GRAYSON COLLEGE

Course Syllabus

DNTA 1349 Radiology in the Clinic
SPRING 2017
Dental Assisting Program
Lecture hours per week 1
Lab hours per week 4
Clock hours per semester 80

Lecture Room 205 Wednesday's 10:00 AM -11:00 AM
Lab Room 201, & 203 Friday's 8:00 AM-12:00 PM

Professor Contact Information
Tonya Hance CDA, RDA
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Office Location: Health Science Administration Office 132

Office Hours:	**Monday**	**8:00 am to 3:00 pm**
	Tuesday	**8:00 am to 3:00 pm**
	Wednesday	**8:00 am to 10:00 am & 11:00 am to 12:00 pm**
	Thursday	**8:00 am to 9:00 am & 1:00 pm to 3:00 pm**
	Friday	**1:00 pm to 3:00 pm**
Professor's Class Schedule:	**Monday**	**Clinical Evaluations**
	Tuesday	**Clinical Evaluations**
	Wednesday	**10:00 am to 11:00 am & 1:00 pm to 4:00 pm**
	Thursday	**9:00 am to 12:00 pm**
	Friday	**8:00 am to 12:00 pm**

Credit Hours 3
Lecture Hours 1
Laboratory Hours 4
Course Length 16 Weeks

Types of Instruction Lecture/Lab

Pre-requisites
DNTA 1311 Dental Science
DNTA 1301 Dental Materials
DNTA 1345 Preventive Dentistry
DNTA 1315 Chairside Dentistry
DNTA 1305 Dental Radiology I
DNTA 1251 Office Management

Co-requisites
DNTA1241 Dental Lab Procedures
DNTA1347 Advanced Dental Science
DNTA 2130 Clinical Seminar
DNTA1353 Dental Assisting Applications
DNTA 1460 Clinical I Dental Assisting

Course Description – (1-4-3) The Practical application of exposing, processing and mounting diagnostically acceptable radiographs obtained by utilizing various radiographic techniques. Specific federal and state safety and standard practices for the classroom and lab settings will be practiced.

Student Learning Outcomes (Course Objectives)-

- Perform radiographic techniques in the clinical setting
- Produce diagnostically acceptable radiographs utilizing the ALARA concept
- Perform FMX while identifying patient considerations and comfort
- Answer common patient questions regarding the need for dental radiographs
- Identify and correct miscellaneous technique errors

Required Textbook and Materials

1. Iannucci, Joen M.,DDS, MS, and Laura Jansen Howerton, RDH,MS, **DENTAL RADIOGRAPHY PRINCIPLES AND TECHNIQUES,** Fifth Edition(2017). Elesevier/Saunders Publishers (ISBN#9780323297424)
2. Microsoft Office Software
3. Pens, Pencils, Highlighters, Paper, Notebooks
4. Student Uniforms
5. Dental Assisting Student ID

Reference Textbook

Bird, Doni L., CDA,RDH,MA, and Debbie S. Robinson, CDA,MS, **MODERN DENTAL ASSISTING,** Tenth Edition (2012). Elsevier/Saunders Publishers (ISBN#978-1-4377-1729-7)

Required Assignments & Academic Calendar

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

As a secondary means of communication the app GroupMe will be used. It is not a requirement of the class, but I strongly urge each of you join the class GroupMe. Any announcements such as inclement weather, class announcements, or in the event class must be canceled due to instructor illness or emergencies an announcement will be made in Canvas, as well as, GroupMe.

The Schedule below will have the Lecture chapters and Lab dates listed with lab activities and assignments.

The schedule listed below is subject to change with fair notice from the professor. Changes will be announced in the classroom, through the Canvas course, and in GroupMe.

