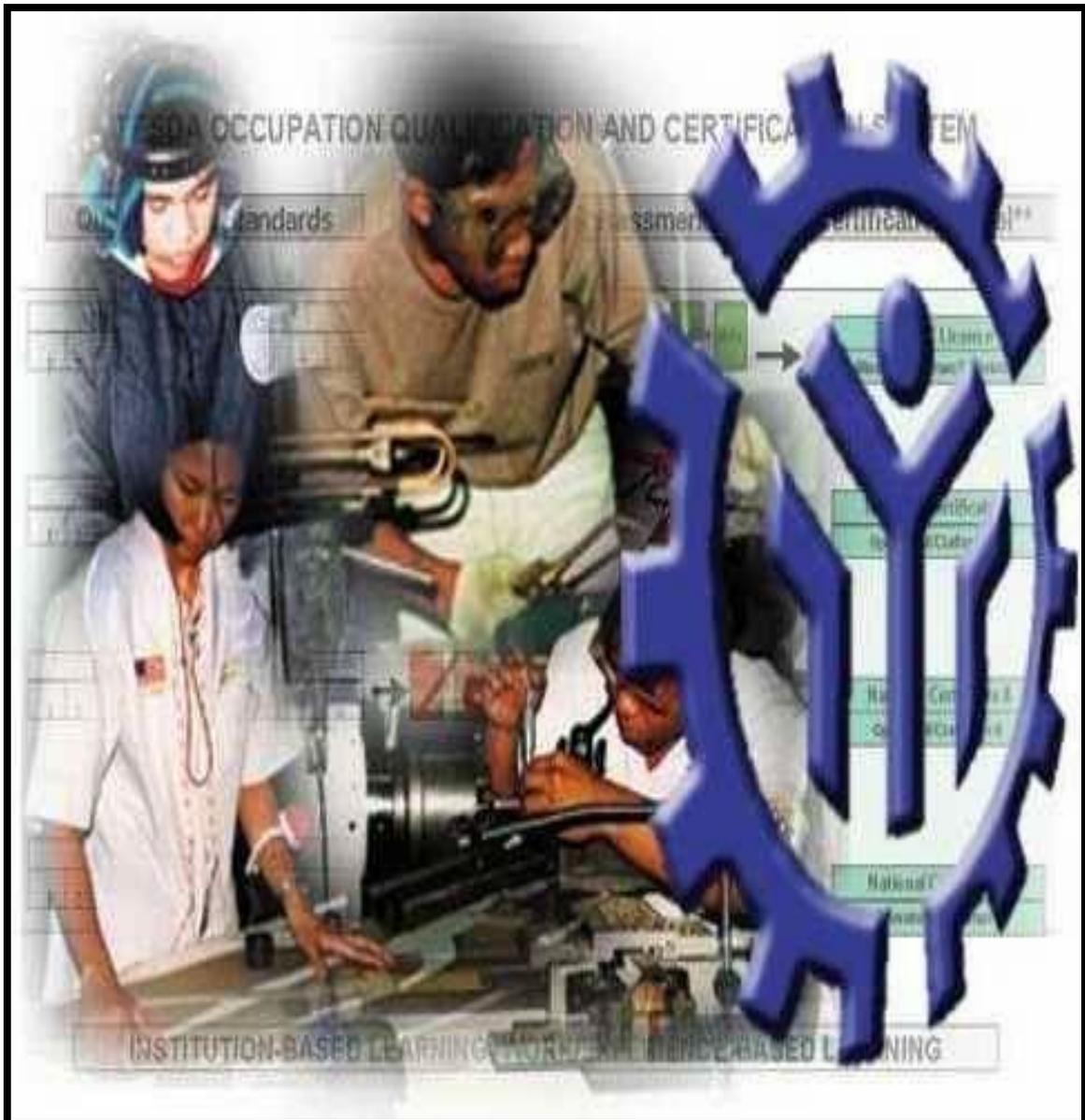


# TRAINING REGULATIONS

## DENTAL TECHNOLOGY NC IV



**HEALTH, SOCIAL, AND OTHER COMMUNITY  
DEVELOPMENT SERVICES SECTOR**

*Technical Education and Skills Development Act of 1994  
(Republic Act No. 7796)*

**Section 22, “Establishment and Administration of the National Trade Skills Standards” of the RA 7796 known as the TESDA Act mandates TESDA to establish national occupational skill standards. The Authority shall develop and implement a certification and accreditation program in which private industry group and trade associations are accredited to conduct approved trade tests, and the local government units to promote such trade testing activities in their respective areas in accordance with the guidelines to be set by the Authority.**

The Competency Standards (CS) serve as basis for the:

1. Competency assessment and certification;
2. Registration and delivery of training programs; and
3. Development of curriculum and assessment instruments.

Each CS has four sections:

- |           |   |
|-----------|---|
| Section 1 | Definition of Qualification - refers to the group of competencies that describes the different functions of the qualification.  |
| Section 2 | Competency Standards - gives the specifications of competencies required for effective work performance.  |
| Section 3 | Training Standards - contains information and requirements in designing training program for certain Qualification. It includes curriculum design; training delivery; trainee entry requirements; tools, equipment and materials; training facilities; trainer's qualification; and institutional assessment. |
| Section 4 | National Assessment and Certification Arrangement - describes the policies governing assessment and certification procedure.  |

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# TRAINING REGULATIONS FOR DENTAL TECHNOLOGY NC IV

## SECTION 1 DENTAL TECHNOLOGY NC IV

This **DENTAL TECHNOLOGY NC IV** covers the fabrication/construction and repair of crowns, bridges, dentures and other dental prosthetics/appliances based on dentist's prescriptions.

The Units of Competency comprising this qualification include the following:

<b>UNIT CODE</b>	<b>BASIC COMPETENCIES</b>
500311101	Receive and respond to workplace communication
500311102	Work with others
500311103	Demonstrate work values
500311104	Practice basic housekeeping procedures
500311105	Participate in workplace communication
500311106	Work in a team environment
500311107	Practice career professionalism
500311108	Practice occupational health and safety procedures
500311115	Utilize specialized communication skills
500311116	Develop teams and individuals
500311117	Apply problem solving techniques in the workplace
500311118	Collect, analyze and organize information
500311119	Plan and organize work
500311120	Promote environmental protection

<b>UNIT CODE</b>	<b>COMMON COMPETENCIES</b>
HCS346201	Maintain instruments and equipment in work area
HCS346202	Assist in dental laboratory procedures
HCS346203	Assist with administration in dental laboratory practice
HCS315202	Apply quality standards
HCS516201	Maintain an effective relationship with customers and clients
HCS516202	Manage own performance
HCS346204	Follow occupational health and safety policies in dental laboratory facilities
HCS346205	Maintain infection control in dental practice
ICT311201	Operate a personal computer

<b>UNIT CODE</b>	<b>CORE COMPETENCIES</b>
HCS322323	Fabricate models
HCS322324	Fabricate custom impression trays
HCS322325	Fabricate registration bite rims
HCS322326	Articulate models and transfer records
HCS322327	Fabricate mouthguard
HCS322328	Arrange artificial teeth for complete dentures
HCS322329	Set-up and wax removable partial dentures
HCS322330	Wax, process and finish acrylic dentures and appliances
HCS322331	Fabricate thermo formed bases and appliances
HCS322339	Repair and modify dentures and appliances
HCS322332	Fabricate oral splints
HCS322333	Fabricate orthodontic appliances
HCS322334	Fabricate cast metal removable partial denture framework
HCS322335	Fabricate metal crown and bridge structures
HCS322336	Fabricate ceramic restorations
HCS322337	Fabricate indirect composite/polymer fixed restorations
HCS322338	Join alloy structures
HCS322340	Manage dental laboratory production and operation
HCS322341	Perform administrative functions
HCS322342	Continue professional growth and development

Occupational/Job titles corresponding to this qualification may include:

- Dental Technologist**
- Dental Lab Technical Services Supervisor**

The national practice of this qualification requires a license from the Board of Dentistry – Professional Regulations Commission.

## SECTION 2 COMPETENCY STANDARDS

This section gives the details of the contents of the basic, common and core units of competency required in **DENTAL TECHNOLOGY NC IV**.

### BASIC COMPETENCIES

**UNIT OF COMPETENCY:** RECEIVE AND RESPOND TO WORKPLACE COMMUNICATION

**UNIT CODE:** 500311101

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required to receive, respond and act on verbal and written communication.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
1. Follow routine spoken messages	1.1 Required information is gathered by listening attentively and correctly interpreting or understanding information/instructions. 1.2 Instructions/information are properly recorded. 1.3 Instructions are acted upon immediately in accordance with information received. 1.4 Clarification is sought from workplace supervisor on all occasions when any instruction/information is not clear.
2. Perform workplace duties following written notices	2.1 <b>Written notices and instructions</b> are read and interpreted correctly in accordance with <b>organizational guidelines</b> . 2.2 Routine written instructions are followed in sequence. 2.3 Feedback is given to workplace supervisor based on the instructions/information received.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Written notices and instructions	May refer to: 1.1 Handwritten and printed material 1.2 Internal memos 1.3 External communications 1.4 Electronic mail 1.5 Briefing notes 1.6 General correspondence 1.7 Marketing materials 1.8 Journal articles
2. Organizational Guidelines	May include: 2.1 Information documentation procedures 2.2 Company policies and procedures 2.3 Organizational manuals 2.4 Service manual

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Demonstrated knowledge of organizational procedures for handling verbal and written communications</p> <p>1.2 Received and acted on verbal messages and instructions</p> <p>1.3 Demonstrated competency in recording instructions/information</p>
<p>2. Underpinning knowledge</p>	<p>2.1 Knowledge of organizational policies/guidelines in regard to processing internal/external information</p> <p>2.2 Ethical work practices in handling communications</p> <p>2.3 Communication process</p>
<p>3. Underpinning skills</p>	<p>3.1 Conciseness in receiving and clarifying messages/information/communication</p> <p>3.2 Accuracy in recording messages/information</p>
<p>4. Resource implications</p>	<p>The following resources MUST be provided:</p> <p>4.1 Pens</p> <p>4.2 Note pads</p>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <p>5.1 Direct Observation</p> <p>5.2 Oral interview</p> <p>5.3 Written Evaluation</p> <p>5.4 Third Party Report</p>
<p>6. Context of assessment</p>	<p>6.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions.</p>

**UNIT OF COMPETENCY: WORK WITH OTHERS**

**UNIT CODE: 500311102**

**UNIT DESCRIPTOR:** This unit covers the skills, knowledge and attitudes required to develop workplace relationship and contribute in workplace activities.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Develop effective workplace relationship	1.1. <b><i>Duties and responsibilities</i></b> are done in a positive manner to promote cooperation and good relationship. 1.2. Assistance is sought from <b><i>workgroup</i></b> when difficulties arise and addressed through discussions. 1.3. <b><i>Feedback</i></b> provided by others in the team is encouraged, acknowledged and acted upon. 1.4. Differences in personal values and beliefs are respected and acknowledged in the development.
2. Contribute to work group activities	2.1. <b><i>Support is provided to team members</i></b> to ensure workgroup goals are met. 2.2. Constructive contributions to workgroup goals and tasks are made according to <b><i>organizational requirements</i></b> . 2.3. Information relevant to work is shared with team members to ensure designated goals are met.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Duties and responsibilities	1.1 Job description and employment arrangements 1.2 Organization's policy relevant to work role 1.3 Organizational structures 1.4 Supervision and accountability requirements including OHS 1.5 Code of conduct
2. Work group	2.1 Supervisor or manager 2.2 Peers/work colleagues 2.3 Other members of the organization
3. Feedback on performance	3.1 Formal/Informal performance appraisal 3.2 Obtaining feedback from supervisors and colleagues and clients 3.3 Personal, reflective behavior strategies 3.4 Routine organizational methods for monitoring service delivery
4. Providing support to team members	4.1 Explaining/clarifying 4.2 Helping colleagues 4.3 Providing encouragement 4.4 Providing feedback to another team member 4.5 Undertaking extra tasks if necessary
5. Organizational requirements	5.1 Goals, objectives, plans, systems and process 5.2 Legal and organization policy/guidelines 5.3 OHS policies, procedures and programs 5.4 Ethical standards 5.5 Defined resources parameters 5.6 Quality and continuous improvement processes and standards

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Provided support to team members to ensure goals are met</li> <li>1.2 Acted on feedback from clients and colleagues</li> <li>1.3 Accessed learning opportunities to extend own personal work competencies to enhance team goals and outcomes.</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 The relevant legislation that affect operations, especially with regards to safety</li> <li>2.2 Reasons why cooperation and good relationships are important</li> <li>2.3 Knowledge of the organization’s policies, plans and procedures</li> <li>2.4 Understanding how to elicit and interpret feedback</li> <li>2.5 Knowledge of workgroup member’s responsibilities and duties</li> <li>2.6 Importance of demonstrating respect and empathy in dealings with colleagues</li> <li>2.7 Understanding of how to identify and prioritize personal development opportunities and options</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Ability to read and understand the organization’s policies and work procedures</li> <li>3.2 Write simple instructions for particular routine tasks</li> <li>3.3 Interpret information gained from correspondence</li> <li>3.4 Communication skills to request advice, receive feedback and work with a team</li> <li>3.5 Planning skills to organize work priorities and arrangement</li> <li>3.6 Technology skills including the ability to select and use technology appropriate to a task</li> <li>3.7 Ability to relate to people from a range of social, cultural and ethnic backgrounds</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Access to relevant workplace or appropriately simulated environment where assessment can take place</li> <li>4.2 Materials relevant to the proposed activity or tasks</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Direct observations of work activities of the individual member in relation to the work activities of the group</li> <li>5.2 Observation of simulation and or role play involving the participation of individual member to the attainment of organizational goal</li> <li>5.3 Case studies and scenarios as a basis for discussion of issues and strategies</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency assessment may occur in workplace or any appropriately simulated environment</li> <li>6.2 Assessment shall be observed while task are being undertaken whether individually or in group</li> </ul>

**UNIT OF COMPETENCY : DEMONSTRATE WORK VALUES**

**UNIT CODE : 500311103**

**UNIT DESCRIPTOR :** This unit covers the outcomes required in demonstrating and living by desirable values and ethics in the workplace.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Define the purpose of work	1.1 One's unique sense of purpose for working and the why's of work are identified, reflected on and clearly defined for one's development as a person and as a member of society. 1.2 Personal mission is in harmony with company's values.
2. Apply work values/ethics	2.1 <b>Work values/ethics/concepts</b> are classified and reaffirmed in accordance with the transparent company ethical standards, policies and guidelines. 2.2 <b>Work practices</b> are undertaken in compliance with industry work ethical standards, organizational policy and guidelines. 2.3 Personal behavior and relationships with co-workers and/or clients are conducted in accordance with ethical standards, policy and guidelines. 2.4 Company resources are used in accordance with transparent company ethical standards, policy and guidelines.
3. Deal with ethical problems	3.1 Company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical conduct are accessed and applied in accordance with transparent company ethical standard, policies and guidelines. 3.2 <b>Work incidents/situations</b> are reported and/or resolved in accordance with company protocol/guidelines. 3.3 Resolution and/or referral of ethical problems identified are used as learning opportunities.
4. Maintain integrity of conduct in the workplace	4.1 Personal work practices and values are demonstrated consistently with acceptable ethical conduct and company's core values. 4.2 Instructions to co-workers are provided based on ethical, lawful and reasonable directives. 4.3 Company values/practices are shared with co-workers using appropriate behavior and language.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Work values/ethics/ concepts	May include but are not limited to: 1.1 Commitment/Dedication 1.2 Sense of urgency 1.3 Sense of purpose 1.4 Love for work 1.5 High motivation 1.6 Orderliness 1.7 Reliability 1.8 Competence 1.9 Dependability 1.10 Goal-oriented 1.11 Sense of responsibility 1.12 Being knowledgeable 1.13 Loyalty to work/company 1.14 Sensitivity to others 1.15 Compassion/Caring attitude 1.16 Balancing between family and work 1.17 Pakikisama 1.18 Bayanihan spirit/teamwork 1.19 Sense of nationalism
2. Work practices	2.1 Quality of work 2.2 Punctuality 2.3 Efficiency 2.4 Effectiveness 2.5 Productivity 2.6 Resourcefulness 2.7 Innovativeness/Creativity 2.8 Cost Consciousness 2.9 5S 2.10 Attention to details
3. Incidents/situations	3.1 Violent/intensed dispute or argument 3.2 Gambling 3.3 Use of prohibited substances 3.4 Pilferages 3.5 Damage to person or property 3.6 Vandalism 3.7 Falsification 3.8 Bribery 3.9 Sexual Harassment 3.10 Blackmail
4. Company resources	4.1 Consumable materials 4.2 Equipment/Machineries 4.3 Human 4.4 Time 4.5 Financial resources
5. Instructions	5.1 Verbal 5.1 Written

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Defined one's unique sense of purpose for working</li> <li>1.2 Clarified and affirmed work values/ethics/concepts consistently in the workplace</li> <li>1.3 Demonstrated work practices satisfactorily and consistently in compliance with industry work ethical standards, organizational policy and guidelines</li> <li>1.4 Demonstrated personal behavior and relationships with co-workers and/or clients consistent with ethical standards, policy and guidelines</li> <li>1.5 Used company resources in accordance with company ethical standard, policies and guidelines</li> <li>1.6 Followed company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical conduct/behavior</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Occupational health and safety</li> <li>2.2 Work values and ethics</li> <li>2.3 Company performance and ethical standards</li> <li>2.4 Company policies and guidelines</li> <li>2.5 Fundamental rights at work including gender sensitivity</li> <li>2.6 Work responsibilities/job functions</li> <li>2.7 Corporate social responsibilities</li> <li>2.8 Company code of conduct/values</li> <li>2.9 Balancing work and family responsibilities</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Interpersonal skills</li> <li>3.2 Communication skills</li> <li>3.3 Self awareness, understanding and acceptance</li> <li>3.4 Application of good manners and right conduct</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace or assessment location</li> <li>4.2 Case studies/scenarios</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Portfolio Assessment</li> <li>5.2 Interview</li> <li>5.3 Third Party Reports</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the work place or in a simulated work place setting.</li> </ul>

**UNIT OF COMPETENCY: PRACTICE HOUSEKEEPING PROCEDURES**

**UNIT CODE: 500311104**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required to apply the basic housekeeping procedures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Sort and remove unnecessary items	1.1 Reusable, recyclable materials are sorted in accordance with company/office procedures. 1.2 <b>Unnecessary items</b> are removed and disposed of in accordance with company or office procedures.
2. Arrange items	2.1 Items are arranged in accordance with company/office housekeeping procedures. 2.2 Work area is arranged according to job requirements. 2.3 Activities are prioritized based on instructions. 2.4 Items are provided with clear and visible <b>identification marks</b> based on procedure. 2.5 Safety equipment and evacuation passages are kept clear and accessible based on instructions.
3. Maintain work area, tools and equipment	3.1 Cleanliness and orderliness of work area is maintained in accordance with company/office procedures. 3.2 Tools and equipment are cleaned in accordance with manufacturer's instructions/manual. 3.3 <b>Minor repairs</b> are performed on tools and equipment in accordance with manufacturer's instruction and manual. 3.4 Defective tools and equipment are reported to immediate supervisor.
4. Follow standardized work process and procedures	4.1 Materials for common use are maintained in designated area based on procedures. 4.2 Work is performed according to standard work procedures. 4.3 Abnormal incidents are reported to immediate supervisor.
5. Perform work spontaneously	5.1 Work is performed as per instruction. 5.2 Company and office decorum are followed and complied with. 5.3 Work is performed in accordance with occupational health and safety (OHS) requirements.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Unnecessary items	May include but are not limited to: 1.1 Non-recyclable materials 1.2 Unserviceable tools and equipment 1.3 Pictures, posters and other materials not related to work activity 1.4 Waste materials
2. Identification marks	2.1 Labels 2.2 Tags 2.3 Color coding
3. Decorum	3.1 Company/office rules and regulations 3.2 Company/office uniform 3.3 Behavior
4. Minor repair	Minor repair include but are not limited to: 4.1 Replacement of parts 4.2 Application of lubricants 4.3 Sharpening of tools 4.4 Tightening of nuts, bolts and screws

## EVIDENCE GUIDE

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Practiced the basic procedures of 5S
2. Underpinning knowledge	2.1 Principles of 5S 2.2 Work process and procedures 2.3 Safety signs and symbols 2.4 General OH & S principles and legislation 2.5 Environmental requirements relative to work safety 2.6 Accident/Hazard reporting procedures
3. Underpinning skills	3.1 Basic communication skills 3.2 Interpersonal skills 3.3 Reading skills required to interpret instructions 3.4 Reporting/recording accidents and potential hazards
4. Resource implications	The following resources <b>MUST</b> be provided: 4.1 Facilities, materials, tools and equipment necessary for the activity
5. Method of assessment	Competency may be assessed through: 5.1 Third Party Report 5.2 Interview 5.3 Demonstration with questioning
6. Context of assessment	6.1 Competency may be assessed in the work place or in a simulated work place setting.

**UNIT OF COMPETENCY: PARTICIPATE IN WORKPLACE COMMUNICATION**

**UNIT CODE: 500311105**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
3. Obtain and convey workplace information	3.1 Specific and relevant information is accessed from <b>appropriate sources</b> . 3.2 Effective questioning, active listening and speaking skills are used to gather and convey information. 3.3 Appropriate <b>medium</b> is used to transfer information and ideas 3.4 Appropriate non- verbal communication is used. 3.5 Appropriate lines of communication with supervisors and colleagues are identified and followed. 3.6 Defined workplace procedures for the location and <b>storage</b> of information are used. 3.7 Personal interaction is carried out clearly and concisely.
4. Participate in workplace meetings and discussions	4.1 Team meetings are attended on time. 4.2 Own opinions are clearly expressed and those of others are listened to without interruption. 4.3 Meeting inputs are consistent with the meeting purpose and established <b>protocols</b> . 4.4 <b>Workplace interactions</b> are conducted in a courteous manner. 4.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded to. 4.6 Meetings outcomes are interpreted and implemented.
5. Complete relevant work related documents	5.1 Range of <b>forms</b> relating to conditions of employment is completed accurately and legibly. 5.2 Workplace data is recorded on standard workplace forms and documents. 5.3 Basic mathematical processes are used for routine calculations. 5.4 Errors in recording information on forms/ documents are identified and properly acted upon. 5.5 Reporting requirements to supervisor are completed according to organizational guidelines.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Appropriate sources	1.1 Team members 1.2 Suppliers 1.3 Trade personnel 1.4 Local government 1.5 Industry bodies
2. Medium	2.1 Memorandum 2.2 Circular 2.3 Notice 2.4 Information discussion 2.5 Follow-up or verbal instructions 2.6 Face to face communication
3. Storage	3.1 Manual filing system 3.2 Computer-based filing system
4. Forms	4.1 Personnel forms, telephone message forms, safety reports
5. Workplace interactions	5.1 Face to face 5.2 Telephone 5.3 Electronic and two way radio 5.4 Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams
6. Protocols	6.1 Observing meeting 6.2 Compliance with meeting decisions 6.3 Obeying meeting instructions

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared written communication following standard format of the organization</li> <li>1.2 Accessed information using communication equipment</li> <li>1.3 Made use of relevant terms as an aid to transfer information effectively</li> <li>1.4 Conveyed information effectively adopting the formal or informal communication</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Effective communication</li> <li>2.2 Different modes of communication</li> <li>2.3 Written communication</li> <li>2.4 Organizational policies</li> <li>2.5 Communication procedures and systems</li> <li>2.6 Technology relevant to the enterprise and the individual's work responsibilities</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Follow simple spoken language</li> <li>3.2 Perform routine workplace duties following simple written notices</li> <li>3.3 Participate in workplace meetings and discussions</li> <li>3.4 Complete work related documents</li> <li>3.5 Estimate, calculate and record routine workplace measures</li> <li>3.6 Basic mathematical processes of addition, subtraction, division and multiplication</li> <li>3.7 Ability to relate to people of social range in the workplace</li> <li>3.8 Gather and provide information in response to workplace Requirements</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Fax machine</li> <li>4.2 Telephone</li> <li>4.3 Writing materials</li> <li>4.4 Internet</li> </ul>
<p>5. Method of assessment</p>	<p>Competency <b>MUST</b> be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Direct observation with questioning</li> <li>5.2 Oral interview and written test</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed individually in the actual workplace or through accredited institution</li> </ul>

**UNIT OF COMPETENCY:**    **WORK IN A TEAM ENVIRONMENT**

**UNIT CODE:**                    **500311106**

**UNIT DESCRIPTOR:**            This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Describe team role and scope	1.1. The <b><i>role and objective of the team</i></b> is identified from available <b><i>sources of information</i></b> . 1.2. Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources.
2. Identify own role and responsibility within team	2.1. Individual role and responsibilities within the team environment are identified. 2.2. Roles and responsibility of other team members are identified and recognized. 2.3. Reporting relationships within team and external to team are identified.
3. Work as a team member	3.1. Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives. 3.2. Effective and appropriate contributions made to complement team activities and objectives, based on individual skills and competencies and <b><i>workplace context</i></b> . 3.3. Observed protocols in reporting using standard operating procedures. 3.4. Contribute to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Role and objective of team	1.1 Work activities in a team environment with enterprise or specific sector 1.2 Limited discretion, initiative and judgment maybe demonstrated on the job, either individually or in a team environment
2. Sources of information	2.1 Standard operating and/or other workplace procedures 2.2 Job procedures 2.3 Machine/equipment manufacturer's specifications and instructions 2.4 Organizational or external personnel 2.5 Client/supplier instructions 2.6 Quality standards 2.7 OHS and environmental standards
3. Workplace context	3.1 Work procedures and practices 3.2 Conditions of work environments 3.3 Legislation and industrial agreements 3.4 Standard work practice including the storage, safe handling and disposal of chemicals 3.5 Safety, environmental, housekeeping and quality guidelines

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Operated in a team to complete workplace activity</li> <li>1.2 Worked effectively with others</li> <li>1.3 Conveyed information in written or oral form</li> <li>1.4 Selected and used appropriate workplace language</li> <li>1.5 Followed designated work plan for the job</li> <li>1.6 Reported outcomes</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Communication process</li> <li>2.2 Team structure</li> <li>2.3 Team roles</li> <li>2.4 Group planning and decision making</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Communicate appropriately, consistent with the culture of the workplace</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Access to relevant workplace or appropriately simulated environment where assessment can take place</li> <li>4.2 Materials relevant to the proposed activity or tasks</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Observation of the individual member in relation to the work activities of the group</li> <li>5.2 Observation of simulation and or role play involving the participation of individual member to the attainment of organizational goal</li> <li>5.3 Case studies and scenarios as a basis for discussion of issues and strategies in teamwork</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in workplace or in a simulated workplace setting</li> <li>6.2 Assessment shall be observed while task are being undertaken whether individually or in group</li> </ul>

