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BTEC Level 4 Diploma in Healthcare Science / Ophthalmic and Vision Science Course Handbook

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BTEC Level 4 Diploma in Ophthalmic and Vision Science



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1. Introduction

The BTEC Level 4 Diploma in Healthcare Science / Ophthalmic and Vision Science is a qualification designed to meet the learning needs of ophthalmic staff who perform assessments and diagnostic tests and investigations in eye departments and clinics at Career Level 4.

Apprenticeships relevant for ophthalmic staff have been developed by the Healthcare Science sector of the NHS. There are four divisions in the healthcare science workforce: Life Sciences; Physiological Sciences; Clinical Engineering and Medical Physics; and Bioinformatics / Genomics. Ophthalmic and Vision Science is one of the disciplines within Physiological Sciences. The Healthcare Science Career Framework has career levels from assistant at Level 2 to consultant clinical scientist at level 9, and it is now possible for someone to begin their career as a healthcare science assistant or associate and progress to become a clinical scientist.

Apprenticeships focus on how an apprentice should demonstrate mastery of an occupation and, where they exist, meet professional registration requirements. Apprenticeships are no longer defined by qualifications, but qualifications can be built into an Apprenticeship Standard, either as a recommendation or as a mandatory requirement. The Level 4 BTEC Diploma is a vocational qualification that is a mandatory requirement for all Level 4 Healthcare Science apprenticeships, but it can also be undertaken without an apprenticeship. The education, training and assessment of vocational qualifications is delivered by Training Organisations that are recognised by Awarding Bodies / Organisations. The Association of Health Professions in Ophthalmology (AHPO) is a Pearson training organisation that delivers the Level 4 Healthcare Science Apprenticeship and BTEC Diploma for Ophthalmic and Vision Science. Pearson is the Awarding Body that assures the quality of training and awards the BTEC Diplomas.

At the end of the apprenticeship, apprentices must undertake an independent end-point assessment (EPA) of the knowledge, skills and behaviours that have been learnt throughout the apprenticeship. This is administered by an assessor from an approved independent End Point Assessment Organisation (EPAO), and not by the training provider who works with the employer during the on-programme part of the apprenticeship programme. End-point assessments are graded and an apprenticeship certificate is only awarded after the end-point assessment is successfully completed. Learners who complete the BTEC Diploma without an apprenticeship do not need an end-point assessment.

Healthcare Science (HCS) apprenticeship programmes have been introduced at Levels 2, 4 and 6:

HCS Assistant	–	Level 2	(AS level equivalent)
HCS Associate	–	Level 4	(equivalent to Year 1 of BSc*)
HCS Assistant Practitioner	–	Level 5	(equivalent to Year 2 of BSc)
HCS Practitioner	–	Level 6	(equivalent to BSc)

* Bachelor of Science Degree

There are a number of different job titles for staff who undertake ophthalmic diagnostic tests and investigations, but all are eligible for healthcare science apprenticeships. Staff working at Level 4 undertake a range of patient investigations and diagnostic procedures that contribute to the diagnostic decision-making and treatment management decisions of senior ophthalmic staff. Apprenticeships and Diplomas provide staff with the knowledge and understanding of the normal and abnormal structure and functioning of the visual system, and the equipment, methods and technology used to assess structure and function. They will understand and report on the quality

and reliability of the tests but will not be responsible for interpreting the results. They will be able to apply their knowledge and skills in the working context, and always within the context of the ethical principles and values of healthcare science practice as set out in *Good Scientific Practice* (GSP).

2 Structure of the BTEC Level 4 Diploma

The BTEC Diploma in Healthcare Science has 10 Mandatory units and 122 Optional units. The mandatory units have a total of 37 credits and must be completed by learners in all Healthcare Science disciplines. Individual disciplines in Healthcare Science can choose relevant units for their discipline from the optional units, with a minimum total credit value of 63 credits, as shown in the Table 1 below:

Table 1: Credits to be achieved for BTEC Level 4 Diploma

Minimum number of credits that must be achieved	100
Minimum number of credits that must be achieved at Level 4 or above	51
Number of mandatory credits that must be achieved	37
Minimum number of optional credits that must be achieved	63

The mandatory units and the 12 generic and Ophthalmic and Vision Science units are listed in Table 2.

Learners in full-time employment who are undertaking the BTEC Level 4 Diploma with an apprenticeship are expected to complete the Diploma within 24 months; this is extended for part-time employees. There is no fixed starting date, but each learner has an Individual Learning Plan (ILP) that is incorporated into their eportfolio.

There is a Learning and Assessment guide for each unit that describes:

- level and credit rating
- aim and scope
- learning outcomes and assessment criteria
- assessment guidance

Learning materials for the units are presented in a series of eBooks that are downloaded to an iPad or tablet. Published textbooks in Kindle or other electronic formats are also provided. Together, these books contain all the knowledge elements required for the course, but learners are also encouraged to use other learning materials they find useful.

