

MEDICAL **MCC** CAREER COLLEGE

OF NORTHERN CALIFORNIA



2006

Course Catalog

Limited Permit X-Ray Technician Certification Program
Chest, Torso-Skeletal, Extremities

MISSION STATEMENT

The intent of the Medical Career College of Northern California is to provide the highest level of education to those students seeking the knowledge and skills necessary to perform the duties of the Limited Permit X-Ray Technician within the scope of Chest, Torso-Skeletal, Extremities and Leg Podiatric in the State of California. The school will provide a learning environment that enables the student to attain this goal within an established time period and at an affordable cost to the student.

In addition to meeting this educational goal, the Medical Career College of Northern California is ready and willing to meet future health care employment needs within our medical community.

The Medical Career College of Northern California will offer a high quality curriculum, a qualified faculty and a comfortable learning environment to assure the success of the student. The program director and instructors will work with each student with honesty and integrity and will welcome diversity in its selection of student enrollment.

Limited Permit X-Ray Program Chest, Torso-Skeletal, Extremities

Program Length and Clock Hours

	Length in weeks	Clock Hours
Clinical Classroom	46	184 hours
Required Lab		25 hours
Externship	12 weeks (minimum) to 1 year	

Career Opportunities

This program provides the background that enables a student to assume a responsible entry-level position as a Limited X-Ray Technician in the scope of Chest, Torso-Skeletal, and Extremities. Upon successful completion of this course of study, the graduate is eligible to take the California State Examination for Limited Permit X-Ray Technician.

Once the graduate passes the examination, he may assume a position as a responsible member of a team in a physician's office or clinic. In addition to being qualified to provide x-ray services, the graduate is also qualified to do most back office patient care procedures. It is also recommended that the prospective student verify certification requirements of another state if he is considering relocation outside of the State of California.

Graduation Requirements

Students must complete all areas of the program with a cumulative GPA of 70% or better and satisfactorily complete the externship program in an approved medical facility. In addition, students must satisfy all financial obligations to the School to receive their certificates.

Externship

The externship will begin when the student demonstrates the basic knowledge and skills necessary to begin taking radiographs. The externship rotation consists of documented proof of 100 Chest, 100 Extremity and 200 Torso-Skeletal exams to be completed over a minimum 3 month period.

The externship incorporates work-related experience in both x-ray and back office settings. All lab procedures will be completed at these sites, and can be done prior to the official start of the extern program. The externship is completed at a radiology facility under the supervision of a License Supervisor Operator.

Limited Permit X-Ray Program Chest, Torso-Skeletal, Extremities Didactic Training Hours

RAD101TEC	HOURS
Introduction to Radiation Protection	10
Introduction to Equipment Operation/Care	5
Anatomy and Physiology	5
Medical Terminology	5
Medical Ethics	1
Torso-Skeletal Positioning	30
Total Hours first 14 weeks	56

RAD102TEC	HOURS
Intermediate Radiation Protection	18
Introduction to Radiation Physics	5
Darkroom and Film Processing	10
X-Ray Technical Factors	4
Intermediate Equipment Operation/Care	5
Nursing Procedures	2
Upper and Lower Extremity Positioning	20
Total Hours second 16 weeks	64

RAD103TEC	HOURS
Advanced Radiation Protection	22
Advanced Radiation Physics	10
Advanced X-Ray Technical Factors	11
Film Quality and Critique	5
Nursing Procedures	2
Chest Positioning	10
Program Review	4
Total Hours third 16 weeks	64
Total Hours for the 46 week course	184

LIMITED PERMIT X-RAY PROGRAM CHEST, TORSO-SKELETAL, EXTREMITIES

Course Description

RADI01TEC: Anatomy and Physiology, Introduction to Radiation Protection, Introduction to Equipment Operation and Care, Medical Terminology, Medical Ethics and Introduction to Torso-Skeletal Positioning.

In this first semester course of study, the anatomical structures of the skeletal system will be emphasized. Lectures introduce the anatomy and physiology of the skeletal system with detailed study of the bones of the chest and spinal column. The lectures on Radiation Protection will introduce the student to the interactions of x-ray with matter. The history of x-ray, tube construction, and shielding are taught to help the student begin to understand the importance of practicing safety on the job. Ethical standards of conduct as well as medical-legal considerations are reviewed, with special emphasis on the role of the Limited X-Ray Technician. Positioning of the torso-skeleton will be taught and practiced in the laboratory setting. Medical Terminology, infection control, CPR and safe body mechanics are taught this semester.

