ear plugs, shields, use sharp containers, and practice ALARA (As, Low, As, Reasonably Achievable) principals to reduce radiation. Practices safety precautions and techniques such as practicing proper body mechanics and transfer techniques.
- There is limited likelihood of receiving minor cuts, bruises or minor illnesses, injury or occupational illness resulting in partial or total disability.

— When in the clinical environment with the students, is constantly exposed to radiation, sharp objects, heavy equipment/machinery use (i.e. lead aprons, portable machines), and limited lighting. Regularly exposed to bodily fluids and waste, infectious diseases, and odours. Occasionally, there is exposure to wet/slippery surfaces, hazardous chemicals, unusual distracting noise, and lack of privacy to conduct confidential discussions.