**UNIT OF COMPETENCY:** PRACTICE CAREER PROFESSIONALISM

**UNIT CODE:** 500311107

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes in promoting career growth and advancement.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Integrate personal objectives with organizational goals	1.1 Personal growth and work plans are pursued towards improving the qualifications set for the profession. 1.2 Intra and interpersonal relationships is are maintained in the course of managing oneself based on performance <b>evaluation</b> . 1.3 Commitment to the organization and its goal is demonstrated in the performance of duties.
2. Set and meet work priorities	2.1 Competing demands are prioritized to achieve personal, team and organizational goals and objectives. 2.2 <b>Resources</b> are utilized efficiently and effectively to manage work priorities and commitments. 2.3 Practices along economic use and maintenance of equipment and facilities are followed as per established procedures.
3. Maintain professional growth and development	3.1 <b>Trainings and career opportunities</b> are identified and availed of based on job requirements. 3.2 <b>Recognitions</b> are -sought/received and demonstrated as proof of career advancement. 3.3 <b>Licenses and/or certifications</b> relevant to job and career are obtained and renewed.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Evaluation	1.1 Performance Appraisal 1.2 Psychological Profile 1.20 Aptitude Tests
2. Resources	2.1 Human 2.2 Financial 2.3 Technology 2.3.1 Hardware 2.3.2 Software
3. Trainings and career opportunities	3.1 Participation in training programs 3.1.1 Technical 3.1.2 Supervisory 3.1.3 Managerial 3.1.4 Continuing Education 3.2 Serving as Resource Persons in conferences and workshops
4. Recognitions	4.1 Recommendations 4.2 Citations 4.3 Certificate of Appreciations 4.4 Commendations 4.5 Awards 4.6 Tangible and Intangible Rewards
5. Licenses and/or certifications	5.1 National Certificates 5.2 Certificate of Competency 5.3 Support Level Licenses 5.4 Professional Licenses

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Attained job targets within key result areas (KRAs)</li> <li>1.2 Maintained intra - and interpersonal relationship in the course of managing oneself based on performance evaluation</li> <li>1.3 Completed trainings and career opportunities which are based on the requirements of the industries</li> <li>1.4 Acquired and maintained licenses and/or certifications according to the requirement of the qualification</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Work values and ethics (Code of Conduct, Code of Ethics, etc.)</li> <li>2.2 Company policies</li> <li>2.3 Company-operations, procedures and standards</li> <li>2.4 Fundamental rights at work including gender sensitivity</li> <li>2.5 Personal hygiene practices</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Appropriate practice of personal hygiene</li> <li>3.2 Intra and Interpersonal skills</li> <li>3.3 Communication skills</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace or assessment location</li> <li>4.2 Case studies/scenarios</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Portfolio Assessment</li> <li>5.2 Interview</li> <li>5.3 Simulation/Role-plays</li> <li>5.4 Observation with questioning</li> <li>5.5 Third Party Reports</li> <li>5.6 Exams and Tests</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the work place or in a simulated work place setting</li> </ul>

**UNIT OF COMPETENCY: PRACTICE OCCUPATIONAL HEALTH AND SAFETY PROCEDURES**

**UNIT CODE: 500311108**

**UNIT DESCRIPTOR:** This unit covers the outcomes required to comply with regulatory and organizational requirements for occupational health and safety

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Identify hazards and risks	1.1 <b>Safety regulations</b> and workplace safety and hazard control practices and procedures are clarified and explained based on organization procedures. 1.2 <b>Hazards/risks</b> in the workplace and their corresponding indicators are identified to minimize or eliminate risk to co-workers, workplace and environment in accordance with organization procedures. 1.3 <b>Contingency measures</b> during workplace accidents, fire and other emergencies are recognized and established in accordance with organization procedures.
2. Evaluate hazards and risks	2.1 Terms of maximum tolerable limits which when exceeded will result in harm or damage are identified based on threshold limit values (TLV). 2.2 Effects of the hazards are determined. 2.3 OHS issues and/or concerns and identified safety hazards are reported to designated personnel in accordance with workplace requirements and relevant workplace OHS legislation.
3. Control hazards and risks	3.1 Occupational Health and Safety (OHS) procedures for controlling hazards/risks in workplace are consistently followed. 3.2 Procedures for dealing with workplace accidents, fire and emergencies are followed in accordance with organization OHS policies. 3.3 <b>Personal protective equipment (PPE)</b> is correctly used in accordance with organization OHS procedures and practices. 3.4 Appropriate assistance is provided in the event of a workplace emergency in accordance with established organization protocol.
4. Maintain OHS awareness	4.1 <b>Emergency-related drills and trainings</b> are participated in as per established organization guidelines and procedures. 4.2 <b>OHS personal records</b> are completed and updated in accordance with workplace requirements.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Safety regulations	May include but are not limited to: <ol style="list-style-type: none"> <li>1.1 Clean Air Act</li> <li>1.2 Building code</li> <li>1.3 National Electrical and Fire Safety Codes</li> <li>1.4 Waste management statutes and rules</li> <li>1.5 Philippine Occupational Safety and Health Standards</li> <li>1.6 DOLE regulations on safety legal requirements</li> <li>1.7 ECC regulations</li> </ol>
2. Hazards/risks	May include but are not limited to: <ol style="list-style-type: none"> <li>2.1 Physical hazards – impact, illumination, pressure, noise, vibration, temperature, radiation</li> <li>2.2 Biological hazards- bacteria, viruses, plants, parasites, mites, molds, fungi, insects</li> <li>2.3 Chemical hazards – dusts, fibers, mists, fumes, smoke, gasses, vapors</li> <li>2.4 Ergonomics               <ul style="list-style-type: none"> <li>• Psychological factors – over exertion/ excessive force, awkward/static positions, fatigue, direct pressure, varying metabolic cycles</li> <li>• Physiological factors – monotony, personal relationship, work out cycle</li> </ul> </li> </ol>
3. Contingency measures	May include but are not limited to: <ol style="list-style-type: none"> <li>3.1 Evacuation</li> <li>3.2 Isolation</li> <li>3.3 Decontamination</li> <li>3.4 (Calling designed) emergency personnel</li> </ol>
4. PPE	May include but are not limited to: <ol style="list-style-type: none"> <li>4.1 Mask</li> <li>4.2 Gloves</li> <li>4.3 Goggles</li> <li>4.4 Hair Net/cap/bonnet</li> <li>4.5 Face mask/shield</li> <li>4.6 Ear muffs</li> <li>4.7 Apron/Gown/coverall/jump suit</li> <li>4.8 Anti-static suits</li> </ol>
5. Emergency-related drills and training	<ol style="list-style-type: none"> <li>5.1 Fire drill</li> <li>5.2 Earthquake drill</li> <li>5.3 Basic life support/CPR</li> <li>5.4 First aid</li> <li>5.5 Spillage control</li> <li>5.6 Decontamination of chemical and toxic</li> <li>5.7 Disaster preparedness/management</li> </ol>
6. OHS personal records	<ol style="list-style-type: none"> <li>6.1 Medical/Health records</li> <li>6.2 Incident reports</li> <li>6.3 Accident reports</li> <li>6.4 OHS-related training completed</li> </ol>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Explained clearly established workplace safety and hazard control practices and procedures</li> <li>1.2 Identified hazards/risks in the workplace and its corresponding indicators in accordance with company procedures</li> <li>1.3 Recognized contingency measures during workplace accidents, fire and other emergencies</li> <li>1.4 Identified terms of maximum tolerable limits based on threshold limit value- TLV.</li> <li>1.5 Followed Occupational Health and Safety (OHS) procedures for controlling hazards/risks in workplace</li> <li>1.6 Used Personal Protective Equipment (PPE) in accordance with company OHS procedures and practices</li> <li>1.7 Completed and updated OHS personal records in accordance with workplace requirements</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 OHS procedures and practices and regulations</li> <li>2.2 PPE types and uses</li> <li>2.3 Personal hygiene practices</li> <li>2.4 Hazards/risks identification and control</li> <li>2.5 Threshold Limit Value -TLV</li> <li>2.6 OHS indicators</li> <li>2.7 Organization safety and health protocol</li> <li>2.8 Safety consciousness</li> <li>2.9 Health consciousness</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Practice of personal hygiene</li> <li>3.2 Hazards/risks identification and control skills</li> <li>3.3 Interpersonal skills</li> <li>3.4 Communication skills</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace or assessment location</li> <li>4.2 OHS personal records</li> <li>4.3 PPE</li> <li>4.4 Health records</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Portfolio Assessment</li> <li>5.2 Interview</li> <li>5.3 Case Study/Situation</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the work place or in a simulated work place setting</li> </ul>

<b>UNIT OF COMPETENCY:</b>	<b>UTILIZE SPECIALIZED COMMUNICATION SKILLS</b>
<b>UNIT CODE:</b>	<b>500311115</b>
<b>UNIT DESCRIPTOR:</b>	This unit covers the knowledge, skills and attitudes required to use specialized communication skills to meet specific needs of internal and internal clients, conduct interviews, facilitate group of discussions, and contribute to the development of communication strategies.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	<i>Italicized terms</i> are elaborated in the Range of Variables
1. Meet common and specific communication needs of clients and colleagues	1.1 Specific communication needs of clients and colleagues are identified and met 1.2 Different approaches are used to meet communication needs of clients and colleagues 1.3 Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization
2. Contribute to the development of communication strategies	2.1 <b>Strategies</b> for internal and external dissemination of information are developed, promoted, implemented and reviewed as required 2.2 Channels of communication are established and reviewed regularly 2.3 Coaching in effective communication is provided 2.4 Work related network and relationship are maintained as necessary 2.5 Negotiation and conflict resolution strategies are used where required 2.6 Communication with clients and colleagues is appropriate to individual needs and organizational objectives
3. Represent the organization	3.1 When participating in internal or external forums, presentation is relevant, appropriately researched and presented in a manner to promote the organization 3.2 Presentation is clear and sequential and delivered within a predetermined time 3.3 Utilize appropriate media to enhance presentation 3.4 Differences in views are respected 3.5 Written communication is consistent with organizational standards 3.6 Inquiries are responded in a manner consistent with organizational standard

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
4. Facilitate group discussion	4.1 Mechanisms which enhance <b><i>effective group interaction</i></b> is defined and implemented 4.2 Strategies which encourage all group members to participate are used routinely 4.3 Objectives and agenda for meetings and discussions are routinely set and followed 4.4 Relevant information is provided to group to facilitate outcomes 4.5 Evaluation of group communication strategies is undertaken to promote participation of all parties 4.6 Specific communication needs of individuals are identified and addressed
5. Conduct interview	5.1 A range of appropriate communication strategies are employed in <b><i>interview situations</i></b> 5.2 Records of interviews are made and maintained in accordance with organizational procedures 5.3 Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Strategies	1.1 Recognizing own limitations 1.2 Referral to specialists 1.3 Utilizing techniques and aids 1.4 Providing written drafts 1.5 Verbal and non verbal communication
2. Effective group interaction	2.1 Identifying and evaluating what is occurring within an interaction in a non judgmental way 2.2 Using active listening 2.3 Making decision about appropriate words, behavior 2.4 Putting together response which is culturally appropriate 2.5 Expressing an individual perspective 2.6 Expressing own philosophy, ideology and background and exploring impact with relevance to communication
3. Types of Interview	3.1 Related to staff issues 3.2 Routine 3.3 Confidential 3.4 Evidential 3.5 Non disclosure 3.6 Disclosure
4. Interview situations	4.1 Establish rapport 4.2 Elicit facts and information 4.3 Facilitate resolution of issues 4.4 Develop action plans 4.5 Diffuse potentially difficult situation

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Demonstrated effective communication skills with clients accessing service and work colleagues</li> <li>1.2 Adopted relevant communication techniques and strategies to meet client particular needs and difficulties</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Communication process</li> <li>2.2 Dynamics of groups and different styles of group leadership</li> <li>2.3 Communication skills relevant to client groups</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Full range of communication techniques including: <ul style="list-style-type: none"> <li>3.1.1 Full range of communication</li> <li>3.1.2 Active listening</li> <li>3.1.3 Feedback</li> <li>3.1.4 Interpretation</li> <li>3.1.5 Role boundaries setting</li> <li>3.1.6 Negotiation</li> <li>3.1.7 Establishing empathy</li> </ul> </li> <li>3.2 Communication skills required to fulfill job roles as specified by the organization</li> </ul>
4. Resource implications	<ul style="list-style-type: none"> <li>4.1 Access to appropriate workplace where assessment can take place</li> </ul>
5. Method of assessment	<p>Competency <b>MUST</b> be assessed through</p> <ul style="list-style-type: none"> <li>5.1 Direct observation</li> <li>5.2 Oral Interview</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 This unit should be assessed on the job through simulation</li> </ul>

**UNIT OF COMPETENCY: DEVELOP TEAMS AND INDIVIDUALS**

**UNIT CODE: 500311116**

**UNIT DESCRIPTOR:** This unit covers the skills, knowledge and attitudes required to determine individual and team development needs and facilitate the development of the workgroup.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Provide team leadership	1.1. <b>Learning and development needs</b> are systematically identified and implemented in line with <b>organizational requirements</b> 1.2. Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented 1.3. Individuals are encouraged to self evaluate performance and identify areas for improvement 1.4. <b>Feedback on performance</b> of team members is collected from relevant sources and compared with established team learning process
2. Foster individual and organizational growth	2.1. Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of competency standards 2.2. <b>Learning delivery methods</b> are appropriate to the learning goals, the learning style of participants and availability of equipment and resources 2.3. Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies 2.4. Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements
3. Monitor and evaluate workplace learning	3.1. Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements 3.2. Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support 3.3. Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning 3.4. Records and reports of competency are maintained within organizational requirement

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
4. Develop team commitment and cooperation	4.1. Open communication processes to obtain and share information is used by team 4.2. Decisions are reached by the team in accordance with its agreed roles and responsibilities 4.3. Mutual concern and camaraderie are developed in the team
5. Facilitate accomplishment of organizational goals	5.1. Team members actively participated in team activities and communication processes 5.2. Teams members developed individual and joint responsibility for their actions 5.3. Collaborative efforts are sustained to attain organizational goals

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Learning and development needs	1.1 Coaching, mentoring and/or supervision 1.2 Formal/informal learning program 1.3 Internal/external training provision 1.4 Work experience/exchange/opportunities 1.5 Personal study 1.6 Career planning/development 1.7 Performance appraisals 1.8 Workplace skills assessment 1.9 Recognition of prior learning
2. Organizational requirements	2.1 Quality assurance and/or procedures manuals 2.2 Goals, objectives, plans, systems and processes 2.3 Legal and organizational policy/guidelines and requirements 2.4 Safety policies, procedures and programs 2.5 Confidentiality and security requirements 2.6 Business and performance plans 2.7 Ethical standards 2.8 Quality and continuous improvement processes and standards
3. Feedback on performance	3.1 Formal/informal performance appraisals 3.2 Obtaining feedback from supervisors and colleagues 3.3 Obtaining feedback from clients 3.4 Personal and reflective behavior strategies 3.5 Routine and organizational methods for monitoring service delivery
4. Learning delivery methods	4.1 On the job coaching or mentoring 4.2 Problem solving 4.3 Presentation/demonstration 4.4 Formal course participation 4.5 Work experience 4.6 Involvement in professional networks 4.7 Conference and seminar attendance 4.8 Induction

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> <li>1.1. Identified and implemented learning opportunities for others</li> <li>1.2. Gave and received feedback constructively</li> <li>1.3. Facilitated participation of individuals in the work of the team</li> <li>1.4. Negotiated learning plans to improve the effectiveness of learning</li> <li>1.5. Prepared learning plans to match skill needs</li> <li>1.6. Accessed and designated learning opportunities</li> </ol>
<p>2. Underpinning knowledge</p>	<ol style="list-style-type: none"> <li>2.1. Coaching and mentoring principles</li> <li>2.2. Understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective</li> <li>2.3. Understanding how to facilitate team development and improvement</li> <li>2.4. Understanding methods and techniques for eliciting and interpreting feedback</li> <li>2.5. Understanding methods for identifying and prioritizing personal development opportunities and options</li> <li>2.6. Knowledge of career paths and competency standards in the industry</li> </ol>
<p>3. Underpinning skills</p>	<ol style="list-style-type: none"> <li>3.1. Ability to read and understand a variety of texts, prepare general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management</li> <li>3.2. Communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management</li> <li>3.3. Planning skills to organize required resources and equipment to meet learning needs</li> <li>3.4. Coaching and mentoring skills to provide support to colleagues</li> <li>3.5. Reporting skills to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes</li> <li>3.6. Facilitation skills to conduct small group training sessions</li> <li>3.7. Ability to relate to people from a range of social, cultural, physical and mental backgrounds</li> </ol>

4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <p>4.1. Access to relevant workplace or appropriately simulated environment where assessment can take place</p> <p>4.2. Materials relevant to the proposed activity or tasks</p>
5. Method of assessment	<p>Competency may be assessed through:</p> <p>5.1. Observation of work activities of the individual member in relation to the work activities of the group</p> <p>5.2. Observation of simulation and or role play involving the participation of individual member to the attainment of organizational goal</p> <p>5.3. Case studies and scenarios as a basis for discussion of issues and strategies in teamwork</p>
6. Context of assessment	<p>6.1. Competency may be assessed in workplace or in a simulated workplace setting</p> <p>6.2. Assessment shall be observed while task are being undertaken whether individually or in-group</p>

**UNIT OF COMPETENCY: APPLY PROBLEM SOLVING TECHNIQUES IN THE WORKPLACE**

**UNIT CODE: 500311117**

**UNIT DESCRIPTOR:** This competency covers the knowledge, skills and attitudes required to apply the process of problem solving and other problems beyond those associated directly with the process unit. It includes the application of structured processes and improvement tools. This competency is typically performed by an experienced technician, team leader or supervisor.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Analyze the problem	1.1. Issues/concerns are evaluated based on data gathered 1.2. Possible causes of problem are identified within the <b>area of responsibility</b> as based on experience and the use of problem solving tools/analytical techniques 1.3. Possible cause statements are developed based on findings
2. Identify possible solutions	2.1 All possible options are considered for resolution of the problem in accordance with <b>safety</b> and operating procedures 2.2 Strengths and weaknesses of possible options are considered 2.3 Corrective action is determined to resolve the problem and its possible future causes
3. Recommend solution to higher management	3.1 Report/ <b>communication</b> or <b>documentation</b> are prepared 3.2 Recommendations are presented to appropriate personnel 3.3 Recommendations are followed-up, if required
4. Implement solution	4.1 Measurable objectives are identified 4.2 Resource needs are identified 4.3 Timelines are identified in accordance with plan
5. Evaluate/Monitor results and outcome	5.1. Processes and improvements are identified based on evaluative assessment of problem 5.2. Recommendations are prepared and submitted to superiors.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Area of responsibility	Variables may include but are limited to: <ul style="list-style-type: none"> <li>1.1. Work environment</li> <li>1.2. Problem solution processes</li> <li>1.3. Preventative maintenance and diagnostic policy</li> <li>1.4. Roles and technical responsibilities</li> </ul>
2. Occupational Health and Safety	2.1. <i>As per company, statutory and vendor requirements. Ergonomic and environmental factors must be considered during the demonstration of this competency.</i>
3. Communication	3.1. Variables may include but are not limited to: 3.2. Written communication can involve both hand written and printed material, internal memos, electronic mail, briefing notes and bulletin boards.
4. Documentation	4.1. <i>Audit trails</i> 4.2. <i>Naming standards</i> 4.3. <i>Version control</i>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> <li>1.1. Analyzed the problem</li> <li>1.2. Identified possible solutions</li> <li>1.3. Implemented solutions</li> <li>1.4. Recommended solutions to higher management</li> <li>1.5. Outcome evaluated/monitored</li> </ol> <p>Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate knowledge and understanding of the elements of the competency and performance criteria.</p>
<p>2. Underpinning knowledge</p>	<ol style="list-style-type: none"> <li>2.1. Broad understanding of systems, organizational systems and functions</li> <li>2.2. Broad knowledge of help desk and maintenance practices</li> <li>2.3. Current industry accepted hardware and software products with broad and detailed knowledge of its general features and capabilities</li> <li>2.4. Broad knowledge of the operating system</li> <li>2.5. Broad knowledge of the client business domain</li> <li>2.6. Broad knowledge based incorporating current industry practices related to escalation procedures</li> <li>2.7. Broad knowledge based of diagnostic tools</li> <li>2.8. General principles of OHS</li> <li>2.8. Divisional/unit responsibilities</li> </ol>
<p>3. Underpinning skills</p>	<ol style="list-style-type: none"> <li>3.1. Decision making within a limited range of options.</li> <li>3.2. Communication is clear, precise and varies according to the type of audience</li> <li>3.3. Teamwork in reference to personal responsibility</li> <li>3.4. Time management as applied to self-management.</li> <li>3.5. Analytical skills in relation to routine malfunctions.</li> <li>3.6. General customer service skills displayed.</li> <li>3.7. Questioning and active listening is employed to clarify general information</li> </ol>

<p>4. Resource implications</p>	<p>4.1. Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios/case studies/what ifs will be required as well as bank of questions which will be used to probe the reasoning behind the observable actions.</p>
<p>5. Method of assessment</p>	<p>Competency <b>MUST</b> be assessed through:</p> <p>5.1. Through direct observation of application to tasks and questions related to underpinning knowledge</p> <p>Under general guidance, checking various stages of operation and at the completion of the activity against performance criteria and specifications</p>
<p>6. Context of assessment</p>	<p>6.1. Competency may be assessed in the work place or in a simulated work place setting</p> <p>6.2. Assessment shall be carried out through TESDA's Accredited Assessment Centers/Venues while tasks are undertaken either individually or as part of a team under limited supervision</p>

**UNIT OF COMPETENCY: COLLECT, ANALYZE AND ORGANIZE INFORMATION**

**UNIT CODE: 500311118**

**UNIT DESCRIPTOR:** This unit covers the outcomes required to process, analyze, interpret and organize workplace information and other relevant data.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Study information requirements	1.1 Needs are identified using established <b>research procedures</b> 1.2 Relevant <b>forms</b> and recording systems are used to gather the information. 1.3 Respondents are selected to implement survey / research based on established procedures.
2. Process data	2.1 <b>Data</b> are collected and collated based on the prescribed method. 2.2 Relevant data are used as references in accordance with the objectives of the program. 2.3 <b>Information</b> is compiled according to the required form.
3. Analyze, interpret and organize information gathered	3.1 Data are analyzed using relevant <b>methodologies</b> 3.2 Where applicable, <b>statistical analysis/methods</b> are employed according to the objectives of the program 3.3 Graphs and other visual presentations are prepared to facilitate analysis / interpretation of information
4. Present findings/ recommendations	4.1 Findings/recommendations summarized and presented/packaged in user-friendly manner 4.2 Relevant inputs gathered to finalize report 4.3 Draft report prepared based on standard format. 4.4 Technical reports are submitted and disseminated to concerned offices.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Research procedures	May include but are not limited to: 1.1 TNA 1.2 Front-end analysis 1.3 Surveys 1.4 Interviews 1.5 Functional analysis 1.6 DACUM research
2. Forms	May include but are not limited to: 2.1 Survey forms/Questionnaires 2.2 Personal information/Profile 2.3 Accident report form 2.4 Requisition slip 2.5 Job orders 2.6 Purchase request form 2.7 Incident report form
3. Methodologies	3.1 Qualitative methods 3.2 Quantitative methods
4. Statistical analysis/methods	4.1. Averages (Mean, Median, Mode) 4.2. Percentage 4.3. Ranks 4.4. Frequency Distribution 4.5 Statistical test
5. Data	5.1. Raw Data
6. Information	6.1. Processed and packaged data

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate</p> <ul style="list-style-type: none"> <li>1.1 Determined information requirements based on organizational goals and objectives.</li> <li>1.2 Used relevant forms and recording systems to gather data</li> <li>1.3 Processed data based on the objectives of the program</li> <li>1.4 Utilized relevant research methods based on the objective of the program</li> <li>1.5 Analyzed and organized information gathered</li> <li>1.6 Submitted/Disseminated technical reports to concerned offices</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Data processing, Information analysis and interpretation</li> <li>2.2 Research methods <ul style="list-style-type: none"> <li>2.2.1 Qualitative</li> <li>2.2.2 Quantitative</li> <li>2.2.3 Statistical</li> </ul> </li> <li>2.3 Report writing</li> <li>2.4 Use of relevant software <ul style="list-style-type: none"> <li>2.4.1 Spreadsheets</li> <li>2.4.2 Presentation graphics</li> <li>2.4.3 Work processor</li> <li>2.4.4 Statistical package</li> </ul> </li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Communicating effectively</li> <li>3.2 Performing research and analysis</li> <li>3.3 Reading / interpreting data and information</li> <li>3.4 Problem solving</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace or assessment location</li> <li>4.2 Access to office equipment and facilities relevant to the unit</li> <li>4.3 Case studies/scenarios</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Written/ Oral Examination</li> <li>5.2 Interviews</li> <li>5.3 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in actual workplace or TESDA Accredited Assessment Center</li> </ul>

**UNIT OF COMPETENCY: PLAN AND ORGANIZE WORK**

**UNIT CODE: 500311119**

**UNIT DESCRIPTOR:** This unit covers the outcomes required in planning and organizing work. It may be applied to a small independent operation or to a section of a large organization.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Set objectives	1.1 <b>Objectives</b> are consistent with and linked to work activities in accordance with organizational aims 1.2 Objectives are stated as measurable targets with clear time frames 1.3 Support and commitment of team members are reflected in the objectives 1.4 Realistic and attainable objectives are identified
2. Plan and schedule work activities	2.1 Tasks/work activities to be completed are identified and prioritized as directed 2.2 Tasks/work activities are broken down into steps in accordance with set time frames achievable components in accordance with set time frames 2.3 <b>Resources</b> are allocated as per requirements of the activity 2.4 <b>Schedule of work activities</b> is coordinated with personnel concerned
3. Implement work plans	3.1 <b>Work methods and practices</b> are identified in consultation with personnel concerned 3.2 <b>Work plans</b> are implemented in accordance with set time frames, resources and <b>standards</b>
4. Monitor work activities	4.1 Work activities are monitored and compared with set objectives 4.2 Work performance is monitored 4.3 Deviations from work activities are reported and recommendations are coordinated with appropriate personnel and in accordance with set standards 4.4 Reporting requirements are complied with in accordance with recommended format 4.5 Observe timeliness of report 4.6 Files are established and maintained in accordance with standard operating procedures

