

# BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GAVIN NEWSOM, GOVERNOR **DENTAL BOARD OF CALIFORNIA**2005 Evergreen St., Suite 1550, Sacramento, CA 95815 P (916) 263-2300 | F (916) 263-2140 | www.dbc.ca.gov



# 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	Receipt #:		
one copy of this application	File #:		
When submitting this application follow the	attached regulations. All requested documentation as		
• • • • • • • • • • • • • • • • • • • •	ed for a course to be considered for approval.		
Applicant (Sponsor of course)	Telephone No		
Address			
Clinical Equility Address (If different)			
Clinical Facility Address (If different)			
TYPE OF COURSE: RDA CERTIFICA	ATION CONTINUING EDUCATION		
Private College Vocational Program	ary) Community CollegeDental School		
Other(Specify)			
PROGRAM FACULTY			
Name of Program Director:	License No Exp DDSRDHRDA		
Instructors:			
DDSLicense#_ RDALicense#_	Expires Expires		
RDALicense#_	Expires		
RDALicense#	Expires		
All RDA instructors shall hold valid California F	Radiation Safety Certificate.		
Faculty/Student Ratio: Didactic:Lab:_Clinical:_			
Name of supervising dentist(s) responsible for clinical training:			
ivaline of supervising definish(s) responsible for	Cililical trairility.		
	License# Evnires		

TOTAL LENGTH O	F RADIATION SAFETY PR	ROGRAM (Hou	rs)
Didactic Hours	Laboratory Hours	_ Clinical Hou	rs
Number of separate Total number of ope Does the facility hav Will an automatic Pr Number of full-mout performed on a lab in Number of bitewing Number of full-mout performed on patien Are all radiographic diagnostic quality? Are extra-mural facility	manikin: surveys, consisting of at lea h periapical surveys, consis its clinically: surveys exposed by and ev lities used for clinical trainin ch contract of affiliation with	erable x-ray unit (excluding parent?  sting of at least ast 4 films each sting of at least raluated by the g exposing der	nanograph)  18 films, 4 of which must be bitewings, n, performed on a lab manikin: 18 films, 4 of which must be bitewings, student and faculty for acceptable
	Please provide a	diagram of	the facility
	•		
			completes the course. Please attach a
The certificate should	ld contain, but not necessar	rily be limited to	the following information:
✓ Date ✓ Sign	dent Name e Course Completed ature of Administrator/Facu al Board Issued Course ID		<ul> <li>✓ Course Provider Name</li> <li>✓ Course Provider Address</li> <li>✓ Number of course hours</li> <li>✓ School Seal</li> </ul>
			MPLETE, OR IF ANY DOCUMENT MIT 1 ORIGINAL AND 2 COPIES OF AL
California that the st correct and that the	atements made above and attached radiation safety pr	the information ogram will be o	jury under the laws of the State of n provided with this application are true an conducted in accordance with Section 165 Code of Regulations Section(s) 1014 and
Date	<u></u>	Signature	
School Seal		Title of person	on authorized to represent course

#### PROVIDER CLASSIFICATION / SETTING

Please indicate the provide	er's classification(s):	
Community College Vocational Program	Dental School CE Provider	Private Vocational College
Other	02 1 1001401	(Specify)
Does your facility offer app	roved programs in Den	tal 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				
Type of Appointment:	Full Time	Other (describe):		
Years of Professional Expe				
Years of Teaching Experien	nce:			
Type of Institution:				
Employment History:	Attach resum	e		
Educational Background:				
Degree	Where Obtained			Year Conferred
	·			<del></del>
License/Certificates:				
License Type Nur	mber	Expiration Date:	_Radiology _	
Other:				
Teaching Credentials:	Туре:	Date Conferred_		
And/or Teaching methodology cert	ification	Date Conferred_		
		t, curriculum vita, current ( odology certification must		

## 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 \_\_\_\_\_ 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 all 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.

VEC

NO

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

	163	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.
STER	ILIZ	ATION/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.
EQUI	PME	ENT AND SUPPLIES
,	11.	Please provide a list of the audiovisual equipment and classroom instructional materials used for the course.
1	12.	Please provide a list of all x-ray equipment, manikins, and supplies maintained by the program.
CURF	RICL	JLUM
,	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 suffice.
		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 per 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

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

that are deemed undiagnostic.

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		
eva	s application for approval is submitted to the Dental Boar luation of this institution as a Board-approved radiation s cessing of our application, all required documents are att	afety course. To exped	
We	certify:		
1.	In preparing this application there was broad participat administrative staff listed below and consultation with a concerned with the radiation safety course.		
2.	We believe this application truly and accurately portray	s this program.	
3.	Faculty members are familiar with the contents of this a	application.	
Nan	nes and titles:	License Number	Expiration Date
Pro	gram Director		
F	aculty		
Sup	pervising Dentist		