Table 2: Summary of the course structure for BTEC Level 4 Diploma

Unit number	Mandatory units	Level	Credits	Guided learning
1	Skills for Lifelong Learning	4	2	16
2	Professional Practice and Person-centred Care	4	5	40
3	Legal and Ethical Context of Practice	4	3	24
4	Health, Safety and Security in the Healthcare Science Environment	4	3	25
5	Technical Scientific Services	4	5	40
6	Effective Communication in Healthcare	4	4	35
7	Audit, Research, Development and Innovation	4	5	20
8	Leadership and Teamwork	4	3	24
9	Teaching, Learning and Assessing Practical Skills	4	4	32
10	Continuing Personal and Professional Development	4	3	20
Unit number	Optional units	Level	Credits	Guided learning
11	Scientific Basis of Healthcare Science: Clinical Science	4	25	200
14	Scientific Basis of Healthcare Science: Epidemiology and Public Health	4	10	80
64	Scientific Basis of Neurosensory Sciences: Applied Anatomy, Physiology and Pathophysiology: The Nervous System	4	10	80
73	Ophthalmic and Vision Science: Applied Microbiology	4	6	52
74	Ophthalmic Pharmacology	4	6	48
75	<i>Instill Eye Medication for Purpose of Investigation or Treatment</i>	4	5	40
76	Anatomy, Physiology and Pathophysiology of the Visual System	4	6	48
77	<i>Imaging the Eye with Fundus Camera and Optical Coherence Tomography</i>	4	6	48
78	<i>Measure Visual Acuity</i>	3	3	17
79	<i>Visual Field Assessment</i>	3	5	40
80	<i>Measure Optical Prescriptions and Refractive Error</i>	3	6	42
	Total		125	971*
99	Performing Peripheral Intravenous Cannulation	5	5	40**

* These are the recommended guided learning hours

** This unit can be undertaken if appropriate for work role

The OVS units are categorised as knowledge or competence units

The **knowledge units** are 11, 14, 64, 73, 74, 76

The **competence units** are 75, 77, 78, 79, 80 and are in italics

3 Entry requirements

The BTEC Diploma in Ophthalmic and Vision Science is a work-based programme and you must have access to a work setting/placement and be engaged in work that includes the assessment of patients with ocular disease.

If you are an apprentice you must have the following *minimum* qualifications or equivalent:

GCSE English at Grade A* to C / 4 to 9 or Level 2 Functional Skills

GCSE Mathematics at Grade A* to C / 4 to 9 or Level 2 Functional Skills

or you must complete the Level 2 Functional Skills before you can take the End Point Assessment.

If you are not an apprentice we strongly recommended and may require that you have Level 2 Functional Skills in maths and English or GCSE equivalent before commencing the Diploma.

4 Training and supervision

When you start the course you are assigned a mentor and assessor.

Your mentor will

- Meet with you regularly to review learning and progress
- Facilitate and support learning in the workplace
- Participate in reviews with the learner and assessor
- Undertake formative assessments for some units
- Inform your assessor when you are ready for summative assessments
- Be your support and advocate if training needs are not being met, and liaise with the assessor as appropriate over such issues.

The role of the assessor is to

- Ensure that the evidence you submit in your portfolio is meeting the learning outcomes
- Mark the assignments and projects against the Marking Guidance provided
- Review the outcomes of formative assessments
- Undertake summative assessments
- Undertake a formal review of your progress at least every 3 months with yourself and your mentor and agree an action plan to address any relevant issues affecting your progress.

Each unit has a credit value, and each credit is considered to equate to about 8 hours of learning and study. The total number of learning hours for the 125 credit Diploma is 971 hours. Assuming a 46 week working year, you can expect to spend approximately 10 to 11 hours per week on training and study.

Your work experience and learning time should include all the learning activities which you are expected to undertake in order to achieve the learning outcomes including:

- Study and revision, preparation of assignments, presentations etc.
- Work-based training
- All forms of assessment

Clinical and educational supervision should promote learning, reflective practice and action planning. You should use **critical reflection** to develop learning from experiences gained in the workplace, for example by considering how a situation might have been handled differently and what other knowledge would have been helpful. You should think regularly about what you are doing as you do it (Reflection in Action) and retrospectively to reflect on practice (Reflection on Action), and keep a record of this in your reflective journal. This can help to bridge the gap between theory and practice, and develop self-sufficiency and self-awareness, and skills in self evaluation and action planning.

The success of the training and the learner experience requires the commitment and enthusiasm from those in the workplace who provide the training. Departments responsible for providing training should therefore ensure that they are fully appraised of the work based components of the Diploma programme, including the required learning outcomes, competences and assessment processes. Additionally the responsibilities for mentoring and supervision should be clear. As an adult learner you have responsibility for your learning by: contributing to learning activities; taking into account feedback received from your mentor, trainer and assessor; and giving considered and constructive feedback on your experience of learning and training.