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
5. Review and evaluate work plans and activities	5.1 Work plans, strategies and implementation are reviewed based on accurate, relevant and current information 5.2 Review is based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback 5.3 Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities 5.4 Performance appraisal is conducted in accordance with organization rules and regulations 5.5 Performance appraisal report is prepared and documented regularly as per organization requirements. 5.6 Recommendations are prepared and presented to <b>appropriate personnel/authorities</b> 5.7 <b>Feedback mechanisms</b> are implemented in line with organization policies

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Objectives	1.1. Specific 1.2. General
2. Resources	2.1. Personnel 2.2. Equipment and technology 2.3. Services 2.4. Supplies and materials 2.5. Sources for accessing specialist advice 2.6. Budget
3. Schedule of work activities	3.1. Daily 3.2. Work-based 3.3. Contractual 3.4. Regular 3.5. Confidential 3.6. Disclosure 3.7. Non-disclosure
4. Work methods and practices	4.1. Work methods and practices may include but not limited to: 4.2. Legislated regulations and codes of practice 4.3. Industry regulations and codes of practice 4.4. Occupational health and safety practices
5. Work plans	5.1. Daily work plans 5.2. Project plans 5.3. Program plans 5.4. Organization strategic and restructuring plans 5.5. Resource plans 5.6. Skills development plans 5.7. Management strategies and objectives

VARIABLE	RANGE
6. Standards	<ul style="list-style-type: none"> <li>6.1. Performance targets</li> <li>6.2. Performance management and appraisal systems</li> <li>6.3. National competency standards</li> <li>6.4. Employment contracts</li> <li>6.5. Client contracts</li> <li>6.6. Discipline procedures</li> <li>6.7. Workplace assessment guidelines</li> <li>6.8. Internal quality assurance</li> <li>6.9. Internal and external accountability and auditing requirements</li> <li>6.10. Training Regulation Standards</li> <li>6.11. Safety Standards</li> </ul>
7. Appropriate personnel/authorities	<ul style="list-style-type: none"> <li>7.1. Appropriate personnel include:</li> <li>7.2. Management</li> <li>7.3. Line Staff</li> </ul>
8. Feedback mechanisms	<ul style="list-style-type: none"> <li>8.1. Feedback mechanisms include:</li> <li>8.2. Verbal feedback</li> <li>8.3. Informal feedback</li> <li>8.4. Formal feedback</li> <li>8.5. Questionnaire</li> <li>8.6. Survey</li> <li>8.7. Group discussion</li> </ul>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> <li>1.1. Set objectives</li> <li>1.2. Planned and scheduled work activities</li> <li>1.3. Implemented work plans</li> <li>1.4. Monitored work activities</li> <li>1.5. Reviewed and evaluated work plans and activities</li> </ol>
<p>2. Underpinning knowledge</p>	<ol style="list-style-type: none"> <li>2.1. Organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities</li> <li>2.2. Organizations policies, strategic plans, guidelines related to the role of the work unit</li> <li>2.3. Team work and consultation strategies</li> </ol>
<p>3. Underpinning skills</p>	<ol style="list-style-type: none"> <li>3.1. Planning</li> <li>3.2. Leading</li> <li>3.3. Organizing</li> <li>3.4. Coordinating</li> <li>3.5. Communication Skills</li> <li>3.6. Inter-and intra-person/motivation skills</li> <li>3.7. Presentation skills</li> </ol>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided</p> <ol style="list-style-type: none"> <li>4.1. Tools, equipment and facilities appropriate to the proposed activities</li> <li>4.2. Materials relevant to the proposed activities</li> <li>4.3. Work plan schedules</li> <li>4.4. Drawings, sketches or blueprint</li> </ol>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ol style="list-style-type: none"> <li>5.1. Direct observation/questioning</li> <li>5.2. Practical exercises on Planning and Scheduling Work Activities</li> <li>5.3. Third Party Report (collection of competency evidence)</li> </ol>
<p>6. Context of assessment</p>	<ol style="list-style-type: none"> <li>6.1. Competency may be assessed in the workplace or in simulated work</li> </ol>

**UNIT OF COMPETENCY : PROMOTE ENVIRONMENTAL PROTECTION**

**UNIT CODE: 500311120**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required in adhering to environmental protection principles, strategies and guidelines

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Study guidelines for environmental concerns.	1.1 Environmental <b>legislations/conventions</b> and local ordinances are identified according to the different <b>environmental aspects/impact</b> . 1.2 <b>Industrial standard/environmental practices</b> are described according to the different environmental concerns.
2. Implement specific environmental programs.	2.1 <b>Programs/Activities</b> are identified according to organizations policies and guidelines. 2.2 Individual roles/responsibilities are determined and performed based on the activities identified. 2.4 Problems/ constraints encountered are resolved in accordance with organizations' policies and guidelines 2.5 Stakeholders are consulted based on company guidelines.
3. Monitor activities on environmental protection /programs	3.1 Activities are <b>periodically</b> monitored and evaluated according to the objectives of the environmental program 3.2 Feedback from stakeholders are gathered and considered in proposing enhancements to the program based on consultations 3.3 Data gathered are analyzed based on evaluation requirements 3.4 Recommendations are submitted based on the findings. 3.5 Management support systems are set/established to sustain and enhance the program 3.6 Environmental incidents are monitored and reported to concerned/proper authorities.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Legislations/Conventions	May include but are not limited to: 1.1 Clean Air act 1.2 Clean Water Act 1.3 Solid Waste Management 1.4 Montreal Protocol 1.5 Kyoto Protocol
2. Environmental aspects/impacts	2.1 Air pollution 2.2 Water pollution 2.3 Noise pollution 2.4 Solid waste 2.5 Flood control 2.6 Deforestation/Denudation 2.7 Radiation/Nuclear /Radio Frequency/ Microwaves 2.8 Situation 2.9 Soil erosion (e.g. Quarrying, Mining, etc.) 2.10 Coral reef/marine life protection
3. Industrial standards/ Environmental practices	3.1 ECC standards 3.2 ISO standards 3.3 company environmental management systems (EMS)
4. Periodic	4.1 hourly 4.2 daily 4.3 weekly 4.4 monthly 4.5 quarterly 4.6 yearly
5. Programs/Activities	5.1 Waste disposal (on-site and off-site) 5.2 Repair and maintenance of equipment 5.3 Treatment and disposal operations 5.4 Clean-up activities 5.5 Laboratory and analytical test 5.6 Monitoring and evaluation 5.7 Environmental advocacy programs

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Demonstrated knowledge of environmental legislations and local ordinances according to the different environmental issues/concerns.</li> <li>1.2 Described industrial standard environmental practices according to the different environmental issues/concerns.</li> <li>1.3 Resolved problems/ constraints encountered based on management standard procedures</li> <li>1.4 Implemented and monitored environmental practices on a periodic basis as per company guidelines</li> <li>1.5 Recommended solutions for the improvement of the program</li> <li>1.6 Monitored and reported to proper authorities any environmental incidents</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Features of an environmental management strategy</li> <li>2.2 Environmental issues/concerns</li> <li>2.3 International Environmental Protocols (Montreal, Kyoto)</li> <li>2.4 Waste minimization hierarchy</li> <li>2.5 Environmental planning/management</li> <li>2.6 Community needs and expectations</li> <li>2.7 Resource availability</li> <li>2.8 Environment-friendly/environmental advocates</li> <li>2.9 5S of Good Housekeeping</li> <li>2.10 3Rs – Reduce, Reuse &amp; Recycle</li> <li>2.11 Sanitary Code</li> <li>2.12 Environmental Code of practice</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Communicating effectively</li> <li>3.2 Performing research and analysis</li> <li>3.3 Reading / interpreting data and information</li> <li>3.4 Problem solving</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace/Assessment location</li> <li>4.2 Legislation, policies, procedures, protocols and local ordinances relating to environmental protection</li> <li>4.3 Case studies/scenarios relating to environmental protection</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Written/ Oral Examination</li> <li>5.2 Interview/Third Party Reports</li> <li>5.3 Portfolio (citations/awards from GOs and NGOs, certificate of training – local and abroad)</li> <li>5.4 Simulations and role-plays</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in actual workplace or at the designated TESDA center.</li> </ul>

## COMMON COMPETENCIES

**UNIT OF COMPETENCY:** MAINTAIN INSTRUMENTS AND EQUIPMENT IN WORK AREA

**UNIT CODE:** HCS346201

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required in maintaining instruments and equipment in the work area.

ELEMENT	PERFORMANCE CRITERIA
	<i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare to clean used items	<p>1.1 <b>Safe work practices</b> and standard precautions are followed at all times in accordance with <b>legislative and workplace guidelines</b>.</p> <p>1.2 Sharps and sharps debris are disposed into a container and in accordance with workplace guidelines.</p> <p>1.3 <b>Waste</b> is segregated and disposed in accordance with organization and legislative guidelines.</p>
2. Clean and dry used items	<p>2.1 <b>Workflow protocols</b> are maintained in instrument reprocessing area and in accordance with workplace guidelines.</p> <p>2.2 Instruments are <b>prepared for cleaning</b> and in accordance with workplace guidelines.</p> <p>2.3 <b>Appropriate cleaning agents</b> are selected and used in accordance with workplace guidelines and manufacturer's specification.</p> <p>2.4 <b>Cleaning methods</b> that avoid the generation of aerosols are used in accordance with workplace guidelines.</p> <p>2.5 Instruments are dried and inspected for damage and remaining debris and in accordance with workplace procedures.</p> <p>2.6 <b>Cleaning process</b> is monitored in accordance with workplace guidelines.</p>
3. Prepare and pack items for storage	<p>3.1 Instruments with hinges or ratchets are opened and unlocked in accordance with standard operating procedures.</p> <p>3.2 Instrument trays are prepared in accordance with workplace protocols.</p> <p>3.3 <b>Critical site instruments</b> are packaged or wrapped in a manner that prevents damage to delicate items.</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Safe work practices	May include but are not limited to: <ul style="list-style-type: none"> <li>1.1 Treatment of all items as a potential source of infection</li> <li>1.2 Personal hygiene practices especially washing and drying hands</li> <li>1.3 Work practices for the safe handling of sharps</li> <li>1.4 Work practices for the safe disposal of sharps and other clinical waste</li> <li>1.5 The use of personal protective equipment:               <ul style="list-style-type: none"> <li>1.5.1 heavy duty gloves</li> <li>1.5.2 mask and protective eyewear</li> <li>1.5.3 hair protection or covering</li> <li>1.5.4 protective clothing and safety footwear</li> </ul> </li> <li>1.6 Safe handling, storage and disposal of chemicals</li> <li>1.7 Safe handling techniques especially as they relate to lifting and handling dangerous and contaminated items</li> </ul>
2. Legislative and workplace guidelines	May include: <ul style="list-style-type: none"> <li>2.1 Infection control guidelines for the transmission of infectious diseases in the health care setting</li> <li>2.2 State legislative requirements</li> <li>2.3 Organization infection control policies and procedures</li> <li>2.4 Occupational Health and Safety policies and procedures</li> <li>2.5 Material Safety Data Sheets for the chemicals used</li> </ul>
3. Waste	May include but is not limited to: <ul style="list-style-type: none"> <li>3.1 Clinical waste:               <ul style="list-style-type: none"> <li>3.1.1 discarded sharps</li> <li>3.1.2 human tissues</li> <li>3.1.3 laboratory waste</li> <li>3.1.4 any other waste as specified by the workplace</li> </ul> </li> <li>3.2 Related waste:               <ul style="list-style-type: none"> <li>3.2.1 radiographic waste</li> <li>3.2.2 chemical waste</li> <li>3.2.3 metal alloy waste</li> </ul> </li> <li>3.3 General waste</li> </ul>
4. Disposal of waste requirements	May include: <ul style="list-style-type: none"> <li>4.1 Disposal in accordance with:               <ul style="list-style-type: none"> <li>4.1.1 Environment Protection Policy (Waste Management)</li> <li>4.1.2 Environment Protection Regulations (Waste Management)</li> </ul> </li> <li>4.2 Organization policy</li> </ul>
5. Work flow protocols	May include: <ul style="list-style-type: none"> <li>5.1 Separate hand washing facilities</li> <li>5.2 Sink suitable for disposal of liquid waste</li> <li>5.3 One direction flow of instruments from contaminated to clean to sterile</li> <li>5.4 Designated work area that is physically separate to prevent possible contamination of processed items</li> <li>5.5 Identification and reporting of disruptions to work flow protocols in accordance with workplace procedures</li> </ul>

VARIABLE	RANGE
6. Preparation of instruments for cleaning	May include: 6.1 Sorting according to type of instrument and corresponding cleaning method 6.2 Written procedures for handling specialized items 6.3 Disassembly of instruments where possible for detergent to reach all surfaces 6.4 Checking for instrument defects, damage and missing parts
7. Selection and use of appropriate cleaning agents	May include: 7.1 Meeting requirements of Product Data Bulletins and Materials Safety Data Sheets for the chemicals used
8. Cleaning methods	May include: 8.1 Initial treatment of used instruments close to their point of use to decrease bio burden 8.2 Thermal washer/disinfector in accordance with current standards 8.3 Ultrasonic cleaner in accordance with current standards 8.4 Manual cleaning
9. Monitoring the cleaning process	May include: 9.1 Visual inspection of all items for cleanliness and absence of detergent or rinse additive residues 9.2 Daily cleaning and maintenance of ultrasonic cleaner and washer/disinfector 9.3 Daily performance testing of ultrasonic cleaner 9.4 Daily checks of washer/disinfector function and detergent dispenser
10. Critical site instruments	May include: 10.1 Instruments which must be cleaned and disinfected as needed
11 Routine cleaning and checking of sterilizers	May include but is not limited to: 11.1 Daily checks: 11.1.1 floor of sterilizer is free of debris 11.1.2 chamber drain and filter are clear 11.1.3 recording devices, gauges and timers are functioning correctly 11.1.4 water reservoir (portable benchtop sterilizers) emptied, cleaned and refilled with distilled water 11.1.5 door seals are intact 11.2 Cleaning: 11.2.1 loading tray and external surfaces cleaned daily

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Followed safe handling, drying and cleaning protocols</li> <li>1.2 Followed correct packing, assembly and wrapping procedures and storage</li> <li>1.3 Followed appropriate OH&amp;S procedures</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Workflow protocols in the instrument reprocessing area</li> <li>2.2 Workplace procedures for using an ultrasonic cleaner</li> <li>2.3 Workplace procedures for manual cleaning</li> <li>2.4 Instrument maintenance checklists</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Following safe work practices and applying standard precautions during cleaning and preparation of items: <ul style="list-style-type: none"> <li>3.1.1 checking items for defects after cleaning</li> <li>3.1.2 selecting and safely using appropriate cleaning agents</li> <li>3.1.3 selecting and wearing appropriate personal protective equipment</li> </ul> </li> <li>3.2 Maintaining workflow protocols in instrument reprocessing area from contaminated to clean and disinfect</li> <li>3.3 Operating mechanical cleaners including ultrasonic cleaner or steamer</li> <li>3.4 Drying items before packaging</li> <li>3.5 Storing packaged items in a clean place away from sources of moisture and contamination</li> </ul>
4. Resource Implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace: Real or simulated work area</li> <li>4.2 Appropriate tools and equipment</li> <li>4.3 Appropriate supplies and materials</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated work setting or environment.</li> </ul>

**UNIT OF COMPETENCY: ASSIST IN DENTAL LABORATORY PROCEDURES**

**UNIT CODE: HCS346202**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required in assisting in dental laboratory procedures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Follow dental laboratory procedures	1.1 Planned procedure is identified correctly. 1.2 <b>Equipment, instruments and materials</b> is anticipated and selected for the planned procedure and arranged them in their likely order of use.
2. Use dental laboratory terminology in communication	5.2 Dental terminology is used in communicating with the dental team. 5.3 Dental terminology is used in receiving, understanding and documenting written and oral instructions. 5.4 Frequently used <b>abbreviations and symbols</b> in dental laboratory are understood.

### **RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1 Equipment, instruments, materials	May include but are not limited to: 1.1 Hand Instruments 1.2 Laboratory Equipment 1.3 Laboratory Materials
2 Personal Protective Equipment	May include but are not limited to: 2.1 Gowns and waterproof aprons 2.2 Glasses, goggles or face-shields 2.3 Face masks

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Complied consistently with occupational health and safety policies of OHSS</li> <li>1.2 Demonstrated consistent performance in the following workplace situations such as: <ul style="list-style-type: none"> <li>1.2.1 Maintenance and storage of instruments, equipment and materials in accordance with manufacturer specifications and operator's requirements</li> <li>1.2.2 Compliance with occupational health and safety procedures</li> <li>1.2.3 Storage of materials in accordance with manufacturer specifications and operator's requirements</li> <li>1.2.4 Maintenance of records of maintenance procedures and processes</li> </ul> </li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Fundamental knowledge of oral anatomy including: <ul style="list-style-type: none"> <li>2.1.1 Structure and functions of teeth and the periodontal tissues</li> <li>2.1.2 Structures of the oral cavity</li> <li>2.1.3 Tooth identification</li> </ul> </li> <li>2.2 Dental laboratory records and laboratory prescriptions including: <ul style="list-style-type: none"> <li>2.2.1 knowledge of correct dental terminology and how it is used in dental laboratory prescription items that constitute a dental laboratory record</li> <li>2.2.2 Dental notation systems and prescription symbols</li> <li>2.2.3 Confidentiality of prescriptions</li> <li>2.2.4 The purpose of study casts and the materials used in their fabrication</li> </ul> </li> <li>2.3 Fundamental knowledge of dental laboratory materials</li> <li>2.4 Dental laboratory practice/organization policies and procedures</li> </ul>

<p>3. Underpinning skills</p>	<p>3.1 Consistently using safe work practices to minimize the risk of transmission of infection including:  3.1.1 Following the procedure for washing and drying of hands  3.1.2 Putting into practice cleaning techniques  3.1.3 Using personal protective equipment  3.1.4 Limiting contamination  3.1.5 Protecting materials, equipment and instruments from contamination until required for use</p> <p>3.2 Using literacy skills to read and follow directions, policies and procedures including:  3.2.1 Occupational health and safety policies and procedures  3.2.2 Infection control policies and procedures  3.2.3 Practice policies and procedures</p> <p>3.3 Consistently following sequenced written instructions and manufacturer specifications for the preparation of dental laboratory materials</p> <p>3.4 Consistently demonstrating interpersonal skills when relating to people from a range of social, cultural and religious backgrounds and physical and mental abilities.</p> <p>3.5 Consistently demonstrating communication skills as required in fulfilling the job role as specified by the dental laboratory practice /organization including:  3.5.1 Negotiation  3.5.2 Asking questions  3.5.3 Active listening  3.5.4 Asking for clarification from client and /or carer  3.5.5 Acknowledging and responding to a range of views</p> <p>3.6 Consistently dealing with conflict</p> <p>3.7 Consistently working with others and displaying empathy with client and relatives</p> <p>3.8 Consistently using problem solving skills</p>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:  4.1 Workplace: Real or simulated work area  4.2 Appropriate tools and equipment  4.3 Appropriate supplies and materials</p>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:  5.1 Demonstration with questioning  5.2 Written Test/Examination  5.3 Third Party Report  5.4 Portfolio</p>
<p>6. Context of assessment</p>	<p>6.1 Competency may be assessed in the workplace or in a simulated work setting or environment.</p>

**UNIT OF COMPETENCY: ASSIST WITH ADMINISTRATION IN DENTAL LABORATORY PRACTICE**

**UNIT CODE: HCS346203**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required in managing appointments to suit the client and the organization, to record and reconcile payments and to maintain client record.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
1. Communicate effectively with clients and other persons	1.1 Clients and other visitors are greeted appropriately. 1.2 An appropriate environment is made available for the client to complete medical, dental and financial details. 1.3 Client and/or carer point of view is listened carefully. 1.4 Information provided to client and/or carer appropriately and language used completely so that it can easily be understood. 1.5 Client and/or carer ensured they understood information provided to them. 1.6 Being polite and negative comments avoided shows empathy and respect for client and/or carer.
2. Respond appropriately to enquiries from clients and visitors	2.1 Personal dress and presentation is maintained. 2.2 <b>Communication equipment</b> is used effectively. 2.3 Enquiries are responded promptly, politely and ethically. 2.4 Purpose of an enquiry, the identity of the person is determined and relevant record/s retrieved if required. 2.5 Messages prioritized and recorded legibly and accurately. 2.6 Enquiries outside area of responsibility are referred to appropriate supervisor. 2.7 Electronic communication with clients and /or carers is complied in accordance with organizational protocols. 2.8 <b>Confidentiality</b> of information relating to clients, staff and the dental practice/organization is maintained.
3. Allocate appointments appropriate to client and organization requirements	3.1 Client's <b>appointment requirements</b> are identified. 3.2 Appointment time is set in accordance with the client's preferences and the organization's requirements. 3.3 <b>Appointment details are recorded</b> accurately and legibly using standard dental notation in the organizations appointment system. 3.4 Copy of appointment details is provided to the client. 3.5 Appointment schedules are monitored; clients and the oral health care team are notified of any necessary changes within a suitable timeframe.
4. Calculate and record basic financial transactions	4.1 Petty cash vouchers and all monies are completed accurately and account for. 4.2 Correct fees are calculated. 4.3 GST applied in accordance with identified requirements. 4.4 Payments received are checked and recorded legibly and accurately. 4.5 Checks and credit card vouchers are validated 4.6 Client is provided with a receipt.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
5. Handle cash and record financial transactions	5.1 Balances accurately monies received against records of payment in accordance with organization policies 5.2 Cash is secured in an approved location. 5.3 Suspected breaches of security are responded and appropriate action taken within minimum delay in accordance with organization policies. 5.4 Record of bad debts identified and appropriate action taken in line with office procedures. 5.5 Banking procedures are followed in accordance with organization policies.
6. Maintain client records	6.1 Correct client files are removed and appropriate fees and diagnostic records attached. 6.2 Order of payment is placed in files. 6.3 Information entered legibly, accurately and updated as appropriate 6.4 Client's dental records are filed correctly after use 6.5 Records of laboratory work are maintained up-to-date, accurate, legible and complete
7. Assist with client recalls	7.1 Knowledge of client <b>recall system</b> is applied 7.2 Client records is marked with relevant recall date as appropriate and as directed by the operator 7.3 Clients who are due for recall are identified and notified them that an appointment is due 7.4 Clients who do not respond to a recall appointment request are followed-up with courtesy

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Communication equipment	May include but are not limited to: 1.1 Telephone/Mobile Phone 1.2 Facsimile 1.3 E-mail/Website
2. Maintaining confidentiality	May include but are not limited to: 2.1 Public environments 2.2 Legal and ethical requirements 2.3 Writing personal details such as medical and dental histories and consent forms 2.4 Conversations on the telephone/mobile phone 2.5 Secure location for written records 2.6 Offering a private location for discussion 2.7 Information disclosed to an appropriate person consistent with the responsibility of a dental assistant
3 Appointment requirements	May include but are not limited to: 3.1 Appointment requirements of the client: 3.1.1 Routine examination 3.1.2 Defined procedures 3.1.3 Emergencies 3.2 Special requirements of the dental practice: 3.2.1 Timing requirements for different types of procedures 3.2.2 Availability of staff 3.3 Scheduling a series of appointments
4. Recording of appointment details	May include: 4.1 Manual – appointment book 4.2 Electronic – computer based program 4.3 Appointment details include the following: 4.3.1 Client's name 4.3.2 Client's contact details 4.3.3 Procedure to be performed for that appointment
5. Dental records	May include but are not limited to: 5.1 Dental charts and dental treatment records 5.2 Completed medical questionnaires 5.3 Consent documents obtained for treatment 5.4 Radiographs, tracings and measurements 5.5 Diagnostic models 5.6 Photographs 5.7 Records of financial transactions 5.8 Notes made by staff following telephone conversations 5.9 Reports to and from referring dentists and specialists 5.10 Copies of correspondence relating to the client
6. Recall system	May include: 6.1 Manual 6.2 Electronic

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Complied consistently with infection control guidelines of DOH and occupational health and safety policies of OHSS</li> <li>1.2 Demonstrated consistent performance in the following workplace situations such as:             <ul style="list-style-type: none"> <li>1.2.1 Responding to a variety of requests for information from a range of persons</li> <li>1.2.2 Accurate calculation of fees</li> <li>1.2.3 Recording of financial transactions in accordance with dental practice/organization requirements</li> <li>1.2.4 Assist with management of an effective appointment and recall system</li> <li>1.2.5 Recording, labeling and filing forms and records in accordance with legislation and the dental practice / organization policies</li> </ul> </li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Dental terminology:             <ul style="list-style-type: none"> <li>2.1.1 Abbreviations and symbols used when recording dental treatment</li> <li>2.1.2 FDI notation system used to designate the permanent and deciduous teeth during examination and charting</li> <li>2.1.3 Palmer notation system used to designate the permanent and deciduous teeth during examination and charting</li> <li>2.1.4 Community periodontal index</li> <li>2.1.5 Symbols used during charting of individual</li> </ul> </li> <li>2.2 Handling and recording financial transactions:             <ul style="list-style-type: none"> <li>2.2.1 Itemizing of client accounts</li> <li>2.2.2 Issuing invoices</li> <li>2.2.3 Recording of payments and issuing receipts</li> <li>2.2.4 The different methods of payment</li> <li>2.2.5 The details that need to be recorded and checked for credit and/or debit cards and check payments</li> <li>2.2.6 Operating a petty cash system</li> <li>2.2.7 Organization policy on banking and handling of cash securely</li> </ul> </li> <li>2.3 Legal requirements             <ul style="list-style-type: none"> <li>2.3.1 The reasons for ensuring the confidentiality of information provided by the client</li> <li>2.3.2 Confidentiality requirements for the recording and storage of client records</li> <li>2.3.3 The requirements of the Health Privacy Principle and their application to the collection of information by the dental practice or organization</li> </ul> </li> </ul>

	<p>2.4 Appointments:</p> <p>2.4.1 The time requirements of different treatment procedures and the effect this has on appointment scheduling</p> <p>2.4.2 The particular needs which clients may have for the timing of appointments</p> <p>2.4.3 The dentists preferred work routine</p> <p>2.4.4 The time constraints imposed by the dental laboratory</p> <p>2.4.5 The relevant details that must be entered into the appointment system and the written confirmation that must be provided to the client</p> <p>2.4.6 The action that must be taken for broken and/or cancelled appointments</p> <p>2.4.7 Confirmation of appointments</p> <p>2.5 Recall appointment</p> <p>2.5.1 Methods used by the dental practice or the organization to identify those clients who require either recall examination or follow-up treatment</p> <p>2.5.2 Methods used to follow-up clients who do not respond to recall</p>
<p>3. Underpinning skills</p>	<p>3.1 Using available technology and software for recording appointments and payments</p> <p>3.2 Using oral communication skills required to fulfill the job role as specified by the dental practice/organization</p> <p>3.2.1 Negotiation</p> <p>3.2.2 Asking questions</p> <p>3.2.3 Active listening</p> <p>3.2.4 Asking for clarification from caller or client</p> <p>3.2.5 Acknowledging and responding to a range of views</p> <p>3.3 Using literacy skills to read and following directions, policies and procedures</p> <p>3.3.1 Occupational health and safety policies and procedures</p> <p>3.3.2 Infection control policies and procedures</p> <p>3.3.3 Practice/Organization policies and procedures</p> <p>3.4 Using numeracy skills</p> <p>3.4.1 Basic mathematical calculations such as addition, multiplication and calculations of percentages</p> <p>3.4.2 Handling and recording of basic financial calculations</p> <p>3.5 Selecting and applying procedures to perform a range of tasks; following sequenced written instructions, recording accurately and legibly client details</p> <p>3.6 Dealing with conflict</p> <p>3.7 Using problem solving skills required including using available resources, prioritizing appointments and assessing urgency of calls</p>

4. Resource implications	The following resources <b>MUST</b> be provided: 4.1 Workplace: Real or simulated work area 4.2 Appropriate tools and equipment 4.4 Appropriate supplies and materials
5. Method of assessment	Competency may be assessed through: 5.1 Demonstration with questioning 5.2 Written Test/Examination 5.3 Third Party Report 5.4 Portfolio
6. Context of assessment	6.1 Competency may be assessed in the workplace or in a simulated work setting or environment.

