Information Packet

Mills-Peninsula Health Services

School of Diagnostic Imaging

1501 Trousdale Drive

Burlingame, CA 94010

Patricia Hopkins, M.S., C.R.T., RT (R), (CT)

Radiology Program Director

(650) 696-5519

hopkinp@sutterhealth.org

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School of Diagnostic Imaging
1501 Trousdale Drive
Burlingame, CA 94010

Dear Applicant,

Thank you for your interest in the Mills-Peninsula Health Services School of Diagnostic Imaging. Your decision to pursue this educational path can lead to a rewarding career in the field of diagnostic medical imaging. The radiologic technologist is a vital member of the health care team. The successful radiographer has excellent communication skills, is adaptive in challenging situations, sees value in helping others and demonstrates an aptitude for critical thinking.

The Mills-Peninsula Health Services School of Diagnostic Imaging is accredited by the Joint Review Committee on Education in Radiologic Technology, which is recognized by the U.S. Department of Education and an approved school by the state of California, Department of Public Health, The American Society of Radiologic Technology (ASRT), and the American Registry of Radiologic Technologists (ARRT).

Our school of radiologic technology is equivalent to the community college based Associate Science degree. As a hospital based program, we are not affiliated with a community college or university. Our curriculum though, is similar to that of the community college. We adhere to the guidelines that have been set by our accrediting body. While a typical community college based radiologic program has to cover more generalized AS degree requirements, this program provides a personalized, in-depth and diversified radiologic specific academic training. Instructors are working technologists with extensive experience. Likewise, the required clinical training is more intense, including weekend/evening rotations, as well as surgery, fluoroscopy, trauma, and CT experience. Students completing the Mills-Peninsula Health Services School of Radiologic Technology meet the same qualifications as community college graduates. Students are given a certificate of completion and are eligible to take the ARRT Radiography Examination and the California Fluoroscopy Permit Examination.

Application to the Radiology Program is from January 1 to April 1 each year. The start date for the program is in July. We accept six students a year. Our program does not offer a paid internship. All clinical hours are part of the school's curriculum. However, unlike college-based programs, we do not, at this time, charge tuition. Students must pay for their textbooks, uniforms, transportation, and parking.

Our program is structured differently from those offered through the community colleges. The program begins in July—5 days a week, 8 hours a day. Clinical rotations include weekends and evenings. Students attend classes twelve hours a week and spend twenty-eight hours a week in the clinical setting. Our program is a rigorous, demanding, full-time program which makes outside employment very difficult if not impossible. We strongly discourage students to work but rather concentrate on their studies. Because we are a hospital-based program and not a college-based program, there are no scholarships, grants, federal assistance, or other types of financial aid available.

Please feel free to contact me if I can be of further assistance.

Patricia Hopkins, MS, CRT, ARRT (R) (CT)
Radiology Program Director
Phone: (650) 696-5519
E-mail: hopkinp@sutterhealth.org

Mills-Peninsula Health Services
School of Diagnostic Imaging

Mission Statement

The mission of the Mills-Peninsula Health Services School of Diagnostic Imaging is to provide the community with competent and qualified imaging practitioners, who through an outstanding quality education in the Radiologic Sciences will possess high ethical standards and will deliver excellent service and care with compassion and respect.

Program Goals

The goals of the Radiologic Technology Program:

1. **To graduate clinically competent entry-level Radiologic Technologists.**
   This goal is attained through comprehensive clinical and didactic curricula that prepare the student to successfully perform all diagnostic, fluoroscopic and mobile/surgical procedures.

2. **To develop the student's communication and critical thinking skills to function as a competent and active member of the health care team.**
   This goal is attained through coursework and clinical rotations including diagnostic, mobile, surgical, and CT imaging that is designed to provide the student with skills necessary to perform in all types of clinical settings.

3. **To instill in the student the importance of professional values and the need for continued education and professional development.**
   This goal is attained with the guidance of staff radiographers, clinical instructors, radiologists, and other members of the health care team, who stimulate and encourage our students.

4. **To provide the community with qualified, competent and compassionate, imaging practitioners.**
   This goal is attained through the utilization and review of benchmarks in assessing student learning outcomes, program completion, pass rates in certification exams, employment rates, and employer satisfaction.

Program Information

The 24-month (4 Semesters) continuous Radiography program provides didactic and clinical education in Radiography. Clinical rotations take place at Peninsula Medical Center, an acute inpatient facility, and Mills Health Center, an outpatient facility that provides a wide range of services, including surgery, rehabilitation and diagnostics.

Upon successful completion of the program, students are awarded a certificate and are eligible to take the registry examination given by the American Registry of Radiologic Technologists (ARRT), and the California Fluoroscopy Permit examination. Passing the ARRT examination allows the graduate to seek employment as a registered radiologic technologist and to use the designation R.T, (R).

The Role of the Radiographer

The radiologic technologist (radiographer) plays an extremely important role working closely with the Radiologist (physician) to produce high-quality images that are crucial to proper diagnosis and treatment. Obtaining high-quality diagnostic images requires conscientious selection of exposure factors, accurate positioning of anatomy and diligent application of safety measures to protect the patient and others in close proximity from the potentially harmful effects of ionizing radiation.

The field of radiologic technology offers a number of employment opportunities including hospitals, education, administration, physician's offices, imaging centers and commercial representatives.

