

## Component Specification

### Human Biology

#### NFQ Level 4

#### 4N2910

#### 1. Component Details

<b>Title</b>	Human Biology
<b>Teideal as Gaeilge</b>	Bitheolaíocht Dhaonna
<b>Award Class</b>	Minor
<b>Code</b>	4N2910
<b>Level</b>	4
<b>Credit Value</b>	10
<b>Purpose</b>	The purpose of this award is to equip the learner with the knowledge, skill and competence to develop a general understanding and awareness of human biology.
<b>Learning Outcomes</b>	Learners will be able to:  <ol style="list-style-type: none"><li>1 Identify the characteristic features of living things</li><li>2 Describe the structure of the body in terms of cells, tissues, organs and systems</li><li>3 Describe the structure and function of the main components of the cell to include cytoplasm, nucleus, chromosomes, genes,  mitochondria and ribosomes</li><li>4 Identify the parts and functions of the human digestive system</li><li>5 Describe, using examples, the processes of physical and chemical digestion</li></ol>

- 6 Explain a balanced diet with reference to carbohydrates, fats, proteins, vitamins, minerals and water
- 7 Describe the structure and function of the circulatory system with reference to the heart and associated blood vessels
- 8 Identify factors associated with diseases of the circulatory system
- 9 Describe the structure and function of the human breathing system, including gaseous exchange
- 10 Describe the process of aerobic respiration
- 11 Describe the differences between inhaled and exhaled air
- 12 Illustrate the circulation of blood around the heart and lungs
- 13 Describe the structure and function of the urinary system
- 14 Explain excretion and the organs associated with the process
- 15 Describe the structure and function of the male and female reproductive systems
- 16 Describe the events that take place in the female reproductive system during the menstrual cycle and the events that occur from fertilisation to birth
- 17 Describe the location and function of genes with reference to inheritable characteristics, non-inheritable characteristics and variation
- 18 Describe the structure and function of the nervous system, including the eye, the ear, motor neurons and sensory neurons
- 19 Describe the main endocrine glands and their associated functions
- 20 Differentiate between the nervous system and the endocrine system
- 21 Discuss the importance of all systems within the human body working efficiently to ensure overall health and well being
- 22 Illustrate each system using labeled diagrams.

## **Assessment**

## General Information

Details of FET assessment requirements are set out in [Assessment Guidelines for Providers](#).

All FET assessment is criterion referenced. Successful achievement of the award is based on learners attaining the required standards of knowledge, skill or competence.

The techniques set out below are considered the optimum approach to assessment for this component. In exceptional circumstances providers may identify alternative assessment techniques through the provider's application for programme validation which are **reliable** and **valid** but which are more appropriate to their context.

Assessment of a number of components may be integrated across programmes for delivery, provided that the learning outcomes of each minor award are assessed.

Group or team work may form part of the assessment, provided each learner's achievement is separately assessed.

All providers are required to submit an assessment plan as part of their application for programme validation. Assessment Plans will include information relating to scheduling and integration of assessment. See current FET validation guidelines at [www.qqi.ie](http://www.qqi.ie).

## Assessment Techniques

In order to demonstrate that they have reached the standards of knowledge, skill and competence identified in all the learning outcomes, learners are required to complete the assessment(s) below.

The assessor is responsible for devising assessment instruments (e.g. project and assignment briefs, examination papers), assessment criteria and mark sheets, consistent with the techniques identified below and FETAC's assessment requirements.

Programme validation will require providers to map each learning outcome to its associated assessment technique. See current FET validation guidelines at [www.qqi.ie](http://www.qqi.ie).

All learning outcomes **must** be assessed and achieved

Assignment	60%
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Examination - Theory	40%
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## Description

### Assignment

*An assignment is an exercise carried out in response to a brief with specific guidelines as to what should be included. An assignment is usually of short duration and may be carried out over a specified period of time.*

### **Examination - Theory**

*An examination provides a means of assessing a learner's ability to recall and apply knowledge, skills and understanding within a set period of time and under clearly specified conditions.*

*A theory-based examination assesses the ability to recall, apply and understand specific theory and knowledge.*

### **Recognition of Prior Learning (RPL)**

Learners may be assessed on the basis of their prior knowledge and experience. Providers must be specifically quality assured to assess learners by this means. To do so they must complete B10, see Provider's Quality Assurance Guidelines and be included on the Register of RPL approved providers. See RPL Guidelines at [www.fetac.ie](http://www.fetac.ie) for further information and registration details.

