ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: DLA 1203 Chairside Assisting I

Date: Fall 2021

Credit Hours: 4

Prerequisite(s): Admission into the Dental Assisting Program

Delivery Method:
- Lecture 2 Contact Hours (1 contact = 1 credit hour)
- Lab 4 Contact Hours (2-3 contact = 1 credit hour)
- Clinical 0 Contact Hours (3 contact = 1 credit hour)

Offered: Fall Spring Summer

CATALOG DESCRIPTION:
This course provides information on the history of dentistry and its progression, educational requirements of the dental team, as well as ethics, jurisprudence and the Health Information Portability and Accountability Act relating to dentistry. Preparation for patient care, including the patient record, observations and assessments, examination, vital signs, dental charting, and the introduction to the dental office and basic chairside assisting are also emphasized. Students will learn basic chairside instruments and maintenance, tray systems, instrument transfer, and how to maintain the operating field. An introduction to communication skills and emergency management will also be presented. Current OSHA and CDC guidelines for infection control and handling of hazardous materials are practiced.
GENERAL EDUCATION GOALS ADDRESSED
[See last page for Course Competency/Assessment Methods Matrix.]
Upon completion of the course, the student will be able:
[Choose up to three goals that will be formally assessed in this course.]

☐ To apply analytical and problem solving skills to personal, social, and professional issues and situations.
☐ To communicate successfully, both orally and in writing, to a variety of audiences.
☐ To construct a critical awareness of and appreciate diversity.
☐ To understand and use technology effectively and to understand its impact on the individual and society.
☐ To develop interpersonal capacity.
☒ To recognize what it means to act ethically and responsibly as an individual and as a member of society.
☒ To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
☐ To connect learning to life.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:
[Outcomes related to course specific goals. See last page for more information.]
Upon completion of the course, the student will be able to:
1. Demonstrate a basic understanding of the Dental Profession
   1.1. Review dental disease and dentistry from the “beginning of time”
   1.2. Identify the items on the timeline of dentistry
   1.3. Name the individuals who had a great impact on the profession of dentistry.
   1.4. Identify the people who promoted education and organized dentistry.
   1.5. Explain what DDS and DMD stand for.
   1.6. Identify the nine specialties of dentistry.
   1.7. Describe, generally, the career skills performed by dental assistants, hygienists, and laboratory technicians.
   1.8. List the education required for, and the professional organizations that represent, each dental career path.

2. Manage infection and hazard control protocol consistent with published professional guidelines. (laboratory-based skills) (Standard 2-8e)
   2.1. Demonstrate a comprehensive knowledge or proper hand hygiene for different situations in the dental office.
   2.2. Demonstrate a comprehensive knowledge of proper Personal Protective Equipment used, and in what order to put on and take off.
   2.3. Demonstrate a comprehensive knowledge of the different barriers used in the dental office and how to properly place and remove them.
   2.4. Understand the different types of disinfectants and disinfection techniques used.
   2.5. Understand the reason and use of the ultrasonic cleaner.
   2.6. Demonstrate a comprehensive understanding of operatory disinfection.
   2.7. Demonstrate a comprehensive understanding of ultrasonic scrubbing of instruments.
   2.8. Demonstrate a comprehensive understanding of packaging instruments for sterilization.
   2.9. Demonstrate a comprehensive understanding of cold chemical sterilization of instruments.
   2.10. Demonstrate a comprehensive understanding of operating the AutoClave
   2.11. Demonstrate a comprehensive understanding of Operating the StatIM
3. **Demonstrate comprehensive understanding of the Dental office and Basic Chairside Assisting.**

3.1. Describe the design of a dental office, explaining the purpose of each area.
3.2. Describe the equipment and function of the equipment in each area.
3.3. Describe the daily routine to open and close the dental office.
3.4. Explain the basic concepts of chairside assisting.
3.5. Identify the activity zones and classifications of motion.
3.6. Describe and demonstrate the necessary steps to prepare the treatment room.
3.7. Explain and demonstrate the necessary steps to seat the patient for treatment. (Standard 2-8g)
3.8. Describe and demonstrate the ergonomics of the operator and the assistant at chairside. (Standard 2-8k)
3.9. Describe and demonstrate the necessary steps to dismiss the patient after treatment is finished. (Standard 2-8g; 2-8m)
3.10. Identify the special needs of certain patients.

