-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- **0069144** **-Session-1986-87**
-Superclass- **PF**

-Title- **DENTAL RECORD BLOCKS**

-DESCRIPTION-

Type and Purpose

A Specialist Module for Dental Technology students who require a knowledge of the construction and the principles of construction of record blocks. It is also suitable for a student who requires basic skills in working with wax.

Preferred Entry Level

09142 Dental Casts

Learning Outcomes

The student should:

1. know the principles underlying the construction and the uses of record blocks;
2. know the properties and types of materials used in record block construction and the reasons for their use;
3. prepare casts for partial and complete record block bases and make partial and complete record blocks to prescription using various materials;
4. demonstrate safe working practice in the laboratory.

Content/ Context

Corresponding to Learning Outcomes 1 - 4:

1. Principles in constructing record blocks explained as:

   (a) basic coverage (in relation to anatomical landmark);

upper; 1-1 labial sulcus,
1-2 buccal sulcus,
1-3 hamular notch,
1-4 fovea palatina,
1-5 muscle attachments.

lower; 1-6 labial sulcus,
1-7 buccal sulcus,
1-8 retromolar pad,
1-9 lingual sulcus,
1-10 muscle attachments.

(b) dimensions;

upper; 1-11 anterior 6 mm)
1-12 posterior 9 mm) width
1-13 anterior 12 mm)
1-14 posterior 10 mm) height

lower; 1-15 anterior 6 mm)
1-16 posterior 9 mm) width
1-17 anterior 10 mm)
1-18 posterior 10 mm) height

Uses of record block explained as recording the vertical relationships, liplines, centre line, canine lines, occlusal plane, as follows:

1.19 recording vertical relationship as the distance between the maxilla and the mandible when the heads of the condyles re in their most retarded yet unstrained position in the glenoid fossa;

1.20 recording the mid lip line as the line drawn on the record block to indicate where the lips meet;

1.21 recording the high lip line as the line drawn on the record block to indicate the height of the patient's smile on the upper record block;

1.22 recording the low lip line as the line drawn on the record block to indicate the extent of the patient's smile on the lower record block;

1.23 recording the centre line as a line drawn on the record block to indicate the middle of the mouth on a vertical axis;

1.24 recording the canine lines as lines drawn on the record block to indicate the corner of the mouth and the width of the patient's smile;

1.25 recording the occlusal plane as the plane which runs parallel to the naso-auricular line (ala of the nose to external auditory meatus of the ear) and those anterior origin is the mid lip line.

2. Properties of materials explained as:

2.1 ease of manipulation;
2.2 strength and rigidity;
2.3 retention of shape at mouth temperature;
2.4 non-irritant to mouth tissue.

Types of materials:

basic materials; shellac, wax, acrylic, acuum formed plastics;

rim materials; wax, micro-crystaline wax, composition, plaster pumice.

Reasons for materials used explained as:

base:

2.5 wax - quick and sufficient for straight forward bite registration;

2.6 shellac - stronger than wax and used if the block may be in the mouth for some time;

2.7 acrylic and vacuum formed plastic - very strong base, used if the patient or technique is difficult or time consuming.

rim:

2.8 wax - quick and sufficient for straight forward bite registration;

2.9 microcrystaline wax - stronger than ordinary wax, with higher melting point, used when block may be in the mouth for some time;

2.10 composition - used for face-bow registration and difficult patient;

2.11 plaster pumice - used for sphero-elipsoidal technique.

3. Preparation of casts, cut postdam, tinfoil relief areas, apply separator.

4. Use of various types of materials, laying accurately fitting bases with securely attached rims and making partial and complete record blocks.

5. Safe working practice with hot wax, flamer, bunsen burner, instruments.

Suggested Learning and Teaching Approaches

Relating to Learning Outcomes 1 - 4:

This is a practical-based module in which the majority of the time will be spent in practising skills to achieve a satisfactory standard of work.

1-2 A collection of demonstration models, visual aids, films and existing record blocks could be shown to the student during short lectures and discussions, backed up where possible by a visit to a clinic.

3. The whole procedure for a record block would be demonstrated possibly by the use of a series of pre-prepared record blocks at differing stages in their construction, so that the time factor is eliminated and the students can gain an overview of the task they will be required to carry out. The student will subsequently, under constant guidance, make several different record blocks using various materials.

   The student should be kept informed of his/her progress and formative assessment by oral questioning and observation of the student's practical work should accompany each practical activity so that remedial action can be undertaken. There should be a discussion on the restraint imposed by industry with regard to the time allocated to this task.

4. The safety procedures should be demonstrated and subsequently discussed frequently throughout the module.

Assessment Procedures

Relating to Learning Outcomes 1 - 4:

1. Short oral or written test or tests (objective or short answer) when appropriate during the module but allowing time for remediation and retesting if necessary.

2. Short oral or written test or tests (objective or short answer) when appropriate during the module but allowing time for remediation and retesting if necessary.

3. Observation of performance during practical work and inspection of finished work, using a checklist to indicate that satisfactory record blocks have been made on at least three occasions and using at least two different materials.

Checklist

3.1 Preparation of casts.
3.2 Fit and coverage of bases.
3.3 Shape and dimensions of rim.
3.4 Articulation with opposing block.
3.5 Quality of finish.
3.6 Correct interpretation of prescription.

4. Observation during practical activities and the use of a checklist.

Safe procedure observed for:

hot wax;
electrical equipment;
bunsen burner;
falmer;
instruments;
eye protection;
face protection.

Performance Criteria.

Learning Outcomes 1 and 2:

The performance in the respective tests should indicate that the student has mastered the content required for the Learning Outcomes. The exact score required will depend on the difficulty and extent of the tests, and cannot be fully judged in advance; it is however unlikely to be less than 70% correct response.

Learning Outcome 3:

The student can carry out the requirements of the Learning Outcome to a satisfactory standard. This will be indicated by completion of all the items on the check list. The record blocks to be used for summative assessment should be retained.

Learning Outcome 4:

The student observes the safe procedure for each item on the checklist before he/she is credited with achievement of the Learning Outcome.

or Learning Outcomes 1,2,3 and 4 the standard to be achieved will be a matter for the professional judgement of the tutor aided by the Council's assessor.

Award of the module will depend on satisfactory achievement of all the Learning Outcomes.
