# **DA 101 – Course Syllabus**

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#### **Office Hours:**

Lois Parento–Thursday 12:30 – 2:30p.m. Shelly Sorensen–Tuesday 10:30- 12:00p.m. Friday 8:00 – 9:00a.m. Thursday 12:30-2:00p.m.

Office Location: DEN 10

<u>Attendance</u>: 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

<u>Appearance</u>: 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:

|                    |                      | <u>Grading s</u> | <u>cale</u> |
|--------------------|----------------------|------------------|-------------|
| Homework           | = 35% of total grade | 90 – 100%        | <b>=</b> A  |
| Exams/Quizzes      | = 45% of total grade | 80 – 89%         | <b>=</b> B  |
| Laboratory project | 70 – 79%             | = C              |             |
|                    |                      | 60 – 69%         | = D         |
|                    |                      | 0 – 59%          | = F         |

# <u>HOLIDAYS</u>

Monday, September 3, 2018 Monday, November 12, 2018 Thursday, November 22, 2018 Friday, November 23, 2018

#### **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

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

FINAL DROP DATE: FRIDAY, OCTOBER 12, 2018
FINAL EXAM DATE: MONDAY, DECEMBER 10, 2018

### **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.

#### 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

|           | 0.    | Huma                                | an relati      | ons                                    | Lecture Hours: 5        |  |  |
|-----------|-------|-------------------------------------|----------------|--|-------------------------|--|--|
|           |       | a.                                  | Perso          | onality types/self evaluations         |                         |  |  |
|           | 7.    | Hums                                | an behav       | vior                                   | Lecture Hours: 2        |  |  |
|           | • •   | a.                                  |                | s of behavior                          | Zecture Hours. 2        |  |  |
|           |       | b.                                  |                | nse mechanisms                         |                         |  |  |
|           |       | c.                                  |                | tant's role and behavior modification  |                         |  |  |
|           |       |                                     |                |  |                         |  |  |
|           | 8.    | Patie                               | nt psych       |  | <b>Lecture Hours: 2</b> |  |  |
|           |       | a.                                  |                | gnition of anxiety                     |                         |  |  |
|           |       | b.                                  |                | ety control techniques                 |                         |  |  |
|           |       | c.                                  | Cont           | rolling patient behavior               |                         |  |  |
|           | 9.    | Inter                               | nersonal       | communications                         | Lecture Hours: 4        |  |  |
| <i>,</i>  |       | a.                                  | Verb           |  |                         |  |  |
|           |       | b.                                  | Nonv           |  |                         |  |  |
|           |       | c.                                  |                | al terminology                         |                         |  |  |
|           |       | d.                                  |                | ciples of communication (communication | ns cvcle)               |  |  |
|           |       |                                     | 1.             | Verbal message                         |                         |  |  |
|           |       |                                     | 2.             | Listing                                |                         |  |  |
|           |       |                                     | 3.             | Formulating response                   |                         |  |  |
|           |       |                                     | 4.             | Problems and interpersonal commu       | nication                |  |  |
|           |       |                                     | 5.             | Asking questions open-ended/front      |                         |  |  |
|           |       |                                     | 6.             | Greeting patients                      |                         |  |  |
|           |       |                                     | 0.             | Greening patients                      |                         |  |  |
|           | 10.   | Speci                               | al patien      |  | <b>Lecture Hours: 2</b> |  |  |
|           |       | a.                                  |                | ole patients                           |                         |  |  |
|           |       | b.                                  |                | nts with health problems               |                         |  |  |
|           |       | c.                                  |                | nts with mental problems               |                         |  |  |
|           |       |                                     | 1.             | Depression                             |                         |  |  |
|           |       |                                     | 2.             | Anxiety                                |                         |  |  |
|           |       |                                     | d.             | Down's syndrome                        |                         |  |  |
|           |       | e.                                  |                | te patients                            |                         |  |  |
|           |       | f.                                  | Cleft          | palate                                 |                         |  |  |
|           | 11.   | Maln                                | ractice is     | Schec                                  | Lecture Hours: 4        |  |  |
|           | 11.   | a.                                  |                | lard of care                           | Eccture Hours. 4        |  |  |
|           |       | а.<br>b.                            |                | ractice insurance                      |                         |  |  |
|           |       | с.                                  | _              | mon grounds for dental malpractice law | venite                  |  |  |
|           |       | <b>C.</b>                           | Com            | mon grounds for dental marpraetice law | vsuits                  |  |  |
|           | 12.   | State                               | of Califo      | ornia Dental Practice Act              | Lecture Hours: 4        |  |  |
| <u>B.</u> | Biode | Biodental 101- Sorensen             |                |  |                         |  |  |
|           | 1.    | 1. Methods of tooth classifications |                |  | Lecture Hours: 2        |  |  |
|           |       | a.                                  |                | anent                                  | Lecture Hours. 2        |  |  |
|           |       |                                     | 1.             | Arch                                   |                         |  |  |
|           |       |                                     | 2.             | Location                               |                         |  |  |
|           |       |                                     | 3.             | Function                               |                         |  |  |
|           |       | b.                                  | Decid          |  |                         |  |  |
|           |       | ~•                                  | 1.             | Arch                                   |                         |  |  |
|           |       |                                     | 2.             | Location                               |                         |  |  |
|           |       |                                     | 3.             | Function                               |                         |  |  |
|           |       |                                     | - <del>-</del> |  |                         |  |  |
|           | 2.    | Tooth                               | ı surface      |  | <b>Lecture Hours: 4</b> |  |  |
|           |       | a.                                  | Ante           | rior teeth                             |                         |  |  |

