

# Dental Equipment & Procedures

## At-A-Glance - Lamar CISD

Ongoing Skills Imbedded All Year	Professional Standards/Employability Skills/Technical Skills		
		1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner. 1(B) The student will cooperate, contribute, and collaborate as a member of a team. 1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.	
Grading Period	Unit Name	Estimated Time Frame	TEKS
<b>Grading Period 1</b> <b>29 Days</b>	<b>Professional Dental Office</b>	<b>10 Days</b>	1.A, 1.B, 1.C, 1.D, 7.I
	1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner. 1(B) The student will cooperate, contribute, and collaborate as a member of a team. 1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills. 1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality. 7(I) The student will describe the dental office design.		
	<b>Duties of a Dental Assistant</b>	<b>10 Days</b>	1.A, 1.B, 1.C, 1.D, 2.A, 2.B, 2.C, 2.D, 3.A, 3.B, 3.C, 3.D, 3.E, 4.A, 4.B, 4.C, 5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 7.A, 7.K, 7.M, 7.P
1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner. 1(B) The student will cooperate, contribute, and collaborate as a member of a team, 1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills. 1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality. 2(A) The student will explain and demonstrate dental charting and the types of numbering systems used. 2(B) The student will identify the symbols and colors used to represent conditions present in the oral cavity. 2(C) The student will explain and demonstrate the methods of charting the permanent and deciduous teeth. 2(D) The student will identify the different cavity classifications. 3(A) The student will explain and demonstrate the proper steps for cleaning, sterilizing and disinfecting instruments and equipment. 3(B) The student will explain and demonstrate the steps required for inspection of instruments and equipment. 3(C) The student will describe and demonstrate proper sterilization packaging and techniques. 3(D) The student will describe accepted storage of instruments and delivery protocols. 3(E) The student will describe a quality assurance program. 4(A) The student will explain and demonstrate the grasps, positions, and transfer of instruments for a given procedure with emphasis on asepsis. 4(B) The student will distinguish the parts of an instrument and describe how instruments are identified. 4(C) The student will identify the categories and functions of dental burs and diamonds. 5(A) The student will assist the patient in completing the patient history. 5(B) The student will review and update the medical and dental history of the patient and identify conditions that may affect the patient's dental treatment. 5(C) The student will perform and assist the dentist in an intra and extra oral examination. 5(D) The student will measure and record vital signs of the patient, including temperature, pulse, respiration, and blood pressure. 5(E) The student will interpret vital signs to determine if the signs are abnormal according to the recommended guidelines set by the current standard of care, 5(F) The student will document treatment rendered and planned on the patient chart. 7(A) The student will describe and apply appropriate verbal and non-verbal communication skills when providing patient care. 7(K) The student will explain and demonstrate preventive maintenance of the operatory and equipment. 7(M) The student will explain and demonstrate the proper preparation of the treatment area. 7(P) The student will roleplay the working positions of the dental health care team when using equipment during dental procedures.			

