Course Syllabus
Wayne County Community College District
DA 120 Dental Specialties

CREDIT HOURS: 2.00

CONTACT HOURS: .00

COURSE DESCRIPTION:
This is a lecture course designed to expose the dental assisting student to the dental specialties. Areas covered are oral surgery, endodontics, orthodontics, pediatrics, prosthetics and periodontics.

PREREQUISITES: DA 110

EXPECTED COMPETENCIES:
Upon successful completion of this course, the student will:

- **Endodontic:**
  - Define endodontics and describe what an endodontist does.
  - Describe pulpal (reversible pulpitis, irreversible pulpitis and pulpal necrosis) and periapical disease (apical periodontitis, periapical abscess)
  - Identify diagnostic procedures used in endodontics such as clinical examination, history, pulp testing, mobility, percussion, etc)
  - Identify and list uses and functions for endodontic instruments and materials:
    - endodontic files
    - paper points
    - gutta percha
    - barbed roach
    - reamers
    - endodontic pliers
    - irrigation syringes
    - silver points
    - spreaders
  - List the assistant's endodontic duties relating to:
    - instrument processing
    - tray set-ups
    - chairside activities
    - patient management
    - rubber dam placement
  - Provide an overview of root canal therapy
  - Explain why a rubber dam is used in endodontics.
• Describe surgical endodontics procedures such as apicoectomy, apical curettage, retrograde restoration, root amputation and hemisection.

• Performance Objective: By the end of the term, the student will have an opportunity to:

  • Assist in electric pulp vitality in DA 202.
  • Assist in root canal therapy in DA 117.
  • Prepare a tray set-up for a root canal procedure in DA 120.

• **Pediatrics:**

  • Define pediatric dentistry as a specialty and the team members.
  • List the premedications used in pediatrics.
  • List the types of anesthetics used in pediatrics.
  • Describe the rationale for and procedure for the following preventive procedures:
    - fluoride treatments
    - pit and fissure sealants
    - oral hygiene instructions
    - mouth guards
    - space maintainer
  • List the purpose for and procedure sequence of:
    - pulpotomy
    - stainless steel crown
  • List the etiology of and treatment procedure for:
    - fractured teeth
    - traumatic intrusion
    - displaced teeth
    - avulsed teeth
  • 7. Describe the behaviors associated with various age groups and describe recommended child management techniques.
  • List the assistant's pedodontic duties relating to:
    - tray set-ups
    - chairside activities
    - patient management
  • 9. Identify the signs of child abuse and the procedure for reporting suspected child abuse cases.

• **Oral Surgery:**

  • Identify and list uses for oral surgery instruments:
    - scalpel
    - surgical curette
    - periosteal elevator
    - mallet & chisel
• suction tips
• rongeurs
• bone files
• extraction elevators
• extraction forceps
• root picks
• surgical scissors
• tissue forceps
• hemostats
• sutures, needles & holders
• surgical aspirating tips
• surgical burs
• tissue retractors

• List the purpose for and procedure sequence of:
  • biopsy
  • forceps extractions
  • impacted molars
  • multiple extractions/alveolectomy
  • root recovery
  • frenectomy
  • placement of sutures
  • reduction of facial fractures

• Outline the etiology of and treatment for:
  • prolonged bleeding
  • infection
  • alveolitis

• List the assistant's oral surgery duties relating to:
  • instrument processing
  • tray set-ups
  • chairside activities
  • patient management

• Explain the difference between a general dentist and an oral and maxillofacial surgeon (OMFS) and list the procedures most commonly performed by an OMFS.

• Discuss the patient's home care following extractions.

• **Orthodontics:**

• Identify and list the uses for orthodontic instrument/devices.
  • band seater
  • ligature director
  • band adaptor
  • ligature tying pliers
  • three-jaw pliers
  • tweed loop pliers
  • bird beak pliers
  • how pliers
• Discuss the principles of:
  o preventive orthodontics
  o interceptive orthodontics
  o corrective orthodontics
  o tooth movement
• List the influences causing orthodontic problems:
  o hereditary
  o systemic
  o local
• List the assistant's orthodontic duties in relation to:
  o laboratory procedures
  o tray set-ups
  o instrument processing
  o patient management
  o expanded duties
• Describe Angle's classes of malocclusion:
• Describe an open bite.
• Describe an overbite.
• Describe a cross bite.
• Describe the types of fixed and removable appliances used in orthodontic treatment.
• Identify the diagnostic records that must be gathered before orthodontic treatment planning.
• Describe the types and the selection, adaptation, cementation, and removal of orthodontic bands.
• Describe the placement and removal of elastomeric ring orthodontic separators.

