The Further Education and Training Awards Council (FETAC) was set up as a statutory body on 11 June 2001 by the Minister for Education and Science. Under the Qualifications (Education & Training) Act, 1999, FETAC now has responsibility for making awards previously made by NCVA.

Module Descriptor

Veterinary Clinical Laboratory Procedures

Level 6 N32921

www.fetac.ie
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Introduction

This module is a statement of the standards to be achieved to gain an FETAC award. Candidates are assessed to establish whether they have achieved the required standards. Credit is awarded for each module successfully completed.

The standards in a module are expressed principally in terms of specific learning outcomes, i.e. what the learner will be able to do on successful completion of the module. The other elements of the module - the purpose, general aims, assessment details and assessment criteria - combine with the learning outcomes to state the standards in a holistic way.

While FETAC is responsible for setting the standards for certification in partnership with course providers and industry, it is the course providers who are responsible for the design of the learning programmes. The duration, content and delivery of learning programmes should be appropriate to the learners’ needs and interests, and should enable the learners to reach the standard as described in the modules. Modules may be delivered alone or integrated with other modules.

The development of learners’ core skills is a key objective of vocational education and training. The opportunity to develop these skills may arise through a single module or a range of modules. The core skills include:

- taking initiative
- taking responsibility for one’s own learning and progress
- problem solving
- applying theoretical knowledge in practical contexts
- being numerate and literate
- having information and communication technology skills
- sourcing and organising information effectively
- listening effectively
- communicating orally and in writing
- working effectively in group situations
- understanding health and safety issues
- reflecting on and evaluating quality of own learning and achievement.

Course providers are encouraged to design programmes which enable learners to develop core skills.
Module Title: Veterinary Clinical Laboratory Procedures

Module Code: N32921

Level: 6

Credit Value: 1 credit

Purpose: This module is a statement of the standards to be achieved to gain an FETAC credit in Veterinary Clinical Laboratory Procedures at Level 6. It is designed as part of an award in Veterinary Nursing.

Preferred Entry Level: Level 5 Certificate, Leaving Certificate or equivalent qualifications and/or relevant life and work experiences.

Special Requirements: Completion of FETAC Small Animal Nursing L21098.

General Aims:

Learners who successfully complete this module will:

8.1 Have an understanding of the role of laboratory diagnostic tests used in veterinary medicine.

8.2 Know how to perform the more commonly used tests carried out in clinical veterinary practice.

8.3 Know how to prepare and manage animals undergoing such tests.

8.4 Know how to handle samples safely and in a manner that ensures accuracy of test results.

8.5 Maintain equipment used in a veterinary practice laboratory.
9 Units

Unit 1 Laboratory records management
Unit 2 Equipment maintenance for routine laboratory procedures
Unit 3 Blood Sample Collection and Management
Unit 4 Examination of Urine
Unit 5 Examination of faeces
Unit 6 Examination of hair/skin/ear wax
Unit 7 Examination of body fluids (discharges, joints, pleural, peritoneal, infectious)
Unit 8 Bacteriology and virology
Unit 9 Tissue histopathology

10 Specific Learning Outcomes

Unit 1 Laboratory records management

Learners will be able to:

- Record patient and sample details
- Pack and post samples in suitable containers
- Record laboratory test results in patient file
- Relay information to veterinary staff and/or clients as appropriate

Unit 2 Equipment maintenance for routine laboratory procedures

Learners will be able to

operate and maintain

- Centrifuge
- Refractometer
- Haemocytometer reader
- Blood biochemistry analyzer
- Haematology machine

Unit 3 Blood Sample collection and Management

Learners will be able to

- Prepare equipment required to take a blood sample
- Take a blood sample from domestic animals
- Select correct sample tubes for individual tests
- Use staining techniques to prepare blood smears
• Carry out tests such as RBCC, PCV “TW BCC”, and “DWBCC”
• Carry out biochemistry tests for tissue and serum enzymology
• Use rapid test kits for common diseases

Unit 4 Examination of Urine

Learners will be able to

• Take a urine sample from a dog using a variety of collection methods
• Record physical characteristics of the sample
• Perform a “multistix” examination
• Measure the specific gravity of urine

Unit 5 Examination of faeces

Learners will be able to

• Take a faecal sample
• Record the physical characteristics of sample
• Examine for the presence of parasites
• Prepare sample for bacteriology
• Use rapid test kits for common diseases

Unit 6 Examination of hair/skin/ear wax

Learners will be able to

• Carry out a hair plucking and skin scraping
• Assist at the taking of a skin biopsy
• Perform ringworm tests (Woods lamp, microscopic, culture)
• Prepare smears of fine needle aspirates

Unit 7 Examination of body fluids (discharges, joints, pleural, peritoneal, infectious)

Learners will be able to

• Prepare the patient, site and equipment for sample collection
• Manage sample for sending to outside laboratory
• Prepare sample for staining for microscopic examination
Unit 8  Bacteriology and virology

Learners will be able to

• Select equipment for sample collection
• Harvest sample under direction from a veterinary practitioner
• Manage the sample(s) for posting to laboratory
• Culture a bacterial swab
• Understand the significance of an antibiogram.

Unit 9  Tissue histopathology

Learners will be able to

• Assist at biopsy harvesting
• Preserve sample in suitable container
• Package samples for postage to laboratory

11 Portfolio of Assessment

All assessment is carried out in accordance with FETAC regulations.
Assessment is devised by the internal assessor, with external moderation by FETAC.