RADI02TEC: Intermediate Radiation Protection, Introduction to Radiation Physics, Intermediate Equipment Operation and Care, Darkroom and Film Processing, Introduction to X-Ray Technical Factors, Nursing Procedures and Positioning of the Upper and Lower Extremities.

The second semester segment will focus on instruction in Intermediate Radiation Protection. The classroom work will look at units of exposure along with dose measuring devices, tube construction and shielding. This will begin to give the student the knowledge they will need to understand their role in minimizing the exposure to the patient as well as the student. The introduction of Radiation Physics will include the internal components of the modern x-ray tube, x-ray protection, and x-ray beam characteristics. Darkroom procedures include film processing, as well as a more in-depth look into equipment operation and care. The students will begin specific back office procedures. Positioning techniques of the upper and lower extremities are taught and practiced.

RADI03TEC: Advanced Radiation Protection and Radiation Physics, Radiographic Technical Factors, Film Quality and Critique, Nursing Procedures and Positioning of the Chest.

A more advanced look into the safety factors and methods used in reducing and controlling scatter radiation will be part of the third semester portion of this course. Radiation Physics will deal with a more advanced look at x-ray production and characteristics as well as combining it with the factors used to create radiographic images. Working in lab, students will take radiographic films to see the effects different factors have on film density, contrast, distortion and definition. Students will be given the opportunity to critique films and discuss measures to improve radiographic quality. The students will continue to practice back office procedure including venipuncture. Positioning of the chest will be taught and practiced in the lab.

RADI06TEC: Externship

Each student will be required to complete a supervised externship within the categories for which they will be licensed. The supervised externship will incorporate 100 chest exams, 100 Extremity exams, and 200 Torso-Skeletal exams over a minimum 3 month period. This work related portion of the program, will include both x-ray and back office experience. An additional 25 hours of lab work will be required. These hours may be completed at any time in which the student has access to an x-ray unit overseen by a Supervising Licensiate approved by the State of California Department of Health Services Radiologic Health Branch.

**MEDIAL CAREER COLLEGE
OF NORTHERN CALIFORNIA
ADMISSION POLICIES AND STANDARDS**

Admission requirements

Applicants for admission must possess a high school diploma or GED to be considered eligible for admission to the Medical Career College of Northern California. All applicants must achieve a minimum passing score of 19 on the school's entrance exam (the Wonderlic). An entrance interview will be held with school officials before acceptance into the program.

Classes will be taught in English so the student will be required to demonstrate the ability to read and write in standard English.

Transfer credits

Students will be assessed individually on the basis of their experience and instructional program. Decisions will be based on transcripts, certificates, degrees or other evidence documenting education relating to their field of study.

In general, a student can petition for one-quarter credit for each 10 hours of individual instruction and each 20 hours of lab activities and each 30 hours of externship done at a site approved by the California Department of Health Services, Radiologic Health Branch.

Tuition Fees, Registration, and Other Charges

The cost of the Limited Permit X-Ray Program, Chest, Torso-Skeletal, Extremities will be as follows:

\$9,000.00 Fee for the 10 month program (\$8,800 tuition + \$200 textbooks) plus
\$100.00 Registration Fee*

\$9,100.00 Total Program Charge

If paid in full by the first class, the cost for the 10 month program will be:
\$8,700.00 Fee for the 10 month program (\$8500 tuition + \$200 textbooks) plus
\$100.00 Registration Fee*

\$8,800.000 Total Program Charge

These charges do not include the fee for the State Board Examination, which will be scheduled at the end of the 10 month course and the completion of the externship. The school will assist the student with providing the documentation necessary to schedule the administration of the state examination.

The school accepts Workers' Compensation Training Vouchers for qualified students.

*non-refundable fees if the student meets the school's entrance requirements

Grounds for Dismissal

The School reserves the right to terminate any student who fails to uphold the standards as set forth by the School. The student must maintain satisfactory progress with-in each of the courses. Failure to make payment as agreed upon, failure to adhere to the attendance policy, cheating, or a demonstration of behavior disruptive to normal classroom discipline, will be grounds for dismissal. If a student destroys or damages any property within the classroom or laboratory setting, the student will be responsible to repair or replace the damaged property. Any engagement of unlawful conduct will also result in dismissal. All students will be notified in writing of their dismissal.

MEDICAL CAREER COLLEGE OF NORTHERN CALIFORNIA REGULATIONS AND POLICIES

Transcripts

The Medical Career College of Northern California will maintain an official student transcript for each student. The transcript will provide a complete record of each student's academic performance. Attendance records are available upon request.

Official transcripts will be provided to whomever the student designates upon written request. There will be no charge for the first two requests for transcripts, providing the student's financial account is up-to-date.