Appearance Personal qualities

b. c.

#### b. Posterior teeth 3. **Odontography of permanent dentition Lecture Hours: 10 Anterior teeth Incisors Characteristics of incisors** a. Key landmarks at each type of incisor b. 2. Cuspids (canines) **Characteristics of cuspids** Key landmarks at each type of cuspids b. b. Posterior teeth **Bicuspids (premolars) Characteristics of bicuspids** a. b. Key landmarks at each type of bicuspids 2. Molars Characteristics of molars Key landmarks of each type b. Charting **Lecture Hours: 3** 4. Types of charts a. b. Methods of numbering teeth **Symbols** c. d. Color coding 5. Importance of primary dentition **Lecture Hours: 2** Speech a. b. Mastication c. **Space retention** d. Overall health 6. **Lecture Hours: 2** Occlusion Angles classification a. Over bite, over jet, cross bite b. Temporal mandibular joint c. 7. Maintenance of tooth position **Lecture Hours: 2** 8. **Lecture Hours: 2 Self-sustaining tooth characteristics** 9. Cavity classification and preparation **Lecture Hours: 4** a. Criteria and location b. Classes 1 through VI Cavity walls and Angles

**Line and Point Angles** 10. **Lecture Hours: 4 Terminology** a. **External surfaces** b. 11. **Oral Pathology Lecture Hours: 8 Etiology of disease** a. 1. Trauma 2. **Extreme temperature** 3. **Chemical extremes** 4. **Biological agents** 5. **Radiation Inflammation process** b. **Cardinal symptoms** 1. **Systemic effects Descriptive terminology** c. Diseases of oral cavity d.

- Dental caries
   Inflammatory diseases
   Vitamin deficiencies
   Developmental defects
- 5. Neoplasm
  - a. Benign
  - b. Malignant
- 6. Miscellaneous
- 12. Landmarks of the face and oral cavity
  - a. Facial landmarks
  - b. Intra-oral landmarks
- 13. Skull
  - a. Bones of the cranial
  - b. Bones of the face
  - c. Landmarks of the skull
- 14. Head and neck anatomy
  - 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
  - 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
  - a. Classification and composition
  - b. Properties
  - c. Measurements and measuring devices
  - d. Armamentaria and tray set ups

**Lecture Hours: 8** 

**Lecture Hours: 13** 

Lecture Hours: 10

**Lecture Hours: 10** 

**Lecture Hours: 7** 

**Laboratory Hours: 11** 

5

- 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)
  - a. Classification and composition
  - b. Properties dimensional change
  - c. Armamentaria/tray set ups
  - d. Disinfection in care of the impression
  - e. Manipulation and taking of the impression
- 3. Bite registration
  - a. Wax
    - 1. Origin and classification
      - 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
  - a. Team positions
  - b. Instrumentation
    - 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

Pre-clinic Hours: 5

**Lecture Hours: 10** 

**Lecture Hours: 5** 

**Laboratory Hours: 6** 

**Pre-Clinic Hours: 3** 

**Lecture Hours: 9** 

**Laboratory Hours: 12** 

Pre-Clinic Hours: 3

**Laboratory Hours: 9** 

#### D. Infection Prevention - Santos /Kron

- 1. Safety
  - a. Laboratory rules
  - b. Equipment
    - 1. Gas
    - 2. Electrical
    - 3. Mechanical
    - 4. First-aid kit
- 2. Clinical patient management
  - a. Management of the patient in the operatory
    - 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
  - a. Goals of infection control in the

dental practice

**Pre-Clinic Hours: 2** 

**Lecture Hours: 12** 

**Laboratory Hours: 12** 

**Lecture Hours: 12** 

**Laboratory Hours: 15** 

**Pre-Clinic Hours: 2** 

**Lecture Hours: 8** 

Laboratory Hours: 8 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
  - 4. Liquid sterilant
- 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

**Polycarboxylate** 

**Dental cements** 

1.