**UNIT OF COMPETENCY: APPLY QUALITY STANDARDS**

**UNIT CODE: HCS315202**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills, attitudes and values needed to apply quality standards in the workplace. The unit also includes the application of relevant safety procedures and regulations, organization procedures and customer requirements.

<b>ELEMENTS</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Assess quality of received materials	1.1. Work instruction is obtained and work is carried out in accordance with standard operating procedures. 1.2. Received <b>materials</b> are checked against workplace standards and specifications. 1.3. Faulty materials related to work are identified and isolated. 1.4. <b>Faults</b> and any identified causes are recorded and/or reported to the supervisor concerned in accordance with workplace procedures. 1.5. Faulty materials are replaced in accordance with workplace procedures.
2. Assess own work	2.1. <b>Documentation</b> relative to quality within the company is identified and used. 2.2. Completed work is checked against workplace standards relevant to the task undertaken. 2.3. <b>Errors</b> are identified and isolated. 2.4. Information on the quality and other indicators of production performance are recorded in accordance with workplace procedures. 2.5. In cases of deviations from specific <b>quality standards</b> , causes are documented and reported in accordance with the workplace' s standards operating procedures.
3. Engage in quality improvement	3.1. Process improvement procedures are participated in relative to workplace assignment. 3.2. Work is carried out in accordance with process improvement procedures. 3.3. Performance of operation or quality of product of service to ensure <b>customer</b> satisfaction is monitored.

## RANGE OF VARIABLES

VARIABLE	RANGE
1 Materials	1.1 Materials may include but not limited to: 1.1.1. Manuals 1.1.2. Job orders 1.1.3. Instructional videos
2 Faults	2.1 Faults may include but not limited to: 2.1.1. Materials not to specification 2.1.2. Materials contain incorrect/outdated information 2.1.3. Hardware defects 2.1.4. Materials that do not conform with any regulatory agencies
3 Documentation	3.1 Organization work procedures 3.2 Manufacturer's instruction manual 3.3 Customer requirements 3.4 Forms
4 Errors	4.1 Errors may be related but not limited to the following: 4.1.1. Deviation from the requirements of the Client 4.1.2. Deviation from the requirement of the organization
5 Quality standards	5.1 Quality standards may be related but not limited to the following: 5.1.1. Materials 5.1.2. Hardware 5.1.3. Final product 5.1.4. Production processes 5.1.5. Customer service
6 Customer	6.1 Co-worker 6.2 Supplier/Vendor 6.3 Client 6.4 Organization receiving the product or service

## EVIDENCE GUIDE

<p>1 Critical aspect of competency</p>	<p>Assessment must show that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Carried out work in accordance with the company's standard operating procedures</li> <li>1.2 Performed task according to specifications</li> <li>1.3 Reported defects detected in accordance with standard operating procedures</li> <li>1.4 Carried out work in accordance with the process improvement procedures</li> </ul>
<p>2 Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Relevant production processes, materials and products</li> <li>2.2 Characteristics of materials, software and hardware used in production processes</li> <li>2.3 Quality checking procedures</li> <li>2.4 Workplace procedures</li> <li>2.5 Safety and environmental aspects of production processes</li> <li>2.6 Fault identification and reporting</li> <li>2.7 Quality improvement processes</li> </ul>
<p>3 Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Reading skills required to interpret work instruction</li> <li>3.2 Communication skills needed to interpret and apply defined work procedures</li> <li>3.3 Carry out work in accordance with OHS policies and procedures</li> <li>3.4 Critical thinking</li> <li>3.5 Solution providing and decision-making</li> </ul>
<p>4 Method of assessment</p>	<p>The assessor must select two of the following to objectively evaluate the candidate:</p> <ul style="list-style-type: none"> <li>4.1 Observation and oral questioning</li> <li>4.2 Third party report</li> <li>4.3 Portfolio</li> <li>4.4 Practical demonstration</li> </ul>
<p>5 Resource implication</p>	<p>Materials, software and hardware to be used in a real or simulated situation</p>
<p>6 Context of Assessment</p>	<p>Assessment may be conducted in the workplace or in a simulated environment</p>

**UNIT OF COMPETENCY: MAINTAIN AN EFFECTIVE RELATIONSHIP WITH CLIENTS AND CUSTOMERS**

**UNIT CODE: HCS516201**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes and values required in building and maintaining an effective relationship with clients, customers and the public.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Maintain a clean and hygienic environment	1.1 Uniform and personal grooming maintained to assignment requirements. 1.2 <b><i>Personal presence</i></b> maintained according to <b><i>employer standards</i></b> . 1.3 Visible work area kept tidy and uncluttered. 1.4 Equipment stored according to assignment requirements.
2. Meet client/customer requirements	2.1 <b><i>Client requirements</i></b> identified and understood by referral to <b><i>assignment instructions</i></b> . 2.2 Client requirements met according to the assignment instructions. 2.3 Changes to <b><i>client's needs and requirements</i></b> monitored and <b><i>appropriate action taken</i></b> . 2.4 All communication with client or <b><i>customer</i></b> is cleared and complied with assignment requirements.
3. Build credibility with customers/clients	3.1 Client expectations for reliability, punctuality and appearance adhered to. 3.2 Possible causes of client/customer dissatisfaction identified, dealt with recorded according employer policy. 3.3 Client fully informed of all relevant matters in a timely manner and according to agreed reporting procedures.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Personal Presence	May include but not limited to: <ul style="list-style-type: none"> <li>1.1 Stance</li> <li>1.2 Posture</li> <li>1.3 Body Language</li> <li>1.4 Demeanor</li> <li>1.5 Grooming</li> </ul>
2. Employer Standards	May include but not limited to: <ul style="list-style-type: none"> <li>2.1 Standing Orders</li> </ul>
3. Client Requirements	May include but are not limited to: <ul style="list-style-type: none"> <li>3.1 Assignment instructions</li> <li>3.2 Post Orders</li> <li>3.3 Scope to modify instructions/orders in light of changed situations</li> </ul>
4. Assignment Instructions	May be conveyed in: <ul style="list-style-type: none"> <li>4.1 Writing</li> <li>4.2 Verbally</li> <li>4.3 Electronically</li> </ul>
5. Client Needs and Requirements	May be detected by: <ul style="list-style-type: none"> <li>5.1 Review of the client brief and/or assignment instructions</li> <li>5.2 Discussion with the client/customer</li> </ul>
6. Appropriate Action	May include: <ul style="list-style-type: none"> <li>6.1 Implementing required changes</li> <li>6.2 Referring to appropriate employer personnel</li> <li>6.3 Clarification of client needs and instructions</li> <li>6.4 Hazard reports</li> </ul>
7. Customers	May include: <ul style="list-style-type: none"> <li>7.1 All members of the public</li> </ul>

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Maintained a professional image</li> <li>1.2 Interpreted client/customer requirements from information</li> <li>1.3 Dealt successfully with a variety of client/customer interactions</li> <li>1.4 Monitored and acted on changing client or customer needs</li> <li>1.5 Met client/customer requirements</li> <li>1.6 Built credibility with customers/client</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Uniform and personal grooming requirements of the employer</li> <li>2.2 Occupational health and safety requirement for the assignment</li> <li>2.3 Assignment Instructions</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Attention to detail when completing client/employer documentation</li> <li>3.2 Interpersonal and communication skills required in client contact assignments</li> <li>3.3 Customer service skills required to meet client/customer needs</li> <li>3.4 Punctuality</li> <li>3.5 Customer Service</li> <li>3.6 Telephone Technique</li> <li>3.7 Problem Solving and Negotiation</li> <li>3.8 Maintaining Records</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided</p> <ul style="list-style-type: none"> <li>4.1 Assessment Centers/Venues</li> <li>4.2 Accredited Assessors</li> <li>4.3 Modes of Assessment</li> <li>4.4 Evaluation Reports</li> <li>4.5 Access to a relevant venue, equipment and materials</li> <li>4.6 Assignment Instructions</li> <li>4.7 Logbooks</li> <li>4.8 Operational manuals and makers/customers' instructions</li> <li>4.9 Assessment instruments, including personal planner and assessment record book</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Written Test</li> <li>5.2 Demonstration with questioning</li> <li>5.3 Observation with questioning</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Assessment may be done in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY: MANAGE OWN PERFORMANCE**

**UNIT CODE: HCS516202**

**UNIT DESCRIPTOR:** This unit of competency covers the knowledge, skills and attitudes in effectively managing own workload and quality work.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Plan for completion of own workload	1.1 <b>Tasks</b> accurately identified. 1.2 Priority allocated to each task. 1.3 Time lines allocated to each task or series of tasks. 1.4 Tasks deadlines known and complied with whenever possible. 1.5 Work schedules are known and completed with agreed time frames. 1.6 Work plans developed according to assignment requirements and employer policy. 1.7 Uncompleted work or tasks detailed and responsibility for completion passed to incoming shift or other appropriate persons.
2. Maintain quality of performance	2.1 Personal performance continually monitored against agreed <b>performance standards</b> . 2.2 Advice and guidance sought when necessary to achieve or maintain agreed standards. 2.3 Guidance from management applied to achieve or maintain agreed standards. 2.4 Standard of work clarified and agreed according employer policy and procedures.
3. Build credibility with customers/clients	3.1 Client expectations for reliability, punctuality and appearance adhered to. 3.2 Possible causes of client/customer dissatisfaction identified, dealt with, recorded and in accordance with employer policy. 3.3 Client fully informed of all relevant matters in a timely manner.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Tasks	1.1 May be identified through: <ul style="list-style-type: none"> <li>1.1.1 Assignment Instructions</li> <li>1.1.2 Verbal Instructions by Senior Staff</li> <li>1.1.3 Policy Documents</li> <li>1.1.4 Duty Statements</li> <li>1.1.5 Self Assessment</li> </ul> 1.2 May be: <ul style="list-style-type: none"> <li>1.2.1 Daily tasks</li> <li>1.2.2 Weekly tasks</li> <li>1.2.3 Regularly or irregularly occurring tasks</li> </ul>
2. Performance Standards	May include: <ul style="list-style-type: none"> <li>2.1 Assignment Instructions</li> <li>2.2 Procedures established in policy documents</li> </ul>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Planned for completion of own workload</li> <li>1.2 Assessed verbal or written work plan through observation and discussion of site and employer requirements</li> <li>1.3 Demonstrated capacity to complete task within specified time frame</li> <li>1.4 Maintained quality of own performance</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Sight and assignment requirements</li> <li>2.2 Employer policy on performance management</li> <li>2.3 Indicators of appropriate performance for each area of responsibility</li> <li>2.4 Steps for improving or maintaining performance</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Capacity to plan and prioritize work loads and requirements</li> <li>3.2 Time and task management</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Assessment Centers/Venues</li> <li>4.2 Accredited Assessors</li> <li>4.3 Modes of Assessment</li> <li>4.4 Evaluation Reports</li> <li>4.5 Access to relevant venue, equipment and materials</li> <li>4.6 Assignment Instructions</li> <li>4.7 Logbooks</li> <li>4.8 Operational manuals and makers'/customers' instructions</li> <li>4.9 Assessment Instruments, including personal planner and assessment record book</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Written Test</li> <li>5.2 Demonstration with questioning</li> <li>5.3 Observation with questioning</li> <li>5.4 Oral questioning/Interview</li> </ul>
<p>6. Context of assessment:</p>	<ul style="list-style-type: none"> <li>6.1 Assessment may be done in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY: FOLLOW OCCUPATIONAL HEALTH AND SAFETY POLICIES IN DENTAL LABORATORY FACILITIES**

**UNIT CODE: HCS346204**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required in applying relevant OHS legislation and codes of practice, including duties and responsibilities for all parties under general duty of care.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1 Follow workplace procedures for hazard identification and risk control	1.1 Hazards in the work area are recognized and reported to supervisor in accordance with workplace procedures. 1.2 <b>Workplace procedures and work instructions for controlling risks</b> , including infection control, are followed accurately. 1.3 <b>Workplace procedures</b> for dealing with accidents, fires and emergencies are followed where necessary.
2 Contribute to the management of OHS	2.1 OHS issues are raised with designated personnel and co-workers as appropriate. 2.2 Contributions are made as appropriate to workplace OHS discussions.
3 Utilize and implement strategies as directed to prevent infection in the workplace	3.1 The environment is kept clean and tidy. 3.2 Personal hygiene practices are followed. 3.3 Any <b>items that may be contaminated</b> are disposed of safely.
4 Utilize strategies to prevent stress overload	4.1 Nominated <b>rest time and breaks</b> are taken. 4.2 Sources of <b>stress</b> are identified and issues raised with supervisor. 4.3 Work roles are clarified and followed.
5 Work in a safe manner	5.1 Defined procedures are followed to ensure personal safety. 5.2 All <b>work is carried out in a manner which ensures safety</b> of self and others 5.3 <b>Organizational security measures</b> are followed. 5.4 Safe manual handling procedures are followed.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Workplace procedures for controlling risks	May include: 1.1 Manual handling techniques 1.2 Safe handling, storage and disposal of inflammable or potentially dangerous substances 1.3 Strategies for reducing the amount of manual handling required
2. Stress	May include: 2.1 Health problems 2.2 Changes in behavior 2.3 Frequent absences 2.4 Negative attitudes 2.5 Unawareness of own stress levels
3. Rest time and breaks	May include: 3.1 Morning and afternoon tea, lunch, dinner breaks
4. Workplace procedures	May include: 4.1 Grievance procedures 4.2 Team meetings 4.3 Incident reports 4.4 Debriefing procedures following crisis 4.5 Smoke free environment
5. Items that may be contaminated	May include: 5.1 Work surfaces 5.2 Clothing
6. Working in a manner that ensures personal safety	May include: 6.1 Carrying communication equipment 6.2 Using personal protection equipment 6.3 Safe work practices for handling sharps and other hazards in dental laboratory practice 6.4 Carrying alarms 6.5 Maintaining infection control in dental laboratory practice
7. Organizational security measures	May include: 7.1 Locking doors 7.2 Alarm system 7.3 Contracted security personnel

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Worked safely and followed OHS policies and procedures in dental laboratory practice</li> <li>1.2 Complied with DOH infection control guidelines</li> <li>1.3 Contributed to the management of OHS</li> <li>1.4 Utilized and implemented strategies as directed to prevent infection in the workplace</li> <li>1.5 Utilized strategies to prevent stress overload</li> <li>1.6 Worked in a safe manner</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Compliance with OHS policy and procedures and infection control guidelines and procedures</li> <li>2.2 Knowledge of potential hazards in the workplace</li> <li>2.3 Knowledge of laboratory waste disposal methods</li> <li>2.4 Knowledge of personal hygiene and personal protection including immunization</li> <li>2.5 Knowledge of legislative requirements and best practice approaches to OHS</li> <li>2.6 Emergency procedures</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual handling techniques</li> <li>3.2 Safe handling techniques</li> <li>3.3 Correct use of equipment, instruments and materials in accordance with manufacturer specifications</li> <li>3.4 Technology used to work safely and competently</li> <li>3.5 Safe work practices to prevent or minimize risk</li> <li>3.6 Reading and writing skills</li> <li>3.7 Oral communication skills</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Relevant dental laboratory practice/organizational policies and procedures manuals such as: <ul style="list-style-type: none"> <li>4.1.1 Incident reporting procedures</li> <li>4.1.2 OHS policy and procedures</li> <li>4.1.3 Infection control guidelines (DOH)</li> <li>4.1.4 Waste management policies</li> <li>4.1.5 Relevant state legislation</li> <li>4.1.6 Manufacturer's instructions for the use of relevant equipment, instruments and materials</li> <li>4.1.7 Material Safety Data Sheets (MSDs)</li> </ul> </li> </ul>
<p>5 Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Observation with questioning</li> <li>5.2 Oral questioning/Interview</li> <li>5.3 Portfolio</li> <li>5.4 Third Party Report</li> </ul>
<p>6 Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated work setting.</li> </ul>

**UNIT OF COMPETENCY: MAINTAIN INFECTION CONTROL IN DENTAL LABORATORY PRACTICE**

**UNIT CODE: HCS346205**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required to comply with infection control procedures before, during and after health care procedures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
<p>1 Monitor and maintain the cleanliness of the dental laboratory</p>	<p>1.1 Appropriate personal protective wear is used during cleaning of equipment and surfaces.</p> <p>1.2 Appropriate disinfectants and cleaning equipment are selected, prepared and used on surfaces in accordance with the manufacturer’s specification.</p> <p>1.3 Used surface covers, if applicable, are removed and replaced in a manner to prevent cross contamination.</p> <p>1.4 <b>Cleaning equipment</b> is correctly stored.</p> <p>1.5 All <b>surfaces</b> including internal storage units within the dental laboratory are monitored and maintained for cleanliness.</p>
<p>2 Clean and disinfect dental laboratory /instruments and equipment</p>	<p>2.1 Dental laboratory instruments and equipment are cleaned of bio-burden and lubricated, where appropriate, prior to cleaning and disinfecting.</p> <p>2.2 Dental laboratory instruments and equipment are checked for faults and disassembled where appropriate.</p> <p>2.3 Prior to cleaning of dental laboratory instruments and equipment are loaded safely and effectively.</p> <p>2.4 Appropriate cleaning procedures are carried out in the correct sequence and duration in accordance with manufacturer specifications.</p> <p>2.5 Regular maintenance program including faults and incidences are recognized, reported and documented.</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
3 Maintain hygiene and personal protection	3.1 Hand washing procedures are correctly followed. 3.2 Open cuts and abrasions are covered with a waterproof dressing. 3.3 Appropriate <b>personal protection wear</b> is correctly worn. 3.4 Immunization is undertaken in accordance with current recommendations for dental health care worker. 3.5 All work is carried out in a manner that minimizes the risk of cross contamination and complies with OHS policy and procedures. 3.6 Hazards in the dental laboratory is recognized and reported to operator. 3.7 Appropriate procedures for dealing with accidents, including sharp injuries, are followed correctly.
4 Dispose of dental laboratory waste safely	4.1 Appropriate protective clothing is worn or used in accordance with OHS policy and procedures when handling waste. 4.2 <b>Waste is segregated, contained</b> , stored and transported correctly. 4.3 Damaged and/or pre-packed items are disposed of safely. 4.4 <b>Waste is disposed of safely.</b>
5 Undertake the necessary measures to ensure prevention of transmission of infection	5.1 Risks of cross contamination are identified and appropriate responses implemented within dental practice. 5.2 Clean, contaminated and administrative zones are clearly identified and maintained. 5.3 Instruments, materials, medicaments and equipment are set up prior to commencement of treatment where appropriate. 5.4 One-way workflow from clean to dirty zone is maintained. 5.5 Risk of transmission of infection is minimized in all dental laboratory related and administrative procedures. 5.6 Spills are removed correctly.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Infection control guidelines and procedures	May include but are not limited to: <ul style="list-style-type: none"> <li>1.1 Current DOH guidelines for infection control in health care settings</li> <li>1.2 Standard Precautions and Additional Precautions as defined by DOH</li> <li>1.3 Dental laboratory practice/organizational policy procedures and infection control guidelines and procedures</li> <li>1.4 Material Safety Data Sheets (MSDS)</li> <li>1.5 Local government ordinances</li> <li>1.6 Legislative requirements</li> </ul>
2. Personal protective wear	May include but not limited to: <ul style="list-style-type: none"> <li>2.1 Sterile and non sterile gloves including heavy duty</li> <li>2.2 Masks</li> <li>2.3 Eye protection</li> <li>2.4 Enclosed footwear</li> <li>2.5 Gowns</li> <li>2.6 Aprons</li> </ul>
3. Cleaning equipment	May include but is not limited to: <ul style="list-style-type: none"> <li>3.1 Ultrasonic cleaner</li> <li>3.2 Manual cleaning with a range of brushes</li> <li>3.3 Drying</li> <li>3.4 Buckets and mops</li> </ul>
4. Waste segregation	May include but is not limited to: <ul style="list-style-type: none"> <li>4.1 Clinical and related waste</li> <li>4.2 Infectious waste</li> <li>4.3 Sharps</li> <li>4.4 General waste</li> <li>4.5 Other hazardous substances</li> </ul>
5. Requirements for safe disposal of waste	May be determined by: <ul style="list-style-type: none"> <li>5.1 Main drainage</li> <li>5.2 Local government ordinances</li> <li>5.3 Material Safety Data Sheet (MSDS)</li> </ul>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Demonstrated knowledge of infection risks in health environment and specifically in dental laboratory practice</li> <li>1.2 Complied with current DOH infection control guidelines and procedures, OHS and legislative requirements</li> <li>1.3 Handled waste safely managed procedures in accordance with legislative requirements</li> <li>1.4 Selected and used appropriate cleaning agents for particular surfaces and equipment in accordance with the manufacturer's specifications</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Knowledge on how infection is spread, cross infection and prevention strategies</li> <li>2.2 Knowledge of relevant OHS policies and procedures</li> <li>2.3 Limitations, properties and precautions required of disinfectants and decontaminates</li> <li>2.4 Knowledge of potential hazards in a health environment</li> <li>2.5 Knowledge of currently available vaccinations against transmissible disease</li> <li>2.6 Knowledge of dental laboratory waste disposal methods</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Applying standard and additional precautions</li> <li>3.2 Using safe work practices to minimize the risk of transmission of infection</li> <li>3.3 Selecting and using appropriate chemicals in cleaning and sanitizing</li> <li>3.4 Using correct hand washing and hand care techniques</li> <li>3.5 Using correct hygiene procedures</li> <li>3.6 Selecting and using equipment and cleaning agents effectively</li> <li>3.7 Using procedures appropriate to the cleaning area and purpose</li> <li>3.8 Minimizing disruption to the work environment</li> <li>3.9 Minimizing safety hazards for self and others</li> <li>3.10 Using time management strategies to set priorities</li> <li>3.11 Using technology to work safely and competently</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Relevant dental laboratory practice/organizational policy and procedures</li> <li>4.2 Incident reporting procedures</li> <li>4.3 Occupational health and safety policy and procedures</li> <li>4.4 Infection control guidelines</li> <li>4.5 Waste management policies</li> <li>4.6 Relevant state legislations</li> <li>4.7 Manufacturer's instructions for the use of relevant equipment, instruments, medicaments, materials and Material Safety Data Sheets (MSDS)</li> <li>4.8 Cleaning agents currently used in the workplace</li> </ul>

5. Method of assessment	Competency may be assessed through: 5.1 Written Test/Examination 5.2 Demonstration with questioning 5.3 Observation with questioning 5.4 Portfolio 5.5 Third Party Report
6. Context of assessment	6.1 Competency may be assessed in the workplace or in a simulated work setting.