4. **Demonstrate a comprehensive understanding and skills in Preparing for Patient Care**

4.1. Explain how patient record is developed and the importance of the personal registration form, medical and dental information, clinical evaluation, and the extraoral and intraoral examinations. (Standard 2-8n)
4.2. Understand how to take and record medical and dental histories, as well as follow-up questions to ask a patient to ensure complete information is collected. (Standard 2-8a)
4.3. Describe how the patient record may be called into litigation or used in a forensic case.
4.4. Perform or assist the dentist in an extraoral and an intraoral evaluation including lips, tongue, glands and oral cavity. (Standard 2-8c)
4.5. Explain how a diagnosis and treatment plan is developed.
4.6. Perform vital signs on the patient, including both oral and tympanic temperature, pulse, respiration, and blood pressure. (Standard 2-8b)
4.7. Document the vital signs and be alert to any signs that are abnormal.
4.8. Identify the five Korotkoff sounds, the two that are used in recording blood pressure, and the man who described them in 1905.

5. **Demonstrate comprehensive understanding of the use of Basic Chairside Instruments and Tray Systems.** (Standard 2-8f)

5.1. Identify the parts of an instrument.
5.2. Describe how instruments are identified.
5.3. Identify the categories and functions of dental burs.
5.4. Describe the types and functions of abrasives.
5.5. Explain the various handpieces and attachments, and be able to demonstrate accessory change.

6. **Demonstrate a comprehensive knowledge and skills during Instrument Transfer and Maintaining the Operating Field.**

6.1. Describe the transfer zone.
6.2. Define fulcrum and tactile sensation.
6.3. Describe and demonstrate the grasps, positions, and transfer of instruments for a procedure. (Standard 2-8h)
6.4. List the eight rules for instrument transfer. (Standard 2-8j)
6.5. Understand instrument transfer modification. (Standard 2-8j)
6.6. Describe and demonstrate how to maintain the oral cavity. (Standard 2-8i)
6.7. Explain the equipment used in the treatment of the oral cavity.
6.8. Describe techniques for moisture control and isolation.

7. **Demonstrate a comprehensive understanding of Dental Dam placement** *(Standard 2-9b)*
   7.1. Explain the expanded functions legally performed in Illinois by the dental assistant.
   7.2. Explain the purpose of the dental dam and identify who places it on a patient.
   7.3. List and explain advantages and contraindications of the dental dam.
   7.4. Identify the armamentarium needed for the dental dam procedure and explain the function of each.
   7.5. Explain how to prepare the patient for dental dam placement and how to determine the isolation area.
   7.6. Describe and demonstrate how dental dam material is prepared.
   7.7. List and demonstrate the steps for placing and removing the dental dam.
   7.8. Explain and demonstrate the dental dam procedure for the child patient.

8. **Demonstrate a comprehensive understanding of Matrix and Wedge systems.** *(Standard 2-9f)*
   8.1. Define matrix and wedge and list the uses and types of matrices.
   8.2. Describe the functions, parts, placement, and removal of the Tofflemire matrix.
   8.3. Discuss the function and placement of the wedge.
   8.4. Describe the AutoMatrix and sectional matrix, and where they are used in restorative procedures.
   8.5. Explain and demonstrate the placement and removal of the strip matrix, Tofflemire, AutoMatrix, and sectional matrix.*

9. **Demonstrate a comprehensive understanding of Dental Charting and SOAP notes.** *(Standard 2-8d)*
   9.1. Explain why charting is used in dental practices.
   9.2. Identify charts that use symbols to represent conditions in the oral cavity.
   9.3. List and explain the systems used for charting the permanent and deciduous dentitions.
   9.4. Define G.V. Black’s six classifications of cavity preparations.
   9.5. List common abbreviations used to identify simple, compound, and complex cavities.
   9.6. Describe basic charting terminology.
   9.7. Explain color indicators and identifying charting symbols.
   9.8. Explain the importance of accurate, inclusive notes written in the patients chart before, during or after treatment.