Table 1 Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	Jan. 18 Jan. 20	**Lecture**: **Module 1** C-22 Panoramic Imaging & C-23 Extraoral Imaging • Assessments on Canvas for C-22 and C-23 **(Due 1/25/17 midnight)** **Lab:** • Start 20 Minute FMS on Manikin / (Opt. 2 & 3) for an **Radiographic Technique Grade- Dr. Moore will grade (Due by 1/27/2017)** • Demonstrate and have students expose 4 Molar PA'S, Bisecting Angle on Manikin (Opt. 4, 6 students) • Turn in grades for 20 minute FMS if completed today- remaining students will complete next week. • Practice Snap-A-Ray placement on Manikin in lab • Practice other clinical skills/ homework/ computer lab • Clean lab, clinic and instruments used following INFECTION CONTROL PROTOCOL • **Dr. Moore Clinical's Speech**
2	Jan. 25 Jan. 27	**Lecture**: **Module 2** C-29 Normal Anatomy: Panoramic Images • Assessments on Canvas for C-29 **(Due 2/1/17 by midnight)** **Lab**: • Finish taking 20 Minute FMS on Manikin / (Opt. 2,) **for an Radiographic Technique Grade- Dr. Moore will grade** • **All 20 Minute FMS Due today by Noon** • Expose 4BWX on ADULT Manikin/ **Radiographic Technique GRADE- DR. MOORE WILL GRADE Due 2/3/16 by Noon** (Opt. 3) • Practice Exposing FMS using Bisecting Angle on Manikin (1 operatory/ 6 students) (Opt. 4) • Practice Snap-A-Ray placement on Manikin- **you will have to place and expose one next week for a radiographic technique grade.** • Competency :Producing a FMS using Bisecting Angle Technique • Demonstrate preparing equipment for Panoramic imaging • Demonstrate preparing patient for Panoramic imaging • Practice other clinical skills in Lab • Homework/ computer lab/ Video • Clean lab, clinic and instruments following infection control protocol
3	Feb. 1 Feb. 3	**Lecture: Module 1 & 2 Test** • **TEST #1-C 22, C- 23, & C-29** **Lab:** • **All BW Grades Due today by Noon**

Week	Date	Topics, Readings, Assignments, Deadlines
		• Expose 1 posterior PA of choice using Snap-A-Ray for an **Radiographic Technique Grade- Dr. Moore will grade – Due today by Noon** (Opt. 2 & 3) • Expose 2BW, 2 OCCL on Pediatric Manikin (Opt. 4)– **Dr. Moore will grade for skills grade.** • Demonstrate preparing equipment for Panoramic imaging • Demonstrate preparing patient for Panoramic imaging • Demonstrate positioning the patient for Panoramic imaging • Expose a Panoramic radiograph using Manikin • Practice other Clinical skills in Lab • Homework/computer lab/ Video • Clean lab, clinic and instruments following infection control protocol
4	Feb. 8 Feb. 10	**Lecture:** **Module 3** C-18 Bisecting Technique • Assessment on Canvas for C-18 **(Due 2/15/17 by midnight)** **Lab**: • **First Patient Day (1 ½ hour limit per patient/ 6 patients total)** • Sterilization Tech 1 per half hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework Clean lab, clinic and instruments following infection control protocol
5	Feb. 15 Feb. 17	**Lecture**: **Module 4** C-19 Bite-Wing Technique & C-21 Occlusal and Localization Techniques • Assessments on Canvas for C-19 and C-21 **(Due 2/22/17 by midnight)** **Lab**: **Guest Speaker- Dr. Courtright** • Practice other Clinical skills in Lab • Homework/computer lab/ Video Clean lab, clinic and instruments following infection control protocol
6	Feb. 22 Feb. 24	**Lecture**: **Module 3 & 4 Test** • **TEST#2- C-18, C-19, & C-21** **Lab**: • **Patient Day (1 ½ hour limit per patient/ 8 patients total)** • Sterilization Tech 1 per half hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework

Week	Date	Topics, Readings, Assignments, Deadlines
		• Clean lab, clinic and instruments following infection control protocol
7	Mar. 1 Mar. 3	**Lecture**: **Module 5** C-20 Exposure and Technique Errors & C-30 Introduction to Image Interpretation • Assessments on Canvas for C-20 & C-30 **(Due 3/8/17 by midnight)** **Lab**: • **Patient Day (1 ½ hour limit per patient/ 8 patients total)** • Sterilization Tech 1 per half hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework • Clean lab, clinic and instruments following infection control protocol
	Mar. 8 Mar. 10	**Lecture**: **Module 5 Test** • **TEST #3- C-20, & C-30** **Lab**: • **Patient Day (1 ½ hour limit per patient/ 8 patients total)** • Sterilization Tech 1 per hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework Clean lab, clinic and instruments following infection control protocol
8	March 13 - 17	**SPRING BREAK HOLIDAY** Enjoy your week.
9	Mar. 22 Mar. 24	**Lecture**: **Module 6** C-31 Descriptive Terminology & C-32 Identification of Restorations, Dental Materials and Foreign Objects • Assessments on Canvas for C 31 and C 32 **(Due 3/29/17 by Midnight)** **Lab**: **PROFESSIONAL DEVELOPMENT-STUDENT HOLIDAY** Enjoy Your Day Off!!! •
10	Mar. 29 Mar. 31	**Lecture**: **Module 6 Test** • **TEST #4- C-31 & C-32** **Lab**: • **Patient Day (1 ½ hour limit per patient/ 8 patients total)**

Week	Date	Topics, Readings, Assignments, Deadlines
		• Sterilization Tech 1 per hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework • Clean lab, clinic and instruments following infection control protocol
11	Apr. 5 Apr. 7	**Lecture**: **Module 7** C-33 Interpretation of Dental Caries, C-34 Interpretation of Periodontal Disease, & C-35 Interpretation of Trauma, Pulpal and Periapical Lesions • Assessments on Canvas for C-33, 34, 35 **(Due 4/12/17 by Midnight)** **Lab**: • **Patient Day (1 ½ hour limit per patient/ 8 patients total)** • Sterilization Tech 1 per hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework • Clean lab, clinic and instruments following infection control protocol
12	Apr. 12 Apr. 14	**Lecture**: **Module 7 Test** • **TEST # 5- C-33, C-34, & C-35** **Lab**: • **Patient Day (1 ½ hour limit per patient/ 8 patients total)** • Sterilization Tech 1 per hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient • Videos/ Computer lab/ Homework • Clean lab, clinic and instruments following infection control protocol
13	Apr. 19 Apr. 21	**Lecture**: **Module 8** C-14 Legal Issues and the Dental Radiographer **Module 8 Test** • **Test #6 C-14 Online Canvas Exam- to be done solo! (Due 5/3/17 by Midnight)** **Lab**: • **Last Patient Day (1 ½ hour limit per patient/ 8 patients total)** • Sterilization Tech 1 per hour • Practice clinical skills in lab • Fabricate Occlusal Guard/ Bleach Trays from impressions taken on patient

Week	Date	Topics, Readings, Assignments, Deadlines
		• Videos/ Computer lab/ Homework • Clean lab, clinic and instruments following infection control protocol
14	Apr.26 Apr. 28	**Lecture**: • Videos/ Computer lab/ Homework • Work on Online Exam if needed: This is to be done solo! **Lab**: • **Dr. Moore's Farewell Speech/" Welcome to the Real World"** • Empty supplies from Clinic/ Clean Clinic • Complete filing all patient charts • Organize and shut down the lab
15	May 3	• **Nitrous Course and Exam w/ Dr. Moore** • **Test will be given at 3:00 pm**
16	May 9	**Final Exam 8:00 am in the Computer Lab**

**** Please note that ALL Occlusal Guards and Bleach Trays that are fabricated in Lab are for practice purposes only and will be destroyed by the Instructor or Dr. Moore after turned in for grade ****

Chapter 22 Panoramic Imaging

Course Outline:

- Basic Concepts
  - Purpose and Use
  - Fundamentals
  - Equipment
- Step-by-Step Procedures
  - Equipment preparation
  - Patient Preparation
  - Patient Positioning
- Common Errors
  - Patient-preparation errors
  - Patient- positioning errors
- Advantages and Disadvantages
  - Advantages of Panoramic Imaging
  - Disadvantages of Panoramic Imaging

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with panoramic imaging

2. Describe the purpose and uses of panoramic imaging
3. Describe the fundamentals of panoramic imaging
4. Describe the equipment used in panoramic imaging
5. Describe patient preparation, equipment preparation, and patient- positioning procedures before exposing a panoramic projection.
6. Identify the patient-preparation and patient- positioning errors seen on panoramic images
7. Discuss the causes of patient-preparation and patient-positioning errors and the necessary measures needed to correct such errors.
8. Discuss the advantages and disadvantages of panoramic imaging

