DA 101 – Course Syllabus

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Office Hours:

Lois Parento–Monday 10:30- 12:30p.m Shelly Sorensen–Monday 9:30 – 10:30
Friday 8:00 – 9:00a.m. Tuesday 10:30- 12:00a.m.
Thursday 8:30-10:30a.m./ Friday 12:00-1:00p.m.

Office Location: DEN 10

Attendance: **Attendance to each and every class in the Dental Assisting Program is mandatory. If you are absent or late you must call this department, 638-0370. After 5 absences instructors will evaluate for dropping student. The program policies outline NO late work.**

Appearance: **During class the correct uniform will be worn, hair will be up off the collar, minimal facial hair and no jewelry (except wristwatch) will be worn. All tattoos must be covered. If you are not in compliance, you will not be allowed into the classroom. See the dental handbook for details.**

GRADING

Each assignment, quiz, exam, and laboratory project has an assigned a point value. Your grade will be calculated as follows:

Homework	= 35% of total grade
Exams/Quizzes	= 45% of total grade
Laboratory projects	= 20% of total grade

Grading scale

90 – 100% = A
80 – 89% = B
70 – 79% = C
60 – 69% = D
0 – 59% = F

HOLIDAYS

Monday, September 6, 2021 **Thursday, November 11, 2021**
Thursday, November 25, 2021 **Friday, November 26, 2021**

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible – Mrs. Parento / Mrs. Sorensen

PERSONAL COMMUNICATION DEVICES (tape recorders, cell phones & pagers) ARE NOT ALLOWED IN THE CLASSROOM.

FINAL DROP DATE: FRIDAY, OCTOBER 8, 2021
FINAL EXAM DATE: MONDAY, DECEMBER 10, 2021

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Student Learning Outcomes:

Students will be able to chart restoration and lesions in the oral cavity utilizing designated symbols and a two-color system. They will demonstrate four-handed dentistry techniques in team concepts, along with utilizing aseptic and infection control techniques. Manipulation of selected dental materials, and knowledge of legal duties regulated in California by the Dental Board of California. During the semester, they will learn skills needed to expose, process, mount and evaluate radiographic dental images taken on manikins. Student's will be taught the muscles and nerves of the head and neck.

COURSE OUTLINE –DENTAL ASSISTING

A. Introduction to Dental Assisting 101 - Sorensen

1. History — **Lecture Hours: 3**
- **a. Dentistry**
- **b. Dental assisting**

2. Educational and licensing requirements — **Lecture Hours: 3**
- **a. Dentist and specialty practices**
- **b. Unlicensed dental assisting; and registered dental assistant; registered dental assistants extended functions**
- **c. Registered dental hygienist; registered dental hygienist extended functions - AP**
- **d. Dental laboratory technician**

3. Professional associations and code of ethics — **Lecture Hours: 3**
- **a. Dentistry (American Dental Association)**
- **b. Dental assisting (American Dental Assistants Association)**
- **c. Dental hygiene (American Dental Hygienist Association)**

4. California State Registered Dental Assistant and D.A.N.B. Certification — **Lecture Hours: 2**

5. Professional qualifications — **Lecture Hours: 2**
- **a. Demeanor**
- **b. Appearance**
- **c. Personal qualities**

6. Human relations — **Lecture Hours: 5**
- **a. Personality types/self evaluations**

7. Human behavior — **Lecture Hours: 2**
- **a. Types of behavior**
- **b. Defense mechanisms**
- **c. Assistant's role and behavior modification**

8. Patient psychology — **Lecture Hours: 2**
- **a. Recognition of anxiety**
- **b. Anxiety control techniques**
- **c. Controlling patient behavior**

9. Interpersonal communications — **Lecture Hours: 4**
- **a. Verbal**
- **b. Nonverbal**
- **c. Dental terminology**
- **d. Principles of communication (communications cycle)**
  - **1. Verbal message**
  - **2. Listing**
  - **3. Formulating response**
  - **4. Problems and interpersonal communication**
  - **5. Asking questions open-ended/front ended**
  - **6. Greeting patients**