Graduates can also work in more than a dozen subspecialties such as computed tomography, cardiac catheterization and mammography.

Application Overview

Application to the Radiologic Technology Program is from January 1 through April 1 each year. A $50.00 non-refundable application fee is required. Payments (checks only) must be made payable to: The Rad. Tech. Fund.

All applicants must take a standardized cognitive assessment test. The assessment test is given by appointment only during the application period. Applicants whose file is complete will be contacted and scheduled for the test.

Prerequisite Requirements

To be in compliance with the educational standards established by the American Society of Radiologic Technologists (ASRT), all applicants must have completed at least **15 credit hours of general education** through credit bearing courses taken at a college-level. All prerequisite requirements (college-level courses) must be worth a minimum of 3 units and must be completed prior to applying to the program.

Many colleges differ in terminology regarding course name and number; however, course descriptions and curriculum share similar components. The following information is provided to assist applicants in selecting college level courses that will fulfill our prerequisite courses.

- **Human Anatomy & Physiology** (at least 36 instructional hours). To fulfill the Mills-Peninsula Health Services School of Diagnostic Imaging prerequisite, Anatomy and Physiology must have a lab and cover **all** major body systems. Anatomy & Physiology may be taken as separate courses with labs or as a combined course with a lab. Colleges may offer combined Anatomy & Physiology courses in two or three continuous semesters or quarters. All courses must be completed to fulfill the requirement.

- **Intermediate Algebra**, however, higher level math courses are accepted. Intermediate Algebra must include the following mathematical components: the real numbering system, solving and graphing linear equations and inequalities, polynomials, exponents and radicals, quadratic equations; second-degree equations and inequalities, functions, conic sections, systems of equations, and exponential and logarithmic functions.
  ** (if completed more than 7 years ago, the applicant must take a math placement test to determine math competency in algebra).

- **Oral Communication or Interpersonal Communication**
  - Oral Communication: this course must present the principles of good oral communication, with attention given to research and delivery techniques and critical evaluation of public communication. The course must address speaking formats such as informative, persuasive, impromptu and narrative presentations. Course must include techniques to assist proficiency in listening to and evaluating public speeches and developing a personal style of speaking in public.
  - Interpersonal Communication: this course must present the theory and practice of interpersonal communication skills including analysis of perception, verbal and nonverbal messages, listening skills, and strategies for resolving conflict.

- **Written Communication**
  Written Communication must contain curriculum that involves intensive training in critical reading, expository and argumentative writing, and library research. Components such as effective writing, evaluation of written work, and methods of clearly communicating and supporting ideas in organized and coherent essays and/or research papers must be included. Additionally, the course must include reading and understanding extensive and difficult texts from diverse perspectives and developing a command of rhetorical strategies that enable presentation of ideas cogently and persuasively. (example: English 1A, freshman English, English Second Language (ESL) or equivalent English courses that fulfill college level graduation requirements)

- **Introduction to Computers**
  This course is an introduction to computer systems and software applications. It must include the fundamentals and structure of computers and computer systems. Additionally, course must include applications of

computer software (word documents, spreadsheets, and power point presentations).

An overall grade point average (GPA) of 2.5 is required of all prerequisite courses and at least 2.0 in individual prerequisite courses. Patterns of withdrawal, repetition of prerequisite courses, academic probation, etc., will be considered in assigning admission priority. Grades lower than "C" are not acceptable.

In addition to the above courses, applicants must have completed at least 80-hours of officially documented volunteer service or possess previous work experience in a health care facility. The purpose of the 80-hour volunteer requirement is to expose the prospective applicant to the duties, tasks, skill requirements, and expectations of an allied health care worker. It is the philosophy of Mills-Peninsula Health Services School of Diagnostic Imaging Program Director, Clinical Instructors, Faculty Members, and Advisory Committee that the applicants who complete this requirement will be better prepared to complete the Radiography Program as well as obtain a meaningful career upon graduation from the program.

In order for the volunteer requirement experience to be meaningful, the following guidelines are recommended:

- The experience must provide the prospective applicant contact with both patients and health care workers. Volunteer activities may include observing / assisting in a health care institution in the fields of nursing, radiology, and physical therapy.
- The experience must total at least 80-hours.
- The volunteer experience may take place at a variety of health care facilities including: hospitals, clinics, convalescent hospital, and home health care.

The prospective applicant should contact the Volunteer Services department of a facility of their choice that is convenient to them. The Mills-Peninsula Health Services School of Diagnostic Imaging is not responsible for placing prospective applicants at their respective sites to fulfill this requirement. It is the applicant's responsibility to contact the site, schedule the hours and complete the requirement.

Admission Policy

In order to be considered for admission to the program, an applicant must:

- Possess a High School Diploma or equivalent
- Complete the following by the established deadline:
  - Program application form
  - Submit official transcripts (no copies will be accepted) of grades from high school and college. Transcripts may be sent directly to the Program Director or included (in a sealed envelope) along with the Program application
  - A letter of character reference
  - A letter of academic reference from an instructor of a science course
  - Letter of intent (written by the applicant).

Mills-Peninsula Health Services School of Diagnostic Imaging has neither the resources nor the expertise to evaluate academic transcripts for students who have attended academic institutions outside the United States. All foreign transcripts and degrees must be evaluated and translated (English) into equivalent college hours of credit including grade point average (GPA). This evaluation must be attached in a sealed envelope.