<b>Grading Period 2 26 Days</b>	<b>General Office</b>	<b>9 Days</b>	1.A, 1.B, 1.C, 3.A, 3.B, 3.C, 3.D, 3.E, 6.B
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(B) The student will cooperate, contribute, and collaborate as a member of a team,</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>3(A) The student will explain and demonstrate the proper steps for cleaning, sterilizing and disinfecting instruments and equipment.</p> <p>3(B) The student will explain and demonstrate the steps required for inspection of instruments and equipment.</p> <p>3(C) The student will describe and demonstrate proper sterilization packaging and techniques.</p> <p>3(D) The student will describe accepted storage of instruments and delivery protocols.</p> <p>3(E) The student will describe a quality assurance program.</p> <p>6(B) The student will explain biohazard disposal.</p>		
	<b>General Office</b>	<b>6 Days</b>	1.A, 1.B, 1.C, 3.A, 3.B, 3.C, 3.D, 3.E, 6.B
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(B) The student will cooperate, contribute, and collaborate as a member of a team,</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>3(A) The student will explain and demonstrate the proper steps for cleaning, sterilizing and disinfecting instruments and equipment.</p> <p>3(B) The student will explain and demonstrate the steps required for inspection of instruments and equipment.</p> <p>3(C) The student will describe and demonstrate proper sterilization packaging and techniques.</p> <p>3(D) The student will describe accepted storage of instruments and delivery protocols.</p> <p>3(E) The student will describe a quality assurance program.</p> <p>6(B) The student will explain biohazard disposal.</p>		
	<b>Dental Office Safety</b>	<b>15 Days</b>	1.A, 1.B, 1.C, 1.D, 3.A, 3.B, 3.C, 3.D, 3.E, 6.A, 6.B, 6.C, 6.D, 6.E, 7.A
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(B) The student will cooperate, contribute, and collaborate as a member of a team,</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.</p> <p>3(A) The student will explain and demonstrate the proper steps for cleaning, sterilizing and disinfecting instruments and equipment.</p> <p>3(B) The student will explain and demonstrate the steps required for inspection of instruments and equipment.</p> <p>3(C) The student will describe and demonstrate proper sterilization packaging and techniques.</p> <p>3(D) The student will describe accepted storage of instruments and delivery protocols.</p> <p>3(E) The student will describe a quality assurance program.</p> <p>6(A) The student will describe applications of OSHA and other regulatory agencies' standards and the roles, functions, and responsibilities of regulatory agencies, including Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), and the Texas State Board of Dental Examiners (TSBDE)</p> <p>6(B) The student will explain biohazard disposal.</p> <p>6(C) The student will demonstrate safety protocols when using and disposing of sharps, such as scalpels, needles, scalers, and burs.</p> <p>6(D) The student will recall and apply state requirements related to blood borne pathogen training stated in House Bill 300.</p> <p>6(E) The student will demonstrate the Occupational Safety and Health Administration (OSHA) requirements for radiation safety in the workplace.</p> <p>7(A) The student will demonstrate and explain the mechanisms of the diagnostic tools used in the head and neck region, such as intraoral and extraoral radiographs, Cone Beam Computed Tomography (CBCT), Computed Tomography (CT), Magnetic Resonance Imaging (MRI), and biopsies.</p>		
	<b>Diagnostic Tools</b>	<b>5 Days</b>	1.A, 1.B, 1.C, 1.D, 7.A, 7.B, 7.C, 7.D, 7.E
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(B) The student will cooperate, contribute, and collaborate as a member of a team,</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.</p>		

	<p>7(A) The student will demonstrate and explain the mechanisms of the diagnostic tools used in the head and neck region, such as intraoral and extraoral radiographs, Cone Beam Computed Tomography (CBCT), Computed Tomography (CT), Magnetic Resonance Imaging (MRI), and biopsies.</p> <p>7(B) The student will describe the steps to develop film radiographs.</p> <p>7(C) The student will explain the use and benefits of digital imaging software and hardware.</p> <p>7(D) The student will analyze radiographs for diagnostic quality.</p> <p>7(E) The student will position patient and equipment accurately to capture anatomical landmarks commonly found on diagnostic images.</p>		
<b>Grading Period 3 25 Days</b>	<b>Diagnostic Tools</b>	<b>10 Days</b>	1.A, 1.B, 1.C, 1.D, 7.A, 7.B, 7.C, 7.D, 7.E
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(B) The student will cooperate, contribute, and collaborate as a member of a team,</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.</p> <p>7(A) The student will demonstrate and explain the mechanisms of the diagnostic tools used in the head and neck region, such as intraoral and extraoral radiographs, Cone Beam Computed Tomography (CBCT), Computed Tomography (CT), Magnetic Resonance Imaging (MRI), and biopsies.</p> <p>7(B) The student will describe the steps to develop film radiographs.</p> <p>7(C) The student will explain the use and benefits of digital imaging software and hardware.</p> <p>7(D) The student will analyze radiographs for diagnostic quality.</p> <p>7(E) The student will position patient and equipment accurately to capture anatomical landmarks commonly found on diagnostic images.</p>		
	<b>Dental Materials</b>	<b>15 Days</b>	4.A, 4.D, 7.G, 7.K, 8.A, 8.B, 8.C, 8.D
	<p>4(A) The student will explain and demonstrate the grasps, positions, and transfer of instruments for a given procedure with emphasis on asepsis.</p> <p>4(D) The student will classify the types and functions of abrasives.</p> <p>7(G) The student will demonstrate the “tell-show-do” approach and explain when this approach would be used.</p> <p>7(K) The student will explain and demonstrate preventive maintenance of the operatory and equipment.</p> <p>8(A) The student will identify and classify restorative materials such as composite, amalgam, and endodontic.</p> <p>8(B) The student will identify and prepare materials used for impressions such as trays and alginate.</p> <p>8(C) The student will identify and prepare prophylactic materials such as preventative medicaments.</p> <p>8(D) The student will identify and compare lab materials such as prosthetic, orthodontic, and cosmetic.</p>		
<b>Grading Period 4 32 Days</b>	<b>Communication &amp; Ethics</b>	<b>12 Days</b>	1.A, 1.B, 1.C, 1.D, 6.A, 6.B, 6.C, 6.D, 6.E, 7.A, 7.B, 7.G, 7.H, 7.I, 7.J, 7.K, 7.L, 7.M, 7.N, 7.O, 7.P
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(B) The student will cooperate, contribute, and collaborate as a member of a team,</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.</p> <p>6(A) The student will describe applications of OSHA and other regulatory agencies' standards and the roles, functions, and responsibilities of regulatory agencies, including Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), and the Texas State Board of Dental Examiners (TSBDE)</p> <p>6(B) The student will explain biohazard disposal.</p> <p>6(C) The student will demonstrate safety protocols when using and disposing of sharps, such as scalpels, needles, scalers, and burs.</p> <p>6(D) The student will recall and apply state requirements related to blood borne pathogen training stated in House Bill 300.</p> <p>6(E) The student will demonstrate the Occupational Safety and Health Administration (OSHA) requirements for radiation safety in the workplace.</p> <p>7(A) The student will describe and apply appropriate verbal and non-verbal communication skills when providing patient care.</p> <p>7(B) The student will demonstrate methods for calming a patient who shows signs of anxiety.</p> <p>7(G) The student will demonstrate the “tell-show-do” approach and explain when this approach would be used.</p> <p>7(H) The student will explain the adaptations needed to care for the various needs of patients such as patients who are children, older adults, pregnant, hearing-impaired, blind, and whose mobility is limited by a wheelchair or walker.</p>		