10. Special patients — **Lecture Hours: 2**
- **a. Disable patients**
- **b. Patients with health problems**
- **c. Patients with mental problems**
  - **1. Depression**
  - **2. Anxiety**
  - **d. Down's syndrome**

e. Stroke patients
f. Cleft palate

11. Malpractice issues — Lecture Hours: 4
a. Standard of care
b. Malpractice insurance
c. Common grounds for dental malpractice lawsuits

12. State of California Dental Practice Act — Lecture Hours: 4

B. Biodental 101- Sorensen

1. Methods of tooth classifications — Lecture Hours: 2
a. Permanent
1. Arch
2. Location
3. Function
b. Deciduous
1. Arch
2. Location
3. Function

2. Tooth surfaces — Lecture Hours: 4
a. Anterior teeth
b. Posterior teeth

3. Odontography of permanent dentition — Lecture Hours: 10
a. Anterior teeth
1. Incisors
a. Characteristics of incisors
b. Key landmarks at each type of incisor
2. Cuspids (canines)
a. Characteristics of cuspids
b. Key landmarks at each type of cuspids
b. Posterior teeth
1. Bicuspids (premolars)
a. Characteristics of bicuspids
b. Key landmarks at each type of bicuspids
2. Molars
a. Characteristics of molars
b. Key landmarks of each type

4. Charting — Lecture Hours: 3
a. Types of charts
b. Methods of numbering teeth
c. Symbols
d. Color coding

5. Importance of primary dentition — Lecture Hours: 2
a. Speech
b. Mastication
c. Space retention
d. Overall health

6. Occlusion — Lecture Hours: 2
a. Angles classification
b. Over bite, over jet, cross bite
c. Temporal mandibular joint

7. Maintenance of tooth position — **Lecture Hours: 2**

8. Self-sustaining tooth characteristics — **Lecture Hours: 2**

9. Cavity classification and preparation — **Lecture Hours: 4**
- **a. Criteria and location**
- **b. Classes 1 through VI**
- **c. Cavity walls and Angles**

10. Line and Point Angles — **Lecture Hours: 4**
- **a. Terminology**
- **b. External surfaces**

11. Oral Pathology — **Lecture Hours: 8**
- **a. Etiology of disease**
  - **1. Trauma**
  - **2. Extreme temperature**
  - **3. Chemical extremes**
  - **4. Biological agents**
  - **5. Radiation**
- **b. Inflammation process**
  - **1. Cardinal symptoms**
  - **2. Systemic effects**
- **c. Descriptive terminology**
- **d. Diseases of oral cavity**
  - **1. Dental caries**
  - **2. Inflammatory diseases**
  - **3. Vitamin deficiencies**
  - **4. Developmental defects**
  - **5. Neoplasm**
    - **a. Benign**
    - **b. Malignant**
  - **6. Miscellaneous**

12. Landmarks of the face and oral cavity — **Lecture Hours: 8**
- **a. Facial landmarks**
- **b. Intra-oral landmarks**

13. Skull — **Lecture Hours: 13**
- **a. Bones of the cranial**
- **b. Bones of the face**
- **c. Landmarks of the skull**

14. Head and neck anatomy — **Lecture Hours: 10**
- **a. Overview of body systems**
- **b. Muscles of mastication**
- **c. Salivary glands**
- **d. Lymph nodes**
- **e. Tongue**
- **f. Trigeminal nerve and its branch**
- **g. Blood vessels**
  - **1. Arteries**
  - **2. Veins**
  - **3. Capillaries**

15. Dental Histology — **Lecture Hours: 10**
- **a. Cellular structure**
  - **1. Cell components**
  - **2. Mitosis**
- **b. Tissue types**

1. Epithelial
2. Connective
3. Muscle
4. Nerves

c. Tooth tissues
1. Enamel
2. Dentin
3. Pulp

d. Oral mucosa
1. Masticatory
2. Lining
3. Specialized

e. Periodontium tissues
1. Gingiva
2. Periodontal ligament
3. Alveolar bone
4. Cementum