Letters of reference must be current (within the last 6 months) signed and dated. Copies will not be accepted.

The academic letter of recommendation should provide testimony to your aptitude, curiosity and industriousness; demonstrate your maturity and seriousness of purpose; speak to your leadership ability; compliment your character; and include other pertinent information about you—things not readily apparent from admission test scores or transcripts.

The letter of character recommendation should describe your positive personal attributes. It is written by someone who is loyal to you-- friend, neighbor, clergy, etc. The letter should include how long the person has known you and in what capacity; what characteristics that are your personal strengths and talents—for example: leadership qualities; sense of responsibility; ability to adapt to new situations; reliability; ability to work with people.

Letter of Intent (written essay) is mandatory. Applicants are asked to submit an essay (no more than 2 typed pages) detailing:

- Reasons for applying to the program
- Personal attributes that would contribute to the applicant's success in the program
- Pertinent work or volunteer experience
- Explain all patterns of withdrawals, course repeats or failures on your transcripts.

Any application on file that has not been completed by the established deadline will not be considered. Application instructions must be followed CAREFULLY in order for your application to be considered.

A physical examination is given to each student after selection into the program. Final acceptance is contingent upon passing the physical examination, background check, and meeting the ARRT Standards of Ethics requirements.

The American Registry of Radiologic Technologists (ARRT) requires disclosure of all misdemeanor and felony convictions for all certification applicants. Persons considering enrollment in the Radiology Program may contact the ARRT in advance of considering these programs to learn whether a previous conviction will prevent certification to practice radiology. Please refer to the ARRT website: www.arrt.org.

Completing the application correctly, obtaining supporting documents and assuring their arrival by the deadline date are the responsibilities of the applicant.

Completion of the Admission Requirements does not guarantee admission into this highly competitive program. Selection is based upon courses and grades in the applicant's transcripts, cognitive test score, letter of intent, and reference letters. An interview process for the top candidates will be conducted.

Following the deadline, all applications are reviewed by the Admissions Committee of the program. Those applicants who meet published admission standards are evaluated in terms of academic potential. A random selection process is utilized for determining interview candidates and twelve applicants are selected for an interview. Six candidates are offered admission into the Program The interview is conducted to evaluate motivation, realistic orientation to the discipline, the ability to work cooperatively with others and to learn from supervised experiences. Selected applicants are interviewed and evaluated on the following criteria: appearance, personality, communications skills, interest, maturity, attitude, and overall impression.

Mills-Peninsula Health Services School of Diagnostic Imaging does not obligate itself to interview all applicants who meet the admission criteria. Applicants selected for an interview will be contacted by mail. Making it to the interview process does not guarantee admission into the program.

Applicants who have been selected as students are notified in writing by May 15.

Application Checklist

Before mailing the application packet, please ensure that all of the following are enclosed:

- Current, signed, and dated application.
- Two current letters of reference, one academic and one character, signed and dated within **6 months** of the application date.
- Official, sealed transcripts. ***Note: All prerequisite courses must be completed prior to submitting an application.***
- $50.00 non-refundable application fee (check only) made payable to: **The Rad. Tech. Fund.**

Applications may be sent by mail or hand delivered to the Radiology Department at Peninsula Medical Center. Applications will not be accepted after the April 1 deadline.

Student Services

The following amenities are provided to students at no charge:

- Background check
- Pre-enrollment physical exam
- CPR certification
- Annual TB testing
- Annual flu shots
- Hepatitis B vaccination
- Varicella vaccination
- Respirator mask fit testing
- Liability insurance
- Lockers for personal belongings
- Access to the hospital Medical Library
- Internet access within the classroom for educational purposes
- Internet portal allowing access to course syllabi, assignments and grades
- Parking at Peninsula Medical Center (shuttle service to Mills)

The following services are provided to students at minimal/discounted fee

- Health Insurance
- Access to Employee Assistance for counseling matters
- Access to hospital Fitness Center
- Required textbooks ordered through the Program
- CSRT annual conference
- Sutter employee discounts
- Discounts to local attraction
- Inclusion in hospital-wide events

Health Insurance

Mills Peninsula Health Services will offer coverage for the individual student enrolled in the School of Diagnostic Imaging. The type of coverage is referred to as **Sutter Select.** All information concerning the coverage should be directed to Human Resources. Explanation of this service will be given to each student during the Hospitals' orientation meeting. If the student declines the health insurance offered through Mills-Peninsula Health Services, the student is responsible for their own personal health coverage. The Program shall have no obligation to furnish medical or surgical care to any student. Students will be financially responsible for all such care rendered in the same manner as any other patient. If a student is injured while in school, the Program is not responsible for providing medical treatment. The student is responsible for their medical treatment and expenses incurred from the injury.

Housing

Mills-Peninsula Health Services offers no housing facilities for students attending any of the programs sponsored by or affiliated with the hospital.

Outside Employment

Employment outside the school is permitted as long as school scheduling takes priority. The school will not alter students' schedules to accommodate outside work

schedules. Students are expected to regard their education as top priority and to be present for assigned schedules regardless of outside employment.

Financial Aid

Mills-Peninsula Health Services School of Diagnostic Imaging does not sponsor financial assistance programs. Arrangements for financial assistance are solely the responsibility of the student.
Students are given the opportunity to apply for the **Mills-Peninsula Auxiliary Scholarship**.