11.1 Summary

Practical skills demonstration 60%
Assignment portfolio 40%

11.2 Skills Demonstration

The internal assessor will devise 6 practical laboratory skill tests which require the candidate to demonstrate familiarity with the specified task.

11.3 Assignments

The internal assessor will devise 8 briefs that require the candidate to produce evidence of completion of tasks related to the Specific Learning Outcomes.

12 Grading

Pass 50 - 64%
Merit 65 - 79%
Distinction 80 - 100%
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# FETAC Module Results Summary Sheet

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### Assessment Marking Sheets

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### Maximum Marks per Marking Sheet

- **Total**
- **%**

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**Signed:**

**Internal Assessor:** ________________________________  **Date:** ________________

This sheet is for internal assessors to record the overall marks of individual candidates. It should be retained in the centre.

The marks awarded should be transferred to the official FETAC Module Results Sheet issued to centres before the visit of the external Authenticator.

### Grade*

- **D**: 80 - 100%
- **M**: 65 - 79%
- **P**: 50 - 64%
- **U**: 0 - 49%
- **W**: candidates entered who did not present for assessment

14
Glossary of Assessment Techniques

**Assignment**

An exercise carried out in response to a brief with specific guidelines and usually of short duration.

Each assignment is based on a brief provided by the internal assessor. The brief includes specific guidelines for candidates. The assignment is carried out over a period of time specified by the internal assessor.

Assignments may be specified as an oral presentation, case study, observations, or have a detailed title such as audition piece, health fitness plan or vocational area profile.

**Collection of Work**

A collection and/or selection of pieces of work produced by candidates over a period of time that demonstrates the mastery of skills.

Using guidelines provided by the internal assessor, candidates compile a collection of their own work. The collection of work demonstrates evidence of a range of specific learning outcomes or skills. The evidence may be produced in a range of conditions, such as in the learning environment, in a role play exercise, or in real-life/work situations.

This body of work may be self-generated rather than carried out in response to a specific assignment eg art work, engineering work etc.

**Examination**

A means of assessing a candidate’s ability to recall and apply skills, knowledge and understanding within a set period of time (time constrained) and under clearly specified conditions.

Examinations may be:

- practical, assessing the mastery of specified practical skills demonstrated in a set period of time under restricted conditions
- oral, testing ability to speak effectively in the vernacular or other languages
- interview-style, assessing learning through verbal questioning, on one-to-one/group basis
- aural, testing listening and interpretation skills
- theory-based, assessing the candidate’s ability to recall and apply theory, requiring responses to a range of question types, such as objective, short answer, structured, essay. These questions may be answered in different media such as in writing, orally etc.

**Learner Record**

A self-reported record by an individual, in which he/she describes specific learning experiences, activities, responses, skills acquired.
Candidates compile a personal logbook/journal/diary/daily diary/record/laboratory notebook/sketch book. The logbook/journal/diary/daily diary/record/laboratory notebook/sketch book should cover specified aspects of the learner’s experience. A substantial individual or group response to a brief with guidelines, usually carried out over a period of time.

**Project**

Projects may involve:

- research – requiring individual/group investigation of a topic
- process – eg design, performance, production of an artefact/event

Projects will be based on a brief provided by the internal assessor or negotiated by the candidate with the internal assessor. The brief will include broad guidelines for the candidate. The work will be carried out over a specified period of time.

Projects may be undertaken as a group or collaborative project, however the individual contribution of each candidate must be clearly identified.

The project will enable the candidate to demonstrate: (some of these – about 2-4)

- understanding and application of concepts in (specify area)
- use/selection of relevant research/survey techniques, sources of information, referencing, bibliography
- ability to analyse, evaluate, draw conclusions, make recommendations
- understanding of process/planning implementation and review skills/planning and time management skills
- ability to implement/produce/make/construct/perform
- mastery of tools and techniques
- design/creativity/problem-solving/evaluation skills
- presentation/display skills
- team working/co-operation/participation skills.

**Skills Demonstration**

Assessment of mastery of specified practical, organisational and/or interpersonal skills.

These skills are assessed at any time throughout the learning process by the internal assessor/another qualified person in the centre for whom the candidate undertakes relevant tasks.

The skills may be demonstrated in a range of conditions, such as in the learning environment, in a role-play exercise, or in a real-life/work situations.

The candidate may submit a written report/supporting documentation as part of the assessment.
Examples of skills: laboratory skills, computer skills, coaching skills, interpersonal skills.
FETAC Assessment Principles

1 Assessment is regarded as an integral part of the learning process.

2 All FETAC assessment is criterion referenced. Each assessment technique has assessment criteria which detail the range of marks to be awarded for specific standards of knowledge, skills and competence demonstrated by candidates.

3 The mode of assessment is generally local i.e. the assessment techniques are devised and implemented by internal assessors in centres.

4 Assessment techniques in FETAC modules are valid in that they test a range of appropriate learning outcomes.

5 The reliability of assessment techniques is facilitated by providing support for assessors.

6 Arising from an extensive consultation process, each FETAC module describes what is considered to be an optimum approach to assessment. When the necessary procedures are in place, it will be possible for assessors to use other forms of assessment, provided they are demonstrated to be valid and reliable.

7 To enable all learners to demonstrate that they have reached the required standard, candidate evidence may be submitted in written, oral, visual, multimedia or other format as appropriate to the learning outcomes.

8 Assessment of a number of modules may be integrated, provided the separate criteria for each module are met.

9 Group or team work may form part of the assessment of a module, provided each candidate’s achievement is separately assessed.