Chapter 23 Extraoral Imaging

Course Outline:

- Basic Concepts
    - Purpose and use
    - Equipment
- Step-by-Step Procedures
    - Equipment Preparation
    - Patient Preparation
    - Patient Positioning
- Extraoral Projection Techniques
    - Lateral Jaw Imaging
    - Skull Imaging
    - Temporomandibular Joint Imaging

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with extraoral imaging
2. Describe the purpose and uses for extraoral imaging.
3. Describe the equipment used in extraoral imaging.
4. Detail the equipment and patient preparations necessary before exposing an extraoral projection
5. Identify the specific purpose of each of the extraoral projections
6. Describe the head position, the receptor placement, and the beam alignment for each of the following: lateral jaw projection, lateral jaw projection-ramus of the mandible, lateral cephalometric projection, posteroanterior projection, Waters projection, submentovertex projections, reverse Towne projection, and transcranial projection.

Chapter 29 Normal Anatomy: Panoramic Images

Course Outline:

- Normal Anatomic Landmarks
    - Bony Landmarks of Maxilla and Surrounding Structures
    - Bony Landmarks of Mandible and Surrounding Structures
- Air spaces seen on Panoramic Images
- Soft tissue seen on Panoramic Images

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with normal anatomy on panoramic images
2. Identify and describe the bony landmarks of the maxilla
3. Identify and describe the bony landmarks of the mandible and surrounding structures as viewed on the panoramic Image
4. Identify air spaces as viewed on the panoramic image
5. Identify soft tissues as viewed on the panoramic image

Chapter 18 Bisecting Technique

Course Outline

- Basic Concepts
    - Terminology
    - Principles of Bisecting Technique
    - Receptor Stabilization
    - Receptors Used in Bisecting Technique
    - Position-Indicating Device Angulations
    - Rules of Bisecting Technique

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with bisecting technique
2. State the rule of isometry
3. State the basic principles of the bisecting technique and illustrate the location of the receptor, tooth, imaginary bisector, central ray, and position- indicating device (PID)
4. List the beam alignment devices that can be used with the bisecting technique
5. Describe the receptor size used with the bisecting technique
6. Describe the correct and incorrect horizontal angulation
7. Describe correct and incorrect vertical angulation
8. State each of the recommended vertical angulation
9. State the basic rules of the bisecting technique
10. Describe patient and equipment preparations necessary before using the bisecting technique
11. Discuss the exposure sequence used for the 14 periapical receptor placements used in the bisecting technique
12. Describe each of the 14 periapical receptor placement recommended for use in the bisecting technique
13. List the advantages and disadvantages of the bisecting technique

Chapter 19 Bite-Wing Technique

Course Outline:

- Basic Concepts
    - Principles of Bite-Wing Technique
    - Beam Alignment Device and Bite-Wing Tab
    - Bite-Wing Receptors
    - Position-Indicating Device Angulation
    - Rules of Bite-wing Technique
- Step-By-Step Procedures
    - Patient Preparation
    - Equipment Preparation
    - Exposure Sequence for Receptor Placements
    - Bitewing Receptor Placement

- Vertical Bite-Wings
- Bite-Wing Technique Modifications
    - Edentulous Spaces
    - Bony Growths

Expected Learning Outcomes

1. Define the key terms associated with the bite-wing technique
2. Describe the purpose and use of the bite-wing image
3. Describe the appearance of opened and overlapped contact areas on a bite-wing technique
4. State the basic principles of the bite-wing technique
5. List the two ways a receptor can be stabilized in the bite-wing technique and identify which one is recommended for bite-wing exposures.
6. List the three receptor sizes that can be used in the bite-wing technique and identify which size is recommended for bite-wing exposures
7. Describe correct and incorrect horizontal angulation
8. Describe the difference between positive and negative vertical angulation
9. State the recommended vertical angulation for all bite-wing exposures using a bite-wing tab
10. State the basic rules for the bite-wing technique
11. Describe patient and equipment preparations that are necessary before using the bite-wing technique
12. Discuss the exposure sequence for a complete mouth radiographic series that includes both periapical and bite-wing exposures
13. Describe the premolar and molar bite-wing receptor placements
14. Describe the purpose and use of vertical bite-wing images
15. List the number of exposures and the size of receptor used in the vertical bite-wing technique

