STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS

BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GAVIN NEWSOM, GOVERNOR
DENTAL BOARD OF CALIFORNIA
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APPLICATION FOR APPROVAL OF COURSE IN RADIATION SAFETY

$300 non-refundable application fee payable to Dental Board is required for processing.

Please return one original and one copy of this application

Receipt #: _____

File #: _____

When submitting this application follow the attached regulations. All requested documentation as well as this completed application is required for a course to be considered for approval.

_____
Applicant (Sponsor of course) Telephone No

_____
Address

_____
Clinical Facility Address (If different)

TYPE OF COURSE: RDA____ CERTIFICATION____CONTINUING EDUCATION_____

Type of program (Must be postsecondary) Community College _____Dental School_____
Private College____ Vocational Program_____ CE Provider _____

Other_____(Specify)

PROGRAM FACULTY

Name of Program Director: _____ License No _____Exp. _____
DDS_____RDH_____RDA_____

Instructors:

DDS_____License#_____Expires_____
RDA_____License#_____Expires_____
RDA_____License#_____Expires_____
RDA_____License#_____Expires_____

All RDA instructors shall hold valid California Radiation Safety Certificate.

Faculty/Student Ratio: Didactic ____:____ Lab ____:____ Clinical ____:____

Name of supervising dentist(s) responsible for clinical training:

_____License#_____Expires_____

TOTAL LENGTH OF RADIATION SAFETY PROGRAM (Hours) _____

Didactic Hours_____ Laboratory Hours_____ Clinical Hours _____

Maximum number of students enrolled per class _____
Number of separate operatories that house operable x-ray units: _____
Total number of operable x-ray units: _____ (excluding panograph)
Does the facility have digital radiographic equipment? _____
Will an automatic Processor be used? _____
Number of full-mouth periapical surveys, consisting of at least 18 films, 4 of which must be bitewings, performed on a lab manikin: _____
Number of bitewing surveys, consisting of at least 4 films each, performed on a lab manikin: _____
Number of full-mouth periapical surveys, consisting of at least 18 films, 4 of which must be bitewings, performed on patients clinically: _____
Are all radiographic surveys exposed by and evaluated by the student and faculty for acceptable diagnostic quality? _____
Are extra-mural facilities used for clinical training exposing dental radiographs? _____
If yes, a copy of each contract of affiliation with each clinical facility utilized by this course must be provided with this application.

Please provide a diagram of the facility

CERTIFICATES OF COMPLETION
A certificate must be issued to each student who successfully completes the course. Please attach a copy of the certificate with the school seal to this application.

The certificate should contain, but not necessarily be limited to the following information:

- ✓ Student Name
- ✓ Date Course Completed
- ✓ Signature of Administrator/Faculty
- ✓ Dental Board Issued Course ID Number
- ✓ Course Provider Name
- ✓ Course Provider Address
- ✓ Number of course hours
- ✓ School Seal

THIS APPLICATION WILL BE REJECTED IF IT IS NOT COMPLETE, OR IF ANY DOCUMENT REQUIRED IS NOT INCLUDED IN THE SUBMISSION. SUBMIT 1 ORIGINAL AND 2 COPIES OF ALL DOCUMENTS

COMPLETE THE FOLLOWING: I certify under penalty of perjury under the laws of the State of California that the statements made above and the information provided with this application are true and correct and that the attached radiation safety program will be conducted in accordance with Section 1657 of the Business and Professions Code and Title 16 California Code of Regulations Section(s) 1014 and 1014.1.

_____ _____
Date Signature

_____
School Seal Title of person authorized to represent course

PROVIDER CLASSIFICATION / SETTING

Please indicate the provider's classification(s):

Community College _____Dental School_____ Private Vocational College_____
Vocational Program_____ CE Provider _____
Other_____ (Specify)

Does your facility offer approved programs in Dental Assisting, Dental Hygiene or Dentistry? _____

FACULTY CREDENTIALS

Each faculty member shall possess a valid special permit or valid license issued by the Board. May be either DDS, RDA, RDAEF, or RDH. A program director may also serve as the program faculty.

The following additional qualifications must be met:

Background in and current knowledge of dental radiography techniques.

