

Course Information

Course Number: 4310
Course Title: Oral Radiography
Section: Summer 2025-Spring 2026
Time: Clinical hours
Location: Radiology Clinic (room508 A) in Clinical and Educational Building
Credit Hours: 1.0

Instructor Details

Course Director: Solaleh Shahmirzadi, DDS, MS
Office: Administration building 216
Phone: 214 828-8390
E-Mail: s.shahmirzadi@tamu.edu
Office Hours: 8am-5pm, Monday & Wednesday-Friday (Arranged by appointment)

Additional Participating Faculty

Scott A. Ehlers, DDS
Office: 216
Phone: 214 828-8390
Email: ehlerssc@tamu.edu

Michael B. Payne, DDS
Email: mbpayne@tamu.edu

Other Participating Residents:

Prajakta Chaudhari, BDS, MS
Grant Kasal, DMD
Madhulika Sarvepalli, BDS, MS

Course Description

This course is intended to provide the student with clinical experience in the application of the principles, procedures, and techniques of oral radiography.

Course Prerequisites

Oral Radiology 3220

Special Course Designation

Dental hygiene senior course

Course Learning Outcomes

Upon completion of this course, the student will be able to:

1. Expose and process adult dentulous and partially dentulous radiographic surveys.
2. Expose and process pediatric radiographic surveys.
3. Expose and process panoramic radiographs.
4. Complete all radiographic surveys with a minimum of patient exposure.
5. Recognize radiographs of diagnostic quality.
6. Recognize and correct exposure and processing artifacts.
7. Recognize both the normal and abnormal radiographic appearance of teeth and bone.

Learning Outcomes/Competencies:

- 1.1 Apply ethical reasoning to dental hygiene and practice with professional integrity.
- 1.2 Comply with state and federal laws governing the practice of dentistry and dental hygiene.
- 2.1 Apply critical thinking skills and evidence-based decision making to the practice of dental hygiene.
- 2.3 Communicate effectively with diverse populations without discrimination.
- 6.1 Determine medical conditions that require special precautions or consideration prior to or during dental hygiene treatment.
- 6.2 Perform an extraoral and intraoral examination of the patient including assessment of vital signs and radiographic examination and distinguish normal from abnormal findings.
- 6.3 Manage the patient at risk for a medical emergency and be prepared to handle the emergency should it occur during an appointment.
- 6.5 Analyze and interpret the assessment data to formulate a dental hygiene diagnosis related to and congruent with the diagnosis of the dentist and other health professionals.
- 8.1 Provide an environment conducive to health by using accepted infection control procedures.
- 8.5 Provide dental hygiene services in a variety of settings.

Textbook and/or Resource Materials

Recommended textbook: White and Pharoah's Oral Radiology: Principles and Interpretation. 8th edition, 2018. Sanjay M. Mallya and Ernest W.N. Lam. Elsevier

Grading Policy

Evaluation Criteria/Methods:

Adult patients. There is a requirement for students to complete **6 sets** of Full Mouth Series (FMX) on adult patients and **five** panoramic images. Complete all assigned radiographic surveys while in attendance at the Radiology Clinic (room 508 A).

Each FMX consisting of seven or more intraoral projections will be evaluated according to the clinical grading criteria for dental hygiene students. All surveys started must be completed. Partial adult radiographic surveys of less than seven projections, adult interproximal, occlusal and panoramic surveys will be evaluated on the basis of pass/fail.

Pediatric patients. Complete **at least three** intraoral radiographic surveys on patients during assignments to either the Pediatric Dentistry Clinic or any of the College satellite clinics before the end of Fall semester, and complete additional one intraoral radiographic survey in Spring semester. Total requirement is **4 sets** of pediatric radiographs in senior year. These surveys may include the pediatric complete mouth, interproximal, or occlusal surveys.

All pediatric surveys will be evaluated pass/fail by faculty in the Pediatric Dentistry Clinic or any of the College satellite clinics. In order to receive credit for pediatric surveys the evaluation slip, signed by a faculty of one of these clinics and a grade report form, must be presented to and recorded in the Radiology Clinic.

Grades. "Incomplete" progress grades will be reported at the end of the summer and fall semester. A final grade will be reported at the end of the spring semester. To receive a passing grade, all assignments in the Radiology Clinic must be completed.