Chapter 21 Occlusal and Localization Techniques

Course Outline:

- Occlusal Technique
    - Basic concepts
    - Step-by-Step Procedures
- Localization Techniques
    - Basic concepts
    - Step-By-Step Procedure

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with occlusal and localization techniques
2. Describe the purpose of occlusal examination
3. List the uses of occlusal examination
4. Describe the patient and equipment preparations that are necessary before using the occlusal technique
5. State the recommended vertical angulations for the following maxillary occlusal projections : topographic, lateral (right or left), and pediatric
6. State the recommended vertical angulations for the following mandibular occlusal projections; Topographic, the cross-sectional and the pediatric
7. State the purpose of localization techniques
8. Describe the buccal object rule

9. Describe the right angle technique
10. List the patient and equipment preparations that are necessary before using the buccal object rule or the right angle technique
11. Describe receptor placements for the buccal object rule and compare the resulting images
12. Describe receptor placements for the right angle technique and compare the resulting images

Chapter 20 Exposure and Technique Errors

Course Outline:

- Receptor Exposure Errors
  - Exposure problems
  - Time and exposure factor problems
- Periapical Technique Errors
  - Receptor placement problems
  - Angulation problems
  - Position-indicating device alignment problems
- Bitewing Technique Errors
  - Receptor placement problems
  - Angulation problems
  - Position-indicating device alignment problems
- Miscellaneous Technique Errors
  - Film Bending
  - Film Creasing
  - Phalangioma
  - Double Exposure
  - Movement
  - Reversed Film

Expected Learning Outcomes (Objective)

1. Define the key terms associated with exposure and technique errors
2. Identify and describe the appearance of the following errors: unexposed receptor, film exposed to light, underexposed receptor, and overexposed receptor
3. Describe vertical and horizontal angulation
4. Identify and describe the appearances of the following periapical technique errors: incorrect horizontal or vertical angulation, and incorrect beam alignment.
5. Describe and identify proper receptor placement for bite-wing radiographs.
6. Identify and describe the appearances of the following bitewing technique errors: incorrect horizontal and vertical angulation, and incorrect PID Alignment.
7. Identify and describe the appearances of the following miscellaneous technique errors: film bending, film creasing, phalangioma, double exposure, movement, and reversed film.

Chapter 30 Introduction to Image Interpretation

Course Outline:

- Basic Concepts
  - Interpretation terminology
  - Importance of Interpretation
- Guidelines

- Who interprets images?
- Interpretation versus diagnosis
- When and where are images interpreted?
- Interpretation and Patient Education

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with interpreting images
2. Summarize the importance of the interpretation of images
3. Define the roles of the dentist and the dental auxiliary in the interpretation of dental images
4. Discuss the difference between interpretation and diagnosis
5. Describe who is able to interpret dental images
6. Describe when and where dental images are interpreted
7. Describe how interpretation can be used to educate the dental patient about the importance and use of dental images

Chapter 31 Descriptive Terminology

Course Outline:

- Definition and Uses
  - What is descriptive terminology
  - Why use descriptive terminology
  - Descriptive terminology versus diagnosis
- Review of Basic Terms
  - Radiograph/Dental Image versus x-ray
  - Radiolucent versus radiopaque
  - Terms used to describe radiolucent lesions
  - Terms used to describe radiopaque lesions

Expected Learning Outcomes (Objectives)

1. Identify the categories of information that should be documented for al lesions viewed on dental images
2. Define descriptive terminology and describe why the dental professional should use descriptive terms
3. Define the terms dental image, radiograph, x-ray, radiolucent, and radiopaque
4. Distinguish the terms radiograph, dental image, and x-ray.
5. Distinguish the terms radiolucent and radiopaque
6. Define the terms unilocular and multiocular
7. Define the terms periapical, inter-radicular, edentulous zone, pericoronal, and alveolar bone loss.
8. Identify radiolucent lesions on a dental image in terms of appearance, location, and size
9. Define the terms focal opacity, target lesion, multifocal confluent pattern, irregular/ill-defined opacity, ground glass opacity, mixed lucent-opaque lesion, and soft tissue opacity.
10. Identify radiopaque lesions on a dental image in terms of appearance, location and size.