C. Chairside 101 - Parento

1. Gypsum products — Lecture Hours: 7
   a. Classification and composition — Laboratory Hours: 11
   b. Properties
   c. Measurements and measuring devices
   d. Armamentaria and tray set ups
   e. Storage
   f. Manipulation
      1. pour rubber mold on primary and permanent dentition, edentulous, and cavity classification
   g. Diagnostic models
      1. Pour cast
      2. Place a base on the cast
      3. Trim the cast properly
      4. Polish the cast properly
      5. Articulate the cast properly

2. Irreversible hydrocolloid (alginate) — Lecture Hours: 10
   a. Classification and composition — Laboratory Hours: 9
   b. Properties dimensional change — Pre-clinic Hours: 5
   c. Armamentaria/tray set ups
   d. Disinfection in care of the impression
   e. Manipulation and taking of the impression

3. Bite registration — Lecture Hours: 5
   a. Wax — Laboratory Hours: 6
      1. Origin and classification — Pre-Clinic Hours: 3
      2. Properties residual stress
      3. Armamentaria/tray set ups
      4. Manipulation and occlusal registration
      5. Disinfection in care of the wax
   b. ZOE impression paste
      1. Composition
      2. Uses and applications
      3. Properties
      4. Armamentaria/tray set ups
      5. Disinfection and care of ZOE impression paste
   c. Polyvinylsiloxane bite registration
      1. Composition
      2. Triple tray technique
      3. Closed bite technique
      4. Open bite technique

5. Properties
6. Armamentaria and/tray set ups
7. Disinfection in care of Polyvinylsiloxane bite registration

d. Maintaining Operative Fields
1. Illumination
2. Retraction
3. Triplex syringe
4. Oral evacuation
5. Practice maintaining operative field

4. Four handed dentistry — Lecture Hours: 9
a. Team positions — Laboratory Hours: 12
b. Instrumentation — Pre-Clinic Hours: 3
1. Grasp
2. Methods of transfer
3. Practice

c. Personnel protocols, OSHA guidelines
1. Uniforms
2. Hair/jewelry
3. Universal precautions-eyewear, mask, face shield, and gloves
4. Uses of protected barriers
5. Personal conduct, work habits

D. Infection Prevention – Garza

1. Safety — Lecture Hours: 12
a. Laboratory rules — Laboratory Hours: 15
b. Equipment — Pre-Clinic Hours: 2
1. Gas
2. Electrical
3. Mechanical
4. First-aid kit

2. Clinical patient management — Lecture Hours: 8
a. Management of the patient in the operatory — Laboratory Hours: 8; Pre-Clinic Hours: 2
1. Updating medical/dental history
2. Seating, monitoring, dismissing
3. Special patients

b. Operatory equipment
1. Identification
2. Operation
3. Maintenance
4. Safety
5 Infection control applications

3. Infection control — Lecture Hours: 12
a. Goals of infection control in the dental practice — Laboratory Hours: 12; Pre-Clinic Hours: 2
b. Principles of infection control and the sepsis in dental practice
1. Barrier techniques
2. Patient protection
3. High-risk patients
4. Equipment cleaning and disinfection
5. Immunization
6. CA minimum standards

c. Physical methods of infection control
1. Steam autoclave
2. Chemical vapor sterilizer
3. Dry heat

d. Chemical agents for infection control
- **1. Activated dialdehydes**
- **2. Iodophors**
- **3. Sodium hydro chlorite**
- **4. Phenol compounds**
- **5. Isopropyl alcohol**
- **6. Quaternary ammonia**

e. Sterilizer monitoring
- **1. Physical monitoring**
- **2. Chemical monitoring**
- **3. Biological monitoring**

f. Skills evaluation
- **1. Preparation of contaminated instruments**
- **2. Hand washing**
- **3. Preparation of specified disinfectants**
- **4. Operation of specified sterilizers**
- **5. Operation of an ultrasonic cleaning device**

g. Dental unit water lines
- **1. Biofilm in water lines**
- **2. Reducing bacterial contamination**
- **3. Testing dental unit waterlines**
- **4. Infection Control and Dental Unit Water**