10. **Demonstrate a basic understanding of patient Psychology, Communication, and Multicultural Interaction.**
    10.1. Define psychology and paradigm.
    10.2. Describe the components of the communication process
    10.3. List the skills used in listening.
    10.4. Differentiate the terms used in verbal and nonverbal communication.
    10.5. Demonstrate how the following body language is used to nonverbal communication behavior: spatial, posture, facial expression, gestures, and perception.
    10.6. Discuss how Maslow’s hierarchy of needs is used, and how it relates to communication in today’s dental office.
    10.7. Discuss how defense mechanisms can inhibit communication.
    10.8. Identify and explain dental patient phobias and concerns.
    10.9. Describe how the baby boomer generation may differ from generations X, Y, and Z.
    10.10. Identify office stress, and demonstrate how to achieve conflict resolution.
10.11. Describe some general behaviors of multicultural patient populations.

11. **Demonstrate a basic understanding of Dental Ethics, Jurisprudence, and the Health Information and Accountability Act**
   11.1. Identify the difference between statutory, civil and criminal law.
   11.2. Define the Dental Practice Act and what it covers.
   11.3. Identify who oversees the Dental Practice Act and how licenses for the dental field are obtained.
   11.4. Define expanded functions.
   11.5. Identify the components of a contract.
   11.6. Identify due care and give examples of malpractice, doctrine of res ipsa loquitur and torts.
   11.7. Define fraud and where it may be seen in the dental office.
   11.8. Identify care that can be given under the Good Samaritan Law.
   11.9. Identify the four areas of the Americans with Disabilities Act.
   11.10. Identify the responsibilities of the dental team in regard to dental records, implied and informed consent, subpoenas, and the statute of limitations.
   11.11. Define ethics and give examples of the American Dental Association and American Dental Assistants Association’s principals of ethics.
   11.12. State how dentistry follows ethical principals in regard to advertising, professional fees and charges, and professional responsibilities and rights.
   11.13. State how HIPAA law has impacted the dental office and identify the parameters of the law.
   11.14. Identify how patient health information can be used and disclosed, as well as the rights of patients.
   11.15. Gain an understanding of the training that the staff must follow to be compliant with the HIPAA laws.
   11.16. Identify the CDT transactions and code sets.

12. **Demonstrate a comprehensive understanding of Emergency Management in the dental office.** (Standard 2-8o)
   12.1. Describe several emergency situations that may take place in the dental office, and how a dental assistant can be prepared for these possibilities.
   12.2. Describe the CAB approach to CPR and demonstrate the associated skills.
   12.3. Define the terms and anatomy used in CPR delivery. Determine if the patient is unconscious and demonstrate knowledge of how to open the airway, as well as when and how to deliver chest compressions.
   12.4. List and describe several causes of airway obstructions in the dental office and demonstrate the ability to open the airway and to perform the Heimlich maneuver.
   12.5. List and describe the signs and treatments of various medical emergencies that may occur in the dental office.

13. **Discuss and demonstrate an understanding of the placement of Topical anesthetic, using information on foramen and nerves learned in DLA 1210.** (Standard 2-9a)
   13.1. Demonstrate a comprehensive understanding of the location of injection sites in terms of where to place the topical anesthetic.
   13.2. Gather the equipment necessary for topical anesthetic placement.
   13.3. Have a comprehensive understanding of potential contraindications in topical anesthetic use.