	<p>7(I) The student will describe the dental office design.  7(J) The student will identify equipment found in a dental operatory and explain and demonstrate how each piece of equipment functions.  7(K) The student will explain and demonstrate preventive maintenance of the operatory and equipment.  7(L) The student will explain and demonstrate the concepts of dental assisting with emphasis on the activity zones (clock position) and classifications of motions.  7(M) The student will explain and demonstrate the proper preparation of the treatment area.  7(N) The student will roleplay the seating and dismissal of the patient from the treatment area.  7(O) The student will explain the factors which must be considered when selecting operator, assistant, and patient positions.  7(P) The student will roleplay the working positions of the dental health care team when using equipment during dental procedures.</p>		
	<p><b>Dental Charting &amp; Treatment Planning</b></p>	<p><b>20 Days</b></p>	<p>2.A, 2.B, 2.C, 2.D, 5.F</p>
<p><b>Grading Period 5 32 Days</b></p>	<p><b>Disinfection &amp; Sterilization</b></p>	<p><b>15 Days</b></p>	<p>1.A, 1.B, 1.C, 1.D, 3.A, 3.B, 3.C, 3.D, 3.E, 4.A, 4.B, 4.C, 4.D, 4.E, 4.F</p>
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.  1(B) The student will cooperate, contribute, and collaborate as a member of a team,  1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.  1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.  3(A) The student will explain and demonstrate the proper steps for cleaning, sterilizing and disinfecting instruments and equipment.  3(B) The student will explain and demonstrate the steps required for inspection of instruments and equipment.  3(C) The student will describe and demonstrate proper sterilization packaging and techniques.  3(D) The student will describe accepted storage of instruments and delivery protocols.  3(E) The student will describe a quality assurance program.  4(A) The student will explain and demonstrate the grasps, positions, and transfer of instruments for a given procedure with emphasis on asepsis.  4(B) The student will distinguish the parts of an instrument and describe how instruments are identified.  4(C) The student will identify the categories and functions of dental burs and diamonds.  4(D) The student will classify the types and functions of abrasives.  4(E) The student will determine the various types of handpieces and attachments.  4(F) The student will explain the types of tray systems and color-coding systems.</p>		
	<p><b>Dental Instruments &amp; Tray Setups</b></p>	<p><b>17 Days</b></p>	<p>4.A, 4.B, 4.C, 4.D, 4.E, 4.F, 6.C</p>
	<p>4(A) The student will explain and demonstrate the grasps, positions, and transfer of instruments for a given procedure with emphasis on asepsis.  4(B) The student will distinguish the parts of an instrument and describe how instruments are identified.  4(C) The student will identify the categories and functions of dental burs and diamonds.  4(D) The student will classify the types and functions of abrasives.  4(E) The student will determine the various types of handpieces and attachments.  4(F) The student will explain the types of tray systems and color-coding systems.  6(C) The student will demonstrate safety protocols when using and disposing of sharps, such as scalpels, needles, scalers, and burs.</p>		
<p><b>Grading Period 6 29 Days</b></p>	<p><b>Lab</b></p>	<p><b>16 Days</b></p>	<p>1.A, 1.C, 1.D, 2.A, 4.A, 4.B, 4.C, 4.D, 4.E, 4.F, 8.A, 8.B, 8.C, 8.D</p>
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.  1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.  1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.  2(A) The student will explain and demonstrate dental charting and the types of numbering systems used.</p>		