Chapter 32 Identification of Restorations, Dental Materials and Foreign Objects

Course Outline:

- Identification of Restorations
  - Amalgam restorations
  - Gold restorations
  - Stainless Steel and Chrome Crowns
  - Post and core restorations
  - Porcelain restorations
  - Composite restorations
  - Acrylic restorations
- Identification of Materials Used in Dentistry
  - Materials used in Restorative Dentistry
  - Materials used in Endodontics
  - Materials used in Prosthodontics
  - Materials used in Orthodontics
  - Materials used in Oral Surgery
- Identification of Miscellaneous Objects
  - Jewelry
  - Eyeglasses and Napkin Chain

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with identifying restorations, materials and foreign objects on dental images
2. Discuss the importance of interpreting dental images while the patient is present
3. On dental images, identify and describe the appearance of the following restorations; amalgam, gold, stainless steel and chrome, post and core, porcelain fused to metal, composite and acrylic
4. On dental images, identify and describe the appearance of the following dental materials and devices: base materials, metallic pins, gutta percha, silver points , removable partial dentures, complete dentures, orthodontic bands, brackets and wires, fixed retainers, implants, suture wires, splints, and stabilizing arches and wires.
5. On dental images, identify and describe the appearance of the following miscellaneous objects: jewelry, eyeglasses and patient napkin chains

Chapter 33 Interpretation of Dental Caries

Course Outline:

- Description of Caries
- Detection of Caries
  - Clinical Examination
  - Dental Image Examination
- Interpretation of Caries on Dental Images
  - Interpretation Tips
  - Factors influencing Caries Interpretation
- Classification of Caries on Dental Images
  - Interproximal Caries
  - Occlusal Caries
  - Buccal or Lingual Caries
  - Root Surface Caries
  - Recurrent Caries
  - Rampant Caries

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with the interpretation of dental caries
2. Describe dental caries
3. Explain why caries appears radiolucent on a dental image
4. Discuss interpretation tips for evaluating caries on a dental image
5. Discuss the factors that may influence the image interpretation of dental caries
6. Detail the classification of caries on dental images
7. On a dental image, identify and describe the appearance of the following: incipient, moderate, advanced and severe interproximal caries
8. On a dental image, identify and describe the appearance of the following: incipient, moderate, and severe occlusal caries
9. On a dental image, identify and describe the appearance of the following: buccal, lingual, root surface, recurrent, and rampant caries

Chapter 34 Interpretation of Periodontal Disease

Course Outline:

- Description of the Periodontium
- Description of Periodontal Disease
- Detection of Periodontal Disease
    - Clinical Examination
    - Dental Image Examination
- Interpretation of Periodontal Disease on Dental Images
    - Bone Loss
    - Classification of Periodontal Disease
    - Predisposing Factors

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with interpreting periodontal disease
2. Describe the healthy periodontium
3. Briefly describe periodontal disease
4. Discuss the importance of the clinical examination and interpretation of dental images in the diagnosis of periodontal disease
5. Describe the limitations of dental images in the detection of periodontal disease
6. Describe the type of dental images that should be used to document periodontal disease and the preferred exposure technique
7. State the difference between horizontal bone loss and vertical bone loss
8. State the difference between localized bone loss and generalized bone loss
9. State the differences among mild, moderate and severe bone loss
10. List each of the four American Dental Association (ADA) case types and describe the corresponding appearance on dental images
11. Recognize each of the four ADA case types on dental images
12. List two predisposing factors for periodontal disease
13. Recognize and describe the appearance of calculus on dental images

Chapter 35 Interpretation of Trauma, and Pulpal and Periapical Lesions

Course Outline:

- Trauma Viewed on Dental Images
    - Fractures
    - Injuries
- Resorption Viewed on Dental Images
    - External Resorption
    - Internal Resorption
- Pulpal Lesions Viewed on Dental Images
    - Pulpal Sclerosis
    - Pulpal Obliteration
    - Pulp Stones
- Periapical Lesions Viewed on Dental Images
    - Periapical Radiolucencies
    - Periapical Radiopacities

Expected Learning Outcomes (Objectives)