**UNIT OF COMPETENCY: OPERATE A PERSONAL COMPUTER**

**UNIT CODE: ICT311201**

**UNIT DESCRIPTOR:** This unit defines the competency required to operate a personal computer by: starting the PC, logging in, using and working with files, folders and programs, saving work, and closing down the PC.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized Bold</i> terms are elaborated in the Range of Variables
1. Start the computer	1.1 The <b>peripheral devices</b> are properly connected 1.2 Power is checked and the <b>computer</b> and peripheral devices are switched on 1.3 Proper logging in and logging off is successfully done 1.4 The <b>operating system</b> features and functions are accessed and navigated 1.5 Hardware configuration and other <b>system features</b> are checked
2. Arrange and customize desktop display/ Windows settings	2.1 The desktop screen or Windows elements are changed as needed 2.2 Desktop icons are added, renamed, moved, copied or deleted 2.3 The <b>online help functions</b> are accessed or used as needed 2.4 Desktop icons of <b>application programs</b> are selected, opened and closed 2.5 <b>Properties</b> of icons are displayed 2.6 Computer or desktop settings are saved and restored
3. Work with files and folders (or directories)	3.1 A file or folder is created, opened, moved, renamed or copied 3.2 Files are located, deleted and restored 3.3 Details and properties of files and folders are displayed or viewed 3.4 <b>Various files</b> are organized for easy lookup and use 3.5 Files and information are searched 3.6 <b>Disks</b> are checked, erased or formatted as necessary
4. Work with user application programs	4.1 <b>Application programs</b> are added, changed, removed or ran 4.2 User software or application program are installed, updated and upgraded 4.3 Information/data are moved between documents or files
5. Print information	5.1 Printer is added or installed and correct <b>printer settings</b> is ensured 5.2 Default printer is assigned accordingly 5.3 Information or document is printed on the installed printer 5.4 Progress of print jobs are viewed and deleted as required
6. Shut down computer	6.1 All open application programs are closed 6.2 Computer and peripheral devices are properly shut down

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Peripheral device	This may include but is not limited to: <ul style="list-style-type: none"> <li>1.1 mouse</li> <li>1.2 keyboard</li> <li>1.3 monitor or visual display unit</li> <li>1.4 printer</li> <li>1.5 scanner</li> </ul>
2. Computer	May include: <ul style="list-style-type: none"> <li>2.1 Laptops/notebooks</li> <li>2.2 Workstations</li> <li>2.3 Servers</li> <li>2.4 other personal computer devices</li> </ul>
3. Application programs	Can include: <ul style="list-style-type: none"> <li>3.1 user programs</li> <li>3.2 database programs</li> <li>3.3 word processors</li> <li>3.4 email programs</li> <li>3.5 Internet browsers</li> <li>3.6 system browsers</li> <li>3.7 spreadsheets</li> </ul>
4. Operating system	May include but is not limited to the various versions and variants of: <ul style="list-style-type: none"> <li>4.1 Windows</li> <li>4.2 NT</li> <li>4.3 Mac OS</li> <li>4.4 Linux</li> <li>4.5 Solaris</li> <li>4.6 Unix</li> </ul>
5. System features	May include but is not limited to the operating system features and hardware features like: <ul style="list-style-type: none"> <li>5.1 memory size</li> <li>5.2 disk capacities</li> <li>5.3 video cards</li> <li>5.4 USBs</li> <li>5.5 Modems</li> <li>5.6 1394 and LAN connectors</li> <li>5.7 SD and PC cards</li> <li>5.8 wireless and infrared connections.</li> </ul>

VARIABLE	RANGE
6. Online help functions	6.1 An instruction manual, or a portion of the manual, integrated and accessible from within the program or software being used.
7. Properties	Indicates the description of the file or folder to include the: 7.1 file name 7.2 type of file 7.3 file size 7.4 date created and modified 7.5 attributes (hidden, read-only).
8. Various files	8.1 Documents 8.2 Records 8.3 Pictures 8.4 Music 8.5 Video
9. Disks	May include but is not limited to: 9.1 Floppy disks 9.2 CDs 9.3 CD-RW (Compact discs-Read/Write) 9.4 DVD RW 9.5 zip disks 9.6 flash drives 9.7 memory sticks 9.8 hard drives
10. Printer settings	The properties of the printer that enables it to work includes: 10.1 page layout 10.2 paper size 10.3 ink/cartridge type 10.4 number of copies 10.5 page orientation.

## EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>1.1 Assessment must confirm the ability to utilize software, navigate the desktop, using system features to perform tasks and save results of work.</p>
<p>2. Underpinning Knowledge</p>	<p>Knowledge includes:</p> <p>2.1 Keyboard layout and functions</p> <p>2.2 Computer functions</p> <p>2.3 Basic parts of a computer and various hardware components</p> <p>2.4 Storage devices and file concepts</p> <p>2.5 Basic software operation and functionalities</p>
<p>3. Underpinning Skills</p>	<p>Skills include:</p> <p>3.1 Saving and retrieving files to and from various folders or disk storage</p> <p>3.2 Mouse and keyboarding skills for running software applications</p> <p>3.3 Reading and writing at a level where basic workplace documents are understood</p> <p>3.4 Clear ability to communicate with peers and supervisors</p> <p>3.5 Interpretation of user manuals and help functions</p> <p>3.6 The ability to carry out written and verbal instructions using a personal computer whether standalone or in a networked environment</p>
<p>4. Resource Implications</p>	<p>To demonstrate competence in this unit access to the following resources will be required:</p> <p>4.1 A personal computer</p> <p>4.2 A printer</p> <p>4.3 Mouse and keyboard</p> <p>4.4 Basic systems software</p>
<p>5. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <p>5.1 Observation in a workplace or simulated environment</p> <p>5.2 Third party reports</p> <p>5.3 Exams and tests</p> <p>5.4 Demonstration of required skills</p> <p>5.5 Interviews</p>
<p>6. Context for Assessment</p>	<p>6.1 Competency may be assessed in the workplace or in a simulated work environment.</p>

## CORE COMPETENCIES

**UNIT OF COMPETENCY:**    **FABRICATE MODELS**

**UNIT CODE:**                **HCS322323**

**UNIT DESCRIPTOR:**        This unit covers the knowledge, skills and attitudes in fabricating models.

ELEMENT	PERFORMANCE CRITERIA
	<i>Italicized terms</i> are elaborated in the Range of Variables
1. Verify integrity of impressions	1.1 <b><i>Impression</i></b> is disinfected according to Department of Health guidelines. 1.2 Impressions are examined for defects. 1.3 Impression is checked to ensure it meets the specifications of the work.
2. Select and prepare model materials	2.1 Appropriate materials are selected. 2.2 Materials are prepared in accordance with desired outcome.
3. Pour impressions	3.1 Impressions are prepared for pouring. 3.2 <b><i>Materials are poured into impressions</i></b> in accordance with accepted techniques. 3.3 Required setting time is allowed.
5. Finish model	4.1 Model is recovered intact from impression. 4.2 Model is inspected for defects. 4.3 Models are trimmed according to requirements.
5. Duplicate model	5.1 <b><i>Duplicating materials</i></b> are prepared according to manufacturer's instructions. 5.2 Duplicating materials are mixed according to manufacturer's instructions. 5.3 An accurate, bubble free cast is produced.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Impression	May include but are not limited to: 1.1 Edentulous impression 1.2 Dentulous impressions 1.3 Partially dentulous
2. Pour materials into impressions	May include but are not limited to: 2.1 Rigid impression materials 2.2 Aqueous elastomers 2.3 Non-aqueous elastomers
3. Duplicating materials	May include but are not limited to: 3.1 Stones 3.2 Diestones 3.4 Refractories

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Verified integrity of impressions</li> <li>1.2 Selected and prepared model materials</li> <li>1.3 Poured impressions</li> <li>1.4 Finished models</li> <li>1.5 Duplicated model</li> <li>1.6 Followed OH&amp;S and Department of Health (DOH) infection control guidelines</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Knowledge on basic oral anatomy and occlusion</li> <li>2.2 Knowledge and application of basic hygiene and the importance of maintaining clean equipment and working environment</li> <li>2.3 Relevant material science for carrying out procedure</li> <li>2.4 Occupation Health and Safety and material safety datasheets</li> <li>2.5 Current Department of Health infection control guidelines, uses and specifications of dental packaging equipment and related products</li> <li>2.6 Dental policies and procedures</li> <li>2.7 Industry codes of practice and relevant legislation</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Communicating and interacting appropriately with colleagues, health care practitioners, other clients and patients</li> <li>3.2 Communicating ideas and information</li> <li>3.3 Maintaining cleanliness</li> <li>3.4 Demonstrating manual dexterity</li> <li>3.5 Working with others and in teams</li> <li>3.6 Planning and organizing activities</li> <li>3.7 Language, literacy and numeracy skills appropriate to the job role and function e.g. documenting packaging information and recording procedures</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 dental policies and procedures</li> <li>4.2.2 industry codes of practice and relevant legislation</li> </ul> </li> <li>4.3 Access to a range of packaging equipment and related products</li> <li>4.4 A qualified workplace assessor and/or technical expert working in partnership with the assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY: FABRICATE CUSTOM IMPRESSION TRAYS**

**UNIT CODE: HCS322324**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes in fabricating custom impression trays.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare model	1.1 Work is interpreted. 1.2 Undesirable undercuts are blocked out. 1.3 Outline is marked and spacer is applied as required.
2. Select and prepare materials	2.1 Selected materials are obtained and mixed in accordance with manufacturer's instructions. 2.2 Equipment is prepared for processing. 2.3 Mixing vessels and templates are provided.
3. Fabricate custom impression tray	3.1 Materials are mixed or manipulated to desired outcome. 3.2 Material is adapted to the cast. 3.3 Handle is fabricated and attached as required. 3.4 <b>Custom tray</b> is processed in accordance with industry standards. 3.5 Outline is trimmed. 3.6 <b>Spacer material</b> is removed. 3.7 Outline is refined and polished as required. 3.8 <b>Impression tray</b> is customized to particular impression material requirements. 3.9 Impression tray is disinfected according to DOH guidelines.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Custom Trays	Trays may be fabricated for: 1.1 Fully edentulous 1.2 Partially dentate 1.3 Fully dentate 1.4 Implant cases
2. Spacer materials	A range of spacer materials may be used: 2.1 Acrylic 2.2 Thermoplastic 2.3 Light-cured composite
3. Impression tray	May include but are not limited to: 3.1 Full arch 3.2 Anterior 3.3 Posterior 3.4 Quadrant

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared model.</li> <li>1.2 Selected and prepared materials</li> <li>1.3 Fabricated custom impression tray</li> <li>1.4 Followed OH&amp;S and DOH infection control guidelines</li> <li>1.5 Identified oro-facial anatomy</li> <li>1.6 Followed different techniques in model fabrication</li> </ul>
<p>2. Underpinning knowledge</p>	<p>Knowledge on the following:</p> <ul style="list-style-type: none"> <li>2.1 Relevant material science for carrying out procedures</li> <li>2.2 Model fabrication techniques</li> <li>2.3 Oro-facial anatomy</li> <li>2.4 Current infection control DOH guidelines</li> <li>2.5 OHS and material data safety sheets</li> <li>2.6 Dental workplace policies and procedures</li> <li>2.7 Industry codes of practice, standards and guidelines</li> <li>2.8 National and local legislation where appropriate</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Model fabrication techniques</li> <li>3.2 Manual dexterity</li> <li>3.3 Thermo-forming technology</li> <li>3.4 Visible light-cured techniques</li> <li>3.5 Planning and organizing work activities</li> <li>3.5 Language, literacy and numeracy skills appropriate to the role and workplace requirements</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 Dental policies and procedures</li> <li>4.2.2 Industry codes of practice, standards and guidelines</li> <li>4.2.3 State legislation where appropriate</li> </ul> </li> <li>4.3 Access to a range of customers with different requirements (real or simulated)</li> <li>4.4 A qualified workplace assessor and/or a technical expert working in partnership with assessor</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY: FABRICATE REGISTRATION BITE RIMS****UNIT CODE: HCS322325****UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes in fabricating registration bite rims.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Select and prepare materials	1.1 <b><i>Appropriate material for the base</i></b> and rims is selected. 1.2 Model is prepared to enable appropriate application of selected base metal.
2. Fabricate base	2.1 Selected base material is applied to model. 2.2 Base material is processed in accordance with type of base material selected. 2.3 Base material is trimmed to peripheral contours of model and appropriate landmarks.
3. Fabricate registration bite rims	3.1 Bite rim is fabricated in selected material. 3.2 Bite rim is trimmed to prescribed dimensions and appropriate landmarks. 3.3 Bite rim is smoothed and polished in accordance with material chosen.
4. Prepare face-bow (if required)	5.1 Face-bow fork is located in required position. 5.2 Material is selected as required by the presentation. 5.3 Face-bows are finished in accordance with acceptable industry standard.

**RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Appropriate materials for base	May include but are not limited to: 1.1 Wax 1.2 Thermo-formed materials 1.3 Light-cured composite 1.4 Acrylic 1.5 Cast metal framework

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Selected and prepared materials for fabrication of registration bite rim.</li> <li>1.2 Constructed base and registration bite rim</li> <li>1.3 Prepared face-bow (if required)</li> <li>1.4 Complied with DOH infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Relevant material science for carrying out procedures</li> <li>2.2 Basic oral anatomy and occlusion</li> <li>2.3 Range of standard dimensions</li> <li>2.4 Application of registration bite rim</li> <li>2.5 Industry codes and practices</li> <li>2.6 National and local legislation as appropriate</li> <li>2.7 Housekeeping/maintenance procedures</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Processing techniques</li> <li>3.4 Maintaining personal hygiene</li> <li>3.5 Following correct measurements</li> <li>3.6 Planning and organizing work activities</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY:**    **ARTICULATE MODELS AND TRANSFER RECORDS**

**UNIT CODE:**                **HCS322326**

**UNIT DESCRIPTOR:**        This unit covers the knowledge, skills and attitudes in articulating models and transferring records.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Select and prepare articulator	1.1 Work order requirements are confirmed. 1.2 Articulator is selected and adjusted as required. 1.3 Mounting method to be used is identified in accordance with the <i>type of articulator</i> .
2. Select and prepare materials	2.1 Models and oral records are positioned in articulator. 2.2 Mounting materials are prepared and applied to models. 2.3 Centric records are established and secured. 2.4 Excess material is removed in accordance with industry standards 2.5 Equipment is cleaned in accordance with standard operating procedures (SOPs).
3. Transfer oral records to articulator	3.1 Records are transported as provided. 3.2 Midline is recorded. 3.3 Vertical height is set and recorded. 3.4 Condylar angle is set as required.

**RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Type of articulators	May include but are not limited to: 1.1 Average movement 1.2 Semi-adjustable 1.3 Fully adjustable

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Selected and prepared articulator</li> <li>1.2 Selected and prepared materials</li> <li>1.3 Transferred oral records to articulator</li> <li>1.4 Complied with DOH infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Recording techniques and devices</li> <li>2.2 Mechanical devices</li> <li>2.3 Articulators</li> <li>2.4 Face-bows</li> <li>2.5 Relevant material science for carrying out procedures</li> <li>2.6 Basic oral anatomy and occlusion</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Recording techniques</li> <li>3.4 Articulating procedure</li> <li>3.5 Planning and organizing work activities</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Range of articulators</li> <li>4.3 Range of jaw relationship</li> <li>4.4 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY: FABRICATE MOUTHGUARD****UNIT CODE: HCS322327****UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes in fabricating mouthguard.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare model for procedure	1.1 Prescription is interpreted in accordance with the dentist's instruction. 1.2 Model is seated and correctly positioned for procedure.
2. Check the dental mouthguard prior to insertion	2.1 Mouthguard is decontaminated in accordance with DOH infection control <i>guidelines</i> . 2.2 Potential injury causing areas of a mouthguard are removed prior to insertion. 2.3 Mouthguard is assessed to ensure desired thickness and protective capabilities have been achieved.
3. Fit and evaluate the mouthguard	3.1 Retention and stability are examined. 3.2 The fitting surfaces of the mouthguard are checked for accuracy and comfort. 3.3 Current DOH infection control guidelines are followed.
4. Alter mouthguard if required	4.1 Materials and equipment required to carry out alterations are used in accordance with manufacturer's instructions, current DOH infection control and OHS guidelines. 4.2 Fitting surfaces and occlusion are checked for accuracy and altered where pressure is indicated or where discrepancies to retention and stability are found. 4.3 Documentation is completed as required.

**RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Guidelines	Relevant guidelines may include but are not limited to: 1.1 Department of Health (DOH) infection control guidelines and procedures 1.2 Occupational Health and Safety Practices

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared model for procedure</li> <li>1.2 Checked the dental mouthguard prior to insertion</li> <li>1.3 Fitted and evaluated the mouthguard</li> <li>1.4 Altered mouthguard if required</li> <li>1.5 Complied with DOH infection control policies and procedures</li> <li>1.6 Followed OH&amp;S policies and procedures</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Rationale and objectives for mouthguard</li> <li>2.2 Types of mouthguard</li> <li>2.3 Maintenance requirements for mouthguard</li> <li>2.4 Principles of quality assurance and work effectiveness</li> <li>2.5 Legal and ethical issues relating to: informed consent, duty of care and confidentiality</li> <li>2.6 Relevant OH&amp;S regulations</li> <li>2.7 Current DOH infection control guidelines</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Communications Skills</li> <li>3.2 Problem Solving</li> <li>3.3 Planning and organizing work activities</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY:** ARRANGE ARTIFICIAL TEETH FOR COMPLETE DENTURES

**UNIT CODE:** HCS322328

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required in the selection, arrangement and wax contouring of a complete denture.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare case for setting of teeth	1.1 Artificial teeth are selected to work order. 1.2 Bases and rims are modified as required for positioning of teeth.
2. Arrange artificial teeth	2.1 Work order is followed. 2.2 Teeth are positioned to achieve aesthetics and centric occlusion, balanced articulation and balanced occlusion. 2.3 Teeth are secured in wax and contoured to gingival outline.
3. Wax up denture for try-in	3.1 Wax is applied as required. 3.2 Facial and lingual aspects are contoured. 3.3 Muscle attachments are located and relieved. 3.4 Peripheral extensions are smoothed and rounded. 3.5 Distal extensions are confirmed.

### RANGE OF VARIABLES

<b>VARIABLE</b>	<b>RANGE</b>
1. Dentures	May include but are not limited to: 1.1 Complete maxillary or complete mandibular 1.2 Combined complete maxillary and complete mandibular.

## EVIDENCE GUIDE

1. Critical aspect of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared case for setting of teeth</li> <li>1.2 Arranged artificial teeth</li> <li>1.3 Waxed up denture for try-in</li> <li>1.4 Complied with infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies and procedures</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Range of articulators</li> <li>2.2 Selection of artificial teeth</li> <li>2.3 Articulation and occlusion</li> <li>2.4 Tooth morphology</li> <li>2.5 Current DOH infection control guidelines</li> <li>2.6 Relevant material science for carrying out procedures</li> <li>2.7 OH&amp;S and material safety data sheets</li> <li>2.8 Industry Codes of Practice</li> <li>2.9 Relevant laws as appropriate</li> <li>2.10 Housekeeping and maintenance procedures</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Selecting artificial teeth</li> <li>3.4 Maintaining personal hygiene</li> <li>3.5 Planning and organizing work activities</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 relevant laws as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 Range of articulators</li> <li>4.1 A qualified workplace assessor and/or a technical expert working in partnership with assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY:** SET-UP AND WAX REMOVABLE PARTIAL DENTURES

**UNIT CODE:** HCS322329

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required to set-up and wax removable partial dentures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Design acrylic removable partial denture	1.1 Models are surveyed. 1.2 Design is established and transferred to master model. 1.3 Undesirable undercuts are blocked out. 1.4 Food lines are scribed.
2. Select and prepare materials	2.1 <b>Materials</b> are selected according to work order. 2.2 Shape and dimension of components are established from design.
3. Arrange artificial teeth	3.1 Teeth are selected and positioned in wax to established aesthetics and function. 3.2 Wax is contoured and dentures made suitable for try-in in mouth.
4. Fabricate retainer units	4.1 Components are constructed as required. 4.2 Components are joined as required. 4.3 Teeth and components are secured in wax. 4.4 Facial and lingual aspects are contoured. 4.5 Appliance is secured for processing.

**RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Material options for base	May include but are not limited to: 1.1 Acrylic 1.2 Light-cured 1.3 Flexible materials

## EVIDENCE GUIDE

1. Critical aspect of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Designed acrylic removable partial denture</li> <li>1.2 Selected and prepared materials</li> <li>1.3 Arrange artificial teeth</li> <li>1.4 Fabricated retainer units</li> <li>1.5 Complied with infection control policies and procedures</li> <li>1.6 Followed OH&amp;S policies</li> <li>1.7 Industry Codes of Practice</li> <li>1.8 Relevant laws as appropriate</li> <li>1.9 Housekeeping Maintenance Procedures</li> <li>1.10 Dental Alloys</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Metallurgy - soldering techniques</li> <li>2.2 Wrought component fabrication techniques</li> <li>2.3 Tooth morphology</li> <li>2.4 Articulation and occlusion</li> <li>2.5 Principles of partial denture design</li> <li>2.6 Relevant material science for carrying out procedures</li> <li>2.7 Duplication techniques</li> <li>2.8 Current DOH infection control guidelines</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Investing and packing techniques</li> <li>3.4 Duplicating techniques</li> <li>3.5 Fabricating techniques of wrought components</li> <li>3.6 Maintaining personal hygiene</li> <li>3.7 Planning and organizing work activities</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 Dental alloys</li> <li>4.4 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Assessment may be conducted in the workplace or in a simulated environment</li> </ul>

**UNIT OF COMPETENCY: WAX, PROCESS AND FINISH ACRYLIC DENTURES AND APPLIANCES**

**UNIT CODE: HCS322330**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes concerned with the process involved in polymerization and finishing of acrylic dentures and appliances.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Wax case for finish consistent with work order	1.1 Wax is applied as required by work order. 1.2 Facial and lingual aspects are contoured.
2. Select and prepare materials and processing	2.1 Appropriate polymer system for case is identified. 2.2 Appropriate investment technique is identified. 2.3 Appropriate processing cycle is identified. 2.4 Material is selected from identified polymer system. 2.5 System components are combined. 2.6 Materials are allowed to reach application stage.
3. Process denture or appliance	3.1 Appropriate investment techniques are applied. 3.2 Material is applied to mould. 3.3 Appropriate processing cycle is applied. 3.4 Model is divested. 3.5 Remount on articulator.
4. Grind dentures and appliances selectively	4.1 Centric occlusion is restored. 4.2 Balanced occlusion is restored. 4.3 Balanced articulation is restored. 4.4 Function is restored.
5. Finish denture or appliance	5.1 Denture or appliance is trimmed, shaped and finished according to job specifications. 5.2 Dentures are disinfected according to current DOH infection guidelines.

**RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Acrylic dentures and appliances	May include but are not limited to: 1.1 Complete and partial dentures 1.2 Orthodontic appliances 1.3 Therapeutic appliances

## EVIDENCE GUIDE

<p>1. Critical aspect of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Waxed case for finish consistent with work orders</li> <li>1.2 Selected and prepared materials and processing techniques</li> <li>1.3 Processed denture or appliance</li> <li>1.4 Grind dentures and appliances selectively</li> <li>1.5 Finished denture or appliance</li> <li>1.6 Complied with infection control policies and procedures</li> <li>1.7 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Relevant material science for carrying out procedures</li> <li>2.2 Tooth morphology and anatomy</li> <li>2.3 OH&amp;S and materials safety data sheets</li> <li>2.4 Current DOH infection control guidelines</li> <li>2.5 Workplace Policy and Procedures Manuals</li> <li>2.6 Product Labels and Sources of Product Information</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Maintaining personal hygiene</li> <li>3.4 Planning and organizing work activities</li> </ul>
<p>4. Resource implication</p>	<p>The following resources <b><u>MUST</u></b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Relevant documentation, such as: <ul style="list-style-type: none"> <li>- workplace policy and procedures manuals</li> </ul> </li> <li>4.2 Access to a range of clients with different requirements</li> <li>4.3 A range of equipment and products appropriate to the workplace</li> <li>4.4 Product labels and sources of product information</li> <li>4.5 A qualified workplace assessor or assessment team</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third party Report</li> <li>5.4 Portfolio</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Assessment may be conducted in the workplace or in a simulated environment</li> </ul>

**UNIT OF COMPETENCY:** FABRICATE THERMO-FORMED BASES AND APPLIANCES

**UNIT CODE:** HCS322334

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitude in fabricating thermo-formed bases and appliances.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare model	1.1 Work order is interpreted. 1.2 Outline is marked and finished lines are scribed where applicable. 1.3 Block-out material is applied as required.
2. Thermo-form appliance or base	2.1 <b>Thermo-forming</b> material and <b>apparatus</b> is selected. 2.2 Heat is applied to material. 2.3 Softened material is adapted. 2.4 Material is allowed to cool. 2.5 Adaptation is verified.
3. Trim, shape and finish appliances or bases	3.1 Thermo-formed blank is removed. 3.2 Outline is trimmed and fitted to model. 3.3 Outline is refined. 3.4 <b>Appliance</b> or base is smoothed and finished.

### RANGE OF VARIABLES

VARIABLE	RANGE
1. Appliances	May include but are not limited to: 1.1 Mouthguard 1.2 Bleach trays 1.3 Occlusal splints 1.4 Baseplates 1.5 Temporary crown stents 1.6 Retaining devices 1.7 Custom impression trays
2. Thermo-forming equipment used	May include but are not limited to: 2.1 Vacuum 2.2 Pressure

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared model</li> <li>1.2 Thermo-formed appliance or base from blank</li> <li>1.3 Trimmed, shaped and finished appliance or bases</li> <li>1.4 Complied with infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Relevant material science for carrying out procedures</li> <li>2.2 Oro-facial anatomy</li> <li>2.3 Thermoforming technology</li> <li>2.4 Polymer science</li> <li>2.5 Tooth morphology</li> <li>2.6 Principles of occlusion</li> <li>2.7 Industry Codes of Practice</li> <li>2.8 Relevant laws as appropriate</li> <li>2.9 Housekeeping and Maintenance Procedures</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Performing orthodontic procedures and wrought wire fabrication techniques</li> <li>3.4 Maintaining personal hygiene</li> <li>3.5 Following correct measurements</li> <li>3.6 Planning and organizing work activities</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or accredited assessment center.</li> </ul>

**UNIT OF COMPETENCY: REPAIR AND MODIFY DENTURES AND APPLIANCES****UNIT CODE : HCS322339****UNIT DESCRIPTION:** This unit covers the knowledge and skills required to reline, rebase, repair and modify removable prostheses.