14. **Demonstrate a comprehensive understanding of the proper techniques used to clean and polish removable prosthesis.** (Standard 2-9k)
   14.1. Understand the reason for each step in the process.
   14.2. Demonstrate the proper cleaning and polishing of removable appliances.
14.3. Be able to properly inspect appliances for remaining debris.
14.4. Understand limitations that appliances have, and what instruments can be used.
14.5. Demonstrate aseptic technique throughout the process.

**MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS**

*For each of the goals selected above, indicate which outcomes align with the goal.*

<table>
<thead>
<tr>
<th>Goals</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>First Goal</td>
<td>10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16</td>
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**COURSE TOPICS AND CONTENT REQUIREMENTS:**

I. Introduction to the Dental Profession
   A. History of Dentistry
   B. Later Progress of Dentistry
   C. Progress of Dentistry in the US
   D. Education and Organized Dentistry
      i. American Dental Association
   E. Dental Health Team
      i. General and Specialty Dentist
      ii. Dental Assistant
      iii. Dental Hygienist
      iv. Dental Laboratory Technician
      v. Miscellaneous Members
   F. Professional and Educational Responsibilities of the Dental
      Assistant
      i. Professional Organizations
      ii. Educational Achievements
      iii. Legal and Ethical Responsibility

II. Intro to the Dental Office and Basic Chairside Assisting
   A. Dental Office Design
      i. Reception room
      ii. Reception desk and business office
      iii. Sterilization area
      iv. Dental office Lab
      v. X-ray processing room
      vi. Optional rooms
         1. Consultation room
         2. Radiography room
   B. The Treatment Rooms and Dental Equipment
      i. The dental chair
ii. The dental unit
iii. Dental stools
iv. Operating light
v. Cabinetry
vi. Sink
vii. Dental x-ray unit
viii. Small equipment found in tx room
ix. Dental air compressor and central vacuum system

C. Routine Office Care
   i. Opening and closing office

D. Concepts of Dental Assisting
   i. Activity zones
   ii. Classification of motion

E. Preparing the Treatment Room

F. Seating the Dental Patient
   i. Greet and escort the patient
   ii. Seat and prepare the patient

G. Ergonomics for the Operator and the Assistant

H. Dismissing the patient

I. Patients with Special Needs
   i. Child patient
   ii. Senior patient
   iii. Pregnant patient
   iv. Hearing-impaired or blind patients
   v. Patients with Wheelchairs or Walkers
   vi. Non English speaking patients

III. Preparation for Patient Care
A. Patient Record
   i. Patient registration form
   ii. Medical information
   iii. Dental information

B. Clinical Observations and Physical Assessment

C. Clinical Setting

D. Clinical Examination
   i. Diagnosis and Treatment Plan
   ii. Treatment Notes (SOAP notes)
   iii. Recall or Continued Care Appointment

E. Vital Signs
   i. Body temperature
   ii. Pulse
   iii. Respiration
   iv. Blood pressure
   v. Recording blood pressure

IV. Basic Chairside Instruments and Tray Systems
A. Instruments for basic chairside procedures
   i. Basic structural parts of dental hand instruments
      1. Basic classifications of dental instruments
      2. Cutting instruments
      3. Noncutting instruments
      4. Miscellaneous Instruments
5. Instrument Care, Maintenance and Sterilization

B. Dental Rotary Instruments
   i. Parts of the bur
   ii. Cutting burs
   iii. Finishing burs
   iv. Surgical burs
   v. Laboratory burs
   vi. Fissurotomy burs

C. Abrasive Rotary Instruments
   i. Mandrels
   ii. Discs
   iii. Stones
   iv. Rubber wheels
   v. Rubber points
   vi. Bur blocks

D. Dental Handpieces
   i. The parts of the Dental Handpiece
   ii. High-speed handpiece
   iii. Low-speed handpiece
   iv. Electrical handpiece
   v. Ultrasonic handpiece
   vi. Dental laser handpiece
   vii. Maintenance and Sterilization
   viii. Air abrasion Unit
   ix. Microetcher