1. Define the key terms associated with the interpretation of trauma, pulpal lesions, and periapical lesions as viewed on a dental image
2. Describe and identify the appearance of crown, root, and jaw fractures as viewed on a dental image.
3. Describe and identify the appearance of an avulsion as viewed on a dental image.
4. Describe and identify the appearance of internal and external resorption as viewed on a dental image.
5. Describe and identify the appearance of pulpal sclerosis, pulpal obliteration, and pulp stones as viewed on a dental image.
6. Describe and identify the appearance of periapical granuloma, cyst, and abscess as viewed on a dental image.
7. Describe and identify the appearance of condensing osteitis, sclerotic bone, and hypercementosis as viewed on a dental image.

Chapter 14 Legal Issues and the Dental Radiographer

Course Outline:

- Legal Issues and the Dental Radiographer
    - Federal and State Regulations
    - Licensure Requirements
- Legal Issues and the Dental Patient
    - Risk Management
    - Malpractice Issues
    - Patient Records
    - Patients who refuse Dental Radiographs

Expected Learning Outcomes (Objectives):

1. Define key words associated with legal issues
2. List federal and state regulations affecting the use of dental x-ray equipment
3. Describe the general application of federal and state regulations as they affect the dental auxiliary
4. Describe licensure requirements for exposing dental radiographs

5. Define the legal concept of informed consent
6. Describe ways to obtain informed consent from a patient
7. Discuss the legal significance of the dental record
8. Describe the legal implications of patient refusal to have dental x-radiation
9. Discuss how confidentiality laws affect the information in the dental record
10. Describe the patient's rights with regard to the dental record

Methods of Evaluation

Grading

Categories	Percentage
Assessments/Tests	25%
Radiographic Techniques	40%
Comp. Final Exam	35%
	100%

Grade	
90-100	A
80-89	B
75-79	C
74-70	D
69 or Below	F

Grades will be posted via Canvas

Late Work Policy
NO LATE WORK ACCEPTED.

Extra Credit Policy
NO EXTRA CREDIT WILL BE GIVEN.

Quizzes and Tests

1. Examinations will be graded via Exam Soft &/or Canvas and the grade will post once the student has submitted the exam.
2. A separate exam will be given to the student who is absent from an exam.
3. Quizzes are given at the discretion of the Professor and can be given unannounced. They are not posted, returned or given to a student who is absent.
4. REFER to the Student Handbook for complete quiz and test policies.
5. Tests and/or Exams fall into the tests category and make up 25% of your grade.

Class Participation

There will be a daily participation grade given. These grades will be placed into Homework category.

Dress Code
The dress code will be strictly enforced. If not followed, it can affect your daily participation grade.

Assessments

Assessments will be due one week from the date it was assigned.

Chapter assessments, pop quizzes, quizzes, class participation grades all fall into the Homework category and makes up 25 % of your grade in this class.

Other
Competency Assessments

1. Radiographic Techniques include the 3 patients that you will have this semester and will account for 40% of your grade.
2. Competency assessments are graded on a Pass/Fail basis with the student having the opportunity to repeat the skill three (3) times. The maximum numerical score on a second attempt to pass the check off is 89 & the third attempt to pass is a maximum score of 75. After the third attempt it will be a zero.
3. REFER to the Student Handbook for complete Skills Assessment Policy.

Methods of Instruction

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1. Class Discussions
2. Online Discussions
3. Class Activities, i.e. Case Studies discussions
4. Power Point Presentations
5. Videos/ You Tube presentations
6. Homework Assignments/ Assessments
7. Skills Assessments
8. Tests
9. Lab

Course & Instructor Policies

Class Room Behavior
We have a **Classroom Disruption Policy** that is : Each Student will be given one (1) warning and then dismissed from class for the rest of the day and will not be able to make up any work missed.

IT IS IMPORTANT THAT YOU, THE STUDENT, NOTIFY THE PROGRAM DIRECTOR OR INSTRUCTOR BY 7 AM IF YOU WILL NOT BE ABLE TO ATTEND CLASS ON A PARTICULAR DAY OR TIME.