E. Operative instruments and materials 101 Parento

1. Dental cements — **Lecture Hours: 9**

a. Polycarboxylate
- **1. Classification, composition, properties**
- **2. Armamentaria**
- **3. Uses**
- **4. Manipulation/Timed practice**

b. Zinc oxide eugenol - ZOE
- **1. Classification, composition, properties**
- **2. Armamentaria**
- **3. Uses**
- **4. Manipulation/Timed practice**

c. Glass ionomer
- **1. Classification, composition, properties**
- **2. Armamentaria**
- **3. Uses**
- **4. Manipulation/Timed practice**

d. Calcium hydroxide
- **1. Classification, composition, properties**
- **2. Armamentaria**
- **3. Uses**
- **4. Manipulation/Timed practice**

e. Composite Resin Cement
- **1. Classification, composition, properties**
- **2. Armamentaria**
- **3. Uses**
- **4. Manipulation**

2. Bases and liners — **Lecture Hours: 6**

a. Deep base — **Laboratory Hours: 12**
- **1. Sound dentin criteria**
- **2. Pulp capping procedures**
- **3. Materials**
- **4. Armamentaria/tray set ups**
- **5. Criteria for placing**
- **6. Placement**

b. Varnish
- **1. Materials**
- **2. Function**
- **3. Armamentaria/tray set ups**
- **4. Criteria for placing**
- **5. Placement**

c. Insulating bass
- **1. Materials**
- **2. Function**
- **3. Armamentaria/tray set ups**
- **4. Criteria for placing**
- **5. Placement**

3. Matrices — **Lecture Hours: 9** / **Laboratory Hours: 10**

a. Functions/rationale

b. Types
- **1. Strips**
- **2. Bands**
- **3. Crown forms**

c. Retainers/adapting
- **1. Tofflemire**
- **2. Ivory**
- **3. Self-retained**

d. Armamentaria/tray set up

e. Band
- **1. Function**
- **2. Sizes/types**
- **3. Criteria**
  - **a. Contact**
  - **b. Occlusal height**
  - **c. Gingival extension**

f. Wedge
- **1. Function**
- **2. Sizes/types/trimming**
- **3. Criteria**
  - **a. Direction**
  - **b. Contact/interproximal contour**
  - **c. Gingival margin closure**

g. Placement and removal

4. Temporary sedative dressing — **Lecture Hours: 6** / **Laboratory Hours: 10**

a. Materials
- **1. IRM**
- **2. Zinc phosphate**
- **3. ZOE**

b. Armamentaria/tray set up

c. Criteria
- **1. Consistency**
- **2. Condensing/filling**
- **3. Carving/anatomy**
- **4. Occlusal height**
- **5. Margins**
- **6. Contact/interproximal contour**

d. Placement and removal

5. Dental amalgam — **Lecture Hours: 7** / **Laboratory Hours: 9**

a. Silver alloy
- **1. Components**
- **2. Properties**

b. Mercury
- **1. Specification and purity**
- **2. Toxicity**
  - **a. Types**
  - **b. Systemic entry**
  - **c. Signs/symptoms**
- **3. Precautions and hygiene protocol**

c. Manipulation
- **1. Alloy/Mercury ratio**
- **2. Amalgam properties**
- **3. Trituration**

d. Amalgam restoration procedure
- **1. Tray set up**
- **2. Instrumentation**
- **3. Assistant's responsibility**

6. Restorative resins — **Lecture Hours: 6**

a. Filled resins — **Laboratory Hours: 6**
- **1. Conventional composites**
- **2. Micro- filled composites**
- **3. Light cure composites**
- **4. Classifications, the compositions, properties**
- **5. Armamentaria/tray set up**
- **6. Instrumentation**
- **7. Assistant's responsibilities**
- **8. Manipulation of materials**