Your progress will be reviewed at least every 3 months and action plans will be agreed to address any obstacles to your progress.

5 Assessment of the Diploma

Assessments are based on evidence of knowledge and competence, and are documented in the Ecordia eportfolio. In general, knowledge will be acquired through private study and assessed by assignments, projects, professional discussion and reflective learning accounts. Competence will be gained through workplace training and assessed through workplace activities documented in your portfolio with witness statements, and formative and summative assessments in the workplace with Direct Observation of Practical / Procedural Skills (DOPS) and oral questioning.

You are required to keep a reflective diary / journal that should include accounts of both your experience of study and work, and you will be required to include reflective accounts in your portfolio.

5.1 Assessment of knowledge

For the most part the knowledge required for performance of diagnostic investigations is included in the knowledge units, and for this reason you must pass the relevant knowledge units before the summative assessment of workplace competence.

The forms of assessment are described below:

Assignments. These are pieces of written work for assessment of knowledge units. There are also assignments for documentation of knowledge and understanding of work based activities for the mandatory units.

Presentations. Usually PowerPoint, that are given to colleagues and others

Reflective accounts. These are accounts of your experience of learning and study and of your working experience. Reflective accounts of your study programme can include how you learn and how well you feel you are doing, the problems you are facing etc. Reflective accounts of workplace experience should relate to your experience of working practice, both successes and difficulties e.g. a team meeting that you organised that went well, or a problem you may have faced, how you dealt with it and what you learned from the experience.

Professional discussion. This provides a holistic approach to assessing knowledge and understanding and is useful in determining not only what and how a learner is performing, but also their analytical and decision-making abilities. Professional discussion may be undertaken in the workplace or by electronic means such as audio and video recording. A template for professional discussion can be found in Appendix C.

Knowledge units are assessed by a combination of assignments and reflective accounts and are graded as pass/action required (as described for the mandatory units). For purposes of formative assessment AHPO awards percentage grades that are independent of any final BTEC or End Point Assessment grading, and also provides optional MCQ exams for formative assessment of units 11, 64, 73, 74 and 76. The grading is rounded to A – E and is summarised in Appendix . Their purpose is to indicate to the learner their standard of knowledge and areas that may be improved. More details of the assessment guidance for the AHPO grading system can be found in Appendix B.

5.2 Assessment of competence

Competence requires both knowledge and experience. The competences required of a healthcare practitioner can be considered in two categories, generic and specific.

Generic competences are concerned with the application in the workplace of professional codes of conduct and ethics. These are stated in *Good Scientific Practice* and the required knowledge and competence is covered in the Mandatory Units.

Specific competences are those relevant to the practice of a profession or discipline, and for ophthalmic associates they are included in the Ophthalmic and Vision Science Competence Units.

Assessment of competence will take the following forms:

Workplace assessments of competence. This is undertaken with work based assessment tools that utilise observation, questioning and discussion. Workplace assessments provide both learner and assessor with regular feedback on progress and achievement. Assessment tools are used that generate evidence from which judgements about progression can be made and areas identified for learner improvement.

Work products. These are products of *your own work* and may include results of investigations and tests you have performed, tables and graphs you have prepared for an audit, critical incident reports (Datix) that you have submitted, and so forth. Competence units 75 and 77 to 80 include a **Reflective log of test / procedure outcomes.** These include printouts of test results and/or documentation of test outcomes in the patient's record, and are confirmed by a witness statement.

Witness statements from colleagues, supervisors, managers and others. A template for witness statements can be found in Appendix D.

Workplace assessments take two forms, and both should be documented in your portfolio:

- **Formative assessments.** You will be observed undertaking tasks or skills by your workplace mentor or another member of staff competent in the area of practice.
- **Summative assessments.** You will be observed undertaking tasks or skills by your assessor. Summative assessments will be undertaken after you have completed the relevant knowledge units.

The tool used for workplace assessments for the BTEC Diploma is Direct Observation of Practical / Procedural Skills (DOPS) and oral questioning. Observed Clinical Event (OCE) and Case Based Discussion (CbD) may be used for the Apprenticeship End Point Assessment. Further information about the assessment tools and assessment templates can be found in Appendix E.

With each workplace assessment of practice, whether formative or summative, you should discuss the outcome with your mentor or assessor, identify strengths and areas that could be improved, and agree an action plan to achieve that improvement.

5.3 Assessment grading

All work presented for the mandatory units, and reflective accounts for all categories of units are assessed as very good/ good/ satisfactory/ unsatisfactory to give the learner feedback as to the quality of their work, with a final grading as competent/ not yet competent. Learners can resubmit work until competence is achieved. Details of grading criteria and a template for the assessment can be found in Appendix A.

Assessment of work for the Generic and Ophthalmic & Vision Science knowledge units is graded as for the mandatory units. AHPO also provides *indicative percentage marking and grading.* This is for purposes of formative assessment and to prepare the learner for the End Point Assessment, and is

independent of any external BTEC or End Point Assessment grading. Details of the AHPO grading scheme can be found in Appendix B.