Transfer and Advanced Placement Policy

The School of Diagnostic Imaging does not accept transfer, part-time, or advanced placement students.

Tuition and Fees

At this time there is no tuition for the radiology program. Tuition and fees are reviewed each year and are subject to change at the start of each program. However, students are responsible for buying their uniforms and textbooks. In addition, students must pay for parking while at Mills Health Center.

Nondiscrimination Policy

The leadership of Mills-Peninsula Health Services is committed to equal employment and educational opportunities. No person, on the basis of race, color, religion, gender, national origin, age, or disability unrelated to program performance requirements will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in the administration of any educational program or activity, including admission thereto. Similarly, this institution does not discriminate in employment on the basis of color, race, gender, religion, national origin, or disability unrelated to job performance, and it complies with the Age Discrimination in Employment Act of 1967, as amended, and with the Vietnam Era Veterans' Readjustment Act of 1984. The commitment to equal opportunity applies to all aspects of recruitment, employment and education of individuals at all levels throughout the institution.

Essential Functions

In accordance with the Americans with Disabilities Act (ADA), the Mills-Peninsula Health Services Radiologic Technology Program makes every effort to make reasonable accommodations to any qualified individual with a disability. The program will not discriminate against any individual with a disability. The program will not discriminate against any individual because of age, gender, ethnic background, sexual orientation, political affiliation, or disability.

Physical Requirements

In order to ensure the safety and welfare of students and patients, the Radiologic Technology student must be able to:

- Stand and/or walk in an erect posture for up to eight hours per day.
- Lift a minimum of 35 pounds from floor level to waist level and lift a minimum of 10 pounds from waist level to shoulder level.

- Carry a minimum of 20 pounds directly on arms or hands while walking a distance of 100 feet.
- Bend or flex the upper trunk forward up to 45 degrees and flex the lower torso into a squatting position.
- Rotate the upper trunk, up to 30 degrees to the right or left, from the neutral position, while standing or sitting.
- Reach a maximum of 72″ above floor level and/or a full arm's reach.
- Push and/or pull objects and equipment weighing up to 250 pounds.
- Manipulate radiographic and medical equipment and accessories utilizing fingering, reaching, pulling, or extending.
- Utilize the sense of hearing and/or lip reading to effectively communicate with the patient or health care team.
- Utilize the sense of vision in all levels of the radiology department or hospital lighting, which varies from low-levels of illumination to bright light levels.

Non-Physical Demands

- Respond quickly and appropriately to emergency situations using the English language.
- Communicate with patients and staff at all times using the English language.
- Tolerate strong, unpleasant odors.
- Handle stressful situations related to technical and procedural standards and patient care situations.
- Provide physical and emotional support to the patients during radiographic procedures.

Program Description

The Mills-Peninsula Health Services School of Diagnostic Imaging is a hospital-based program accredited by the Joint Review Committee on Education in Radiologic Technology* and approved by the California Department of Public Health, Radiologic Health Branch**. All clinical and academic education takes place during a forty (40) hours / week schedule for twenty-four (24) months duration. Upon the successful completion of the program, a certificate is awarded by the Mills-Peninsula Health Services School of Diagnostic Imaging allowing graduates eligibility for the ARRT Radiography Examination and the California Fluoroscopy Permit Examination.

*Joint Review Committee on Education in Radiologic Technology
20 North Wacker Dr. Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Web: http://www.jrcert.org

**California Department of Public Health
Radiologic Health Branch, MS 7610
Sacramento, CA 95899-7414
Phone: (916) 327-5106
Web: http://www.dhs.ca.glv/rhb/

All clinical and academic education takes place during a forty (40) hour a week schedule for twenty-four (24) months duration. Upon the successful completion of the program, a certificate is awarded by the Mills-Peninsula Health Services School of Diagnostic Imaging program allowing graduates eligibility for the California State and National certification board examinations.

Didactic Curriculum – Approximately 890 hours
Didactic courses are taught by a staff of qualified instructors including the program director, assistant program director, clinical instructors, certified radiologic technologists, radiology nurses, and a variety of guest speakers. Refer to the didactic syllabi for course titles, hours, instructors and course descriptions for additional information.

First year students attend lecture classes Tuesday and Thursday mornings and Wednesday afternoon. Second year students attend lecture classes Tuesday and Thursday afternoon and Wednesday mornings.

The initial weeks of the program are designed to orient new student radiographers to the field of radiologic technology. This orientation also includes the hospital environment as a whole, medical ethics including patient care techniques, confidentiality, and medical terminology.

The curriculum is designed to coordinate the didactic and clinical portions of education in a manner that delivers optimum instruction to student radiographers. In this manner, the classroom instruction supports and coincides with the clinical progression of students.

The program operates on a Semester system with completion of the program after four (4) consecutive Semesters.

Semester I	July	-	December
Semester II	January	-	June
Semester III	July	-	December
Semester IV	January	-	June

Course objectives and outlines are handed out at the beginning of each course and are included in the Didactic Course Description portion of the Student Handbook.