	<p>4(A) The student will explain and demonstrate the grasps, positions, and transfer of instruments for a given procedure with emphasis on asepsis.</p> <p>4(B) The student will distinguish the parts of an instrument and describe how instruments are identified.</p> <p>4(C) The student will identify the categories and functions of dental burs and diamonds.</p> <p>4(D) The student will classify the types and functions of abrasives.</p> <p>4(E) The student will determine the various types of handpieces and attachments.</p> <p>4(F) The student will explain the types of tray systems and color-coding systems.</p> <p>8(A) The student will identify and classify restorative materials such as composite, amalgam, and endodontic.</p> <p>8(B) The student will identify and prepare materials used for impressions such as trays and alginate.</p> <p>8(C) The student will identify and prepare prophylactic materials such as preventative medicaments.</p> <p>8(D) The student will identify and compare lab materials such as prosthetic, orthodontic, and cosmetic.</p>		
	<p><b>Patient Management</b></p>	<p><b>11 Days</b></p>	<p>1.A, 1.C, 1.D, 2.A, 5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 6.A, 6.B, 6.C, 6.D, 6.E, 6.F, 7.A, 7.B, 7.C, 7.D, 7.E, 7.F, 7.G, 7.H, 7.P</p>
	<p>1(A) The student will demonstrate verbal and non-verbal communication in a clear, concise, and effective manner.</p> <p>1(C) The student will demonstrate professionalism, attention to detail, and problem-solving skills.</p> <p>1(D) The student will explain the importance of the Health Insurance Portability and Accountability Act (HIPAA) and patient privacy and confidentiality.</p> <p>2(A) The student will explain and demonstrate dental charting and the types of numbering systems used.</p> <p>5(A) The student will assist the patient in completing the patient history.</p> <p>5(B) The student will review and update the medical and dental history of the patient and identify conditions that may affect the patient's dental treatment.</p> <p>5(C) The student will perform and assist the dentist in an intra and extra oral examination.</p> <p>5(D) The student will measure and record vital signs of the patient, including temperature, pulse, respiration, and blood pressure.</p> <p>5(E) The student will interpret vital signs to determine if the signs are abnormal according to the recommended guidelines set by the current standard of care,</p> <p>5(F) The student will document treatment rendered and planned on the patient chart.</p> <p>6(A) The student will analyze a rationale for maintaining the operating field.</p> <p>6(B) The student will explain and apply the steps in maintaining an operating field.</p> <p>6(C) The student will explain and apply the steps in illuminating an operating field.</p> <p>6(D) The student will explain and apply the steps in evacuating an operating field.</p> <p>6(E) The student will explain and apply the steps in optimizing the field of vision in a wet and dry field.</p> <p>7(A) The student will describe and apply appropriate verbal and non-verbal communication skills when providing patient care.</p> <p>7(B) The student will demonstrate methods for calming a patient who shows signs of anxiety.</p> <p>7(B) The student will describe the steps to develop film radiographs.</p> <p>7(C) The student will explain the use and benefits of digital imaging software and hardware.</p> <p>7(D) The student will analyze radiographs for diagnostic quality.</p> <p>7(E) The student will position patient and equipment accurately to capture anatomical landmarks commonly found on diagnostic images.</p> <p>7(G) The student will demonstrate the "tell-show-do" approach and explain when this approach would be used.</p> <p>7(H) The student will explain the adaptations needed to care for the various needs of patients such as patients who are children, older adults, pregnant, hearing-impaired, blind, and whose mobility is limited by a wheelchair or walker.</p> <p>7(P) The student will roleplay the working positions of the dental health care team when using equipment during dental procedures.</p>		
	<p><b>Semester Review &amp; Exam</b></p>	<p><b>2 Days</b></p>	