Assessment of the competence units is graded as competent/ not yet competent. Indicative percentage grades can also be given for summative assessments of competence to prepare the learner for the End Point Assessment; these indicative percentage grades are independent of any external BTEC or End Point Assessment grading. Details of the grading scheme can be found in Appendix B.

6. Plagiarism

According to the *Merriam-Webster OnLine Dictionary*, to “plagiarise” means

- 1) to steal and pass off (the ideas or words of another) as one's own
- 2) to use (another's production) without crediting the source
- 3) to commit literary theft
- 4) to present as new and original an idea or product derived from an existing source.

AHPO does not tolerate plagiarism, whether intentional or unintentional, and a learner who commits plagiarism can be charged with academic misconduct and penalised. It is important, therefore, that you understand plagiarism and how to avoid it. You can protect yourself against unintentional plagiarism by good note keeping of your source materials, by summarising, paraphrasing and quoting correctly, and by citing and referencing your sources.

Recommended citing and referencing styles for the OVS Diploma

The Harvard referencing style should be used for assignments including written work and presentations.

Further information about plagiarism and citation and referencing can be found in the Skills for Life-long Learning eBook Section 2.9.

7 AHPO Policies and Procedures

The documents listed below describe AHPO’s policies and procedures for the delivery and awarding of AHPO qualifications:

- AHPO Appeals Policy and Procedure
- AHPO Equality and Diversity
- AHPO Malpractice and Maladministration Policy
- AHPO Malpractice and Maladministration Procedure
- AHPO Reasonable Adjustments Policy
- AHPO Safeguarding and Prevent Policy
- AHPO Special Consideration Policy
- AHPO Health & Safety Policy

APPENDIX A

Assessment Criteria for assignments and presentations

Assignments and presentations that are not given a percentage grade (mandatory units and reflective accounts) are graded as competent / action required. The good / satisfactory / unsatisfactory categories are for guidance only.

	Good	Satisfactory	Unsatisfactory
Structure and presentation	Material is well organised and structured and shows logical progression. Generally clearly expressed and well presented.	Lack of adequate organisation or structure of material. Lack of clarity of expression in areas and a number of presentational errors.	Difficult to follow or interpret (poor structure and/or lack of logic). Very poor presentation. Difficulties with expression.
	Comments:		
Evidence produced by candidate. Uses own words except when quoting – <i>authenticity</i>	Evidence produced independently by candidate. If part of team effort, student's contribution can be clearly identified.	Limited evidence that work is not authentic. If part of team effort, some lack of distinction between student's contribution and that of others.	Clear evidence that work is not authentic. If part of team effort, misattribution of work of others to self.
	Comments:		
Meets assessment criteria – <i>validity and sufficiency</i>	All assessment criteria met with sufficient detail.	All assessment criteria met, some with insufficient detail.	Some assessment criteria not met, or met but most with insufficient detail.
	Comments:		
Citation and referencing	Consistent citation and referencing of most or all sources. Consistent use of Harvard reference system.	Majority of sources are cited and referenced. Some inconsistencies / deficiencies in use of Harvard reference system.	Few or no sources are cited and referenced. Harvard reference system poorly understood / used inconsistently in majority of instances.
	Comments:		
Relates knowledge and understanding to own practice	Good integration of clinical practice with knowledge of subject area. Appropriate discussion of relevant documents and learning resources.	Insufficient integration of clinical practice with knowledge of subject area. Limited discussion of relevant documents and learning resources.	Misapplication of theory to practice. Lack of reference to relevant documents and learning resources.
	Comments:		
Demonstrates self-awareness	Capacity to identify limitations and potential areas for improvement. Highlights learning related to further development of practice in the future.	Gaps in identification of limitations. More reflection on learning and practice required.	No or very limited attempts to critically appraise self/work. Limited demonstration of preparedness to change practice.
	Comments:		
Self-reflection	Good illustration of depth of insight and ability to self-reflect. Clear understanding of the issues presented.	Some discussion included, illustrating insight and ability to self-reflect. Requires further elaboration to demonstrate understanding of some issues.	No, or very limited, illustration of ability to self-reflect and lack of insight. Limited or misunderstanding of the issues discussed.
	Comments:		

APPENDIX A continued

Marking Template for assignments and presentations graded as competent / not yet competent

	Very Good	Good	Satisfactory	Unsatisfactory	Comments
Structure and presentation					
Uses own words except when quoting – <i>authenticity</i>					
Meets assessment criteria – <i>validity and sufficiency</i>					
Citation and referencing					
Relates knowledge and understanding to own practice					
Demonstrates self-awareness and reflection					
Evidence from current practice (2-3 years) - <i>currency</i>	Yes / No				
Overall Comments					
Outcome	COMPETENT / ACTION REQUIRED				

APPENDIX B

Indicative AHPO marking and grading. This is provided for purposes of formative assessment and is independent of any final BTEC or End Point Assessment grading.