2. Armamentaria 3. Uses 4. Manipulation/Timed practice Zinc oxide eugenol - ZOE b. Classification, composition, properties 2. Armamentaria 3. Uses 4. Manipulation/Timed practice Glass ionomer c. Classification, composition, properties 1. 2. Armamentaria 3. Uses Manipulation/Timed practice 4. Calcium hydroxide d. Classification, composition, properties 1. 2. Armamentaria 3. Uses 4. Manipulation/Timed practice **Composite Resin Cement** e. Classification, composition, properties 2. Armamentaria 3. Uses 4. Manipulation **Lecture Hours: 6** 2. **Bases and liners Laboratory Hours: 12** Deep base 1. Sound dentin criteria 2. Pulp capping procedures 3. Materials 4. Armamentaria/tray set ups 5. Criteria for placing **Placement** 6. Varnish b. Materials 1. 2. **Function** 3. Armamentaria/tray set ups 4. Criteria for placing 5. **Placement Insulating bass** c. 1. Materials 2. **Function** 3. Armamentaria/tray set ups Criteria for placing 4. 5. **Placement Lecture Hours: 9** 3. **Matrices** Functions/rationale **Laboratory Hours: 10** a. b. **Types** 1. **Strips** 2. **Bands Crown forms** 3. Retainers/adapting c. 1. **Tofflemire** 2. **Ivorv** 3. **Self-retained** 

Classification, composition, properties

**Lecture Hours: 9** 

**Band** e. **Function** 1. 2. Sizes/types 3. Criteria Contact a. Occlusal height b. **Gingival extension** c. f. Wedge 1. **Function** 2. Sizes/types/trimming 3. Criteria Direction a. **Contact/interproximal contour** b. Gingival margin closure c. Placement and removal g. 4. Temporary sedative dressing **Lecture Hours: 6** Materials **Laboratory Hours: 10** 1. **IRM** 2. Zinc phosphate 3. ZOE Armamentaria/tray set up b. Criteria c. 1. Consistency Condensing/filling 2. 3. Carving/anatomy 4. Occlusal height 5. **Margins** Contact/interproximal contour d. Placement and removal 5. **Dental amalgam Lecture Hours: 7** Silver alloy **Laboratory Hours: 9** Components 2. **Properties** b. Mercury Specification and purity 1. 2. **Toxicity** a. **Types** b. **Systemic entry** Signs/symptoms Precautions and hygiene protocol c. Manipulation Alloy/Mercury ratio 1. **Amalgam properties** 2. **Trituration** 3. Amalgam restoration procedure d. Trav set up 1. Instrumentation 2. Assistant's responsibility 3. 6. **Restorative resins Lecture Hours: 6 Laboratory Hours: 6** Filled resins **Conventional composites** 1. Micro- filled composites 2. 3. Light cure composites 4. Classifications, the compositions, properties 5. Armamentaria/tray set up

d.

Armamentaria/tray set up

- 6. Instrumentation
- 7. Assistant's responsibilities
- 8. Manipulation of materials

## 7. Hand cutting instruments

- a. Identification and classification
  - o. 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

- a. Identification and classification
  - 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

Lecture Hours: 10 Laboratory Hours: 10

**Lecture Hours: 9** 

**Laboratory Hours: 10** 

- a. Cleaning and flushing
- b. Oiling

#### F. Radiology 101 - Sorensen

Lecture Hours: 4

**Lecture Hours: 6** 

- 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
  - 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 Lecture Hours: 8 anatomical landmarks
  - a. Composition of dental film

- Film emulsion speeds b. Types and sizes of dental films, intra-oral and extra-oral c. d. Film protection and storage Film mounting procedures e. 1. **Mounts** 2. **Mounting** f. Factors influencing radiographic definition and distortion, geometry and imagery Principles of shadow casting g. h. Anatomical landmarks visible on intra-oral films Normal radiographic anatomy 1. 2. Radiographic tooth anatomy 3. **Tooth development** 4. **Basic restoration** Anatomy of maxillae and mandible **Evaluating films for diagnostic quality** i. Filing and storage of films j. Intra-oral techniques and film holding devices **Lecture Hours: 5** Intra-oral procedures, **Laboratory Hours: 6** patient positioning Principles of paralleling technique b. Principles of bisecting technique c. d. Horizontal and vertical angulations Snap-a-Ray, XCP, Fitzgerald techniques, and bite blocks e. f. Disinfection and sterilization of dental radiograph equipment Manipulation of the DXTTR mannequins g. The interproximal or bitewing examination **Lecture Hours: 2** Fundamental of bitewing **Laboratory Hours: 18** a. examination b. Film holders Film positioning c. d. Anterior and posterior surveys Alignment of the PID and horizontal angulations e. Exposure, processing and mounting of the bitewing survey f. on DXTTR The Periapical examination **Lecture Hours: 2** Fundamental of the periapical a. **Laboratory Hours: 23** examination b. Film holders Correct film placement techniques c. Sequence of exposure d. Periapical exposures-paralleling technique e. f. **Buccal exposures-bisecting technique** Exposure, processing, mounting of full mouth surveys on g.