Didactic Course Descriptions

First-Year Courses

Introduction to Radiologic Technology and Lab
The first two-weeks of the program are designed to introduce the new student to the field of radiologic technology including the hospital and radiology departments. Topics will include:

- Hospital policies and organization
- Cultural diversity
- Interpersonal communications
- Medical ethics and professionalism
- Introduction to patient care
- Medicolegal considerations
- Organization and operation of the radiology department
- Radiation safety and protective measures

- Allied health professions
- Certification and licensing
- The American Registry of Radiologic Technologists
- The Joint Review Committee on Education in Radiologic Technology
- Professional development and career advancement
- Introduction to medical terminology
- Introduction to radiographic procedures
- Introduction to infection control
- Critical thinking skills
- Introduction to imaging equipment
- Introduction to radiographic positioning
- MPHS Standards of Care

Medical Terminology

This course is designed to give students a basic background in medical terminology and pathological terms related to specific body systems. The prefixes, roots, and suffixes of commonly used medical words are presented. The course uses lectures, discussions, demonstrations, student presentations, and independent study to develop knowledge and understanding of the professional language of medicine to communicate effectively with other members of the medical profession.

Patient Care and Lab (Part 1)

The primary purpose of this course is to introduce the student radiographer to the patient care techniques used in the general care of the patient with the emphasis on the role of the radiographer. Incorporated in the course, the student will become familiar with the following subjects:

- Communication skills
- Body mechanics
- Evaluation of patient needs
- Infection control
- Medical/surgical asepsis
- Emergency medications
- Contrast media reactions
- Patient preparation for radiographic examinations

Patient Care (Part 2) Pediatric and Geriatric Radiology and Lab

This course involves the psychological, physical and emotional aspects of pediatric and geriatric radiography. The course is designed to familiarize the student with age specific characteristics from the neonate to the geriatric patient. In part one, Pediatrics, topics that are covered include:

- The Bill of Rights for Children and Teens
- Approaching patients with special needs
- Suspected child abuse

The student is familiarized with the newborn nursery with instruction by the course instructor and nursery staff to aid in performing portable examinations. Course emphasis is placed on the following topics:

- Equipment
- Immobilization techniques
- Surgical aspects of pediatrics
- Technical factors
- Radiation protection
- Specialized studies unique to the pediatric patient.

In part two, Geriatrics, the student is familiarized with the specific problems of the aging. Topics that are covered include:

- Demographics and social effects of aging
- Physical, cognitive, and psychological effect of aging
- Patient care of the elderly.

Anatomy I

This course is designed to present a basic review of the different body systems and the basic principles associated with the structure and function of the human body.

Radiographic Science I: Image Production and Evaluation and Lab

This course is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of ionizing radiation, x-ray production and the fundamentals of photon interactions with matter. It is also designed to establish a knowledge base in factors that govern and influence the production and recording of radiologic images. Film and electronic imaging with related accessories will be emphasized. Class demonstrations and labs are used to demonstrate application of theory. Content is also designed to establish a knowledge base in radiographic film, intensifying screens, radiographic film processing, the darkroom, and digital and computed radiography. Topics that will be discussed will include, components of radiographic film, the different types of film, proper film storage, primary chemicals used in film processing, automatic processing, darkrooms, cassettes, components of intensifying screens, and digital image acquisition.

Fluoroscopic and Genitourinary Procedures and Lab

The primary objective of this course is to teach the student routine diagnostic fluoroscopic procedures and special fluoroscopic procedures performed in the Radiology Department as well as the theories, concepts, and factors that influence the employment of fluoroscopic examinations and the equipment utilized. Specific radiographic positioning, aspects of patient care and nursing skills essential to these procedures will be discussed. Additional topics covered will include contrast materials, radiation protection, image intensification, fluoroscopic imaging and recording devices. The course incorporates lectures, demonstrations, and positioning practicums to meet the objectives of the course.

Radiographic Physics and Lab

The student is introduced to the fundamentals of electrical and radiation physics and the basic principles underlying the operation of x-ray equipment including:

- Structure of matter
- Electrodynamics
- Generators/motors
- Physical concepts of energy
- Static electricity
- Electromagnetism / Magnetism
- X-ray tubes and circuits

Lectures, demonstrations, lab experiments, and a field trip are used to teach these principles. In addition, the student will prepare a 5–6 page independently researched paper on a principle of physics that was observed during the field trip and describe how that principle relates to x-ray physics.

Radiation Biology / Radiation Protection

Content is designed to provide an overview of the principles of the interaction of ionizing radiation with living systems and the effect of it on the body (molecules, cells, tissues and organs). Factors affecting biological response are presented including acute and chronic effects of ionizing radiation. In addition, an overview of the principles of radiation protection including the responsibilities of the radiographer for patients, self and the general public will be covered. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and health care organizations are incorporated. Lecture, demonstrations, and student presentations will be utilized in the course.

Radiographic Procedures I: Skeletal Positioning and Lab

This course is designed to introduce the student to radiographic positioning, primarily of the skeletal system. Course time will incorporate lectures, demonstrations, image analysis as well as positioning practicums where the student will have the opportunity to demonstrate necessary positioning skills, equipment manipulation, radiation protection, and selection of technical factors. These skills are important in preparing the student in achieving didactic and clinical competency.

Surgery and Mobile Radiography and Lab

This course is designed to familiarize the student with the various mobile (portable) radiographic units that are used. The use of each unit involving positioning and technical skills required for bedside and surgical radiography is taught. Students will be introduced to the many different types of tubes/catheters that are used for treatment and their proper placement in the body. Also included in this course is the use of digital fluoroscopic C-arm units including set-up, recording the image, image manipulation, and photography. The student will also be instructed on the use of the automatic contrast injector. The student will learn proper surgical attire, sterile technique, and sterile fields. Lectures as well as direct demonstration and practice by the student will be used.