1. Knowledge units: assignments and projects, MCQ examinations

Assignments and projects for knowledge units that contribute to the overall grade of the Diploma are marked according to the criteria below. Reflective accounts included in the knowledge units are graded as pass/fail and do not contribute to the grade of the unit.

Grade Letter	Mark Band %	Grade Descriptor	
A	70-100	Excellent	PASS
B	60-69	Very good/ Commendable	
C	50-59	Good/ Competent	
D	40-49	Satisfactory	
E	30-39	Marginal fail/ Weak fail	FAIL
F	0-29	Very weak fail	

Criteria for grading assignments and projects

Essential elements

- 1 **Relevance:** it directly answers the question
- 2 **Understanding** of the topic
- 3 **Evidence** of the use of appropriate material (e.g. books, journal articles, etc.)
- 4 **Organisation** of material into a coherent structure: introduction, argument and evidence, conclusion
- 5 **Clear style**, including accurate spelling, clear sentence construction and punctuation*
- 6 **References**
- 7 **Bibliography**
- 8 **Use of own words**, except where directly quoting from another source
- 9 **Language:** avoidance of inappropriate slang, racist or sexist language

*with due allowance made for students registered as dyslexic

The following features are deemed to be evidence of quality

- 1 Evaluation and analysis of a wide range of material and sources
- 2 Ability
 - to understand
 - to discuss critically abstract ideas, theories and concepts
- 3 Argument - well formulated, substantiated, and with evidence of critical and independent thought

Grading

Excellent (70-100%)

A first class assignment will typically demonstrate **excellence** in the following:

- accurate integration of a wide range of material and resources
- high level of critical analysis and independent judgement quality of arguments in response to the question
- sources fully and accurately identified
- originality of exposition or treatment

in addition to incorporating all of the elements required of all assignments (above)

Very good/ Commendable (60-69%)

There is **very good** use of **many** or **most** of the aspects outlined in the first class assignment, but certain features may be less fully realised. Thus, for example, a typical 2.1 essay will

- include a comprehensive knowledge and understanding of all relevant issues
- display a very good level of independent and critical judgement
- involve conceptual analysis in relation to certain issues of the argument
- in addition to incorporating all of the elements required of all essays (above)

Good/ Competent (50-59%)

There will be **good** use of **some** of the features of the first class assignment, although several elements will be only partially realised. Thus, for example, a typical 2.2 assignment will display some independent thought (e.g. through the use of original examples), but

- may have uneven coverage of relevant issues, with some explored in more detail than others
- may lack sustained conceptual analysis, tending to accept uncritically the principal arguments in an area
- will include most of the elements required of all assignments, but not all, for example, there may be some confusion in the use of terms
- the referencing may be inaccurate or inconsistent, there may be use of inappropriate language

Satisfactory (40-49%)

There will be a **satisfactory** use of a **limited** number of the features outlined for the first class assignment, but significant elements will be underdeveloped. Thus, for example, a typical third class assignment may

- display little evidence of independent thought and critical judgement include a partial and rather superficial coverage of the key issues lack critical analysis
- while some of the elements required of all assignments are present, they are not necessarily adequate. The assignment may display, for example, a satisfactory grasp of the topic, be relevant to the question, but it may
- it may be poorly structured
- it may include some waffle (i.e. deploying lots of words without meaning very much
- the language may lapse into colloquialism references may be inadequate and inaccurate

Marginal fail /Weak fail (30-39%)

There will be an **inadequate** use of a **significant** number of the features outlined for the first class assignment. A typical Fail assignment may be characterised by the following:

- major inaccuracies and omissions
- offers unsubstantiated opinion
- demonstrates little evidence of critical judgement
- there may be an attempt to respond to the question, but the assignment as a whole will not answer it
- may be badly written
- there may be limited references
- there may be little evidence of reading

Very weak fail (0-29%)

There will be an **inadequate** use of **most** of the features outlined for the first class assignment. A typical week fail assignment may be characterised by the following:

- major inaccuracies and omissions
- offers unsubstantiated opinion
- demonstrates little or no evidence of critical judgement

- there is little or no attempt to respond to the question
- will be badly written
- there may be few or no references
- there may be little or no evidence of reading

2. Competence units

Candidates will have formative and summative assessments. The indicative grading that will be documented in the transcript will be from the summative assessment. Each area is graded as below expectations, borderline, meets expectations, or above expectations, and candidates must achieve a minimum of borderline for each area of the assessment. Marks are awarded according to the scale below:

	Below expectations	Borderline	Meets expectations	Above expectations
Mark for each area	1	2	3	4