6.

7.

8.

**DXTTR** 

- 9. Interpretation of films for diagnostic quality **Lecture Hours: 3** Importance of identifying faulty **Laboratory Hours: 10** a. radiographs
  - **Technique errors:** b.
    - 1. **Incorrect film positioning**
    - 2. **Incorrect horizontal angulations**
    - 3. **Incorrect vertical angulations**
    - 4. **Incorrect the PID positioning**

- 5. **Incorrect exposure factors** 6. Miscellaneous errors **Processing errors Incorrect time-temperature** Faulty handling of films 2. **Chemical contamination** 3. 4. Light leaks Fog on film 1. Film storage 2. **Exposure settings** 3. Fog caused during processing Advanced radiograph techniques, **Lecture Hours: 1** errors-causes and corrections **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** The occlusal examination Lecture Hours: 1 Reasons for the occlusal exam **Laboratory Hours: 3 Technical considerations** Maxillary occlusal examination Mandibular occlusal examination **Localization techniques**
- d. e. f. Occlusal surveys for children
- 12. Radiography for children Lecture Hours: 1 Importance of radiography for children
  - When to take radiographs on children b.

  - Techniques for pedodonic radiographs c.
  - Film requirements for pedodonic surveys d.
  - 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
    - Maxillary canine surveys 6.
    - 7. Maxillary molar surveys
- 13. Radiographic for edentulous patients Lecture Hours: 1
  - Importance of radiographic for edentulous patients
  - Film requirements b.

c.

d.

10.

11.

a. b.

c.

- Techniques for edentulous survey c.
- 14. Panoramic radiographic **Lecture Hours: 2** 
  - Fundamentals of panoramic radiography
  - Concepts of focal troughs b.
  - c. Geometry and shortness of an image
  - d. Importance of correct head positioning
  - 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

- 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

- 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

- 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)

- a. Armamentarium/materials needed
- b. Types of records
- c. Diagnostic aids

Lecture Hours: 2

**Lecture Hours: 2** 

**Lecture Hours: 3** 

**Lecture Hours: 2** 

**Laboratory Hours: 1** 

**Pre-Clinic Hours: 2** 

**Laboratory Hours: 20** 

**Pre-Clinic Hours: 8** 

**Laboratory Hours: 2** 

**Pre-Clinic Hours: 2** 

2. Recording deviations from normal 3. **Legal/ethical considerations Supervised clinical practice** 4. 19. General patient appraisal **Lecture Hours: 2** Physical appearance **Laboratory Hours: 1** a. **Deviations from normal** b. **Treatment planning considerations** c. d. Head and neck inspections Landmarks 1. 2. Anatomy 3. **Nodes** 4. Glands 5. **TMJ** Recording in a clinical record 6. **Supervised clinical practice** 7. 20. Radiographic interpretation: caries, Lecture hours: 2 periodontal disease, and pulpal, periapical, and bone lesions a. **Caries** Periodontal disease b. **Pulpal lesions** c. Traumatic injuries d. e. Foreign bodies and root tips f. **Extractions socket Cvst and tumors** g. Metabolic bone lesions h. 1. Salivary stones 21. **Intra-oral soft tissue examination Lecture Hours: 4** Landmarks and anatomy **Pre-Clinic Hours: 2** a. Pathology and deviations from normal b. Terminology and descriptive terms c. **Examination sequence** d. Recording in a clinical record e. f. Supervised clinical practice 22. Charting and classification of occlusion **Lecture Hours: 2 Tooth morphology Pre-Clinic Hours: 2** a. b. Cavity classification c. **Charting restorations** d. Charging abnormalities/pathology **Inspection techniques** e. **Direct observation** 1. 2. **Indirect observation** 3. **Transillumination** Uses of a triplex syringe f. **Classification of occlusion** Recording information in a clinical record g. h. Supervised clinical practice

d.

1.

Medical/dental history

Interpretation

# 23. Radiographic interpretation:

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

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**Lecture Hours: 2**