SUPERVISING DENTIST

As part of an approved radiation safety course, a currently licensed dentist must oversee the courses offered. This includes at least:

Evaluation of curriculum

Periodic review of dental x-rays, records, etc.

The dentist must sign a document in which he agrees to be responsible for and in control of the quality, radiation safety, and technical aspects of all x-ray examinations and procedures in accordance with Section 106975 of the Health and Safety Code. Please provide a copy of the agreement with this application. This document must also be on file at the facility and available for review by the Dental Board.

REGISTERED DENTAL ASSISTANT X-RAY PROGRAM DIRECTOR DATA SHEET

Name_____

Academic Rank or Title_____

Type of Appointment: _____Full Time _____Other (describe): _____

_____

Years of Professional Experience: _____

Years of Teaching Experience: _____

Type of Institution: _____

Employment History: **Attach resume**

Educational Background:

Degree	Where Obtained	Year Conferred
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

License/Certificates:

License Type _____ Number_____ Expiration Date: _____Radiology _____

Other: _____

Teaching Credentials: Type: _____ Date Conferred_____
And/or
Teaching methodology certification _____Date Conferred_____

A copy of the Program Director data sheet, curriculum vita, current CPR certification and teaching credential and/or teaching methodology certification must be included with this application.

REGISTERED DENTAL ASSISTANT X-RAY PROGRAM FACULTY DATA SHEET

Name_____

Academic Rank or Title_____

Type of Appointment: _____ Full Time _____ Other (describe): _____

_____

Years of Professional Experience: _____

Years of Teaching Experience: _____

Type of Institution: _____

Employment History: **Attach resume**

Educational Background:

Degree	Where Obtained	Year Conferred
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

License/Certificates:

License Type _____ Number_____ Expiration Date: _____ Radiology _____

Other: _____

Teaching Credentials: Type: _____ Date Conferred_____
And/or
Teaching methodology certification _____

A copy of instructor's data sheet, curriculum vita, current CPR certification, and teaching credential and/or teaching methodology certification for <u>all</u> faculty must be included with this application.

Make additional copies of form as needed.

ADMISSION TO THE RADIATION SAFETY COURSE

Applications

1. What is the maximum number of students that can be accepted in each radiation safety class? _____

2. Please provide a description and any pre-requisites of the established criteria and procedures used for admission to the class.

FACILITIES, EQUIPMENT AND SUPPLIES

Operatory

3. Please provide a description and diagram of the operatory(s)

4. Please provide a copy of the infection control procedures followed in the x-ray operatory to include at a minimum the equipment, surface barriers, pre-cleaning, set up and clean-up protocol,

5. Please provide a copy of the documentation that establishes that each radiographic operatory fully complies with the California Radiation Control Regulations (Title 17, California Code of Regulations, commencing with Section 30100), and that it is properly equipped with supplies and equipment for practical work and includes for every seven (7) students at least one functioning radiography machine that is adequately filtered and collimated in compliance with Department of Health Services regulations and is equipped with a minimum of one (1) set of position-indicating film holding devices for each machine.

DARKROOM OR PROCESSING AREA

The developing or processing facilities shall be deemed adequate if it is of sufficient size, based on the number of students, to accommodate students' needs in learning processing procedures and is properly equipped with supplies and equipment for practical work using either manual or automatic equipment.

6. If a darkroom is used with manual processing answer the following items:

	YES	NO
Water Temperature Control Valves	○	○
Safelight	○	○
Work Surface	○	○
Manual Processing Tanks	○	○
Method for Film Drying	○	○

7. If automatic processing units are used, indicate the design:

   _____ Installed in darkroom

   _____ Daylight loading, portable unit

8. Please provide a copy of the infection control procedures followed in the x-ray darkroom or processing area to include at a minimum the equipment, surface barrier, pre-cleaning, set up and clean-up protocol, special precautions for daylight and installed automatic processing units.

STERILIZATION/DISINFECTION/WASTE

9. Please describe the process by which the position-indicating film holding devices are sterilized.

10. Please describe the method/s for waste removal of processing chemicals.

EQUIPMENT AND SUPPLIES

11. Please provide a list of the audiovisual equipment and classroom instructional materials used for the course.

12. Please provide a list of all x-ray equipment, manikins, and supplies maintained by the program.

CURRICULUM

13. Please provide the following general course information. Curriculum task needs to be broken down to show hours for each separate area:

    _____Total Hours of Course

    _____Total Didactic Hours

    _____Total Laboratory Hours

    _____Total Clinical Hours

This information must also be included in the course outline.