The marks for each area of the assessment will be summed and expressed as a percentage of the total marks that can be attained. Thus for a Direct Observation of Practical / Procedure Skills (DOPS) with 10 areas of assessment, a learner who was borderline in two areas, met expectations in four areas and was above expectations in two areas would receive a total of 24 of 40 marks, or 60%. Grade descriptors for the assessment are outlined in the table below:

Mark Band %	Grade Descriptor
85-100	Highly competent
65-84	Competent
50-64	Borderline competent
0-49	Not yet competent

4. Final grading for the award of BTEC OVS Diploma

The classification of the BTEC Level 4 Diploma in Healthcare Science / Ophthalmic and Vision Science will be Distinction / Merit / Pass / Fail, as illustrated in the table below. The units or sections of units that are graded as pass / fail only are excluded from the calculation of the award classification. The contribution of the grade of each unit to the award classification will be calculated according to the credit value of the unit i.e. the grading achieved for a 40 credit unit will contribute proportionally more than that of a 15 credit unit.

Grade Letter	Mark Band %	Grade Descriptor	Award classification		
			Honours degree*	Certificate or Foundation Degree	
A	70-100	Excellent	PASS	First 1	Distinction
B	60-69	Very good/ Commendable		Upper Second 2:1	Merit
C	50-59	Good/ Competent		Lower Second 2:2	Pass
D	40-49	Satisfactory		Third 3	
E	30-39	Marginal fail/ Weak fail	FAIL	Fail	Fail
F	0-29	Very weak fail			

*Included for comparison

APPENDIX C

Professional Discussion template

Candidates should be informed of the format the discussion will take. Assessors should agree a list of areas/points (as per an agenda) they wish their candidate to cover. It is recommended that candidates receive a written copy of these points in advance of the discussion.

Qualification		Candidate	
Assessor		Date and time of discussion	

<p>Record of the Professional Discussion. Please include:</p> <ul style="list-style-type: none"> • people present • what you discussed/questions/answers • what the candidate did well • how the candidate could improve 	<p>Indicate which of the units and assessment criteria have been covered. Briefly explain how they have been addressed</p>

Assessor Signature		Date	
Candidate Signature		Date	

APPENDIX D

Witness statement / Written testimony template

Witness statement

A witness statement is used to provide a written record of learner performance against targeted assessment criteria. Someone other than the assessor of the qualification/unit may complete it. This may be an assessor of a different qualification or unit, a work placement supervisor, a technician, learning resources manager or anyone else who has witnessed the performance of the learner against given assessment criteria. It can be someone who does not have direct knowledge of the qualification, unit or evidence requirements as a whole, but who is able to make a professional judgement about the performance of the learner in the given situation.

The quality of witness statement is greatly improved, and enables the assessor to judge the standard and validity of performance against the assessment criteria, if:

- the witness is provided with clear guidance on the desirable characteristics required for successful performance
- the evidence requirements are present on the witness testimony (this may need further clarification for a non-assessor)
- the learner or witness also provides a statement of the context within which the evidence is set.

Please note:

A witness statement is a source of evidence and **does not** confer an assessment decision. The assessor must:

- consider all the information in the witness statement
- note the relevant professional skills of the witness to make a judgement of performance
- review supporting evidence when making an assessment decision
- review the statement with the learner to enable a greater degree of confidence in the evidence
- be convinced that the evidence presented by the witness statement is valid, sufficient and authentic.

When a number of witnesses are providing testimonies:

- it may be helpful to collect specimen signatures
- all witness testimonies should be signed and dated by the witness
- information of their job role/relationship with the learner should also be recorded.

These details add to the validity and authenticity of the testimony and the statements made in it.

APPENDIX D continued: Witness statement

Learner name:			
Qualification:			
Unit number & title:			
Description of activity undertaken (please be as specific as possible)			
Assessment criteria (for which the activity provides evidence)			
How the activity covers the requirements of the assessment criteria, including how and where the activity took place (this does not confirm achievement of assessment criteria or confer an assessment decision)			
Witness name:		Job role:	
Witness signature:		Date:	
Learner name:			
Learner signature:		Date:	
Assessor name:			
Assessor signature:		Date:	

APPENDIX E

Summary of the Work Based Assessment Tools

Assessment Tool	Direct Observation of Practical Skills (DOPs)	Observed Clinical Event (OCE) <i>(previously known as mini-cex)</i>	Case Based Discussion (CbD)	Competency Log
Purpose	Observation Assessment of a practical skill or procedure including, where relevant, interaction with a patient. Learner and assessor feedback is generated, learning needs identified and an action plan agreed.	Observation Observation and assessment of a clinical encounter or interaction with colleagues with respect to an aspect of patient care. The format and approach is similar to DOPs but takes place with a patient present or when the learner is working with clinical colleagues.	Conversation/ discussion A clinical case is used as the basis for a discussion to assess the learner’s application of knowledge and understanding of an aspect of an activity they have been part of e.g. professional practice, communication, leadership, science, the role of healthcare science in patient care.	Record of Attainment To demonstrate achievement of each work based competence and clinical experiential learning (CEL) activity.
Method	The assessor observes a practical activity and facilitates learner centred feedback either during or immediately following the observation. The learner generates an action plan and agrees this with the assessor.	The assessor observes a clinical activity and facilitates learner centred feedback either during or immediately following the observation. The learner generates an action plan and agrees this with the assessor.	A discussion between the learner and assessor with respect to any aspect of a case including professional practice / good scientific practice.	An assessor reviews the evidence provided by the learner to support achievement of each competence and CEL. The expectation is that as the learner progresses the competency log will demonstrate an evidential base of achievement / progression.