Demonstration of this unit of competency requires training and/or experience in infection-control procedures, constructing models, articulating models and transferring records, and constructing simple complete removable acrylic dentures and appliances.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare case	1.1 <b>Standard precautions</b> are applied when receiving, handling and working on dentures and appliances 1.2 <b>Dentures and appliances are decontaminated</b> according to infection control guidelines 1.3 Prescription are read and interpreted 1.4 Fractured components are examined for defects 1.5 Fractured components are realigned, positioned and secured in their correct relationship
2. Prepare model	2.1 Model is constructed in accordance with the dentist requirements 2.2 Articulation key is constructed if required
3. Repair denture or appliance	3.1 Denture surfaces are prepared and shaped to allow for bonding with the new material 3.2 Components are relocated 3.3 <b>Materials</b> and processing equipment are selected and <b>prepared</b> 3.4 Repair material is applied using the correct technique to acquire the required shape and thickness 3.5 Material is processed in accordance with manufacturer's instructions/specifications
4. Modify denture or appliance, where required	4.1 Impressions are decontaminated according to infection control guidelines 4.2 The model material is poured into the impression in accordance with accepted techniques 4.3 Where necessary, case is articulated and records are transferred or articulation key is constructed based on client requirement 4.4 Denture or appliance surfaces are prepared appropriately in accordance with <b>modification</b> to be made 4.5 Denture is relined, re-based or modified in accordance with dentist prescription
5. Trim, shape and finish denture or appliance	5.1 Denture or appliance is trimmed to relevant anatomical outline or required extension of the base 5.2 The tissue fitting surface is examined and any processing anomalies and sharp surfaces are removed 5.3 Surfaces are refined and polished in order produce required contours 5.4 <b>Finished prosthesis are evaluated</b> in accordance with quality standard 5.5 The appliance is decontaminated according to infection control guidelines 5.6 The appliance is placed in a sealed container for dispatch

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Standard precautions	May include but are not limited to: <ul style="list-style-type: none"> <li>1.1 A dedicated clean area to receive incoming cases</li> <li>1.2 Appropriate personal protection:               <ul style="list-style-type: none"> <li>1.2.1 disposable gloves</li> <li>1.2.2 apron</li> <li>1.2.3 eye protection</li> <li>1.2.4 mask where there is a risk of airborne transmission of infection</li> </ul> </li> <li>1.3 Decontamination of dentures and appliances</li> <li>1.4 Disposal of all packaging materials in accordance with the waste regulations of DOH and environmental authorities (DENR)</li> <li>1.5 Cleaning reusable containers with detergent followed by disinfection</li> <li>1.6 Washing hands before leaving the work area</li> <li>1.7 Excluding all food and drink from the work area</li> </ul>
2. Decontamination of dentures and appliances	May include but is not limited to: <ul style="list-style-type: none"> <li>2.1 Rinsing denture or appliance in clean running water</li> <li>2.2 Cleaning in an ultrasonic cleaner</li> <li>2.3 Cleaning in a mild detergent solution until all traces of blood and body fluids are removed, followed by rinsing</li> </ul>
3. Preparation of materials	May include but is not limited to: <ul style="list-style-type: none"> <li>3.1 Selection of materials appropriate to the removable prosthesis that is to be repaired</li> <li>3.2 The correct quantities necessary for the repair</li> </ul>
4. Modifications to a prosthesis	May include but is not limited to: <ul style="list-style-type: none"> <li>4.1 Adding new artificial teeth</li> <li>4.2 Replacing existing artificial teeth</li> <li>4.3 Modifying the denture base</li> <li>4.4 Adding new metallic components</li> <li>4.5 Modifying existing metallic components</li> </ul>
5. Evaluation of the finished prosthesis	May include but is not limited to: <ul style="list-style-type: none"> <li>5.1 Checking the prosthesis for:               <ul style="list-style-type: none"> <li>5.1.1 Compliance with the prescription</li> <li>5.1.2 Quality and freedom from defects</li> <li>5.1.3 Functional effectiveness of the design</li> <li>5.1.4 Accurate fit to the cast</li> </ul> </li> </ul>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> <li>1.1 Complied consistently with current infection control guidelines, DOH and PDA requirements as they relate to the dental technician's specific job role</li> <li>1.2 Complied consistently with occupational health and safety policies and procedures as they relate to the dental technician's specific job role</li> <li>1.3 Demonstrated consistent performance over the required range of workplace situations including:             <ol style="list-style-type: none"> <li>1.3.1 consistently design and manufacture oral splints using a range of materials, for a range of jaw relations and malocclusions</li> <li>1.3.2 consistently use a range of articulators</li> </ol> </li> <li>1.4 Trimmed, polished, finished and evaluated oral splints for suitability for insertion in the mouth</li> </ol>
<p>2. Underpinning knowledge and attitudes</p>	<p>Knowledge on:</p> <ol style="list-style-type: none"> <li>2.1 Infection control guidelines for the decontamination of dentures and appliances that have already been inserted into the mouth</li> <li>2.2 Applied oral anatomy             <ol style="list-style-type: none"> <li>2.2.1 structures of the oral cavity – hard and soft palate, lateral and posterior borders of the oral cavity, tongue and floor of the mouth</li> <li>2.2.2 teeth – form and function</li> <li>2.2.3 dentition – Arrangement of the teeth, naming and coding of teeth</li> </ol> </li> <li>2.3 Constructional faults that cause fractures of denture base including:             <ol style="list-style-type: none"> <li>2.3.1 incorrect positioning of upper posterior teeth</li> <li>2.3.2 absence of balanced occlusion</li> <li>2.3.3 insufficient thickness of acrylic resin in the anterior palatal region of the denture</li> <li>2.3.4 incorrect dough consistency when packing</li> <li>2.3.5 inadequate polymerisation times and temperatures</li> <li>2.3.6 rapid cooling after processing</li> </ol> </li> <li>2.4 Constructional faults that cause broken teeth</li> <li>2.5 Methods for modifying, repairing and maintaining removable prostheses</li> <li>2.6 Denture base materials</li> </ol>

3. Underpinning skills	<p>3.1 Use safe work practices to minimize the risk of transmission of infection including:</p> <ul style="list-style-type: none"> <li>3.1.1 consistently following the procedure for washing and drying hands</li> <li>3.1.2 consistently putting into practice clean techniques</li> <li>3.1.3 consistently using personal protective equipment</li> <li>3.1.4 consistently limiting contamination</li> <li>3.1.5 consistently maintaining clean receiving and work areas</li> </ul> <p>3.2 Consistently follow occupational health and safety policies and procedures</p> <p>3.3 Use literacy skills to read and follow directions, policies and procedures including:</p> <ul style="list-style-type: none"> <li>3.3.1 occupational health and safety policies and procedures</li> <li>3.3.2 infection control policies and procedures</li> <li>3.3.3 material safety data sheets</li> <li>3.3.4 laboratory policies and procedures</li> </ul> <p>3.4 Select materials, techniques and equipment to reline, rebase, repair and modify removable prostheses</p> <p>3.5 Consistently follow sequenced written instructions and manufacturer specifications for the preparation of materials</p>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Dental materials</li> <li>4.3 Dental tools and equipment</li> <li>4.4 Dentist requirements/prescription</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Observation with questioning</li> <li>5.3 Oral questioning/Interview</li> </ul>
6. Context of assessment	<p>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</p>

**UNIT OF COMPETENCY: FABRICATE ORAL SPLINTS****UNIT CODE: HCS322332****UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitude in fabricating oral splints.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Fabricate splint	1.1 <b>Materials</b> for the fabrication of splint are selected. 1.2 Splint is fabricated according to work order requirements. 1.3 Splint is processed according to manufacturer's recommendations.
2. Trim, shape and finish	2.1 <b>Splint</b> is trimmed according to material selection. 2.2 Splint is shaped according to work order and rechecked on articulator. 2.3 Splint is fitted back to master model. 2.4 Splint is finished appropriately according to type of material selected.

**RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Materials	May include but are not limited to: 1.1 Cast alloys 1.2 Acrylic resins (heat activated, chemically activated, thermo-formed) 1.3 Visible light-cured composite resins
2. Splint to be fabricated	May include but are not limited to: 2.1 Cast metal alloy cap splints 2.2 Acrylic cap splints 2.3 Gunning splints 2.4 Wrought wire retained splints 2.5 Occlusal splints (bruxing, neutral, anterior, repositioning, TMJ, orthodontic)

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Fabricated splint</li> <li>1.2 Trimmed, shaped and finished splint</li> <li>1.3 Followed OH&amp;S and DOH infection control guidelines</li> <li>1.4 Identified dental anatomy and dental metallurgy</li> <li>1.5 Used surveying equipment and vacuum forming procedures</li> </ul>
2. Underpinning knowledge	<p>Knowledge on:</p> <ul style="list-style-type: none"> <li>2.1 Articulation and occlusion</li> <li>2.2 Relevant dental anatomy</li> <li>2.3 Dental metallurgy</li> <li>2.4 Relevant material science for carrying out procedures</li> <li>2.5 Use of surveying equipment</li> <li>2.6 OHS and material safety data sheets</li> <li>2.7 Current DOH infection control guidelines</li> <li>2.8 Processing of wax patterns in acrylic resin</li> <li>2.9 Using of vacuum forming procedures</li> <li>2.10 Dental Laboratory Materials, splint materials, jaw relations and malocclusions of severe skeletal orthodontic type</li> <li>2.11 Range of articulators</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Surveying and blocking out undercuts</li> <li>3.3 Selecting articulators</li> <li>3.4 Using face-bow and centric records</li> <li>3.5 Planning and organizing</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Range of dental laboratory materials, splint materials, jaw relations and malocclusions of severe skeletal orthodontic type</li> <li>4.3 Range of articulators</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated workplace setting.</li> </ul>

**UNIT OF COMPETENCY: FABRICATE ORTHODONTIC APPLIANCES**

**UNIT CODE: HCS322333**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitude in fabricating orthodontic appliances.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Select or fabricate and assemble components and materials	1.1 <b>Materials</b> are selected according to design and function specified by work order. 1.2 Individual <b>components</b> are selected and/or fabricated as appropriate to work order.
2. Fabricate orthodontic appliance	2.1 Components are secured to model by appropriate means. 2.2 Materials are applied and processed according to manufacturer's instructions.
3. Finish orthodontic appliance	3.1 <b>Appliances</b> are trimmed, shaped and finished.

### RANGE OF VARIABLES

<b>VARIABLE</b>	<b>RANGE</b>
1. Components	May include but are not limited to: 1.1 Screws 1.2 Piston-screws 1.3 Springs and sheaths made in a variety of metals and polymers
2. Materials	May include but are not limited to: 2.1 Polymers or metals and metal joining techniques
3. Appliances	May include but are not limited to: 3.1 Functional appliances 3.2 Retainers of varying types 3.2.1 bite opening 3.2.2 retraction 3.2.3 expansion 3.2.4 retaining 3.2.5 incline plane 3.2.6 oral screen

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Selected or fabricated and assembled components and materials</li> <li>1.2 Fabricated orthodontic appliance</li> <li>1.3 Finished orthodontic appliances</li> <li>1.4 Complied with infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Dental metallurgy</li> <li>2.2 Relevant material science for carrying out procedures</li> <li>2.3 Relevant oral anatomy</li> <li>2.4 Principles of Orthodontic Procedures</li> <li>2.5 Occlusion</li> <li>2.6 Wrought wire fabrication techniques</li> <li>2.7 Industry Codes of Practice</li> <li>2.8 Relevant laws as appropriate</li> <li>2.9 Housekeeping and maintenance procedures</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Performing orthodontic procedures and wrought wire fabrication techniques</li> <li>3.4 Maintaining personal hygiene</li> <li>3.5 Following correct measurements</li> <li>3.6 Planning and organizing work activities</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third party Report</li> <li>5.4 Portfolio</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or accredited assessment center.</li> </ul>

**UNIT OF COMPETENCY: FABRICATE CAST METAL REMOVABLE PARTIAL DENTURE FRAMEWORK**

**UNIT CODE: HCS322331**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes concerned with fabrication of alloy removable partial denture framework.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare master model	1.1 Work order is interpreted. 1.2 <b>Alloy</b> is selected 1.3 Model is surveyed. 1.4 Designed is transferred to master model. 1.5 Undesirable undercuts are blocked out. 1.6 Clasp ledges are created. 1.7 Finished lines are scribed. 1.8 Tissue relief is applied. 1.9 Saddle relief is applied.
2. Construct refractory model	2.1 Master model is duplicated in refractory material and sprue former is constructed, as necessary. 2.2 Refractory model surface is treated.
3. Wax and invest removable partial denture framework	3.1 Design is transferred to refractory model. 3.2 Patterns and waxes are selected. 3.3 Patterns are waxed up and sprues attached. 3.4 Appropriate investment and technique are selected. 3.5 Investment material is prepared. 3.6 Wax, patterns and sprues are treated. 3.7 Investment setting time is allowed for.
4. Burn out, cast and finish removable partial denture framework	4.1 Burn out and preheat cycles are selected for appropriate investment/alloy combination. 4.2 Investment mould is burnt out and preheated. 4.3 Alloy is melted and cast using appropriate equipment/ <b>technique</b> . 4.4 Cooling cycle is selected and applied. 4.5 Denture framework is divested. 4.6 Denture framework is trimmed, shaped, treated, finished and fitted to master model. 4.7 Framework is treated in accordance with DOH infection control guidelines.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Alloy	May include but are not limited to: 1.1 Cobalt chromium based alloys 1.2 Gold alloys 1.3 Metal/ceramic alloys
2. Melting/casting techniques	May include but are not limited to: 2.1 Flame melting 2.2 Induction melting 2.3 Resistance melting 2.4 Centrifugal casting 2.5 Gas pressure casting 2.6 Vacuum casting

## EVIDENCE GUIDE

1. Critical aspect of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Selected and prepared materials for fabrication of metal/cast metal alloy</li> <li>1.2 Fabricated base and registration rim</li> <li>1.3 Prepared face-bow (if required)</li> <li>1.4 Complied with infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Dental alloy</li> <li>2.2 Relevant material science for carrying out procedures</li> <li>2.3 Solidification</li> <li>2.4 Melting and casting</li> <li>2.5 Heat treatment</li> <li>2.6 Surface finishing</li> <li>2.7 Industry Codes of Practice</li> <li>2.8 Relevant Laws as appropriate</li> <li>2.9 Housekeeping Maintenance</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Melting and casting techniques</li> <li>3.4 Maintaining personal hygiene</li> <li>3.5 Planning and organizing work activities</li> </ul>
4. Resource implication	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation, such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance</li> </ul> </li> <li>4.3 Dental alloys</li> <li>4.4 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Assessment may be conducted in the workplace or in a simulated environment</li> </ul>

**UNIT OF COMPETENCY:** FABRICATE METAL CROWN AND BRIDGE STRUCTURES

**UNIT CODE:** HCS322335

**UNIT DESCRIPTOR:** This unit involves fabrication of metal alloy, crown and bridge structures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare sectionalized models	1.1 Models are sectioned. 1.2 Margins are identified and models are trimmed. 1.3 Margins are hardened if required.
2. Wax and invest fixed partial dentures and structures	2.1 Crown and bridge restorations are waxed up. 2.2 Crown and bridge wax pattern is sprued and prepared for investing. 2.3 Appropriate investment material is selected and wax patterns are selected. 2.4 Wax patterns are invested.
3. Burn-out cast and finish <b>alloy</b> fixed partial dentures and structures	3.1 Burnout techniques are selected appropriate to the technique. 3.2 Metal <b>restorations</b> are cast in appropriate alloy. 3.3 Metal restoration is devested without damaging casting. 3.4 Metal restoration is trimmed and polished while maintaining all contact areas and margin.

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Construction of crown and bridges structures	May include but are not limited to: 1.1 A range of designs 1.2 Anterior and posterior teeth 1.3 Metal inlays, crowns and bridges 1.4 Ceramic fused to metal sub structures
2. Alloy	May include but are not limited to: 2.1 Cobalt chromium based alloys 2.2 Gold alloys 2.3 Metal/ceramic alloys
3. Restoration	May include but are not limited to: 3.1 Complete and partial dentures 3.2 Crown and bridge 3.3 Implant 3.4 Splints

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared and sectionalized models</li> <li>1.2 Waxed and invested fixed partial dentures and structures</li> <li>1.3 Burned-out cast and finished alloy fixed partial dentures and structures</li> <li>1.4 Applied the different principles, policies and techniques on casting, spruing, soldering, waxing, investing and finishing</li> <li>1.5 Followed OH&amp;S and Department of Health infection control guidelines</li> </ul>
2. Underpinning knowledge	<p>Knowledge and principles on:</p> <ul style="list-style-type: none"> <li>2.1 Casting techniques</li> <li>2.2 Spruing techniques</li> <li>2.3 Tooth morphology</li> <li>2.4 Articulation and occlusion</li> <li>2.5 Relevant material science for carrying out procedures</li> <li>2.6 Soldering techniques</li> <li>2.7 Wax and plastic pattern techniques</li> <li>2.8 Investing techniques</li> <li>2.9 Occupation Health and Safety</li> <li>2.10 Finishing techniques</li> <li>2.11 Current DOH infection control guidelines</li> <li>2.12 Dental Policies and Procedures</li> <li>2.13 Regulatory and Legislation Requirements</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Casting techniques</li> <li>3.2 Spruing techniques</li> <li>3.3 Soldering techniques</li> <li>3.4 Wax and plastic pattern techniques</li> <li>3.5 Investing techniques</li> <li>3.6 Finishing technique</li> <li>3.7 Manual dexterity</li> <li>3.8 Ability to work as part of the team</li> <li>3.9 Planning of work</li> <li>3.10 Language, literacy and numeracy skills appropriate to the role and workplace requirements</li> <li>3.11 Operational skills to consistently use time effectively and provide quality customer service in the dental environment</li> </ul>
4. Resource implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real simulated dental environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 dental policies and procedures</li> <li>4.2.2 regulatory and legislation requirements as appropriate</li> </ul> </li> <li>4.3 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Assessment may be conducted in the workplace or in a simulated environment</li> </ul>

**UNIT OF COMPETENCY: FABRICATE CERAMIC RESTORATIONS**

**UNIT CODE: HCS322336**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitude in fabricating ceramic restorations and fixed partial dentures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1 Prepare sub-structures	1.1 Sub-structure is assessed for accuracy and appropriateness. 1.2 Sub-structure conformed to standard guidelines. 1.3 Structure is prepared for porcelain build-up. 1.4 Sub-structure is treated according to manufacturer's guidelines.
2 Select and apply ceramics	2.1 Porcelains appropriate to the <b>procedure</b> is selected and applied. 2.2 Operator requirements are selected and applied.
3 Trim, shape and finish restorations	3.1 Ceramic <b>restoration</b> is trimmed to required anatomical shape. 3.2 Ceramic restoration is completed to meet the clinically accepted standards.

### RANGE OF VARIABLES

<b>VARIABLE</b>	<b>RANGE</b>
1. Procedures	Procedures to include crowns and bridges of the following types: 1.1 Ceramic fused to precious, semi-precious and non-precious metal/alloy 1.2 All ceramic restorations 1.3 Ceramic veneers, inlays and onlays 1.4 Castable ceramic
2. Restoration	May include but not limited to: 2.1 Complete and partial 2.2 Crown and bridge 2.3 Implant 2.4 Splint

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared sub-structures</li> <li>1.2 Selected and applied ceramics</li> <li>1.3 Trimmed, shaped and finished restorations</li> <li>1.4 Complied with infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Ceramics</li> <li>2.2 Metallurgy</li> <li>2.3 Color</li> <li>2.4 Science</li> <li>2.5 Current DOH infection control guidelines</li> <li>2.6 Oral Anatomy</li> <li>2.7 Cause of faults during fabrication</li> <li>2.8 Rationale for processes and procedures</li> <li>2.9 Principles of occlusion</li> <li>2.10 Industry Codes of Practice</li> <li>2.11 Relevant Laws as appropriate</li> <li>2.12 Housekeeping and Maintenance Procedures</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Carving teeth</li> <li>3.4 Accuracy</li> <li>3.5 Efficient use of materials</li> <li>3.6 Analyzing faults</li> <li>3.7 Maintaining personal hygiene</li> <li>3.8 Following correct measurements</li> <li>3.9 Planning and organizing work activities</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 A qualified workplace assessor and/or a technical expert working in partnership with assessor</li> </ul>

5. Method of assessment	Competency may be assessed through: 5.1 Demonstration with questioning 5.2 Written Test/Examination 5.3 Third Party Report 5.4 Portfolio
6. Context of assessment	6.1 Competency may be assessed in the workplace or accredited assessment center.

**UNIT OF COMPETENCY:** FABRICATE INDIRECT COMPOSITE/POLYMER FIXED RESTORATIONS

**UNIT CODE:** HCS322337

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitude in fabricating indirect composite/polymer fixed restorations.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
1. Prepare model	1.1 Work order is interpreted. 1.2 Model is treated as required. 1.3 Sub-structure (if used) is treated for application of material.
2. Fabricate restoration	2.1 Appropriate system is selected. 2.2 Margin is indicated as required. 2.3 Materials are selected. 2.4 Materials are mixed or manipulated. 2.5 Materials are applied and adapted. 2.6 Surface of the restoration is treated if required. 2.7 Material is processed to industry standard.
3. Trim, shape and finish restoration	3.1 Rotary trimmers are selected. 3.2 Shape is refined. 3.3 Restoration is finished according to work order requirements.

**RANGE OF VARIABLES**

VARIABLE	RANGE
1. Restorations	May include but are not limited to: 1.1 Single full crowns 1.2 Bridges 1.3 Maryland bridges 1.4 Implant supported restorations 1.5 Veneers 1.6 Inlays 1.7 Half and three-quarter crowns 1.8 On-lays

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared model</li> <li>1.2 Fabricated restoration</li> <li>1.3 Trimmed, shaped and finished restoration</li> <li>1.4 Complied with infection control policies and procedures</li> <li>1.5 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Relevant material science for carrying out procedures</li> <li>2.2 Articulation and occlusion</li> <li>2.3 Tooth morphology</li> <li>2.4 Oral anatomy</li> <li>2.5 Color</li> <li>2.6 Current DOH infection control guidelines</li> <li>2.7 Metallurgy</li> <li>2.8 Polymer science</li> <li>2.9 Industry Codes of Practice</li> <li>2.10 Relevant Laws as appropriate</li> <li>2.11 Housekeeping and Maintenance Procedures</li> </ul>
<p>3 Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Carving restorations</li> <li>3.4 Matching of color and shades</li> <li>3.5 Analyzing of faults</li> <li>3.6 Maintaining personal hygiene</li> <li>3.7 Use of materials</li> <li>3.8 Planning and organizing work activities</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 Color and shades of teeth</li> <li>4.4 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>

5. Method of assessment	Competency may be assessed through: 5.1 Demonstration with questioning 5.2 Written Test/Examination 5.3 Third Party Report 5.4 Portfolio
6. Context of assessment	6.1 Competency may be assessed in the workplace or accredited assessment center.

<b>UNIT OF COMPETENCY:</b>	<b>JOIN ALLOY STRUCTURES</b>
<b>UNIT CODE:</b>	<b>HCS322338</b>
<b>UNIT DESCRIPTOR:</b>	This unit covers the knowledge, skills and attitudes in joining alloy structures through thermal processes.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Solder components	1.1 <b>Component materials</b> are identified. 1.2 Appropriate solder and flux are selected. 1.3 Appropriate <b>heating methods</b> are selected. 1.4 Components are selected and soldered. 1.5 Components are cleaned, trimmed, shaped and finished. 1.6 Components are disinfected according to DOH guidelines.
2. Weld components	2.1 Component materials are identified. 2.2 Appropriate welding techniques are selected. 2.3 Components are welded. 2.4 Components are cleaned, trimmed, shaped and finished. 2.5 Components are disinfected according to DOH guidelines.

### **RANGE OF VARIABLES**

<b>VARIABLE</b>	<b>RANGE</b>
1. Component materials	May include but are not limited to: 1.1 Solder and flux 1.2 Soldering investment
2. Heating methods	May include but are not limited to: 2.1 Open flame 2.2 Laser

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Soldered components</li> <li>1.2 Welded components</li> <li>1.3 Complied with infection control policies and procedures</li> <li>1.4 Followed OH&amp;S policies</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Dental alloys</li> <li>2.2 Orthodontic wires</li> <li>2.3 Solder and Fluxes</li> <li>2.4 Soldering and welding techniques</li> <li>2.5 Finishing methods</li> <li>2.6 OH&amp;S and materials safety data sheets</li> <li>2.7 Industry Codes of Practice</li> <li>2.8 Relevant Laws as appropriate</li> <li>2.9 Housekeeping and Maintenance Procedures</li> </ul>
<p>3 Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Manual dexterity</li> <li>3.2 Maintaining a healthy and safe working environment</li> <li>3.3 Soldering and welding techniques</li> <li>3.4 Finishing methods</li> <li>3.5 Planning and organizing work activities</li> </ul>
<p>4. Resource implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 A real or simulated dental laboratory environment</li> <li>4.2 Relevant documentation such as: <ul style="list-style-type: none"> <li>4.2.1 industry codes of practice</li> <li>4.2.2 state legislation as appropriate</li> <li>4.2.3 housekeeping/maintenance procedures</li> </ul> </li> <li>4.3 Solder and fluxes</li> <li>4.4 Dental alloys</li> <li>4.5 Orthodontic wires</li> <li>4.6 A qualified workplace assessor and/or a technical expert working in partnership with the assessor</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Observation with questioning</li> <li>5.3 Oral questioning/Interview</li> <li>5.4 Written Test/Examination</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or accredited assessment center.</li> </ul>

**UNIT OF COMPETENCY:**     **MANAGE DENTAL LABORATORY PRODUCTION AND OPERATION**

**UNIT CODE:**                 **HCS322340**

**UNIT DESCRIPTOR:**         This unit covers the knowledge, skills and attitudes required to manage facilities in a dental laboratory environment.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Supervise laboratory technicians	1.1 Staffing patterns and staffing performance involving dental laboratory operation are maintained and monitored in accordance with <b><i>standards, policies and procedures</i></b> 1.2 Staffing plan is maintained involving dental laboratory operation following standards, policies and procedures 1.3 Staff turnover problems are identified, analyzed and rectified as required in accordance with standards, policies and procedures 1.4 Performance appraisal and counseling are conducted as required according to standards, policies and procedures 1.5 Performance and achievement is recognized and individuals are encouraged to contribute to their own assessment and in improving policies and procedures 1.6 Staff dismissals are implemented in accordance with standards, policy and procedures and <b><i>statutory requirements</i></b> 1.7 Details of all procedures are accurately and completely recorded and made available to authorized personnel
2. Manage dental laboratory maintenance program	2.1 Premises, fittings, fixtures and equipment are monitored and maintained according to standards, policies and procedures 2.2 Deficiencies in <b><i>dental laboratory maintenance</i></b> procedures are identified and remedial action is taken as required according to standards, policies and procedures 2.3 Maintenance program on dental equipment is monitored and implemented according to manufacturer's designs and specifications 2.4 Maintenance procedures are monitored to ensure products and tasks meet the required specifications 2.5 Equipment faults or failures are reported according to service agreements, standards, policies and procedures
3. Manage dental laboratory facilities and space requirements	3.1 Facilities and space requirements are identified according to standards, policy and procedures 3.2 Suitable facilities and space are located following standards, policies and procedures 3.3 Space utilization is maximized with considerations to existing configuration