LABORATORY AND CLINICAL INSTRUCTION

14. Please provide the amounts of exposure techniques that your students perform in the following classifications:

    Total number of bitewing surveys on a manikin consisting of at least 4 films _____

    Total number of full mouth surveys on a manikin (other than digital), consisting of at least 18 films _____

    Total number of full mouth surveys using digital on a manikin, consisting of at least 18 films _____

    Total number of full mouth surveys on a patient (other than digital), consisting of at least 18 films _____

    Total number of full mouth surveys using digital on a patient, consisting of at least 18 films _____

15. Please provide a comprehensive curriculum that includes: detailed course outline that states curriculum subject matter, specific instructional hours in the individual areas of didactic, laboratory and clinical instruction; general program objectives; specific instructional unit objectives in the cognitive and psychomotor domain and objective evaluation criteria with noted critical steps and number of attempts required for psychomotor skills.

16. Are students provided with specific unit objectives and evaluation criteria for all aspects of the course? _____

17. Please provide a description of the laboratory (manikin) and clinical practice (patients) experience that includes a description of the amount of exposures for bitewing and full mouth surveys, sequence of performance from laboratory to clinical experience; film packet requirement for laboratory and clinical experience; how students progress towards attainment of clinical competency; detailed description of prescription form used prior to exposure on clinical patients and patient criteria.

18. Please provide a copy of the criteria for an acceptable bitewing and periapical film that includes description of root apex of the periapical exposure; contact area, density and contrast.

19. Please provide a description of the re-take policy for periapical and bitewing films that are deemed undiagnostic.

20. Please explain the procedures used for assisting students with academic difficulties.

21. Please describe the procedures for conducting the written examination and what constitutes a passing score for this examination.

22. Please describe the procedures used to evaluate the bitewing and full mouth surveys and include the radiograph evaluation forms that include the following: description of student and faculty evaluation protocol; worksheets that include areas of identification for commonly encountered exposure and processing errors; x-ray manikin and clinical patient product evaluation sheets.

23. Please describe how the clinical examination is conducted and what constitutes a passing score for this examination.

24. Please provide a copy of a written contract of affiliation that describes the settings in which the clinical experience is received, verification that all equipment meets the State requirements, a medical health history form used for each patient being exposed, and signature of the provider of the facility with address and phone number.

25. Please provide a sample copy of a certificate that would contain the student's name, course provider name, course provider address, date course was completed, signature of administrator/faculty, Dental Board issued course ID number, and school seal.

RADIATION SAFETY COURSE REGULATIONS

Includes Changes Through January 1, 2006

Article 3.1 Radiation Safety Courses

1014. Approval of Radiation Safety Courses.

(a) A radiation safety course is one which has as its primary purpose providing theory and clinical application in radiographic techniques. A single standard of care shall be maintained and the board shall approve only those courses which continuously maintain a high quality standard of instruction.

(b) A radiation safety course applying for approval shall submit to the board an application and other required documents and information on forms prescribed by the board. The board may approve or deny approval of any such course. Approval may be granted after evaluation of all components of the course has been performed and the report of such evaluation indicates that the course meets the board's requirements. The board may, in lieu of conducting its own investigation, accept the findings of any commission or accreditation agency approved by the board and adopt those findings as its own.

(c) The board may withdraw its approval of a course at any time, after giving the course provider written notice setting forth its reason for withdrawal and after affording a reasonable opportunity to respond. Approval may be withdrawn for failure to comply with the board's standards or for fraud, misrepresentation or violation of any applicable federal or state laws relating to the operation of radiographic equipment.

(d) The processing times for radiation safety course approval are set forth in Section 1061.

Note Authority cited: Sections 1614 and 1656, Business and Professions Code. Reference: Section 1656 Business and Professions Code; and Section 106975, Health and Safety Code.

1014.1. Requirements for Radiation Safety Courses.

A radiation safety course shall comply with the requirements set forth below in order to secure and maintain approval by the board. The course of instruction in radiation safety and radiography techniques offered by a school or program approved by the board for instruction in dentistry, dental hygiene or dental assisting shall be deemed to be an approved radiation safety course if the school or program has submitted evidence satisfactory to the board that it meets all the requirements set forth below.