Wendy Renfro renfrow@grayson.edu or office phone 903-415-2529
Tonya Hance hancet@grayson.edu or office phone 903-463-8780

Class Attendance
Academic success is closely associated with regular classroom attendance and course participation. All successful students, whether on campus or online, are expected to be highly self-motivated.

All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their professors' instructions. Students taking courses During compressed semester time frames such as mini-mester, summer sessions, and mid-semester should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. **More than two (2) absences are considered to be excessive**. In addition, students' eligibility to receive financial aid or live in a College dormitory can be affected by withdrawal from courses. When withdrawal occurs, any tuition refund would be made in accordance with state regulations.

Student Conduct & Discipline
Students are to maintain classroom decorum that includes respect for other students and the professor.

Disruptive behaviors such as harassment of fellow students and/or professors; persistent talking in class while lecture is in progress; using electronic equipment without authorization (cell phone/texting) or repeated tardy arrival to class will not be tolerated. Students will be counseled initially, but may be dismissed from the classroom for repeated offenses.

We have a **Classroom Disruption Policy** that is: Each Student will be given one (1) warning and then dismissed from class for the rest of the day and will not be able to make up any work missed

Cell phones need to be kept on silent notification at all times and left in the classroom. Cell phones during Lab, Pre-Clinical or Clinical days can result in lowered behavior grades.

PLEASE REFER TO THE STUDENT HANDBOOK FOR DETAILED RULES AND POLICIES.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic certificate or degree depends upon the absolute integrity of the work done by the student for that award, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic Dishonesty, any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material.

Copyright Notice

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials, including music and software. Copying, displaying, reproducing, or distributing copyrighted works may infringe the copyright owner's rights and such infringement is subject to appropriate disciplinary action as well as criminal penalties provided by federal law. Usage of such material is only appropriate when that usage constitutes "fair use" under the Copyright Act.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal from any college-level courses. These dates and times are published in that semester's schedule of classes. Administrative procedures must be followed. It is the student's responsibility to handle student initiated withdrawal requirements from any class. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled (see GC College Catalog for details).

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room SC 115 in the Student Success Center.

The contact information for the Office of Disability Services is:
Jeffri Hodge
(903) 463-8751 (voice or TTY)
hodgej@grayson.edu

If you anticipate issues related to the format or requirements of this course, please meet with the Coordinator of Disability Services. The Coordinator is available to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Services to notify them of your eligibility for reasonable accommodations. Disability Services can then plan how best to coordinate your accommodations.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Financial Aid

Effective July 1, 2000 students receiving Title IV funds (Pell, Federal Grants, and Student Loans), who subsequently withdraw from classes, will be required to return a portion of the

federal financial aid received. Only the percentage of aid earned (determined by the percentage of time attended) will be eligible for retention on the student's behalf. Any aid that is not earned must be returned to its source. If there is a student account balance resulting from these adjustments, the student is responsible for payment. Further details can be obtained from the Office of Financial Aid.

Drop Rule

Under section 51.907 of the Texas Education Code, "an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education." This statue was enacted by the State of Texas in spring 2007 and applies to students who enroll in a public institution of higher education as first-time freshmen in fall 2007 or later. Any course that a student drops is counted toward the six-course limit if (1) the student drops a course after census date or (2) the student is not dropping the course in order to withdraw from the institution. Some exemptions for good cause could allow a student to drop a course without having it counted toward this limit, but it is the responsibility of the student to establish that good cause before the drop. Students with questions should contact the Counseling Office or the Office of Admissions & Records for more information before dropping a course!

TITLE IX

GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on Title IX, please contact:

- Dr. Regina Organ, Title IX Coordinator (903-463-8714)
- Dr. Dava Washburn, Title IX Coordinator (903-463-8634)
- Dr. Kim Williams, Title IX Deputy Coordinator- South Campus (903) 415-2506
- Mr. Mike McBrayer, Title IX Deputy Coordinator (903) 463-8753
- Website: http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html
- GC Police Department: (903) 463-8777- Main Campus) (903) 415-2501 - South Campus)
- GC Counseling Center: (903) 463-8730
- For Any On-campus Emergencies: 911

Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

These descriptions and timelines are subject to change at the discretion of the Professor.

Grayson College campus-wide student policies may be found on our Current Student Page on our website:
http://grayson.edu/current-students/index.html

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