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables
4. Comply with dental ethics and jurisprudence	<p>4.1 Key elements of major <b><i>legal systems</i></b> affecting business to dental laboratory operations are examined to ensure full compliance under <b><i>legal and legislative provisions</i></b></p> <p>4.2 Various issues affecting <b><i>different forms of contract</i></b> are compared within business operations</p> <p>4.3 <b><i>Statutory and legal requirements</i></b> for the sale of products and services are determined across the industry</p> <p>4.4 Dental products are handled and stored according to standards, policies and procedures, and safety practices</p> <p>4.5 Purchase of dental products and laboratory supplies and materials are made in accordance with legal requirements and established procedures.</p> <p>4.6 Compliance of current product are monitored in accordance with statutory and legal requirements</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Standards, policies and procedures	May include but are not limited to: <ul style="list-style-type: none"> <li>1.1 Staffing</li> <li>1.2 Staffing performance and evaluation</li> <li>1.3 Employee relations and staff development</li> <li>1.4 Maintenance</li> <li>1.5 Facilities management</li> <li>1.6 Reporting mechanism</li> <li>1.7 Occupational Health and Safety (OHS)</li> <li>1.8 Dept. of Health (DOH- BFHS)</li> </ul>
2. Statutory requirements	May include but are not limited to: <ul style="list-style-type: none"> <li>2.1 Equal Employment Opportunity (EEO) policies</li> <li>2.2 Disciplinary procedures</li> <li>2.3 Awards and agreements</li> <li>2.4 Wages and conditions</li> <li>2.5 OHS</li> <li>2.6 Anti-discrimination</li> <li>2.7 Company policies and procedures</li> </ul>
3. Dental laboratory maintenance	May include but are not limited to: <ul style="list-style-type: none"> <li>3.1 Facilities maintenance</li> <li>3.2 Equipment maintenance</li> <li>3.3 Maintenance contract terms and options</li> <li>3.4 OHS legislation and codes of practice               <ul style="list-style-type: none"> <li>3.4.1 Handling and storage of goods</li> <li>3.4.2 Waste management</li> </ul> </li> <li>3.5 Standards, policy procedures</li> </ul>
4. Legal systems	May include but are not limited to: <ul style="list-style-type: none"> <li>4.1 Workplace relations</li> <li>4.2 Industry codes and practices</li> <li>4.3 License, patent or copyright arrangements</li> </ul>
5. Legal and legislative provisions	May include but are not limited to: <ul style="list-style-type: none"> <li>5.1 Dental Law</li> <li>5.2 Occupational Health and Safety (OHS)</li> <li>5.3 Workplace relations</li> <li>5.4 Workers' compensations</li> <li>5.5 Equal employment opportunity (EEO)</li> <li>5.6 Environmental protection legislation</li> </ul>

<p>6. Different forms of contracts</p>	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> <li>6.1 Letters of appointments or intent</li> <li>6.2 Memorandum of agreement <ul style="list-style-type: none"> <li>6.2.1 External contracts</li> <li>6.2.2 Written contracts</li> </ul> </li> <li>6.3 Terms of payment agreement</li> <li>6.4 Purchase order</li> <li>6.5 Petty cash</li> </ul>
<p>7. Statutory and legal requirements</p>	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> <li>7.1 Types of products and services provided</li> <li>7.2 Size, type and location of business</li> <li>7.3 Characteristics of specific products or services</li> <li>7.4 Worksite-specific context, variations and environments</li> </ul>

## EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Supervised laboratory technicians in accordance with standards, policies and procedures</li> <li>1.2 Managed dental laboratory maintenance program and procedures in accordance with standards, policies and procedures</li> <li>1.3 Managed dental laboratory facilities and space requirements following standards, policies and procedures</li> <li>1.4 Complied with dental ethics and jurisprudence in accordance with legal and legislative provisions</li> <li>1.5 Demonstrated knowledge on dental law, and other relevant legal and statutory requirements</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Dental Act of 2007 (RA No. 9484) and implementing rules</li> <li>2.2 Relevant standards, policy and procedures</li> <li>2.3 Relevant statutory and legal requirements</li> <li>2.4 Human resource development</li> <li>2.5 Staffing performance appraisals</li> <li>2.6 Employee relations</li> <li>2.7 Maintenance Program/Procedures for dental equipment and facilities</li> <li>2.8 Dental laboratory procedures on basic, fixed and removable restorations</li> <li>2.9 Occupational Health and Safety (OHS)</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Interpersonal communication skills</li> <li>3.2 Monitoring staff performance</li> <li>3.3 Conducting performance appraisal</li> <li>3.4 Applying relevant legal principles</li> <li>3.5 Dental laboratory maintenance program</li> <li>3.6 Following safe work practices and applying standard precautions during maintenance of equipment: <ul style="list-style-type: none"> <li>3.6.1 checking items for defects after cleaning</li> <li>3.6.2 selecting and safely using appropriate cleaning agents</li> <li>3.6.3 selecting and wearing appropriate personal protective equipment</li> </ul> </li> <li>3.7 Recording and reporting</li> </ul>
4. Resource Implications	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace: Real or simulated work area</li> <li>4.2 Appropriate tools and equipment</li> <li>4.3 Appropriate personnel, supplies and materials</li> </ul>
5. Method of assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
6. Context of assessment	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated work setting or environment.</li> </ul>

**UNIT OF COMPETENCY: PERFORM ADMINISTRATIVE FUNCTIONS**

**UNIT CODE: HCS322341**

**UNIT DESCRIPTOR:** This unit covers the knowledge, skills and attitudes required to perform administrative functions relating to market/promotion and quality control dental-laboratory products and services.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Analyze market	1.1 <b><i>Merchandise and marketing policies and procedures</i></b> are identified and analyzed in accordance with standards operating procedures 1.2 <b><i>Customer requirements</i></b> are monitored in order to evaluate market trends and customer needs 1.3 New products and services are researched in following the standards operating procedures 1.4 Opportunities to improve sales of products or services are identified and evaluated 1.5 <b><i>Merchandise range</i></b> are monitored to identify the demand for individual needs
2. Plan dental product ranges	2.1 <b><i>Buying plan</i></b> is developed and implemented according to outcomes of analysis and business policy 2.2 Future directions for merchandise ranges are determined according to business policy 2.3 Product sales or services are analyzed to determine contribution rates of product lines 2.4 Investment levels are determined with reference to previous year's product sales, predicted demand and its <b><i>impact on business operations</i></b> 2.5 Merchandise range sources of supply is analyzed, evaluated and amended according to management, staff customer <b><i>feedback</i></b>
3. Market dental products and services	3.1 Customer requirements are established in accordance with standards, policy and procedures 3.2 <b><i>Marketing strategies</i></b> are developed and implemented in accordance with the <b><i>business plan</i></b> 3.3 Marketing strategies are monitored in accordance with <b><i>marketing activities</i></b> 3.4 Marketing strategies and customer satisfaction are evaluated in accordance <b><i>with marketing mix</i></b> 3.5 Product range is introduced according to marketing plan and activities

ELEMENT	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
4. Implement quality control	4.1 Quality standards for dental-laboratory products and services are established according to <b><i>legal requirements</i></b> , customer requirements and business policy 4.2 Quality of merchandise is monitored and ensured during supply, production and delivery processes 4.3 Stock product returns are recorded and analyzed against target figures

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Merchandise and marketing policies and procedures	May include but are not limited to: 1.1 Business culture 1.2 Current market position 1.3 Target market
2. Customer requirements	May include but are not limited to: 2.1 Observations 2.2 Questionnaires 2.3 Surveys
3. Merchandise range	May include but are not limited to: 3.1 Existing stocks 3.2 New stocks
4. Buying plan	May include but are not limited to: 4.1 Financial requirement 4.2 Inventory of stocks 4.3 Dental manufacturers/suppliers
5. Impact on business operations	May include but are not limited to: 5.1 Buying 5.2 Ordering patterns 5.3 Planning 5.4 Budgeting
6. Feedback	May include but are not limited to: 6.1 Verbal or written 6.2 Groups 6.3 Individuals
7. Marketing strategies	May include but are not limited to: 7.1 Product or service 7.2 Business relationships 7.3 Strategic imperative 7.4 Sales strategy 7.5 Promotional strategies and their duration, cycle and product or service
8. Business plan	May include but are not limited to: 8.1 Sales 8.2 Marketing 8.3 Purchasing and procurement 8.4 Disposal 8.5 Human resources 8.6 Public relations 8.7 Contingency 8.8 Risk management 8.9 Environmental impact

VARIABLE	RANGE
9. Marketing activities	May include but are not limited to: 9.1 Market control 9.2 Market information 9.3 Market planning 9.4 Market structure 9.5 Market share
10. Marketing mix	May include but are not limited to: 10.1 Promotions 10.2 Product 10.3 Price 10.4 Market research information 10.5 Customers 10.6 Resource requirements
11. Legal requirements	Includes: 11.1 Standard of care – nature and manner of delivery of dental services 11.2 Purchase of dental products – commercial acquisition of dental products and materials 11.3 Technical services – design and fabrication of dental appliances and repair of previously fabricated dental appliances

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Analyzed market in accordance with standards, policies and procedures</li> <li>1.2 Planned dental product ranges according business policy</li> <li>1.3 Marketed dental products and services in accordance with business plan, marketing strategies and marketing mix</li> <li>1.4 Monitored merchandise quality standards according to legal requirements, customer requirements and business policy</li> <li>1.5 Demonstrated knowledge on dental laws and regulations</li> </ul>
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Dental Act of 2007 (RA No. 9484) and its implementing rules</li> <li>2.2 Relevant standards, policy and procedures</li> <li>2.3 Research methods</li> <li>2.4 Marketing principles, strategies and practices</li> <li>2.5 Planning integration of development and maintenance functions</li> <li>2.6 Business policies and procedures</li> <li>2.7 Staff product knowledge training</li> <li>2.8 Industry and business information <ul style="list-style-type: none"> <li>2.8.1 market needs</li> <li>2.8.2 range of product availability</li> <li>2.8.3 market competition</li> <li>2.8.4 channels of distribution</li> </ul> </li> <li>2.9 Occupational Health and Safety (OHS)</li> </ul>
<p>3. Underpinning skills</p>	<ul style="list-style-type: none"> <li>3.1 Interpersonal communication skills</li> <li>3.2 Research skills</li> <li>3.3 Planning marketing strategy consistent with principles and practices of marketing</li> <li>3.4 Developing and implementing marketing strategies</li> <li>3.5 Applying relevant legal principles</li> <li>3.5 Determining customer needs, expectations and satisfaction levels</li> <li>3.6 Recording and reporting</li> </ul>
<p>4. Resource Implications</p>	<p>The following resources <b>MUST</b> be provided:</p> <ul style="list-style-type: none"> <li>4.1 Workplace: Real or simulated work area</li> <li>4.2 Appropriate tools and equipment</li> <li>4.3 Appropriate technicians, supplies and materials</li> </ul>
<p>5. Method of assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>5.1 Demonstration or Observation with questioning</li> <li>5.2 Written Test/Examination</li> <li>5.3 Third Party Report</li> <li>5.4 Portfolio</li> </ul>
<p>6. Context of assessment</p>	<ul style="list-style-type: none"> <li>6.1 Competency may be assessed in the workplace or in a simulated work setting or environment.</li> </ul>

<b>UNIT OF COMPETENCY</b>	<b>CONTINUE PROFESSIONAL GROWTH AND DEVELOPMENT</b>
<b>UNIT CODE</b>	<b>HCS322342</b>
<b>UNIT DESCRIPTOR</b>	This unit covers the knowledge, skills and attitudes required to continue professional growth and development in line with dental laboratory production and operations.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables
1. Keep abreast of laboratory skills and technologies	<p>2.1 <b><i>Training objectives and activities</i></b> are developed based on considered assessment of existing individual and team competencies, potential competency and career aspirations according to standards, policies and procedures</p> <p>2.2 <b><i>Personal professional development plan relevant to dental technology</i></b> is designed and identified needs and objectives are reflected in accordance with organizational requirements</p> <p>2.3 <b><i>Personal development strategies</i></b> suitable to individual learning are selected and used to maintain currency of professional development and competence</p> <p>2.4 Personal performance and progress is reviewed to determine the efficiency and effectiveness of own professional development and competence</p> <p>2.5 Information regarding competency development is documented and maintained in accordance with organizational requirements</p>
2. Improve professional practices	<p>2.1 <b><i>Professional networks and associations</i></b> are participated in to identify and build relationships to provide benefit and positive outcomes for individuals and the organization</p> <p>2.2 New developments and trends across the dental industry sector are identified and the associated knowledge and skills acquired are applied to improve current processes and practices</p> <p>2.3 <b><i>Ethical behaviors</i></b> and competent performance is developed to maintain positive relationships with relevant persons</p> <p>2.4 <b><i>Development opportunities</i></b> for improving professional practices and services are identified through the use of continuous improvement techniques and processes</p>
3. Establish basis for career advancement	<p>3.1 <b><i>Training certificates and recognitions</i></b> are sought/received and demonstrated as proof of professional expertise and career advancement</p> <p>3.2 <b><i>Licenses and/or certifications</i></b> relevant to job and career are obtained and renewed</p> <p>3.3 <b><i>Relevant support resources and technology</i></b> are used to ensure they support <b><i>quality outcomes for career development services</i></b></p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Training objectives	May include but are not limited to: 1.1 Existing staff competencies 1.2 Level of competencies required by staff 1.3 Budget allocation for staff training 1.4 Varying levels of staff training
2. Personal professional development plan relevant to dental technology	May include but is not limited to: 2.1 Capability build-up program on: 2.1.1 Concepts and Principles on Dental Technology 2.1.2 Code of Conduct and Ethics 2.2 Advocacy of professional standards, coaching, mentoring and conflict resolution 2.3 Industry immersion (Participation) 2.4 Educating clients/general public
3. Personal development strategies	May include but are not limited to: 3.1 Short course or qualification base training 3.2 Interpersonal/technical skills development 3.3 Updating stress management abilities 3.4 Adapting work rotation to facilitate changing personal/work priorities 3.5 Formal/informal learning programs 3.6 Utilization of existing strengths to focus future career development 3.7 Coaching, mentoring and/or supervision 3.8 Establishment of new career paths 3.9 Promote individual ethics and integrity 3.10 Improve workplace performance resulting from adaptation to new technologies/organizational climates, acquisition of new skills, adaptation of new work practices 3.11 Facilitate and encourage the development and maintenance of high levels of professionalism
4. Professional networks and associations	May include but are not limited to: 4.1 PRC – accredited professional organizations 4.2 Philippine Dental Association 4.3 National Association of Dental Prosthetic Laboratories, Inc.
5. Ethical behaviors	May include but is not limited to: 5.1 Compliance with industry codes of practice 5.2 Compliance with legislative and regulatory requirements 5.3 Compliance with client instructions and agency requirements 5.4 Avoiding conflicts of interest 5.5 Disclosure of all fees, charges, commissions, special interests and relationships relevant to a clients financial plan 5.6 Organizational standards

VARIABLE	RANGE
6. Development opportunities	May include but are not limited to: 6.1 Action learning 6.2 Coaching 6.3 Exchange/rotation 6.4 Induction 6.5 Mentoring 6.6 Structured training programs
7. Training certificates and recognitions	May include but are not limited to: 7.1 Participation in training programs 7.1.1 Technical 7.1.2 Supervisory 7.1.3 Managerial 7.1.4 Continuing Education 7.2 Serving as Resource Persons in conferences and workshops 7.3 Recognitions 7.3.1 Recommendations 7.3.2 Citations 7.3.3 Certificates of Appreciations 7.3.4 Commendations 7.3.5 Awards 7.3.6 Tangible and Intangible Rewards
8. Licenses and/or certification	May include but is not limited to: 8.1 National Certificates 8.2 Certificate of Competency 8.3 Support Level Licenses 8.4 Professional Licenses
9. Relevant support resources and technology	May include but are not limited to: 9.1 Career information and support materials 9.2 Communication technologies, such as telephones and email 9.3 Electronic and information technology 9.4 Meeting rooms and facilities 9.5 Physical support services
10. Quality outcomes for career development services	May include but are not limited to: 10.1 Capacity to offer a range of choice and advice 10.2 Careers counseling 10.3 Compliance with regulatory, professional and organizational standards 10.4 Effective conflict resolution/mediation 10.5 Industry's advocacy, enterprising and mentoring skills 10.6 Relevance, currency and appropriateness of services provided to individuals 10.7 Satisfaction of needs associated with a specific context and target group

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidences that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Demonstrated knowledge of organizational and/or industry professional development requirements on dental laboratory skills and technologies</li> <li>1.2 Planned support systems and resources requirements, effective action planning skills to provide quality career development service delivery relevant to dental technology</li> <li>1.3 Applied and maintained career development standards and competence to all aspects of work role</li> <li>1.4 Participated in continuing professional education program</li> <li>1.5 Improved professional practices through the use of continuous improvement techniques and processes</li> <li>1.6 Established basis for career advancement</li> </ul>
<p>2. Underpinning Knowledge</p>	<ul style="list-style-type: none"> <li>2.1 Principles and techniques of measuring performance and self-assessment</li> <li>2.2 Concepts of career development and management</li> <li>2.3 Range of career development strategies and plans</li> <li>2.4 Development needs analysis techniques</li> <li>2.5 Relevant competency standards and training programs on dental technology</li> <li>2.6 Range of evaluation methodologies</li> <li>2.7 Organizational policies and procedures, particularly in relation to employment, career planning and progression</li> <li>2.8 Organizational and professional procedures, practices and social, ethical and business standards</li> <li>2.9 Economic environmental trends</li> <li>2.10 Limitations of work role, responsibility and professional abilities</li> <li>2.11 Equal employment opportunity (EEO), equity and diversity principles</li> <li>2.12 Legislation and statutory requirements</li> </ul>
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> <li>3.1 Monitoring own performance and identifying and prioritizing any personal development needs</li> <li>3.2 Creating a personal professional development plan</li> <li>3.3 Identifying ways to improve performance</li> <li>3.4 Accessing learning opportunities to extend own personal work competencies</li> <li>3.5 Developing and expanding professional networks and participate in positive relationship building to further enhance skills and knowledge</li> <li>3.6 Setting career goals and evaluating alternative career paths</li> <li>3.7 Working effectively with teams and groups</li> <li>3.8 Accurately completing appropriate documentation</li> </ul>

4. Resource Implications	<p>The following resources MUST be provided:</p> <p>4.1 Computer hardware with peripherals</p> <p>4.2 Appropriate software</p> <p>4.3 Forms, materials and equipment</p>
5. Methods of Assessment	<p>Competency may be assessed through:</p> <p>5.1 Direct observation or demonstration with oral questioning to the candidate in pursuing professional development in dental technology</p> <p>5.2 Written Test/Examination</p> <p>5.3 Third Party Report</p> <p>5.4 Portfolio</p>
6. Context for Assessment	<p>6.1 Assessment may be done in the workplace or in a simulated workplace environment</p>

## SECTION 3 TRAINING STANDARDS

This set of standards provides Technical and Vocational Education and Training (TVET) providers with information and other important requirements to consider when designing training programs for **DENTAL TECHNOLOGY NC IV**

This includes information on curriculum design, training delivery, trainee entry requirements, tools, materials and equipment, training facilities and trainers qualification and national assessment and certification arrangements.

### 3.1 CURRICULUM DESIGN

Course Title: **DENTAL TECHNOLOGY**

NC Level: **NC IV**

Nominal Training Hours: **3499 Hours + 1056 Hours OJT\***

Course Description:

This course is designed to enhance the knowledge, skills and attitudes of a **dental technologist** in accordance with industry standards. It covers the fabrication/construction and repair of crowns, bridges, dentures and other dental prosthetics/appliances based on dentist's prescriptions; management functions in dental laboratory production and operation; performing administrative functions; and career advancement through continuous professional growth and development.

This course is also designed to enhance the basic and common knowledge, skills and attitudes of an individual in the field of dental technology.

To obtain this, all units prescribed for this qualification must be achieved.

This course satisfies the prescribed two (2) year program and six (6) months on-the-job training (OJT) of Republic Act 9484.

Pursuant to the provision of Republic Act (RA) 9484, the Dental Technology NC IV program shall be registered in Unified Training Program Registration and Accreditation System (UTPRAS) to a recognized and legally constituted college, or school of dentistry.

Completion of this two-year course that includes six-month on-the-job-training is required for those applying for the PRC licensure exam.

Dental Technology NC IV maybe offered as accumulation of qualifications in Dental Laboratory Technology Services NC I, Dental Laboratory Technology Services (Removable Dentures/Appliances) NC II and Dental Laboratory Technology Services (Fixed Dentures/Restorations) NC II and the three units of competency for the laboratory management of Dental Technology NC IV provided that all the competency requirements for the abovementioned qualifications are all complied with. Thus trainees may complete the basic, common and core competency requirements for Dental Laboratory Technology Services NC I then proceed to Dental Laboratory Technology Services (Removable Dentures/Appliances) NC II and Dental Laboratory Technology Services (Fixed Dentures/Restorations) NC II and thereafter proceed to Dental Technology NC IV.

\*Note: The six-month OJT is required for all graduates of this course applying for the Dental Technology licensure, as per the provisions of RA 9484. This OJT component is considered separate from the two-year Dental Technology NC IV program, as per the policy set by the Board of Dentistry-PRC.

## BASIC COMPETENCIES

UNIT OF COMPETENCY	LEARNING OUTCOMES	METHODOLOGY	ASSESSMENT APPROACH
1. Receive and respond to workplace communication	1.1 Follow routine spoken messages 1.2 Perform workplace duties following written notices	<ul style="list-style-type: none"> <li>• Group discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/ questioning</li> </ul>
2. Work with others	2.1 Develop effective workplace relationship 2.2 Contribute to work group activities	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/ questioning</li> </ul>
3. Demonstrate work values	3.1 Define the purpose of work 3.2 Apply work values/ethics 3.3 Deal with ethical problems 3.4 Maintain integrity of conduct in the workplace	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/ questioning</li> </ul>
4. Practice housekeeping procedures	4.1 Sort and remove unnecessary items 4.2 Arrange items 4.3 Maintain work area, tools and equipment 4.4 Follow standardized work process and procedures 4.5 Perform work spontaneously	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Plant tour</li> <li>• Symposium</li> </ul>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Interview</li> </ul>
5. Participate in workplace communication	5.1 Obtain and convey workplace information. 5.2 Complete relevant work related documents. 5.3 Participate in workplace meeting and discussion.	<ul style="list-style-type: none"> <li>• Group discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/</li> <li>• Questioning</li> </ul>
6. Work in a team environment	6.1 Describe and identify team role and responsibility in a team. 6.2 Describe work as a team member.	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/</li> <li>• Questioning</li> </ul>
7. Practice career professionalism	7.1 Integrate personal objectives with organizational goals. 7.2 Set and meet work priorities. 7.3 Maintain professional growth and development.	<ul style="list-style-type: none"> <li>• Group discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/</li> <li>• Questioning</li> </ul>

8 Practice occupational health and safety	8.1 Evaluate hazard and risks. 8.2 Control hazards and risks. 8.3 Maintain occupational health and safety awareness.	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Plant Tour</li> <li>• Symposium</li> </ul>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Interviews</li> </ul>
9. Utilize specialized communication skills	5.1 Apply communication strategies to meet specific needs of internal and external client. 5.2 Represent the organization in internal and external forums 5.3 Facilitate group discussion 5.4 Conduct interview	<ul style="list-style-type: none"> <li>• Discussion method</li> <li>• Role Play</li> <li>• Brainstorming</li> <li>• Lecture</li> </ul>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Performance test</li> <li>• Interview</li> </ul>
10. Develop team and individual needs	10.1 Determine development needs. 10.2 Foster individual and organization growth 10.3 Monitor and evaluate workplace learning 10.4 Develop team commitment and cooperation 10.5 Facilitate accomplishment of organizational goals	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Role playing</li> <li>• Observation</li> </ul>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Direct observation</li> <li>• Role playing</li> </ul>
11. Apply problem solving techniques in the workplace	11.1 Analyze the problem 11.2 Identify fundamental cause of the problem 11.3 Determine possible solution 11.4 Prepare communication or documentation report 11.5 Present recommendation to appropriate personnel 11.6 Implement solution	<ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Discussion</li> <li>• Case studies</li> <li>• Role playing</li> <li>• Small group work</li> </ul>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Direct observation</li> <li>• Interview</li> </ul>

12. Collect, analyze and organize information	12.1 Study information requirements. 12.2 Process data. 12.3 Analyze, interpret and organize information gathered. 12.4 Present findings/ recommendations	<ul style="list-style-type: none"> <li>• Group discussion</li> <li>• Case study</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Practical/ performance test</li> </ul>
13. Plan and organize work	13.1 Set work objectives 13.2 Plan and schedule work activities 13.3 Implement and monitor plans/activities 13.4 Review and evaluate work plans and activities	<ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Discussion</li> <li>• Case studies</li> <li>• Role playing</li> <li>• Small group work</li> </ul>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Direct observation</li> <li>• Interview</li> </ul>
14. Promote environmental protection	14.1 Study guidelines for environmental concerns. 14.2 Implement specific environmental programs 14.3 Monitor activities on environmental protection/programs	<ul style="list-style-type: none"> <li>• Group discussion</li> <li>• Case study</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Practical/ performance test</li> </ul>

### COMMON COMPETENCIES

UNIT OF COMPETENCY	LEARNING OUTCOMES	METHODOLOGY	ASSESSMENT APPROACH
1. Maintain instruments and equipment in work area	1.1 Prepare to clean dental laboratory instruments and work area 1.2 Clean and dry dental laboratory instruments	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Written Test</li> <li>• Practical/ Performance Test</li> <li>• Interview</li> </ul>
2. Assist in dental laboratory procedures	2.1 Identify dental laboratory procedures 2.2 Use dental terminology in communication within the health care setting	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Written Test</li> <li>• Practical/ Performance Test</li> <li>• Interview</li> </ul>

<p>3. Assist with administration in dental laboratory practice</p>	<p>3.1 Communicate effectively with clients and other persons</p> <p>3.2 Respond appropriately to inquiries from clients and visitors</p> <p>3.3 Allocate appointments appropriate to client and organization requirements</p> <p>3.4 Calculate and record basic financial transactions</p> <p>3.5 Handle cash and record financial transactions</p> <p>3.6 Maintain client records</p>	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Written Test</li> <li>• Practical/ Performance Test</li> <li>• Interview</li> </ul>
<p>4 Apply quality standard</p>	<p>4.1 Assess quality of received materials</p> <p>4.2 Assess own work</p> <p>4.3 Engage in quality improvement</p>	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Written Test</li> <li>• Practical/ Performance Test</li> <li>• Interview</li> </ul>
<p>5. Maintain an effective relationship with clients and customers</p>	<p>5.1 Maintain a clean and hygienic environment.</p> <p>5.2 Meet client/customer requirements</p> <p>5.3 Build credibility with customers/clients</p>	<ul style="list-style-type: none"> <li>• Lecturette</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Observation and oral questioning</li> <li>• Grid questioning</li> <li>• Practical exercise</li> </ul>
<p>6. Manage own performance</p>	<p>6.1 Plan for completion of own workload.</p> <p>6.2 Maintain quality performance.</p> <p>6.3 Build credibility with customers/clients</p>	<ul style="list-style-type: none"> <li>• Lecturette</li> <li>• Brainstroming</li> </ul>	<ul style="list-style-type: none"> <li>• Observation and oral questioning</li> <li>• Grid questioning</li> <li>• Practical exercise</li> </ul>

