Assessment Requirements for HLTDET016
Design digital dental restorations and appliances using computer-aided design (CAD)
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Modification History

Not applicable.

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- read and correctly interpreted four work orders
- used computer-aided design (CAD) software and technologies to prepare four digitally designed restorations or appliances, one of which must be a unit of crown and bridge work. The remaining three must be selected from two of the following categories:
  - prosthetics
  - chrome casting
  - orthodontics
  - splints
- applied infection control precautions and safe work practices to prepare the above four digital restoration or appliance designs
- critically evaluated the above four digital restoration or appliance designs to meet requirements of the work order.

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- Australian/New Zealand Standards, workplace health and safety (WHS) policies, Dental Board of Australia guidelines on infection control, Commonwealth legislation and State/Territory legislation, and organisational policies relating to dental laboratory work
- requirements and organisational policies relating to dental laboratory work including:
  - use of standard infection control precautions
  - use of personal protective equipment
  - requirements for the use of technologies and computer-aided design (CAD) software
  - requirements for storage of digital designs
  - work health and safety
- benefits and limitations of computer-aided design (CAD) in digital dentistry
- commonly used types of computer-aided design (CAD) technologies used in the dental industry
- digital design processes and procedures
- digital design file types
- digital and physical impressions and properties
- types of digital restorations and appliances
- properties of restoration and appliance material applicable to computer-aided manufacturing (CAM) and the applicability of each material
- computer-aided manufacturing types and processes commonly used in digital dentistry
- fundamentals of oral anatomy:
  - dentition – arrangement of teeth, naming and coding of teeth
  - structures of the oral cavity – hard and soft palate, lateral and posterior borders of the oral cavity, tongue and floor of mouth
  - teeth form and function.

Assessment Conditions

Skills must have been demonstrated in a dental laboratory workplace or in a simulated dental laboratory environment that reflects workplace laboratory conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources:
  - access to a variety of work orders
  - digital and/or physical impressions or models
  - computer-aided design (CAD) software and technologies commonly used within the dental industry
  - Dental Board of Australia guidelines on infection control on which the candidate bases the planning process
  - laboratory safety manuals and procedures in line with relevant Commonwealth and State/Territory legislation.

Assessors must satisfy the standards for registered training providers’ requirements for assessors.

Links