E. Tray Systems
   i. Positioning on trays
   ii. Cassette systems for instruments
   iii. Color-coding systems

V. Instrument Transfer and Maintaining the Operating Field

A. Instrument transfer
   i. Transfer hand
   ii. Instrument grasps
   iii. Instrument transfer methods
   iv. Instrument transfer modifications

B. Maintaining the Operating Field
   i. Lighting
   ii. The evacuation system
   iii. Saliva ejector
   iv. The Air-water syringe
   v. Retraction of tissues
   vi. Isolite system

C. Techniques for Moisture Control and Isolation
   i. Cotton rolls
   ii. Dry angles
   iii. Dental assistants performing expanded functions

VI. Dental Dam
   i. Advantages of Dental Dam use
   ii. Contraindications
   iii. Materials and equipment
iv. Preparation before placement
v. Placement and removal procedures
vi. Removing the dental dam
vii. Dental dam for pediatric patients
viii. Alternatives to the full dental dam placement

VII. Matrix and Wedge Systems
A. Matrices
i. AutoMatrix
ii. Plastic strip matrix
iii. Sectional matrix
iv. Tofflemire Matrix
B. Wedges
i. Wooden
ii. Plastic
iii. Proper placement

VIII. Dental Charting
A. Dental charts
B. Numbering systems
i. Universal
ii. FDI
iii. Palmer
C. Cavity Classifications
i. Class I
ii. Class II
iii. Class III
iv. Class IV
v. Class V
vi. Class VI
D. Abbreviations of Tooth Surfaces
E. Basic charting terms
F. Charting color indications and symbols

IX. Psychology, Communication, and Multicultural Interaction
A. Understanding individual paradigms
B. Communication
C. Components of the Communication process
   i. Sender
   ii. Receiver
   iii. Message
   iv. Feedback
   v. Channel
D. Listening skills
   i. Telephone listening skills
E. Verbal and nonverbal communication
   i. Territoriality or special relation
   ii. Posture and position
   iii. Facial expression
   iv. Gestures
   v. Perception
F. Maslow’s Hierarchy of Needs
   i. Survival or physiological needs
ii. Safety needs
iii. Belongingness and love needs
iv. Prestige and esteem needs
v. Self-actualization

G. Defense mechanisms
H. Dental phobias and concerns
I. Understanding different generations
   i. Baby boomers
   ii. Generation X
   iii. Generation Y
   iv. Generation Z

J. Stress in the Dental Office
   i. Conflict
   ii. Conflict resolution
K. Culture, Ethnicity, and Race
L. Multicultural Interaction

X. Ethics, Jurisprudence, and the Health Information Portability and Accountability Act
A. The law
   i. Civil and criminal law
   ii. Dental Practice Act
   iii. State Board of Dentistry
B. The Dentist, the Dental Assistant and the Law of Contracts
C. Standard of Care
   i. Malpractice
   ii. Torts
   iii. Assault and battery
   iv. Defamation of Character
   v. Invasion of Privacy
   vi. Fraud
   vii. Good Samaritan Law
   viii. Child Abuse and Neglect
   ix. Emotional Abuse, Domestic Violence, and Elder Abuse
   x. Americans with Disabilities
D. Dental Records
   i. Informed Consent
   ii. Implied Consent
   iii. Subpoenas
   iv. Statute of Limitations
E. Ethics
   i. Advertising
   ii. Professional Fees and Charges
   iii. Professional Responsibilities and Rights
F. Health Insurance and Portability Act
   i. The law
   ii. Transactions and code sets
   iii. Who does HIPAA encompass
   iv. Who must comply with HIPAA
   v. Protected Health Information
   vi. Security Rule
   vii. Office Manual
viii. Federal Civil and Criminal Penalties for Violations of Patient’s Right to Privacy
ix. HIPAA Challenge
G. The Americans Dental Assistants Association Principals of Ethics and Professional Conduct
   i. Dental Assistants Following Ethics and Jurisprudence