APPENDIX E

DOPS, CBD and OCE templates

Direct Observation of Practical/Procedural Skills Template (DOPS)

Learner name:	ID confirmed: yes / no
Assessed by (name):	Job title or Professional role:
assessor / mentor / trainer / other (circle)	If other, please state

Unit title:					
Procedure / NOS:					
Prerequisite units completed:		yes / no	If no, reason:		
Number of times procedure performed by learner (excluding assessments) (please circle):		1 - 4	5 - 9	10 - 20	>20
Formative assessment No.: (consecutive numbering of assessments)		Summative assessment No.: (consecutive numbering of assessments)			

Scope / range of test / procedure: (as specified e.g. adult / child, vision impairment, communication difficulty, ocular condition etc.)
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	The learner should be able to:	C/Q/NYC	Comments
Preparation	Establish professional relationship with patient, identifying and addressing any special needs, analysing patient needs and maintaining patient confidentially.		
	Minimise risks and hazards including the control of infection in accordance with Health and Safety policies.		
	Ensure that all the required equipment is working correctly and safely.		
	Use effective communication skills within the healthcare environment adapting communication style and language to meet the needs of the listener.		
	Review a referral letter, retrieve the medical notes, greet patient, identify self, and check patient ID.		
	Explain the procedure to the patient and gain informed consent.		
Performance	List elements of procedure to be assessed •		
Documentation	Accurately record all information, and sign, date, and state position held.		
Further action	Notify the appropriate member of the multidisciplinary team if unexpected or clinically significant information, and record actions in patient record.		
Professionalism	Reflect on and document practice and commitment to continuing professional development.		

	Keep professional, technical and scientific knowledge and skills up to date.		
	Plan and prioritise commitments and goals using a range of organisation and planning tools.		
	Comply with relevant guidance and laws to include those relating to <ul style="list-style-type: none"> - Your scope of practice - Research Ethics and Governance - Patient Confidentiality - Data Protection - Equality and Diversity - Use of Chaperones - Informed Consent 		
	Work constructively and effectively as a member of a multi-disciplinary team.		

Please grade the following areas using the scale below	Below expectations	Borderline	Meets expectations	Above expectations	Unable to comment. ¹
1. Understands scientific principles of procedure including underpinning basic science					
2. Has read, understands and follows the appropriate SOP's, risk and COSHH assessments, and any other relevant health and safety documentation					
3. Understands and applies the appropriate internal and external quality control associated with the procedure					
4. Understands the risks associated with items of equipment and uses them appropriately					
5. Accurately completes associated documentation					
6. Output meets accepted laboratory/professional standards					
7. Carries out the procedure within appropriate time frame					
8. Is aware of the limitations of the test					
9. Demonstrates awareness of the limits of responsibility and when to seek advice					
10. Professionalism					

¹ Please mark this if you have not observed the behaviour

FEEDBACK AND DOCUMENTATION OF LEARNING NEEDS	AGREED ACTION
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Outcome	Satisfactory Unsatisfactory	Date of assessment		Time taken for assessment:	
Signature of Assessor		Signature of Learner		Time taken for feedback:	

Case Based Discussion Template (not used for BTEC Diploma but may be used for End Point Assessment)

Learner name:	ID confirmed (circle): yes / no
Assessed by (name):	Job title or Professional role:
assessor / mentor / trainer / other (circle)	If other, please state:

Unit title (if relevant):	
Procedure / NOS (if relevant):	
Description of case / scenario:	
Formative assessment No.: (consecutive numbering of assessments)	Summative assessment No.: (consecutive numbering of assessments)

Please grade the following areas using the scale below	Below expectations	Borderline	Meets expectations	Above expectations	Unable to comment. ¹
1. Understands clinical and/or scientific principles relevant to scenario					
2. Can discuss relevant health and safety issues					
3. Can discuss the procedures used to obtain the results					
4. Can discuss the quality control procedures to ensure the result is accurate					
5. Demonstrates a knowledge of relevant 'Best Practice' guidelines and other policies relevant to the scenario					
6. Can discuss the significance of routine patient results with reference to the reason for referral					
7. Is aware of, and can use as required, appropriate resources to aid in the interpretation of results					
8. Is aware of importance of audit trail and can complete audit trail accurately					
9. Demonstrates awareness of the limits of responsibility and when to seek advice					
10. Professionalism					