(a) Educational Level. The course shall be established at the postsecondary educational level or a level deemed equivalent thereto by the board.

(b) Program Director. The program director, who may also be an instructor, shall actively participate in and be responsible for at least all of the following:

(1) Providing daily guidance of didactic, laboratory and clinical assignments;

(2) Maintaining all necessary records, including but not limited to the following:

(A) Copies of current curriculum, course outline and objectives;

(B) Faculty credentials;

(C) Individual student records, which shall include pre-clinical and clinical evaluations, examinations and copies of all successfully completed radiographic series used toward course completion. Records shall be maintained for at least five years from the date of course completion.

(3) Issuing certificates to each student who has successfully completed the course and maintaining a record of each certificate for at least five years from the date of its issuance;

(4) Transmitting to the board on a form prescribed by the board the name**, last four digits of the social security number** and, where applicable, license number of each student who has successfully completed the course;

(5) Informing the board of any significant revisions to the curriculum or course outlines.

(c) Faculty. The faculty shall be adequate in number, qualifications and composition and shall be suitably qualified through academic preparation, professional expertise, and/or appropriate training, as provided herein. Each faculty member shall possess the following qualifications:

(1) Hold a valid special permit or valid license as a dentist, registered dental hygienist, registered dental assistant, registered dental assistant in extended functions, registered dental hygienist in extended

functions, or registered dental hygienists in alternative practice issued by the board;

(2) All faculty shall have been licensed for a minimum of two years. All faculty shall have the education, background, and occupational experience and/or teaching expertise necessary to perform, teach, and evaluate dental radiographs. All faculty responsible for clinical evaluation shall have completed a two hour methodology course which shall include clinical evaluation criteria, course outline development, process evaluation, and product evaluation;

(3) Shall have either passed the radiation safety examination administered by the board or equivalent licensing examination as a dentist, registered dental hygienist, registered dental assistant, registered dental assistant in extended functions, registered dental hygienist in extended functions, or registered dental hygienists in alternative practice or, on or after January 1, 1985, shall have successfully completed a board approved radiation safety course.

(d) Facilities. There shall be a sufficient number of safe, adequate, and educationally conducive lecture classrooms, radiography operatories, developing or processing facilities, and viewing spaces for mounting, viewing and evaluating radiographs. Adequate sterilizing facilities shall be provided and all disinfection and sterilization procedures specified by board regulations shall be followed.

(1) A radiographic operatory shall be deemed adequate if it fully complies with the California Radiation Control Regulations (Title 17, Cal. Code Regs., commencing with section 30100), is properly equipped with supplies and equipment for practical work and includes for every seven students at least one functioning radiography machine which is adequately filtered and collimated in compliance with Department of Health Services regulations and which is equipped with the appropriate position-indicating devices for each technique being taught.

(2) The developing or processing facility shall be deemed adequate if it is of sufficient size, based upon the number of students, to accommodate students' needs in learning processing procedures and is properly equipped with supplies and equipment for practical work using either manual or automatic equipment.

(3) X-ray areas shall provide protection to patients, students, faculty and observers in full compliance with applicable statutes and regulations.

(e) Program Content. Sufficient time shall be available for all students to obtain laboratory and clinical experience to achieve minimum competence in the various protocols used in the application of dental radiographic techniques.

(1) A detailed course outline shall be provided to the board which clearly states curriculum subject matter and specific instructional hours in the individual areas of didactic, laboratory, and clinical instruction.

(2) General program objectives and specific instructional unit objectives shall be stated in writing, and shall include theoretical aspects of each subject as well as practical application. The theoretical aspects of the program shall provide the content necessary for students to make judgments regarding dental radiation exposure. The course shall assure that students who successfully complete the course can expose, process and evaluate dental radiographs with minimum competence.

(3) Objective evaluation criteria shall be used for measuring student progress toward attainment of specific course objectives. Students shall be provided with specific unit objectives and the evaluation criteria that will be used for all aspects of the curriculum including written, practical and clinical examinations.