7. Hand cutting instruments — **Lecture Hours: 10**

a. Identification and classification — **Laboratory Hours: 10**

b. Parts of hand instruments
- **1. Bevel/blade, nib**
- **2. Formulas**
  - **a. 3 number**
  - **b. 4 number**

c. Categories and uses
- **1. Cutting**
- **2. Condensing**
- **3. Carving**
- **4. Basic set up**
- **5. Miscellaneous**

d. Instruments sharpening (theory)

e. Infection control and sterilization

8. Rotary instruments — **Lecture Hours: 9**

a. Identification and classification — **Laboratory Hours: 10**
- **1. Burs**
- **2. Diamond**
- **3. Stones**
- **4. Disks**
- **5. Wheels**
- **6. Finishing burs**
- **7. Finishing strips**

b. Parts of rotary instruments
- **1. Shank design**
- **2. Head**
  - **a. Names**
  - **b. Numbers**
  - **c. Uses**

c. Hand pieces
- **1. Speeds**

2. Uses
    a. High-speed
    b. Slow speed
3. Power mechanism
4. Straight hand piece
    a. Parts
    b. Attachments
        1. Contour angle
        2. Prophy angle
    c. Maintenance
5. High-speed contra angle
    a. Parts
    b. Chuck
    c. Changing burs
    d. Coolant
    e. Washed field and dry field techniques
    f. Maintenance
    d. Sterilization and infection control
        1. Running the water lines
            a. Beginning of the day
            b. Between patients
        2. Hand piece sterilization-not disinfection
        3. Maintenance
            a. Cleaning and flushing
            b. Oiling

F. Radiology 101 - Sorensen

Lecture Hours: 4

1. Introduction, characteristics of radiation and dental unit
    a. Discovery of Roentgen Ray, an early progress
    b. Modern use at dental radiology
    c. Types and characteristics of radiation
    d. Properties of x-radiation and electromagnetic spectrum
    e. X-radiation production, primary and secondary
    f. Ionization
    g. Parts and components of the x-ray unit
    h. Average, voltage, transformer, and control devices

2. Effects of radiation exposure, infection control and protection — **Lecture Hours: 10**
    a. Interaction of ionizing radiation on cells, tissue and matter
    b. Cell sensitivity to radiation exposure
    c. Factors that determine radiation exposure
    d. Effects of radiation exposure, somatic and genetic tissue
    e. Laws regulating the use of diagnostic radiation tissue
    f. Personnel monitoring
    g Effects of collimation, filtration and amount of an exposure dose rate
    h. Measurement of x-radiation, terms and definitions
    i. Radiation protection in the dental office, patient and personnel
    j. Chronic and acute dose, definition and symptoms
    k. Effects on oral radiation therapy
    l. Importance the patient medical history as related to previous experience
    m. Equipment and structural requirements
    n. Quality-control

3. Technical aspects of radiation production — **Lecture Hours: 5**

a. Principles of x-ray tube operation
b. Significance of electron activity
c. Requirements of good radiographs
d. Variable radiation control factors
e. Effects of milliamperage, kilovoltage and exposure time
f. Effects of variation in distances

4. Dental film processing — Lecture Hours: 6
a. Fundamentals of film processing — Laboratory Hours: 8
b. Darkroom equipment and illumination
c. Chemistry of processing
d. Processing procedure-manual
e. Processing procedure-automatic
f. Maintaining processing tanks and automatic processor
g. Rapid processing
h. Film duplicating procedure
i. Quality control
j. Processing errors and artifacts
k. Operation of the view box

5. Dental films, principles of shadow casting and anatomical landmarks — Lecture Hours: 8
a. Composition of dental film
b. Film emulsion speeds
c. Types and sizes of dental films, intra-oral and extra-oral
d. Film protection and storage
e. Film mounting procedures
    1. Mounts
    2. Mounting
f. Factors influencing radiographic definition and distortion, geometry and imagery
g. Principles of shadow casting
h. Anatomical landmarks visible on intra-oral films
    1. Normal radiographic anatomy
    2. Radiographic tooth anatomy
    3. Tooth development
    4. Basic restoration
    5. Anatomy of maxillae and mandible
i. Evaluating films for diagnostic quality
j. Filing and storage of films