Second-Year Courses

Radiographic Science II: Image Production and Evaluation and Lab

With the knowledge the student has gained from the first segment of the course (Radiographic Science I), the student will continue sequencing the topics from the production of x-rays through to the final radiographic image. Part I of this course will focus on Digital Radiography/PACS. Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital imaging systems. Principles of digital system quality assurance and maintenance are presented. Lecture, laboratory assignments, and discussions will be the methods used for instruction.

Anatomy II

Section I: Neuroanatomy

This course is designed to provide the student with an advanced understanding of the bony calvarium, central nervous system, peripheral nervous system and the sensory organs. Lecture and reading assignments will be used as methods of instruction.

Section II: Cross-Sectional Anatomy

This course is designed to familiarize the student with the anatomy as seen with multiple imaging modalities. The student will be able to utilize this information and apply it to imaging modalities such as CT and MRI. Lecture, image analysis, and reading assignments will be included as methods of instruction.

Section III: Radiographic Pathology

The purpose of this course is to give the student a basic understanding of the principles of pathology and its appearance on the radiographic image and how disease affects radiographic technical factor selection. Information is discussed as to the effect that a particular condition or disease may have on the approach that a radiographer should take when imaging patients.

Radiation Biology / Radiation Protection II

During this class, the student will discuss in depth the laws and regulations of California State, Title XVII, regarding the use of ionizing radiation and radiation protection.

Ethical and Legal Issues for Imaging Professionals

The purpose of this course is to give the student a basic understanding of the ethical and legal issues that imaging professionals face. Topics include ethical and legal theories and models, principles of beneficence and nonmaleficence, patient autonomy and informed consent, caring and communication, truthfulness and confidentiality, and cultural diversity.

Special Imaging Procedures: Vascular / Interventional Procedures and Lab
In this course, the student will be introduced to the theory, operation and application of radiographic equipment used when performing special procedures in the cardiac catheterization lab, vascular / interventional lab, and CT. Patient care procedures related to these special examinations and vascular anatomy will be taught. In addition to procedural explanation, sterile technique, patient preparation, contrast media, indications and risks associated with these procedures will be taught. Lectures, visual aids, and sterile procedure practicums will be used as methods of instruction.

Principles of Computed Tomography
This course begins with an introduction to computer literacy, digital imaging, computers in radiology, and the historical developments of computed tomography. The student is instructed on the theory, operation and application of computed tomography. Examination protocols, radiation dosimetry, contrast media preparation, image manipulation, image storage and archiving, and patient care procedures will be discussed.

Radiographic Procedures II: Positioning of the Spinal Column and Headwork and Lab
In Part One, Positioning of the Spinal Column, students are instructed in the anatomy and pathology of the spinal column. This course also covers trauma and routine radiographic examinations of the spinal column. In Part Two, Headwork, students are instructed in the anatomy and positioning of the cranium and facial bones. This course covers trauma and routine radiographic examinations of the facial bones and cranium and how to perform them. Topics that will be covered include: positioning, technical factor selection, anatomy, and care of trauma patients. Lectures, demonstrations, image analysis, and laboratory practicums will be the methods of instruction used.

Quality Assurance / Quality Control
Content will include the proper monitoring of technical equipment in order to assure the consistency and reliability of radiographic images. The student will be introduced to the history, components, and benefits of a radiation quality assurance program. Lecture and laboratory practicums will be the methods used for instruction.

California Fluoroscopy Permit Course and Lab
This course is designed to teach the student the principles of image intensification, recording devices, appropriate radiation protection, state regulations pertaining to the conduct of fluoroscopic examinations, anatomy and physiology of the eye, illumination and photometry, quality control and assurance testing of equipment, and biological effects of ionizing radiation. Lecture and laboratory experiments will be used as methods of instruction. Upon successful completion of this course, the student will be eligible to take the Certification Examination in Fluoroscopy administered by the California Department of Public Health upon graduation from the program.

Venipuncture

Course content is designed to meet the requirements of **California Health and Safety Code Section 106985** for the radiologic technologist in venipuncture and administration of contrast materials in the upper extremity. The course consists of 10 hours of instruction in the following areas:

- Anatomy and physiology of venipuncture sites.
- Venipuncture instruments, intravenous solutions, and related equipment.
- Puncture techniques.
- Techniques of intravenous line establishment.
- Hazards and complications of venipuncture.
- Post-puncture care.
- Composition and purpose of antianaphylaxis tray.
- First aid and basic cardiopulmonary resuscitation.
- Types of contrast media
- Allergic reactions
- Patient care
- Informed consent

Students must perform 2 supervised venipuncture sticks during the 10-hour course with the completion of a total of 10 venipunctures. All venipunctures must be done with direct supervision by either a radiologist or a radiology nurse. Upon completion of 10 supervised venipuncture sticks, students will be awarded a certificate of completion.

Independent Study

This course is designed to develop the critical thinking skills of the student radiographer—the ability to perceive, gather, organize, analyze, and present information in a well-written, concise research paper. The student will select a topic relating to the field of radiology and medical imaging.