XI. Emergency Management
   A. Prevention of Emergencies
   B. Routine Preparedness for Dental Team Members
   C. The Dental Assistant’s Role in Emergency Care
   D. Dental Office Emergency Kit
   E. Cardiopulmonary Resuscitation
      i. AHA guidelines for CPR
   F. Foreign Body Airway Obstruction
   G. Causes, Signs and Treatment of Medical Emergencies
      i. Syncope
      ii. Orthostatic hypotension
      iii. Asthma
      iv. Allergic reactions
      v. Anaphylactic reaction
      vi. Hyperventilation
      vii. Epilepsy/seizure disorder
      viii. Diabetes Mellitus
      ix. Hypoglycemia
     x. Cardiovascular Emergencies
        1. Angina
        2. Myocardial Infarction
        3. Stroke

XII. Topical Anesthetic Placement
   A. Infiltration
   B. Anterior Superior Alveolar Nerve block
   C. Middle Superior Alveolar Nerve block
   D. Posterior Superior Alveolar Nerve block
   E. Greater Palatine nerve Block
   F. Nasopalatine nerve block
   G. Maxillary nerve block
   H. Inferior Alveolar nerve block
   I. Buccal nerve block
   J. Lingual nerve block
   K. Mental nerve block
   L. Incisive nerve block

INSTRUCTIONAL METHODS:
- Lecture
- Classroom Discussion
- Text Assignments
- Demonstration
- Visual aids - videos, charts & models
- Computers – MindTap, research, Eaglesoft
- Exams & quizzes
• Laboratory practice of skills
• Guest lecturers
• Role playing

INSTRUCTIONAL MATERIALS:
• Study Models
• Patterson Eaglesoft Charting Software
• Paterson Dental Inventory Software

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:
Written examinations are used to evaluate student progress and comprehension, these will comprise 30% of your final grade. A comprehensive final exam will be given at the end of the semester and is 30% of your final grade. Quizzes will make-up 20% of your grade. Homework, participation and attendance will be the remaining 20% of your final grade.

Laboratory: Students are required to wear white lab coats in the laboratory and follow the posted rules.

• All skills must be successfully completed by the student to pass the lab and for continuation in the Dental Assisting Program.
• Tests and unannounced quizzes will be given to evaluate student comprehension.
• Laboratory performance notes will be kept by the instructor for each student. These notes, along with the test and quiz grades will be used to determine the student’s final laboratory grade.

Final Grade: A grade of a ‘C’ is required in the lecture portion and in the laboratory portion of this course for graduation from the Dental Assisting Program.

The student’s final grade will be calculated:
50% Lecture grade
50% Laboratory grade

The following grading scale will be used as a guide in determining the final grade for this course:

A= 90-100
B= 80-89
C= 70-79
D= 60-69
F= 0-59
### Course Competency/Assessment Methods Matrix

#### (DLA 1203- Chairside Asst.)

<table>
<thead>
<tr>
<th>Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.</th>
<th>Assessment of Student Learning</th>
<th>Assessment Options</th>
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</thead>
<tbody>
<tr>
<td>Direct/Indirect</td>
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<tr>
<td>Demonstrate a basic understanding of the dental health team and each member’s professional, legal and ethical responsibilities.</td>
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<td>Demonstrate and apply the concepts of four-handed dentistry.</td>
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<tr>
<td>Demonstrate a basic understanding of the use and types of hand and rotary instruments used in dentistry.</td>
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<td>Demonstrate a basic understanding of the psychological factors which affect patient behavior and ways of helping a patient overcome his fears and anxieties about dentistry.</td>
<td>X</td>
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<td>Demonstrate a basic understanding of the process of oral diagnosis and treatment planning including the types of data that must be collected and recorded in the clinical record both on paper and electronically.</td>
<td>X</td>
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