The final grade for the course will be determined by the following:

- **Section 1:** Completion of radiographic examination, quality analysis, radiographic interpretation when you are in Radiology Clinic or with walk-in patients for FMX. The grade of each FMX will be recorded in axiUm in the quality assessment form and the average for all FMX you take during DH2 year will be recorded and be part of the final grade for clinical course 4310.
- **Section 2:** Competency exam. The evaluation of a competency will be rated as **Pass or Fail**, and not a numeric grade. The evaluation result will be recorded in axiUm on the quality assessment form. Multiple try out with the make-up study of technique and interpretation skills until passing the competency exam is allowed.

Section 1:

The student is assigned to the Radiology Clinic during the DH2 year. During this period, the student is expected to complete each study and perform any related task assigned. All radiographic images made by the student in the Radiology Clinic, including those images made on patients assigned to the student will be evaluated by an attending radiology faculty member.

The grade representing this evaluation will be determined in part by using the criteria of acceptable periapical and interproximal radiographic images and the Evaluation Grading Scale described below.

Radiology clinical grading criteria (Clinical grading on FMX)

(1.0) PROFESSIONALISM / MANAGEMENT SKILLS

- Ethics/integrity
- Willingness to accept instruction
- Patient records/financial management
- Work habits/time management/punctuality
- Student attire/grooming
- Adheres to rules and procedures
- Prep for procedure/lab communication
- Instrument/material set up/radiation safety
- Infection control/cleanliness
- Confidence/independence
- Reaction to stress
- Interpersonal skills (patient and staff)

(2.0) RADIOGRAPHIC TECHNIQUE *

- Exposure factors
- Image receptor placement/PID placement
- Image processing
- Mounting and image evaluation
- Manual skills



0-1 Errors	=	-0.0
2-3 Errors	=	-0.5
4-5 Errors	=	-1.0
6-7 Errors	=	-1.5
≥ 8 Errors	=	- 2.0

(1.0) RADIOGRAPHIC INTERPRETATION / EVALUATION

- Dental caries
- Periodontal disease
- Anomalies/regressive changes
- Other local/systemic diseases

NOTE: Professionalism breeches, if significant, may supersede the normal weighting factor at the discretion of the attending faculty.

** Graded on the basis of technical errors, not remakes.*

This grade will be recorded in axiUm on the quality assessment form. All FMX will receive a numeric grade. To receive a passing grade, the average for all FMX must be 2 or more and a competency procedure must be completed successfully. If this average is less than 2, remediation will be required before competency procedure can be attempted. Significant deficiencies in professionalism may result in a reduction of the final grade (up to one letter grade). The average for all FMX you take during DH2 year will be recorded and be part of final grade for clinical course 4310.

Section 2:**Clinical radiology technique and interpretation competency assessment**

When you have successfully made **three** diagnostically acceptable FMX with a minimum average of 3.0, and exposed **one** panoramic image, and reviewed the images and report with a Radiology faculty member, you may select any patient reporting for radiographic studies from the screening and/or comprehensive care for purposes of establishing clinical competency in technique and interpretation. There is heavy emphasis on normal anatomy. Therefore, the radiology faculty will supervise the competency procedure directly.

You were required to have successfully completed 3 FMX and 1 panoramic radiograph before challenging your competency procedure. However, we will assess your eligibility to challenge the competency procedure based on patient availability.

Students who do not successfully complete the Radiology Technique and Interpretation Competency Assessment must remediate the summative assessment by selecting and making radiographs on another patient until it is performed at a satisfactory level without assistance.

Lastly, only those interpretations completed and signed off in Radiology will count toward Competency requirements.

Remediation Policy:

By the end of the spring semester, an average of 2.0 must be achieved for all adult complete mouth surveys. If the average is less than 2.0, the student will be required to complete five additional adult complete mouth surveys at a proficiency level of 2.0 or above.

4.0 = 100

3.5 = 92

3.0 = 89

2.5 = 83

2.0 = 79

1.0 = 74

Dental Hygiene Students

LETTER GRADE	NUMERICAL GRADE RANGE	GRADE POINTS	DESCRIPTOR
A	90-100	4.0	Excellent
B	80-89	3.0	Good
C	75-79	2.0	Fair
D	70-74	1.0	Poor, may require remediation
F	Below 70	0.0	Failure
S		0.0	Satisfactory
U		0.0	Unsatisfactory
I			Incomplete (work or assignments)

Makeup assessments for excused absences must be administered either in advance of the scheduled exam or within 5 business days of the student's return from the absence.

Graded Class Participation – N/A

Graded Attendance – N/A

Grading Policy Changes – N/A

Late Work Policy – N/A

Course Schedule

Date	Session Title/Topic
2025-2026	Oral Radiology Clinical Rotation Schedule
The students will be assigned to the Radiology Clinic on a schedule provided by the office of Dental Hygiene Program.	