<p>7. Follow occupational health and safety policies in dental facilities</p>	<p>7.1 Apply workplace procedures for hazard identification and risk control</p> <p>7.2 Utilize and implement strategies as directed to prevent infection in the workplace</p> <p>7.3 Work in a safe manner</p>	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/ Questioning</li> </ul>
<p>8 Maintain infection control in dental practice</p>	<p>8.1 Monitor and maintain the cleanliness of the dental laboratory rooms</p> <p>8.2 Clean and maintain dental instruments and equipment</p> <p>8.3 Maintain hygiene and personal protection</p> <p>8.4 Dispose of dental laboratory waste safely</p> <p>8.5 Disinfect and clean impressions</p>	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/ Questioning</li> </ul>
<p>9 Operate a personal computer</p>	<p>9.1 Start and shut down the computer</p> <p>9.2 Arrange and customize desktop display/window setting</p> <p>9.3 Work with files and folders (or directories)</p> <p>9.4 Work with user application programs</p> <p>9.5 Print information</p>	<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Interaction</li> <li>• Lecture</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Observation</li> <li>• Interviews/ Questioning</li> <li>• Written Exam</li> </ul>

## CORE COMPETENCIES

UNIT OF COMPETENCY	LEARNING OUTCOME	METHODOLOGY	ASSESSMENT APPROACH
1 Fabricate models	1.1 Verify integrity of impressions 1.2 Select and prepare model materials 1.3 Pour impressions 1.4 Finish model 1.5 Duplicate model	<ul style="list-style-type: none"> <li>• Discussion/ Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
2 Fabricate custom impression trays	2.1 Prepare model 2.2 Select and prepare materials 2.3 Fabricate custom impression trays	<ul style="list-style-type: none"> <li>• Discussion/ Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
3 Fabricate registration bite rims	3.1 Select and prepare materials 3.2 Fabricate base 3.3 Fabricate registration bit rims 3.4 Prepare face-bow (if required)	<ul style="list-style-type: none"> <li>• Discussion/ Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
4 Articulate models and transfer records	4.1 Select and prepare articulator 4.2 Select and prepare materials 4.3 Transfer oral records to articulator	<ul style="list-style-type: none"> <li>• Discussion/ Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
5 Fabricate mouthguard	5.1 Prepare model for procedure 5.2 Check the dental mouthguard prior to insertion 5.3 Fit and evaluate the mouthguard 5.4 Alter mouthguard if required	<ul style="list-style-type: none"> <li>• Discussion/ Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
6 Arrange artificial teeth for complete dentures	6.1 Prepare case for setting of teeth 6.2 Arrange artificial teeth 6.3 Wax up denture for try-in	<ul style="list-style-type: none"> <li>• Demonstration/ Practical Hands-on Exercises</li> <li>• Competency-Based Learning Materials Method</li> </ul>	<ul style="list-style-type: none"> <li>• Written examination</li> <li>• Observation</li> <li>• Questioning</li> </ul>

<b>UNIT OF COMPETENCY</b>	<b>LEARNING OUTCOME</b>	<b>METHODOLOGY</b>	<b>ASSESSMENT APPROACH</b>
7 Set-up and wax removable partial dentures	7.1 Design acrylic removable partial denture 7.2 Select and prepare materials 7.3 Arrange artificial teeth 7.4 Fabricate retainer units	<ul style="list-style-type: none"> <li>• Demonstration/ Practical Hands-on Exercises</li> <li>• Competency-Based Learning Materials Method</li> </ul>	<ul style="list-style-type: none"> <li>• Written examination</li> <li>• Observation</li> <li>• Questioning</li> </ul>
8 Wax, process and finish acrylic dentures and appliances	8.1 Wax case for finish consistent with work order 8.2 Select and prepare materials and processing 8.3 Process denture or appliance 8.4 Grind dentures and appliances selectively	<ul style="list-style-type: none"> <li>• Demonstration/ Practical Hands-on Exercises</li> <li>• Competency-Based Learning Materials Method</li> </ul>	<ul style="list-style-type: none"> <li>• Written examination</li> <li>• Observation</li> <li>• Questioning</li> </ul>
9 Fabricate thermoformed bases and appliances	9.1 Prepare model 9.2 Thermo-form appliance or base 9.3 Trim, shape and finish	<ul style="list-style-type: none"> <li>• Lecture/ Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
10 Repair and modify dentures and appliances	10.1 Prepare case 10.2 Prepare model 10.3 Repair denture or appliance 10.4 Modify denture or appliance, where required 10.5 Trim, shape and finish denture or appliance	<ul style="list-style-type: none"> <li>• Lecture/ Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
11. Fabricate oral splints	11.1 Fabricate splint 11.2 Trim, shape and finish	<ul style="list-style-type: none"> <li>• Lecture/ Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
12. Fabricate orthodontic appliances	12.1 Select or fabricate and assemble components and materials 12.2 Fabricate orthodontic appliance 12.3 Finish orthodontic appliance	<ul style="list-style-type: none"> <li>• Lecture/ Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>

<b>UNIT OF COMPETENCY</b>	<b>LEARNING OUTCOME</b>	<b>METHODOLOGY</b>	<b>ASSESSMENT APPROACH</b>
13. Fabricate cast metal removable partial denture framework	13.1 Prepare master model 13.2 Fabricate refractory model 13.3 Wax and invest removable partial denture framework 13.4 Burn out, cast and finish removable partial denture framework	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demo</li> </ul>	<ul style="list-style-type: none"> <li>• Written examination</li> <li>• Interview</li> </ul>
14. Fabricate metal crown and bridge structures	14.1 Prepare sectionalized models 14.2 Wax and invest fixed partial dentures and structures 14.3 Burn-out cast and finish alloy fixed partial dentures and structures	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demo</li> </ul>	<ul style="list-style-type: none"> <li>• Written examination</li> <li>• Interview</li> </ul>
15. Fabricate ceramic restorations	15.1 Prepare sub-structures 15.2 Select and apply ceramics 15.3 Trim, shape and finish	<ul style="list-style-type: none"> <li>• Lecture/ • Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
16. Fabricate indirect composite/polymer fixed restorations	16.1 Prepare model 16.2 Fabricate restoration 16.3 Trim, shape and finish	<ul style="list-style-type: none"> <li>• Lecture/ • Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
17. Join alloy structures	17.1 Solder components 17.2 Weld components	<ul style="list-style-type: none"> <li>• Lecture/ • Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
18. Manage dental laboratory production and operation	18.1 Supervise laboratory technician 18.2 Manage dental laboratory maintenance program 18.3 Manage dental laboratory facilities and space requirements 18.4 Comply with dental ethics and jurisprudence	<ul style="list-style-type: none"> <li>• Lecture/ • Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>
19. Perform administrative functions	19.1 Analyze market 19.2 Plan dental product ranges 19.3 Market dental products and services 19.4 Regulate dental quality control	<ul style="list-style-type: none"> <li>• Lecture/ • Demonstration</li> <li>• OJT</li> </ul>	<ul style="list-style-type: none"> <li>• Written Examination</li> <li>• Demonstration</li> <li>• Observation</li> </ul>

UNIT OF COMPETENCY	LEARNING OUTCOME	METHODOLOGY	ASSESSMENT APPROACH
20. Continue professional growth and development	20.1 Update dental laboratory skills and technologies 20.2 Improve professional practices 20.3 Establish basis for career advancement	<ul style="list-style-type: none"> <li>•Lecture/ Demonstration</li> <li>•OJT</li> </ul>	<ul style="list-style-type: none"> <li>•Written Examination</li> <li>•Demonstration</li> <li>•Observation</li> </ul>

**DENTAL TECHNOLOGY  
GUIDELINES  
FOR “ON-THE-JOB TRAINING” (O.J.T.)\*  
6 months/1,056 hrs.**

**REQUIREMENTS:**

- 1.) **Must be licensed Dental Laboratory – DOH Registered**
- 2.) **Trainer must be a holder of a Certificate of Competency (C.O.C.) / National Certificate (NC) II (Fixed and/or Removable) and one Dental Technologist**
- 3.) **Maximum of 25 trainees – 1 trainer**
- 4.) **School must provide Trainee’s Profile and Evaluation Form for O.J.T.’s**
- 5.) **Licensed Dental Laboratory must issue a “Certificate of Training” after completion of 6 months training.**
- 6.) **Training plan is based on curriculum developed for the competencies standards for laboratory management.**
- 7.) **Training is individualized and self-paced**
- 8.) **Training is based on work that must be performed**
- 9.) **Training materials are directly related to the competency standard and curriculum.**
- 10.) **Memorandum of agreement between the school and licensed dental laboratory**

**\* on-the-job training is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire specific competencies prescribed in the training regulations.**

### 3.2 TRAINING DELIVERY

The delivery of training should adhere to the design of the curriculum. Delivery should be guided by the 10 basic principles of competency-based TVET.

- The training is based on curriculum developed from the competency standards;
- Learning is modular in its structure;
- Training delivery is individualized and self-paced;
- Training is based on work that must be performed;
- Training materials are directly related to the competency standards and the curriculum modules;
- Assessment is based in the collection of evidence of the performance of work to the industry required standard;
- Training is based both on and off-the-job components;
- Allows for recognition of prior learning (RPL) or current competencies;
- Training allows for multiple entry and exit; and
- Approved training programs are nationally accredited.

In accordance with RA 9484 and its implementing rules, the Dental Technology program shall have a two-year in-school component and a six-month OJT component. On-the-job training is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire specific competencies prescribed in the training regulations.

### 3.3 TRAINEE ENTRY REQUIREMENTS:

Trainees or students wishing to enroll in the *two-year Dental Technology NC IV* should possess the following requirements:

- Must be physically fit and mentally fit (specifically on eye and hand coordination);
- Must possess good moral character; and
- Must be able to communicate both orally and in written form.

### 3.4 TOOLS, MATERIALS AND EQUIPMENT: DENTAL TECHNOLOGY NC IV

Recommended list of tools, equipment and materials for the training of 25 trainees for **DENTAL TECHNOLOGY NC IV** are as follows. For schools/college of dentistry with limited dental equipment and existing signed MOA / partnership with a **licensed Dental Laboratory – DOH Registered** is acceptable

TOOLS		EQUIPMENT		MATERIALS	
Qty.	Description	Qty.	Description	Qty.	Description
25 sets	Base Former (upper, lower quadrant)	25 pcs. 5 pcs. 1 pc.	Articulator, Non-Adjustable Articulator, Semi-Adjustable Articulator, Fully Adjustable	25 pcs.	Abrasive (assorted)
25 pcs.	Plaster Knife	1 pc.	Steamer	25 pcs.	Masks
25 pcs.	Caliper	25 pcs.	Bunsen Burner	25 pcs.	Laboratory Gown
25 sets	Waxing Instrument Set	1 pc.	Cleaning Unit	1 box	Gloves
5 pcs.	Chisel	1 pc.	Die Trimming Machine	1 kilo	Acrylic Resin
25 pcs.	Duplicating Tray	10 units	Micro Motor		Polishing Paste and Compound (assorted)
25 pcs.	Mixing Bowl	1 pc.	Vacuum Former Machine	1 gal.	Disinfecting Solution
25 pcs.	Plaster Spatula	2 units	Vibrator		Dental Lab Waxes (assorted)
25 pcs.	Impression Tray or Stock Tray	2 pcs.	Lathe Machine	25 pcs.	Adhesives
100 pcs.	Mandrel	2 pcs.	Pressure Pot	25 kilos each	Gypsum (assorted)
25 pcs.	Plaster Cutters	1 pc.	Vacuum Mixer	25 pcs. each	Duplicating Materials (assorted)
25 pcs.	Alcohol Torch	2 pcs.	Cast Trimmer	25 btl.	Alcohol
25 pcs.	Guide or Template	1 unit	Weighing Scale	2 tanks	Laboratory Gases
5 pcs.	Die Saw	5 units	High Speed Grinder	1 btl.	Die Hardener/Conditioner (120 ml.)
25 pcs.	Die Opening Burs	1 unit	Pinblaster	1 btl.	Die Spacer
25 pcs.	Lead Free Pencil	2 pcs.	Lathe Machine	1 btl.	Die Separator
25 pcs.	Scalpel	2 pcs.	Alloy High Speed Grinder	1 box	Wax (assorted)

TOOLS		EQUIPMENT		MATERIALS	
Qty.	Description	Qty.	Description	Qty.	Description
25 pcs.	Bunsen Burner	2 pcs.	Cast Trimmer	2 tanks	LPG
25 sets	Wax Instruments (assorted)	5 pcs.	Wax Pot	1 tank	Oxygen
25 pcs.	Caliper	1 pc.	Vacuum Mixer	1 kilo	Metal Alloy (non-precious/precious)/nickel chrome/chrome cobalt alloy
25 pcs.	Brushes (assorted)	1 pc.	Steamer	25 kilos	Investment materials
25 pcs.	Glass Slab	1 unit	Casting Machine/Burn-Out Oven and Accessories	25 kilos	Gypsum Products (type 1,2,3,4)
25 sets	Ceramic Hand Instruments	1 unit	Sand Blaster and Accessories	25 pcs.	Cutting Discs
25 pcs.	Denture/Bantam Flask	1 pc.	Casting Torch	25 pcs.	Abrasives (assorted)
12 pcs.	Ortho Pliers (assorted)	1 pc.	Weighing Scale	25 pcs.	Polishing Materials (assorted)
5 pcs.	Laboratory Scissors	1pc.	Porcelain Furnace	25 pcs.	Articulating Paper
2 sets	Shade Guide	1 pc.	Ultrasonic	25 pcs.	Contact Markers
2 pcs.	Magnifiers	1 unit	Injection Moulding Machine/Flexibles and Accessories*	25 starter sets	Ceramic Powders and Paste (assorted)
25 sets	Safety Accessories	2 pcs.	Pressure Pot and Accessories	1 kilo	Duplicating Gel
25 pcs.	Lab Pans	2 pcs.	Air Turbine	1 kilo	Acrylic Products (assorted)
10 pcs.	Flask carrier	1 pc.	Air Compressor (2 Hp)	25 sets	Pontic/Artificial Teeth
25 pcs.	Duplicating Flask	1 pc.	Soldering Torch	1 set	Soldering Materials
25 pcs.	Casting Rings	1 pc.	Vacuum Forming Machine and Accessories	25 pcs.	Thermoplastic materials
25 pcs.	Sprue Base	1 unit	Light Curing Machine and Accessories	5 kls.	Aluminum oxide
25 pcs.	Hemostat	1 unit	Surveyor	25 pcs.	Light Cure Materials
25 pcs.	Cement Spatula	1 unit	Hydraulic/Bench Presser	2 sets	Orthodontic wire
25 pcs.	Alcohol Lamp	1 unit	Boil-out unit	1 gal.	Separating Medium
5 pcs.	Die saw	1 unit	Electro Plater	5 btls.	Debubblizer
25 pcs.	Carbide Burs	2 units	Pin Drilling Machine	1 gal.	Electro Plating Solution

5 pcs.	Graduated Cylinder			24 syringes	Composite Resin
25 pcs.	Duplicating Flask			1kl.	Pumice
5 pcs.	Artist brush			2 btls.	Bonding Agent
25 pcs.	Goggles			1 pack	Pins with sleeves
				25 pcs.	Shellac baseplate
				2 boxes	Mouthguard materials

\* **Optional**

### 3.5 TRAINING FACILITIES DENTAL TECHNOLOGY NC IV

The Dental Technology Learning Facility must be of concrete structure. Based on class size of **25** students / trainees the space requirements for the teaching / learning and curriculum areas are as follows.

TEACHING / LEARNING AREAS	SIZE IN METERS	AREA IN S. METERS	TOTAL AREA IN SQ. METERS
Student/Trainee Performance Space (S/TPS)	5 X 4	20	20
Learning Resource Center (LRC)	3 X 5	15	15
Circulation Area		21	21
Separate Restrooms for Male and Female Trainees/Students	2 X 5	10	10
<b>Total Workshop Area</b>			<b>75 sq. m.</b>

### 3.6 TRAINER QUALIFICATION (TQ IV)

Technical

- Must be a licensed Dentist with experience in managing dental laboratory or licensed Dental Technologist
- Must have completed Trainer's Methodology Course
- Must be a holder of a NC I Dental Laboratory Technology Services, NC II FIXED Dentures/Restorations AND REMOVABLE Dentures/Appliances

Non-Technical

- Must have 18 units in Education

### 3.7 INSTITUTIONAL ASSESSMENT

Institutional Assessment is undertaken by trainees to determine their achievement of units of competency. A certificate of achievement is issued for each unit of competency.

## SECTION 4 NATIONAL ASSESSMENT AND CERTIFICATION ARRANGEMENTS

- 4.1 The National Qualification of Dental Technology NC IV covers the competency requirements for practicing as a Registered Dental Technologist under the Philippine Dental Act of 2007 (RA 9484)
- 4.2 In accordance with Section 13 of Republic Act 9484, examination and licensing of Dental Technologists shall be administered by the Board of Dentistry of the Professional Regulations Commission.
- 4.3 In accordance with Section 14 of Republic Act 9484 and its IRR, applicants for admission to the licensure examination at the time of filing his/her application must be:
  - 4.3.1 A citizen of the Philippines;
  - 4.3.2 Of good moral character;
  - 4.3.3 He/she had finished the two years and six months program certificate in dental technology conferred by a recognized and legally constituted college, or school of dentistry registered with the TESDA;
  - 4.3.4 Undergone on –the- job training in a registered/accredited dental laboratory for at least six months; and/or

Those who have failed the PRC examination three times shall take a refresher course in a PRC accredited dental school which will be posted in the PRC Application Division and a certificate thereon shall be submitted with the application.

- 4.4 The core competencies for the following National Qualifications are embedded in the Dental Technology NC IV Qualification.
  - Dental Laboratory Technology Services NC I
  - Dental Laboratory Technology Services (Removable Dentures/Appliances) NC II
  - Dental Laboratory Technology Services (Fixed Dentures/Restorations) NC II

National Assessment shall continue to be administered by TESDA for the above qualifications. For further details, please refer to the Training Regulations for the above qualifications.

**COMPETENCY MAP – HEALTH CARE SECTOR (DENTAL TECHNOLOGY NC IV)**  
**BASIC COMPETENCIES**

Receive and respond to workplace communication	Work with others	Demonstrate work values	Practice basic housekeeping procedures	Participate in workplace communication	Work in team environment	Practice career professionalism
Practice occupational health and safety procedures	Lead workplace communication	Lead small team	Develop and practice negotiation skills	Solve problems related to work activities	Use mathematical concepts and techniques	Use relevant technologies
Utilize specialized communication skills	Develop teams and individuals	Apply problem solving techniques in the workplace	Collect, analyze and organize information	Plan and organize work	Promote environmental protection	

**COMMON COMPETENCIES**

Implement and monitor infection control policies and procedures	Respond effectively to difficult/challenging behavior	Apply basic first aid	Maintain high standard of patient services	Process reusable instruments and equipment in health work	Prepare for and assist with oral health care procedures	Assist in dental laboratory procedures
Assist with administration in dental practice	Maintain an effective relationship with customers and clients	Manage own performance	Follow occupational health and safety policies in dental practice	Maintain infection control in dental practice	Maintain instruments and equipment in work area	Apply quality standards
Operate a personal computer						

**CORE COMPETENCIES**

Provide care and support to infants and toddlers	Provide care and support to children	Foster social, intellectual, creative and emotional development of children	Foster the physical development of children	Provide care and support to elderly	Provide care and support to people with special needs	Maintain a healthy and safe environment
Respond to emergency	Clean living room, dining room, bedrooms, toilet and bathroom	Wash and iron clothes, linen and fabric	Prepare hot and cold meals	Prepare and maintain beds	Collect and maintain linen stocks at end users location	Assist in patient mobility
Assist in transporting patients	Assist in bio- psychosocial support care of patients	Handle waste in a health care environment	Install biomedical equipment	Perform corrective maintenance on biomedical equipment	Perform preventive maintenance on biomedical equipment	Repair biomedical equipment
Perform basic life support	Maintain life support equipment and resources	Implement safe access and extrication procedures in an emergency	Manage request for ambulance service	Allocate ambulance service resources	Coordinate emergency resources	Deliver basic ambulance communication skills
Supervise on-road operations	Manage the scene of a special event	Manage routine scene	Deliver pre-hospital patient care	Manage ambulance operations	Transport emergency patients	Transport non-emergency patients
Drive vehicles under operational conditions	Work within a holistic therapeutic massage framework	Perform therapeutic massage assessment	Plan the therapeutic massage treatment	Implement therapeutic massage treatment	Perform remedial therapeutic massage treatment	Work within a community development framework

Prepare for work in the community service industry	Support community resources	Provide primary/residential care	Support community participation	Recruit and coordinate volunteers	Respond holistically to client issues	Develop and provide health education program in the community
Implement health promotion and community interventions	Fabricate models	Fabricate custom impression trays	Fabricate registration bite rims	Articulate models and transfer records	Fabricate mouthguard	Arrange artificial teeth for complete dentures
Set up and wax removable partial dentures	Wax, process and finish acrylic dentures and appliances	Fabricate thermoformed bases and appliances	Repair and modify dentures and appliances	Fabricate oral splints	Fabricate orthodontic appliances	Fabricate cast metal removable partial denture framework
Fabricate ceramic restorations	Fabricate metal crown and bridge structures	Fabricate indirect composite/polymer fixed restorations	Join alloy structures	Perform administrative functions	Manage dental laboratory production and operations	Continue professional growth and development

## DEFINITION OF TERMS

<b>ABUTMENT</b>	- Tooth or teeth that support a fixed or removable bridge
<b>ANTERIOR TEETH</b>	- the six upper or six lower front teeth (canines, laterals & central incisors)
<b>APEX</b>	- the tip of the root of a tooth
<b>ARCH</b>	- describes the alignment of the upper or lower teeth
<b>ARTICULATE</b>	- to unite by forming a joint or joints
<b>ARTICULATOR</b>	- a mechanical device representing the temporomandibular joints and jaw members to which casts of the mouth
<b>BASE</b>	- cement placed under a dental restoration to insulate the pulp (nerve chamber)
<b>BITE</b>	- relationship of the upper and lower teeth on closure (occlusion)
<b>BONDING</b>	- adhesive dental restoration technique; a tooth-colored composite resin to repair and/or change the color or shape of a tooth
<b>BRACES</b>	- devices used by orthodontists to gradually reposition teeth to a more favorable alignment
<b>BRIDGE</b>	- stationary dental prosthesis (appliance) fixed to teeth adjacent to a space; replaces one or more missing teeth, cemented or bonded to supporting teeth or implants adjacent to the space
<b>CANTILEVER BRIDGE</b>	- fixed bridge that attaches to adjacent teeth only on one end
<b>CAP</b>	- common term for dental crown
<b>CLASP</b>	- device that retains a removable partial denture to stationary teeth; can be metal or acrylic (matches teeth and gums)
<b>CROSS BITE</b>	- reverse biting relationship of upper and lower teeth; aka "under bite," as in Class III malocclusion (prognathic jaw)
<b>CROWN</b>	(1) the portion of a tooth above the gum line; (2) dental restoration covering all or most of the natural tooth
<b>CUSTOM IMPRESSION TRAY</b>	- an impression tray made from a preliminary impression used to make the final impression
<b>DENTAL WAXES</b>	- wax compounds used in dentistry are mixtures of individual waxes of materials or synthetic origin. As with all other dental materials, each component in the mixture is selected to give specific properties best suited for the procedure being performed
<b>DENTURE</b>	- removable (partial or complete) set of artificial teeth
<b>DIASTEMA</b>	- open space between teeth
<b>DISTAL</b>	- farthest from any point of reference
<b>DUPLICATE</b>	- identically copied from an original
<b>FABRICATE</b>	- to make; create; to construct by combining or assembling
<b>FACE-BOW FORK</b>	- a device used to attach the face-bow to an occlusion rim for a face-bow transfer
<b>FACING</b>	- tooth colored overlay on the visible portion of a crown; may be acrylic, composite or porcelain

<b>FILLING</b>	- restoration of lost tooth structure with metal, porcelain or resin materials
<b>FULL DENTURE</b>	- removable dental prosthesis (appliance) replacing all upper or lower teeth
<b>FULL MOUTH RECONSTRUCTION</b>	- extensive restorations of natural teeth with crowns and or fixed bridges to manage restorative and bite problems.
<b>GYPSUM</b>	- is the common name for calcium sulfate dehydrate. Gypsum products are more frequently used on laboratory procedures than any other single group of compounds. Controlled variations in the manufacturing of gypsum products yield a group of dental materials including plaster, artificial stone (hydrosol), disc stone, casting investment and soldering investment
<b>IMPRESSION</b>	- mold made of the teeth and soft tissues
<b>INLAY</b>	- indirect – filling made by a dental laboratory that is cemented or bonded into place,  direct – placement of dental composite resin, or porcelain restoration at chair side
<b>INTEROCCLUSAL</b>	- space between upper and lower teeth
<b>JACKET</b>	- crown for a front tooth, usually made of porcelain
<b>LAMINATE</b>	- thin plastic or porcelain veneer produced in a dental laboratory and then bonded to a tooth
<b>MALOCCLUSION</b>	- “bad bite” or misalignment of the upper and lower teeth
<b>MARGIN</b>	- interface between a restoration and tooth structure
<b>MARYLAND BRIDGE</b>	- a bridge that is bonded to the back of the adjacent teeth; requires minimum tooth reduction
<b>MODEL</b>	- a material used extensively for making impressions. It contains shellac, talc, glycerin, wax, tallow and palm oil
<b>OVERBITE</b>	- vertical overlap of the front teeth; deep bite
<b>PARTIAL DENTURE</b>	- removable dental prosthesis (appliance) replacing one or more natural teeth
<b>PONTIC</b>	- replacement tooth mounted on a fixed or removal appliance
<b>PORCELAIN CROWN</b>	- all porcelain restoration covering the coronal portion of tooth (above the gum line)
<b>PORCELAIN FUSED TO METAL (PFM) CROWN</b>	- restoration with metal coping (for strength) covered by porcelain (for appearance)
<b>PORCELAIN INLAY OR ONLAY</b>	- tooth-colored restoration made of porcelain, cemented or bonded in place
<b>PORCELAIN VENEERS</b>	- a thin layer of porcelain, fabricated by a laboratory) bonded to a natural tooth to replace lost tooth structure, close spaces, straighten teeth or change color and/or shape
<b>PROSTHESIS</b>	an artificial appliance for the replacement for a body part, tooth or teeth
<b>SOLDERING INVESTMENT</b>	- a soldering investment is similar in composition to a casting investment that has a
<b>SPLINT</b>	- connection of two or more teeth so they function as a stronger single structure

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- Dental Technology NC IV**
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