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**3701-72-03 Standards for accreditation of educational programs and approval of continuing education courses.**

- (A) Any person may apply to the director for approval to conduct an educational program for general x-ray machine operators, radiographers, radiation therapists, or nuclear medicine technologists. Any person desiring to conduct an accredited educational program for a specific course of study shall complete an application prescribed by the director and submit the completed application to the director with the non-refundable application fee at least sixty days prior to initiating the program. The application fee shall be paid by check or money order, payable to "Treasurer, State of Ohio" in the amount of five hundred dollars. The director shall return an incomplete application to the applicant for completion. An approval to conduct an educational program does not expire but may be suspended or revoked in accordance with paragraph (J) of this rule. An application for approval as an accredited educational program shall contain the following:
- (1) Name, address, and telephone number of applicant;
  - (2) Title of program, length of program, target audience, specific program objectives, and the instructional techniques or strategies that will be used to obtain the intended learning outcomes;
  - (3) Name, address, telephone number, and curriculum vitae of all instructors; and
  - (4) A statement certifying that the program complies and will remain in compliance with the requirements of this rule.
- (B) The director shall not approve an application for a radiographer educational program unless the program meets the following requirements:
- (1) Appendix A of 42 CFR 75 (as published in the October 1, 2005, Code of Federal Regulations); or
  - (2) The program is accredited by the "Joint Review Committee on Education in Radiologic Technology;" or
  - (3) The program is housed in a college accredited by the "North Central Association of Colleges and Schools" or other United States department of education approved regional accrediting agencies.
- (C) The director shall not approve an application for a nuclear medicine technologist educational program unless the program meets the following requirements:
- (1) Appendix D of 42 CFR 75 (as published in the October 1, 2005, Code of Federal Regulations); or
  - (2) The program is accredited by the "Joint Review Committee on Educational Programs in Nuclear Medicine Technology" or
  - (3) The program is housed in a college accredited by the "North Central Association of Colleges and Schools" or other United States department of education approved regional accrediting agencies.
- (D) The director shall not approve an application for a radiation therapist educational program unless the program meets the following requirements:
- (1) Appendix E in 42 CFR 75 (as published in the October 1, 2005, Code of Federal Regulations); or
  - (2) The program is accredited by the "Joint Review Committee on Education in Radiologic Technology"; or
  - (3) The program is housed in a college accredited by the "North Central Association of Colleges and Schools"

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or other United States department of education approved regional accrediting agencies.

- (E) The director shall not approve an application for a general x-ray machine operator educational program unless:
- (1) The program is accredited by the "Joint Review Committee on Education in Radiologic Technology"; or
  - (2) The program is housed in a college accredited by the "North Central Association of Colleges and Schools," or
  - (3) The program is accredited by an organization recognized by the United States department of education; or
  - (4) The program is a professional association of and recognized by licensed practitioners; and
  - (5) Has a curriculum that includes a didactic training section which, as a minimum, includes the following:
    - (a) Radiographic equipment and often-used terms/terminology;
    - (b) The nature of x-rays, their relative energy spectrum, and their fundamental properties when traveling in space and interacting with matter;
    - (c) The components of the x-ray tube and their basic functions;
    - (d) How x-rays are produced by the x-ray machine;
    - (e) The essential factors controlling the quality and quantity of x-ray beam intensity, specifically what kilovoltage peak (kVp) and milliamperes (mA) do to the x-ray beam;
    - (f) The functions of the x-ray tube, control panel, table, and grid devices;
    - (g) The three potential interactions of x-rays with matter, how these combine to produce a useful image, along with their potential negative effects on both the image clarity and radiation safety. However, the student is not required to conceptualize how these interactions occur using atomic models or their relative probabilities of interaction;
    - (h) X-ray image formation and the different processing techniques for both film/screen and digital image receptors;
    - (i) Major factors that control and affect image quality forming the basis of technique chart development;
    - (j) The applicable units of measurement used in dosimetry, the methods to monitor occupational exposure, and when dosimetry is required;
    - (k) The acute biologic effects of radiation, with an emphasis on their limited relevance in diagnostic radiology;
    - (l) The long term biologic effects of x-rays as a foundation to understanding the principles of safe practice;
    - (m) The cardinal rules of safety, along with standard safe practices in protecting both patients and operators from ionizing radiation;
    - (n) The initial clinical approach to identifying the patient and explaining the procedure;