Traditionally Delivered Course – Fall/Spring =17 weeks, Summer =8 weeks

Non-Traditionally Delivered Course – N/A

Optional Course Information Items

Technology Support

Students are responsible for maintaining their devices and ensuring that they are in proper working order throughout the semester. This includes maintaining access to the college wireless network, access to all accounts (both TAMU and TAMU Health) and keeping passwords up to date. Students are expected to keep their devices up to date in regard to patches and OS updates.

Division of IT

If the student experiences issues with an electronic device, wifi access, axiUm, Zoom, or user accounts, their first point of contact should be the Division of IT Central Help Desk or the local Division of IT at COD. The Central Helpdesk provides 24-hour support.

Division of IT Central Help Desk Website: https://it.tamu.edu/help/ Phone: 1-979-845-8300 Email: helpdesk@tamu.edu	COD Local Division of IT Office Room: 519 Phone: 214-828-8248
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COD Instructional Design Team

For electronic exam support or problems concerning other academic technology, such as the LMS (Canvas), ExamSoft, or Examplify, students should contact the Instructional Design team.

Room: 516 - Academic Affairs

Carmina Castro

ccastro@tamu.edu

(214) 828-8316

Jeff Lowry

lowryj1@tamu.edu

(214) 828-8243

Canvas support 24-hours

(877) 354-4821

Lecture Recordings and Mediasite Support

Lecture recordings are posted to the Mediasite course catalog typically no more than 24 hours after they have been received. Unless otherwise specified, all course recordings are available via the Mediasite channel link within the Canvas course.

For missing recordings, contact your instructor and the Instructional Design Team.

For problems with recording playback, Mediasite access, or performance, contact IT's Health Technology Care Team (979.436.0250).

University Policies

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

DDS students, please refer to your student handbook, DH students please refer to student rule 7 for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the Office of Student Affairs.

Please refer to [Student Rule 7](#) in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" ([Student Rule 7, Section 7.4.1](#)).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" ([Student Rule 7, Section 7.4.2](#)).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See [Student Rule 24](#).)

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" ([Section 20.1.2.3, Student Rule 20](#)).

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You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu. You can also contact Graduate Studies at 214-828-8182, Student Affairs at 214-828-8210, or your Program Director, for guidance.

Americans with Disabilities Act (ADA) Policy

Texas A&M College of Dentistry

Texas A&M University is committed to providing equitable access to learning opportunities for all students. All students are encouraged to discuss their disability-related needs with Disability Resources and their instructors as soon as possible. If you experience barriers to your education due to a disability which may include, but not limited to: attentional, learning, mental health, sensory, physical, or chronic health conditions, visit Disability Resources for more information. <http://disability.tamu.edu>.

The primary contact for any new disability accommodation requests and for any accommodation questions/concerns:

Tracey Forman, Associate Director of Disability Resources
979.845.1637 | traceyf@disability.tamu.edu |

Staff and administration in Student Affairs, Student Development and Academic Affairs are available as needed to discuss any concerns and navigate the accommodations process with our students locally.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see [University Rule 08.01.01.M1](#)):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

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Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's [Title IX webpage](#). College of Dentistry students can contact Graduate Studies at 214-828-8182, Student Affairs at 214-828-8210, Security at 214-828-8335, their Program Director, or their Department Head to report an incident.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care by utilizing available resources and services on your campus.

Texas A&M College of Dentistry

Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org. You can also contact Graduate Studies at 214-828-8182 or Student Affairs at 214-828-8210 for a referral to a local counselor. These counseling sessions are private and confidential, as are any referral requests. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



Campus-Specific Policies

Statement on the Family Educational Rights and Privacy Act (FERPA)

FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. Currently enrolled students wishing to withhold any or all directory information items may do so by going to howdy.tamu.edu and clicking on the "Directory Hold Information" link in the Student Records channel on the MyRecord tab. The complete [FERPA Notice to Students](#) and the student records policy is available on the Office of the Registrar webpage.

Items that can never be identified as public information are a student's social security number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.

Directory items include name, UIN, local address, permanent address, email address, local telephone number, permanent telephone number, dates of attendance, program of study (college, major, campus), classification, previous institutions attended, degrees honors and awards received, participation in officially recognized activities and sports, medical residence location and medical residence specialization.

College and Department Policies

College and departmental units may establish their own policies and minimum syllabus requirements. As long as these policies and requirements do not contradict the university level requirements, colleges and departments can add them in this section. Please remove this section if not needed.