Class Attendance Requirements

Students are expected to attend all classes and be on time for those classes. The loss of subject material due to tardiness or absence can be very costly in this intensive educational environment.

In the event of an emergency or an unavoidable absence, students must call the school to inform the instructor of that absence. Students who miss in excess of 15 hours a session will need to take that particular session again. All sessions must be taken in sequential order. If a student needs to repeat a session, he or she will have to wait until that class is offered again before proceeding to next session.

Under special circumstances, such as in the event of an emergency, provisions can be made for some home study make-up work. The School does not offer correspondence study.

All absences or episodes of tardiness are recorded. Problem tardiness will be dealt with and may result in a student being placed on attendance probation.

Conduct and Dress Code

All students and faculty will treat each other with respect and dignity. Any student or faculty member who attends the School under the influence of drugs or alcohol, or is disruptive or caught cheating will be suspended or terminated. Destruction of school property will not be tolerated. Students are asked to attend class ready and willing to learn. The classroom is a nonsmoking facility.

Medical Career College students are required to come to class wearing comfortable casual business attire. No cut-offs, tank tops, bear midriiffs, offensive or illegal themes on clothing are permitted. Shoes must be worn. All students shall come to class clean and well groomed. No facial piercing (including tongue) is permitted. No tattoos shall be visible. Extern students shall wear scrubs or appropriate medical uniform attire.

Make-up of Didactic Training, Exams and Clinical Externship

Students are required to make up all missed didactic training and clinical education prior to the completion of the program in order to maintain the correct amount of hours as set forth by the State of California, Department of Health Services, Radiologic Health Branch.

The instructor will schedule make-up days for all didactic training and exams. These days will be in addition to the regularly scheduled hours and must be completed before the end of each session. The school offers an open lab once a week for student's to practice positioning or catch up on classroom work. All clinical hours must meet the required minimum of 100 Chest exams, 100 Extremity exams, and 200 Torso-Skeletal exams over a minimum 3 month period.

Leave of Absence Policy

A request for an approved Leave of Absence must be submitted in writing to the Program Director. Approval for a Leave of Absence will be authorized on the merits of each request. A student on a Leave of Absence is considered enrolled and in good standing. Leave of Absences cannot be considered acceptable if it jeopardizes the student's ability to meet the requirements set forth by the State of California Department of Health Services.

REGULATIONS AND POLICIES, CONTINUED

Student Complaint/Grievance Procedure

Student grievances relating to student matters should first be discussed with the individual instructor. If the grievance is not satisfactorily resolved, the grievance may then be submitted to the Program Director or her designee. A Complaint Form is available for student's to submit their complaint. The Director or her designee will meet with the student within 7 days. The decision by the Program Director will be considered final within this grievance procedure. The student is free at any time within this procedure to file a complaint with the Bureau for Private Postsecondary and Vocational Education.

Academic Progress Policy

The school shall maintain an ongoing file, which documents each student's attendance, academic progress and student performance. The student records shall be kept at the administrative office for a period of 5 years after the student's graduation, withdrawal or termination, and shall be accessible to the student upon request. In addition, the student will be able to view his or her records during classroom hours.

Criteria for Testing Students

All students will be expected to pass each session of the didactic training with a 70% or better grade point average before proceeding to the next session. The students will be tested in every aspect of the session over the course of the eight week period.

Tutoring will be available upon request by the student and will be scheduled by the instructor in either a one-on-one or group session.

Students are expected to pass the final examination with a 70% or better score. The student failing the final examination will be eligible for tutoring and a second opportunity to pass the examination. A student failing the final examination a second time will be dismissed from the program. In addition to the final examination, the student must pass a positioning proficiency examination.;

Grading Policy

Grade Point Average	Equivalent Percentage	Letter Grade	Level Obtained
4.0	90-100	A	Excellent
3.0	80-89	B	Good
2.0	70-79	C	Fair
0.0	Below 70	F	Fail

Institutional Approvals

This institution has received approval to operate from the Bureau for Private Postsecondary and Vocational Education ("Bureau"). An approval to operate means that the Bureau has determined and certified that the institution meets the minimum standards for integrity, financial stability, and educational quality, including the offering of bona fide instruction by qualified faculty and the appropriate assessment of students' achievement prior to, during and at the end of its programs.

This institution has received approval from the Department of Health Service, Radiologic Health Branch to give instruction in the Limited Permit X-Ray Technologist Program, Chest, Extremities and Torso-Skeletal.