Registry Seminars

This course enables the student to direct study efforts toward exam related material prior to taking the registry examination. The following coursework will be reviewed:

- General Radiographic Procedures and Anatomy
- Patient Care and Medical Ethics
- Radiographic Science: Image Production and Evaluation
- Equipment Operation and Maintenance
- Radiation Biology / Radiation Protection

Discussion, review and mock examinations will be used to help prepare the student for the registry examination.

Clinical Curriculum – Approximately 2600 hours

Student radiographers spend 8 hours Monday and Friday and 4 hours Tuesday, Wednesday, and Thursday in a clinical rotation. Each clinical rotation lasts for a period of 2 weeks. There are several different clinical rotations. As a student finishes one 2-week rotation, they move on to the next rotation until the cycle begins again.

First year clinical rotations include the following:

- Diagnostic radiography
- Fluoroscopic radiography
- Mobile and surgical radiography (2nd semester)
- Occasional weekend diagnostic radiography

Second year clinical rotations include the following:

- Diagnostic radiography
- Fluoroscopic radiography
- Mobile and surgical radiography
- Special procedures (vascular / interventional radiography)
- CT scanning
- MRI scanning (one 2-week rotation)
- Occasional evening and weekend diagnostic radiography

Clinical objectives are included in the Clinical Course Description portion of the Student Handbook.

Methods of Evaluation

Periodically a student's academic and clinical performance must be evaluated to determine if the student is performing satisfactorily. A combination of the following evaluation tools may be used to measure a student's performance:

- Oral and written examinations
- Clinical practicums
- Clinical competency evaluations
- Clinical rotation evaluations
- End of Semester performance evaluation (done by the Clinical Instructors)
- End of Semester evaluation—didactic and clinical (done by the Program Director)

Evaluations are reviewed and recorded and become a part of the student's portfolio

Introduction to Clinical Education

The overall guideline for all clinical education rules is that the student is expected to conduct himself/herself in a professional and ethical manner at all times. These rules simply indicate the exact elements of professional behavior and conduct for the Mills-Peninsula Health Services Radiography Student.

During the two (2) years of the program, the student experiences two major clinical rotations: Mills Health Center and Peninsula Medical Center. Clinical and classroom schedules are as follows:

- Clinical – 28 hours / week
- Didactic – 12 hours / week

Semester I	July	-	December
Semester II	January	-	June
Semester III	July	-	December
Semester IV	January	-	June

Evening and Weekend Clinical Rotations

To provide a complete course of study in the field of Radiologic Technology, the student's clinical schedule includes clinical rotation during the evening and every sixth weekend. Clinical hours for the evening rotation are 11:30 a.m. – 8:00 p.m. (second year). The clinical rotation hours for weekends are 8:30 a.m. - 5:00 p.m. The radiographer in charge will be responsible for the supervision of the student. The purposes of weekend and evening rotations are to:

- Give the student the opportunity to observe and participate in emergency and trauma examinations that do not routinely occur during normal weekday rotations.
- Demonstrate the differences in technical responsibilities between daytime, weekend and evenings.
- Allow the student to perform general radiographic procedures under indirect supervision in order to utilize critical thinking skills, thereby encouraging the student to make technical and positioning judgments, especially in non-routine situations.
- Provide the additional skeletal, surgical, and mobile examinations that are necessary to meet the program's competency requirements.

Students' total weekend and evening clinical clock hours shall not exceed 25% of the total clinical hours. Example: Total clinical education hours are approximately **2700**. The total hours that the student spends in clinical evening and weekend assignments shall not exceed **675** hours. Currents students spend less than **200** hours of their total clinical education in evening and weekend clinical assignments.

Vacation and Holiday Policies

Vacations

Students are given two weeks per year.

- **Winter vacation**
  First year students are not scheduled for academic classes or clinical rotations during the week of Christmas. Second year students are not scheduled for academic classes or clinical rotations during the week of New Year's.

- **Spring vacation**
  First year students are not scheduled for academic classes or clinical rotations during the week prior to Memorial Day. Second year students are not scheduled for academic classes or clinical rotations during the last week in April.

Designated weeks are determined by the Program Director and are subject to change.

Holidays
Students are given holidays throughout their education. Students are not scheduled for academic classes or clinical rotations on holidays. The current list of holidays includes:

New Years Day	Independence Day
Martin Luther King's Birthday	Labor Day
Presidents' Day	Thanksgiving Day
Memorial Day	Christmas Day

Criteria for Successful Program Completion

All students will complete the didactic courses in the curriculum set forth by the program in sequence and with final course grades of 75% or higher.

All students will complete the assigned clinical curriculum meeting all requirements consistent with the Standards and Guidelines for an Accredited 24-month Competency Based Program in Radiologic Sciences.

After successful program completion and graduation, the student will be eligible to take the American Registry of Radiologic Technologists Diagnostic Radiography examination and the California State Fluoroscopy Permit examination.

INSTRUCTIONS:

- Please print legibly.
- Attached resumes will not be accepted
- Incomplete applications will not be considered.
- Deadline for submission is April 1(end of business day)
- Two year course of instruction begins in July

Admissions Application

School of Diagnostic Imaging

Mills-Peninsula Health Services

1501 Trousdale Drive, Burlingame, CA 94010
(650) 696-5519
www.mphsradschool.org

PERSONAL DATA

Name_____Date _____

Last *First* *M.I.*

Other name(s) you have used_____Social Security No. _____

Address _____ Home phone _____

City_____State_____Zip_____ Mobile phone _____

E-mail_____

Mailing address _____

If different from above address

City_____State_____Zip_____

EDUCATION BACKGROUND

School	Name & Location	Major Course	Diploma/Degree	Dates
High School				
College				
College				
College				
College				
College				

It is the applicants responsibility to have official transcripts sent to MPHS. Official transcripts must be in a sealed envelope from the institution.
High School transcripts are not required.