### **Grading**

Pass	50% - 64%
Merit	65% - 79%
Distinction	80% - 100%

### **Specific Validation Requirements**

There are no specific validation requirements

### **Supporting Documentation**

None

### **Access**

To access programmes leading to this award the learner should have reached the standards of knowledge, skill and competence associated with the preceding level of the National Framework of Qualifications. This may have been achieved through a formal qualification or through relevant life and work experience.

### **Transfer**

Successful completion of this component award enables the learner to transfer to programmes leading to other certificates where this component is a mandatory or an elective requirement.

## **2. FET Award Standards**

QQI award standards are determined within the National Framework of Qualifications (NFQ), <http://www.nfq-qqi.com>. QQI determines standards for the education and training awards that it makes itself and that are made by providers to whom it has delegated authority to make an award. Providers offering programmes leading to QQI awards **must** have their programme(s) validated in accordance with current validation policy (see [www.qqi.ie](http://www.qqi.ie)).

Award standards are designed to be consistent with the NFQ's award classes i.e. major, special purpose, supplemental and minor awards. They are expressed in terms of **learning outcomes** i.e. concise statements of what the learner is expected to know or be able to do in order to achieve a particular award. Learning outcomes for FET awards are contained within the associated specifications:

AWARD CLASS	STANDARDS	AWARDS
Major Award	Certificate Specification	Certificate (Levels 1 to 5) Advanced Certificate (Level 6)
Supplemental Award	Supplemental Specification	Supplemental Certificate (Level 3 to 6)
Special Purpose	Specific Purpose Specification	Specific Purpose Certificate (Levels 3 to 6)
Minor Award	Component Specification	Component Certificate (Levels 1 to 6)

Award standards are thresholds, they describe standards of knowledge, skill or competence to be acquired, and where appropriate, demonstrated, by a learner before an award may be made.

Award standards will be reviewed from time to time as necessary. Minor changes may be made by the QQI executive outside the review cycle where necessary. Changes to standards are published on QQI's website. Providers with validated programmes and providers with delegated authority to make awards are responsible for monitoring relevant standards and making necessary responses to changes.

### 3. FET Credit

Every FET certificate and component specification includes an FET credit value (Table 1). FET credit is quantified in multiples of 5 FET credits (up to 50 hours of learner effort). Learner effort is based on the time taken by typical learners at the level of the award to achieve the learning outcomes for the award. It includes all learning time involved including: guided learning hours, self-directed learning and assessment.

**Table 1: FET Credit Values**

NFQ Level	Major Awards Credit Values	Default Credit Values Minor Awards	Other Permitted Minor Award Credit Values	Special Purpose and Supplemental Award Credit Value Ranges
1	20	5	10	
2	30	5	10	
3	60	10	5,20	>5 and <60
4	90	10	5,15,20	>5 and <90
5	120	15	5,10,30	>5 and <120

## Guide to Level

Independence is the hallmark of this level. Learning outcomes at this level correspond to a growing sense of responsibility for participating in public life and shaping one's own life. The outcomes at this level would be associated with first-time entry to many occupational sectors.

<b>Strand</b>	<b>Sub-strand</b>	<b>Nature of learning</b>
Knowledge	Breadth	Broad range of knowledge
	Kind	Mainly concrete in reference and with some elements of abstraction or theory
Know How & Skill	Range	Demonstrate a moderate range of practical and cognitive skills and tools
	Selectivity	Select from a range of procedures and apply known solutions to a variety of predictable problems
Competence	Context	Act in familiar and unfamiliar contexts
	Role	Act with considerable amount of responsibility and autonomy
	Learning to Learn	Learn to take responsibility for own learning within a supervised environment
	Insight	Assume partial responsibility for consistency of self-understanding and behaviour

*Extract from 'Determinations for the Outline National Framework of Qualifications': NQAI*