(4) Areas of instruction shall include at least the following as they relate to exposure, processing and evaluations of dental radiographs:

(A) Radiation physics and biology

(B) Radiation protection and safety

(C) Recognition of normal anatomical landmarks and abnormal conditions of the oral cavity as they relate to dental radiographs

(D) Radiograph exposure and processing techniques using either manual or automatic methods

(E) Radiograph mounting or sequencing, and viewing, including anatomical landmarks of the oral cavity

(F) Intraoral techniques and dental radiograph armamentaria, including holding devices

(G) Interproximal examination including principles of exposure, methods of retention and evaluation

(H) Intraoral examination including, principles of exposure, methods of retention and evaluation
(I) Identification and correction of faulty radiographs
(J) Supplemental techniques including the optional use of computerized digital radiography
(K) Infection control in dental radiographic procedures
(L) Radiographic record management.

Students may be given the opportunity to obtain credit by the use of challenge examinations and other methods of evaluation.

(f) Laboratory Instruction. Sufficient hours of laboratory instruction shall be provided to ensure that a student successfully completes on an x-ray manikin at least the procedures set forth below. A procedure has been successfully completed only if each radiograph is of diagnostic quality There shall be no more than 6 students per instructor during laboratory instruction.

(1) Two full mouth periapical series, consisting of at least 18 radiographs each, 4 of which must be bitewings; no more than one series may be completed using computer digital radiographic equipment;
(2) Two bitewing series, consisting of at least 4 radiographs each;
(3) Developing or processing, and mounting or sequencing of exposed radiographs;
(4) Student and instructor written evaluation of radiographs.

(g) Clinical Experience. The course of instruction shall include sufficient clinical experience, as part of an organized program of instruction, to obtain clinical competency in radiographic techniques. There shall be no more than 6 students per instructor during clinical instruction. Clinical instruction shall include clinical experience on four patients with one of the four patients used for the clinical examination. Clinical experience shall include:

(1) Successful completion of a minimum of four full mouth periapical series, consisting of at least 18 radiographs each, 4 of which must be bitewings. Traditional film packets must be double film. No more than three series may be completed using computer digital radiographic equipment. Such radiographs shall be of diagnostic quality. All exposures made on human subjects shall only be made for diagnostic purposes, and shall in no event exceed three (3) exposures per subject. All clinical procedures on human subjects shall be performed under the supervision of a licensed dentist in accordance with section 106975 of the Health and Safety Code.
(2) Developing or processing, and mounting or sequencing of exposed human subject radiographs;
(3) Student and instructor written evaluation of radiographs.

(h) Clinical Facilities. There shall be a written contract of affiliation with each clinical facility utilized by a course. Such contract shall describe the settings in which the clinical training will be received and shall provide that the clinical facility has the necessary equipment and accessories appropriate for the procedures to be performed and that such equipment and accessories are in safe operating condition. Such clinical facilities shall be subject to the same requirements as those specified in subdivision (g).

(i) Length of Course. The program shall be of sufficient duration for the student to develop minimum competence in the radiation safety techniques, but shall in no event be less than 32 clock hours, including at least 8 hours of didactic instruction, at least 12 hours of laboratory instruction, and at least 12 hours of clinical instruction.

(j) Certificates. A certificate shall be issued to each student who successfully completes the course. The certificate shall specify the number of course hours completed. A student shall be deemed to have successfully completed the course if the student has met all the course requirements and has obtained passing scores on both written and clinical examinations.

Note Authority cited: Sections 1614 and 1656, Business and Professions Code. Reference: Section 1656, Business and Professions Code, and Section 106975, Health and Safety Code.

MEMORANDUM

To: Dental Board Date:

Re: Radiation Safety Course Approval

This application for approval is submitted to the Dental Board of California for evaluation of this institution as a Board-approved radiation safety course. To expedite the processing of our application, all required documents are attached with their respective exhibits:

We certify:

1. In preparing this application there was broad participation by the members of the total administrative staff listed below and consultation with all individual faculty members concerned with the radiation safety course.

2. We believe this application truly and accurately portrays this program.

3. Faculty members are familiar with the contents of this application.

Names and titles:	License Number	Expiration Date
_____ Program Director	_____	_____
_____ Faculty	_____	_____
_____ Faculty	_____	_____
_____ Faculty	_____	_____
_____ Faculty	_____	_____
_____ Supervising Dentist	_____	_____