• **Prosthetics:**

• Identify the following prosthetic devices:
  o retention cores and posts
  o cast gold crowns
  o esthetic crowns
- fixed bridges
- cast gold inlays
- removable prosthetics
- partial dentures
- full dentures
- cast gold onlays

- List the procedure sequence for:
  - cast gold inlay
  - crown preps
  - impressions
  - temporization
  - cementation

- Discuss the fabrication of:
  - cast restorations
  - full and partial dentures
  - esthetic crowns

- List the assistant's prosthodontic duties relating to:
  - trays set-ups
  - chairside activities
  - laboratory relations
  - patient management

- Name indications and contraindications for fixed prosthetics.
- Describe the indications and contraindications for removable partial and complete dentures.
- Describe the steps in the construction of a (an):
  - removable partial denture
  - complete denture
  - overdenture
  - immediate denture

- **Dental Implants and TMJ:**

  1. List and describe the different types of dental implants such as endosteal, subperiosteal and transosteal implants.
  2. Explain the surgical procedures for placing dental implants.
  - Explain the team approach in placing dental implants for reconstruction.
  - Discuss the indications and contraindications for dental implants.
  - Discuss the selection of patients to receive dental implants.
  - Define the term osseointegration.
  - Identify the specialized instruments used for implant surgery.
  - Describe the home care procedures and follow-up visits required after receiving dental implants.
  - Describe the procedure for custom impression tray fabrication.
  - Describe temporomandibular joint disease (TMJ) and types of treatment.
• **Periodontics:**

• Describe the scope of periodontics.
• Describe the stages of periodontal disease.
• Explain the procedures necessary for a comprehensive periodontal examination including dental examination, mobility, periodontal probing, bleeding index, occlusal adjustment, radiographs.
• Identify and list uses for periodontal instruments:
  - scalers/curettes
  - periodontal files
  - periodontal probe
  - scalpels
  - periodontal knives
  - electrosurgery unit
  - suction tips

• List the purpose for and procedure sequence for the following Nonsurgical procedures:
  - scaling and root planing
  - subgingival curettage

• List the purpose for and procedure sequence for the following Surgical procedures:
  - gingivectomy
  - gingivoplasty
  - occlusal equilibration
  - osteoplasty
  - ostectomy
  - flap procedures
  - bone grafts
  - implants
  - lasers

• List the assistant's duties relating to:
  - instrument processing
  - tray set-ups
  - chairside activities
  - patient management

• Discuss the points to be covered when giving postoperative instructions to a patient following periodontal surgery.

• Identify the types of periodontal dressings and how they are prepared, placed and removed.
• Describe periodontal maintenance procedures and the patient’s role relating to each.

• Discuss the various types of antimicrobial and antibiotics agents that may be prescribed as adjuncts to treatment.

  • **Dental Assisting Competencies:**

    o Competencies can be described by several basic characteristics. They are 1) a combination of knowledge, psychomotor skill, communication skill and/or attitude; and 2) independently performed at or above an acceptable level of a defined standard.

    o As a participating member of the health care team the dental assistant plays an integral role in the delivery of dental services to individuals and populations of all ages, including the medically compromised, mentally or physically challenged and socially or culturally disadvantaged. Each dental assisting course in the curriculum will strive to facilitate and certify the competence of the dental assisting student.

    o Upon completion of DA 120, the student will continue to acquire the following skills, knowledge and values as outlined in the document “Competencies for the Dental Assisting Graduate”.

  • **Competencies for the Dental Assisting Graduate**

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

      • Collect diagnostic and treatment data.
      • Manage infection hazard control.
      • Perform clinical supportive treatments.
      • Take diagnostic radiographs
      • Perform dental laboratory procedures
      • Provide patient oral health instructions.
      • Assist in managing medical emergencies
      • Model professional behaviors, ethics, and appearance
      • Carry out dental office procedures
      • Perform expanded functions legal in Michigan

**ASSESSMENT METHODS:**
Student performance may be assessed by examination, quizzes, case studies, oral reports, group discussion, written reports or presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

**GRADING SCALE:**
A  = 94% to 100%
B = 87% to 93%
C = 80% to 86%
D = 73% to 79%
E = less than 72%