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- (o) Proper patient assessment and patient care skills when performing radiographic procedures;
  - (p) Methods of patient safety;
  - (q) Methods of operator safety; and
  - (r) Patient assessment and patient care - "Prelude to Clinical Training"; or
- (6) Has one or more of the clinical training modules specified in the appendix to this rule. The competency based clinical assessment shall be conducted in a laboratory setting to include film and digital image receptors, or DXA scanner for bone densitometry, and shall include the following minimum requirements:
- (a) Evaluating and assessing the patient with respect to:
    - (i) Verification of the correct patient;
    - (ii) Categorizing key factors, such as patient age and body habitus, for purposes of determining technique;
    - (iii) Basic patient history and underlying medical issues (such as age, osteoporosis, spinal osteoarthritis) pertinent to radiography;
    - (iv) Patient concerns regarding radiation exposure or the procedure;
    - (v) Communication problems;
    - (vi) Prior studies;
    - (vii) Pregnancy status, last menstrual cycle;
    - (viii) Mobility and ambulatory status of patient (e.g., post op, post trauma, wearing a cast);
  - (b) Explaining the radiologic procedure to the patient;
  - (c) Measuring part thickness (excluding podiatric and extremities) with calipers;
  - (d) Comparing the technique chart with the patient characteristics and setting the exposure factors on the unit;
  - (e) Properly placing or employing the image receptor identification labels;
  - (f) Competently positioning patients for all routine procedures associated with the category of interest identified in the appendix to this rule, to include:
    - (i) Appropriate immobilization and use of positioning aids;
    - (ii) Visualization of pertinent anatomy;
    - (iii) Correct object-image distance (OID), source-to-image distance (SID), image receptor size, grid use, and compensating filters, as applicable;
    - (iv) Proper collimation of the radiation beam; and

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- (v) Appropriate breathing instructions to patient;
  - (g) Operating equipment safely by keeping radiation exposures "as low as reasonably achievable" (ALARA). This entails routinely employing the cardinal safety principles of time, distance and shielding for both patient and operator;
  - (h) Processing the image; and
  - (i) Assessing the image for basic quality control; and
- (7) Is conducted by an instructor with a minimum of two years of professional experience and proficiency in instructing, and is qualified through academic preparation evidenced by a degree in radiological science, or completion of core course work in the radiological sciences, or demonstrates equivalent standards of experience and education.
- (F) Any person may apply to the director for approval to conduct a continuing education course for general x-ray machine operators, radiographers, radiation therapists, or nuclear medicine technologists. Any person desiring to apply for approval to conduct a specific course of study shall complete one application per subject prescribed by the director and submit the completed application to the director with the application fee at least sixty days prior to initiating the program. The non-refundable application fee shall be paid by check or money order, payable to "Treasurer, State of Ohio" in the amount of seventy-five dollars per subject. The director shall return an incomplete application to the applicant for completion. An approval to conduct a continuing education course does not expire but may be suspended or revoked in accordance with paragraph (J) of this rule. An application for approval of a continuing education course shall contain the following:
- (1) Name, address, and telephone number of applicant;
  - (2) Title of course, number of CE credits, target audience, specific program objectives, and the instructional techniques or strategies that will be used to obtain the intended learning outcomes;
  - (3) Name, address, telephone number, and curriculum vitae of all instructors; and
  - (4) A statement certifying that the course complies and will remain in compliance with the requirements of this rule.
  - (5) A sample copy of the certificate that will be given to each participant that successfully completes the continuing education course which includes the following information:
    - (a) The title of the program and the department approval number;
    - (b) Date of the course;
    - (c) Number of approved CE-~~redits~~ credits;
    - (d) Name of the approved sponsor;
    - (e) Signature space for the instructor or authorized representative of the sponsor; and
    - (f) Name of the participant.
- (G) The director shall not approve an application for approval of a continuing education course unless the course meets the following requirements:

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- (1) The course shall be conducted by an instructor who has a minimum of two years of professional experience and proficiency in instructing, and is qualified through academic preparation evidenced by a degree in radiological science, or completion of core course work in the radiological sciences, or demonstrates equivalent standards of experience and education.
- (2) The course content shall include one of the following subjects:
  - (a) Quality control, quality assurance, or quality management practices;
  - (b) Principles of radiographic imaging;
  - (c) Radiographic, radiation therapy, nuclear medicine or bone densitometry equipment, instrumentation, positioning, or procedures; or
  - (d) Radiation safety and protection.
- (H) Except in the case of a course approved pursuant to paragraph ~~(M)~~(L) of rule 3701-72-02 of the Administrative Code, an approved continuing education provider shall notify the department of any changes in curricula or instructors at least fourteen days prior to commencing the program or course. The department may audit any educational program or continuing education course accredited or approved under this rule.
- (I) Except in the case of a course approved pursuant to paragraph ~~(M)~~(L) of rule 3701-72-02 of the Administrative Code, an accredited education program or approved continuing education provider shall maintain records of individuals enrolled in the program for a period of at least three years from the date of providing the course.
- (J) The department, in accordance with Chapter 119. of the Revised Code, may deny, suspend, or revoke accreditation of an educational program, or may deny, suspend, or revoke approval of a continuing education course if the program or course fails at any time to meet the requirements of Chapter 4773. of the Revised Code or Chapter 3701-72 of the Administrative Code.