WORK EXPERIENCE

Begin with your most recent experience and list all employment for the past 10 years.
Use a separate sheet if necessary and include all information

From Month Year	Employer	Position
To Month Year	Address	Duties
Salary:	City	
	St Zip	

From Month Year	Employer	Position
To Month Year	Address	Duties
Salary:	City	
	St Zip	

From Month Year	Employer	Position
To Month Year	Address	Duties
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From Month Year	Employer	Position
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From Month Year	Employer	Position
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From Month Year	Employer	Position
To Month Year	Address	Duties
Salary:	City	
	St Zip	

From Month Year	Employer	Position
To Month Year	Address	Duties
Salary:	City	
	St Zip	

LICENSURE/CERTIFICATION

Indicate your current licensure or certification in your profession or occupation, if any:

_____

California License or Certification Number:_____

Other professional certification:_____

Are you CPR certified? YES ☐ NO ☐ Expiration date:_____

_____

GENERAL INFORMATION

Have you ever been convicted of a felony? YES ☐ NO ☐ If yes, please explain:

PLEASE NOTE:

The School of Diagnostic Imaging does not discriminate because of race , color, creed, religion, marital status, gender, ancestry, national origin, age, disability or status as a veteran or a disabled veteran.

RELEASE AND AUTHORIZATION

I understand that in connection with the application process, Mills-Peninsula, and/or their designees, may request verbal or written information from my past employers, educational institutions, personal references, and any public or private agencies that have issued me either a professional or vocational certification or license. I also understand that any such investigation may include a review of my motor vehicle history and any criminal records. I have provided complete and truthful information to Mills-Peninsula Health Services regarding all sources of information about my past employment, education, licensure, certification, criminal conviction record, as well as any other information requested in the application, and have been fully informed that any misrepresentations or material omissions concerning such information will be grounds for denying my application, withdrawing any offer of admission to the School of Diagnostic Imaging, or immediate discharge. I further hereby release and hold harmless Mills-Peninsula Health Services, its officers, employees and agents, and any other person, or public or private entity inquiring about, investigating, furnishing, communicating, reviewing or evaluating information or documents pursuant to the Release, or making any verbal or written communications for such purposes, from any claims arising from such activities.

Signature:_____ Date:_____

Full name (print legibly)_____

Driver's License Number_____ State Issued:_____

APPLICATION CHECKLIST

In addition to the completion and filling of the application, each applicant must submit the following:

☐ Letter of Intent
- No more than 2 typed pages
- Give your reason for applying to the program
- List personal attributes that would contribute to the success in the program
- Explain pertinent work or volunteer experience
- Explain all patterns of withdrawals, course repeats or failures on your transcripts.

☐ Letter of character reference

☐ Letter of academic reference

☐ Completed at least 80-hours of officially documented volunteer service or possess previous work experience in a health care facility (Include log documenting signed off hours)

☐ Official sealed transcripts from educational institutions. **Delivered by April 1**

☐ $50.00 non-refundable application fee (check only) Payable to "The Rad Tech Fund"

☐ Insure **all required prerequisites are completed by April 1**.

☐ The following prerequisite course must have been completed **within the past seven (7) years:**
- Intermediate Algebra or higher level math (if completed more than 7 years ago, the applicant may take a math placement test to determine math competency in algebra).

Please provide prerequisite information. To satisfy Anatomy & Physiology prerequisite, students must have completed #A **and** #B **or** #C (combination course). Anatomy & Physiology must have a lab and cover all major body systems. Courses must be college level and a minimum of 3 units with a grade of C+ (2.5 GPA) or higher.

Course	Name of College	Course Number	Date Completed	Number of Units	Grade Received
A. Human Anatomy with Lab					
B. Human Physiology with Lab					
C. Human Anatomy & Physiology					
Intermediate Algebra or taken a math placement test					
Written Communication (Comprehension /Composition)					
Oral Communication or Interpersonal Communication					
Introduction to Computers					

Please review requirements in school brochure or website very carefully.

Applications will be rejected for incomplete prerequisites.

Application packet may be dropped off to the Radiology Department or mailed to:

Program Director
School of Diagnostic Imaging
Peninsula Medical Center
1501 Trousdale Drive
Burlingame, CA 94010

You will be notified to setup an appointment for the MPHS cognitive assessment test after receipt of completed application.

How did you hear about this Program? (Please check all that apply)

- ☐ Friend
- ☐ MPHS School of Diagnostic Imaging Information Seminar
- ☐ Website / Internet
- ☐ MPHS Employee
- ☐ MPHS Publication

Mills-Peninsula Health Services
School of Diagnostic Imaging

Official documentation of 80 or more Hours of Volunteer Time
Attach this completed form to your application

Student Name: _____
Please Print Last First MI

Clinical Site	Date	Hours	Signature of Manager/Supervisor
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
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16.			
17.			
18.			
19.			
20.			

Please feel free to make copies of this paper as necessary.
Please attach to application.