6. Intra-oral techniques and film holding devices — Lecture Hours: 5
a. Intra-oral procedures, patient positioning — Laboratory Hours: 6
b. Principles of paralleling technique
c. Principles of bisecting technique
d. Horizontal and vertical angulations
e. Snap-a-Ray, XCP, Fitzgerald techniques, and bite blocks
f. Disinfection and sterilization of dental radiograph equipment
g. Manipulation of the DXTTR mannequins

7. The interproximal or bitewing examination — Lecture Hours: 2
a. Fundamental of bitewing examination — Laboratory Hours: 18
b. Film holders
c. Film positioning
d. Anterior and posterior surveys
e. Alignment of the PID and horizontal angulations

f. Exposure, processing and mounting of the bitewing survey on DXTTR

8. The Periapical examination — **Lecture Hours: 2**, **Laboratory Hours: 23**

- **a. Fundamental of the periapical examination**
- **b. Film holders**
- **c. Correct film placement techniques**
- **d. Sequence of exposure**
- **e. Periapical exposures-paralleling technique**
- **f. Buccal exposures-bisecting technique**
- **g. Exposure, processing, mounting of full mouth surveys on DXTTR**

9. Interpretation of films for diagnostic quality — **Lecture Hours: 3**, **Laboratory Hours: 10**

- **a. Importance of identifying faulty radiographs**
- **b. Technique errors:**
  1. **Incorrect film positioning**
  2. **Incorrect horizontal angulations**
  3. **Incorrect vertical angulations**
  4. **Incorrect the PID positioning**
  5. **Incorrect exposure factors**
  6. **Miscellaneous errors**
- **c. Processing errors**
  1. **Incorrect time-temperature**
  2. **Faulty handling of films**
  3. **Chemical contamination**
  4. **Light leaks**
- **d. Fog on film**
  1. **Film storage**
  2. **Exposure settings**
  3. **Fog caused during processing**

10. Advanced radiograph techniques, errors-causes and corrections — **Lecture Hours: 1**

- **a. Evaluation of outpatient films for:**
  1. **Contrast**
  2. **Density**
  3. **Correct film placement**
  4. **Elongation**
  5. **Foreshortening**
  6. **Visible contacts**
  7. **Anatomical landmarks**
  8. **Pathology and dental restorations**
  9. **Correct mounting**
  10. **Processing errors**

11. The occlusal examination — **Lecture Hours: 1**, **Laboratory Hours: 3**

- **a. Reasons for the occlusal exam**
- **b. Technical considerations**
- **c. Maxillary occlusal examination**
- **d. Mandibular occlusal examination**
- **e. Localization techniques**
- **f. Occlusal surveys for children**

12. Radiography for children — **Lecture Hours: 1**

- **a. Importance of radiography for children**

b. When to take radiographs on children
c. Techniques for pedodonic radiographs
d. Film requirements for pedodonic surveys
e. Interproximal and bitewing exams
  1. Posterior interproximal surveys
  2. Mandibular incisor surveys
  3. Mandibular canine surveys
  4. Mandibular molar surveys
  5. Maxillary incisor surveys
  6. Maxillary canine surveys
  7. Maxillary molar surveys

13. Radiographic for edentulous patients — Lecture Hours: 1
a. Importance of radiographic for edentulous patients
b. Film requirements
c. Techniques for edentulous survey

14. Panoramic radiographic — Lecture Hours: 2
a. Fundamentals of panoramic radiography
b. Concepts of focal troughs
c. Geometry and shortness of an image
d. Importance of correct head positioning
e. Types of panoramic units
f. Operational procedures
g. Advantages and disadvantages of panoramic films
h. Technique errors
i. Anatomy of panoramic films