REGULATIONS AND POLICIES, CONTINUED

Refund, Cancellation/Withdrawal Policies

Students who enter a program for which they have enrolled may withdraw at any time after beginning classes. Students are requested to cancel their enrollment by written request at any time before or during their training. The date when the School receives the notice of the student's intent to withdraw shall be the termination date.

Cancellation notices received prior to the beginning of the course: Enrolled students who cancel their agreement with the School at any time prior to the commencement of the first day of class will be refunded 100% of the charges less the registration fee. Any books issued to the student must be returned in excellent condition in order to have the textbook fee refunded.

The applicant shall receive all monies due within 30 days from cancellation. The \$100.00 registration fee is non-refundable.

Termination or Withdrawal after the commencement of classes: A student may withdraw at any time after the start of the program. The refund policy for students who have completed 60% (110 hours) or less of the course of instruction shall be a prorated refund. After 60% (110 hours) of attendance has been completed, no refund will be forthcoming. The students are required to have an exit interview with the Director of the School to discuss the amount of money to be refunded. Refunds are calculated from the first date of the program to the receipt of the letter requesting withdrawal from the program.

Refunds will be calculated as follows:

Program fee per hour (bases on total program charge and total program hours) x the number of hour completed subtracted from the total program charge. The non-refundable registration fee is not included in the formula.

\$8,800 Total Charge ** (paid in full at program start)
100.00 Registration Fee*
\$8,700 Total Program Charge

\$8,700 total program charge divided by 184 program hours = \$47.00 per hour program fee

therefore (example): \$47.00 x 50 completed hours = \$2350.00
 \$8,700 - \$2,350.00 = \$6,350.00 refund

The above example is based on the California State Refund Policy. The example shows a student that was enrolled in a 184 hour course that had a total charge of \$8,800.00 (\$8,700.00 plus a \$100.00 registration fee) for which the student had paid in full. The student had completed 50 hours of instruction.

Student Tuition Recovery Fund

The Student Recovery Fund (STRF) is a special fund established by the California Legislature to reimburse students who might otherwise experience a financial loss as a result of (a) the closure of the institution; (b) a breach or anticipatory breach of the institutions agreement for the course of instruction; (c) the quality of instruction declines within the 30 day period before the institution's closure. This Fund only protects California students.

Enrollees must keep a copy of the enrollment agreement, contract or application to document the total amount of tuition paid. This information will be needed to substantiate a claim for reimbursement from the STRF, which must be filed within one year of the Bureau's service on the student of their rights under the STRF, or if no notice of rights are served to the student, within four years of the institution's closure. For further information or instructions contact:

The Bureau of Private Postsecondary and Vocational Education
400 R Street, 5th Floor, Sacramento, Ca. 95814-6200
(916) 445-3427

**MEDICAL CAREER COLLEGE
OF NORTHERN CALIFORNIA**

FACULTY

Diane Morgan, CRT

Diane Morgan has been the Director for the Medical Career College of Northern California since its establishment in 2003. In addition to her duties of Director, Diane teaches Radiation Protection, Equipment Operation and Care, Darkroom, Radiographic Positioning, Radiation Physics and Technical Factors as well as Film Quality and Critique. She has been licensed by the State of California as a Certified Radiologic Technologist since 1977. Since then Diane has worked in all aspects of Radiology. She has 10 years experience working in the hospital environment as a staff technologist as well as years of experience in the urgent care setting, primary care medical offices and diagnostic centers. During her career she has managed many on-the-job training programs in Radiologic Technology. The educational process has become her main focus the last few years.

Since 1999, Diane has been an instructor in a Vocational Training Program for Limited X-Ray Technologist. After the program closed, she discovered the need for qualified Limited X-Ray Technologists was not being met within our communities.

Joan Lukkonen, RN, LPXT

Joan Lukkonen is the Program Manager as well as an instructor for the Medical Technology portion of the program. Joan teaches the Medical Terminology, Medical Ethics, Anatomy and Physiology and Nursing Procedures portions of the program. She has been an R.N. for over 30 years and has a wide range of experience. Joan has held many positions of responsibility within the acute care setting, including Director of Patient Services, Administrative Supervisor, and for the last 15 years, Shift Coordinator on a busy medical unit. She also has had experience in private practice and urgent care settings.

Over the years and especially during the last 15 years, Joan has worked daily with students, new employees, and co-workers as a resource person and advisor and enjoys that aspect of her job very much.

In addition to the above, Joan is a Limited Permit X-Ray Technician in the scope of Leg Podiatric.

The faculty of the Medical Career College is dedicated to establishing a disciplined, thorough program of instruction that will meet the needs of its students and the communities in which they will work.