15. Extra-oral radiography — Lecture Hours: 2
a. Types of extra-oral films
b. Uses of extra-oral films
c. Cassettes and holding devices
  1. Screens and grades
d. Extra-oral films
  1. Lateral jaw surveys
  2. Laterals skull surveys
  3. Facial profile surveys
  4. Posterior-anterior surveys
  5. Temporomandibular articulation surveys
e. Supplementary surveys
  1. Uses in orthodontics
  2. Landmarks and planes

16. Patient management — Lecture Hours: 3 — Laboratory Hours: 20 — Pre-Clinic Hours: 8
a. Value of patient education
b. Program policy for outpatient procedures
c. Appointment scheduling
d. Outpatient exposure, processing and evaluation
e. Benefits of preventive radiation
f. Goals of dental diagnostic radiographs

17. Vital signs — Lecture Hours: 2 — Laboratory Hours: 1 — Pre-Clinic Hours: 2
a. Blood pressure
  1. Measurement techniques
  2. Recognition of normal ranges
  3. Significance in treatment planning
  4. Recording in a clinical record
  5. Supervised clinical practice
b. Pulse rate

1. Measurement techniques
2. Recognition of normal ranges
3. Significance in treatment planning
4. Recording in a clinical record
5. Supervised clinical practice

c. Respiration rate
1. Measurement techniques
2. Recognition of normal ranges
3. Significance in treatment planning
4. Recording in a clinical records
5. Supervised clinical practice

d. Temperature
1. Measurement techniques
2. Recognition of normal ranges
3. Significance in treatment planning
4. Recording in a clinical record
5. Supervised clinical practice

18. Oral examination (mouth mirror inspection of the oral cavity)

Lecture Hours: 2
Laboratory Hours: 2
Pre-Clinic Hours: 2

a. Armamentarium/materials needed
b. Types of records
c. Diagnostic aids
d. Medical/dental history
1. Interpretation
2. Recording deviations from normal
3. Legal/ethical considerations
4. Supervised clinical practice

19. General patient appraisal

Lecture Hours: 2
Laboratory Hours: 1

a. Physical appearance
b. Deviations from normal
c. Treatment planning considerations
d. Head and neck inspections
1. Landmarks
2. Anatomy
3. Nodes
4. Glands
5. TMJ
6. Recording in a clinical record
7. Supervised clinical practice

20. Radiographic interpretation: caries, periodontal disease, and pulpal, periapical, and bone lesions

Lecture hours: 2

a. Caries
b. Periodontal disease
c. Pulpal lesions
d. Traumatic injuries
e. Foreign bodies and root tips
f. Extractions socket
g. Cyst and tumors
h. Metabolic bone lesions
1. Salivary stones

21. Intra-oral soft tissue examination

Lecture Hours: 4
Pre-Clinic Hours: 2

a. Landmarks and anatomy
b. Pathology and deviations from normal
c. Terminology and descriptive terms

d. Examination sequence
e. Recording in a clinical record
f. Supervised clinical practice

22. Charting and classification of occlusion — **Lecture Hours: 2**, **Pre-Clinic Hours: 2**
a. Tooth morphology
b. Cavity classification
c. Charting restorations
d. Charging abnormalities/pathology
e. Inspection techniques
1. Direct observation
2. Indirect observation
3. Transillumination
4. Uses of a triplex syringe
f. Classification of occlusion
g. Recording information in a clinical record
h. Supervised clinical practice

23. Radiographic interpretation: — **Lecture Hours: 2**
Development disturbances of the teeth and bone
a. Eruption of teeth
b. Impaction of teeth
c. Supernumerary teeth (hyperdontia)
d. Congenital missing teeth
e. Enamel pearls
f. Fusion
g. Germination
h. Concrescence
i. Dens invaginatus
k. Malposition of teeth
l. Amelogenesis imperfecta
m. Dentinogenisis imperfecta
n. Fissural cysts
o. Cleft palate
p. Dentigerous cyst