1. Please mark this if you have not observed the behaviour

FEEDBACK AND DOCUMENTATION OF LEARNING NEEDS	AGREED ACTION

Outcome	Satisfactory Unsatisfactory	Date of assessment		Time taken for assessment:	
Signature of Assessor		Signature of Learner		Time taken for feedback:	

Observed Clinical Event Template (not used for BTEC Diploma but may be used for End Point Assessment)

Learner name:	ID confirmed (circle): yes / no
Assessed by (name):	Job title or Professional role:
assessor / mentor / trainer / other (circle)	If other, please state:

Unit title (if relevant):	
Procedure / NOS (if relevant):	
Brief description of output and focus of scenario discussed:	
Formative assessment No.: (consecutive numbering of assessments)	Summative assessment No.: (consecutive numbering of assessments)

Please grade the following areas using the scale below	Below expectations	Borderline	Meets expectations	Above expectations	Unable to comment. ¹
1. History Taking <i>Does the learner obtain the information required prior to undertaking a procedure from the patient or a clinical colleague?</i>					
2. Communication Skills <i>e.g. Does the learner use language appropriate to the situation (verbal and/or body language) when explaining or discussing an aspect of clinical care (test results, diagnostic procedure), does he/she check the understanding of the patient or their colleague?</i>					
3. Clinical Examination Skills <i>e.g. Does the learner undertake a clinical skill such as performing a diagnostic test appropriately and accurately?</i>					
4. Clinical Judgement <i>e.g. is the procedure correct for the required outcome?</i>					
5. Scientific judgement: <i>e.g. Was the choice of equipment appropriate for the required outcome, has it been correctly calibrated and any necessary settings correctly applied?</i>					

6 Professionalism <i>e.g. Did the learner introduce themselves and their role or did they discuss the procedure/result with a colleague using appropriate language, considering any patient confidentiality or ethical issues?</i>					
7. Organisation and Efficiency: <i>e.g. Was the learner well organised and efficient ensuring all record keeping was appropriate and accurate, did they keep to time and ensuring accurate recording of results, did they process the results in a timely fashion?</i>					
8. Overall Clinical Care <i>e.g. Did the learner show respect, empathy and compassion for the patient and/or recognise the importance of the procedure/test within the care pathway for the patient or colleagues where the test contributes to a diagnosis, treatment or management?</i>					

¹1. Please mark this if you have not observed the behaviour

FEEDBACK AND DOCUMENTATION OF LEARNING NEEDS	AGREED ACTION

Outcome	Satisfactory Unsatisfactory	Date of assessment		Time taken for assessment:	
Signature of Assessor		Signature of Learner		Time taken for feedback:	

APPENDIX F: GLOSSARY

Term	Definition
Clinical Experiential Learning	The cyclical process linking concrete experience with abstract conceptualisation through reflection and planning.
Clinical Experiential Learning Outcomes	The activities that the learner will undertake to enable and facilitate their learning in the workplace.
Competence	The ability of an individual to perform a role consistently to required standards combining knowledge, understanding, skills and behaviour.
Competence statements	Active and outcome-based statements that provide a further breakdown of the Learning Outcomes –reflecting what the learner will be able to do in the workplace at the end of the programme. Each competence should linked back to the numbered Learning Outcomes.
Curricula	An outline of the expected educational outcomes across a subject area The learning that is expected to take place during the Scientist Training Programme described in terms of knowledge, skills and attitudes,
Division	A high level description of an area of practice within healthcare science. There are three divisions: Life Sciences, Physical Sciences and Biomedical Engineering and Physiological Sciences.
Domains of Learning	Cognitive (knowledge and intellectual skills), affective (feelings and attitudes), interpersonal (behaviour and relationships with others) and psychomotor (physical skills)
Feedback	Specific information about the comparison between a learner’s observed performance and a standard, given with the intent to improve the learners performance (<i>van de Ridder JMM, Stokking KM, McGaghie WC and ten Cate OT. What is feedback in clinical education? Medical Education 2008: 42: 189–197</i>)
Good Scientific Practice	Non-statutory guidance on the minimum requirements for good practice for the healthcare science workforce.
Key Learning Outcome	A defined learning outcome linked to relevant competence(s) within the workplace Learning Guide
Knowledge and Understanding	The knowledge and understanding that must be applied in the work place to achieve the stated competence.
Learning Framework	The specification for work based learning contained within the Learning Guide
Learning Outcome	A high level, outcome based statement that describes what a learner will be able to do at the end of the unit
Unit	A distinct set of learning outcomes and competences that form part of a programme. Units may be rotational, specialist, elective or professional practice and can be combined to meet the needs of specific programmes
Unit Aim	The overall objective of a work based learning unit – defining the intended learning achievements of the learner. The Aim works together with the ‘Scope’ statement to define the overall objectives and scope of the unit
Unit Scope	A statement within work based learning units that defines the range/limits/ of the learning undertaken by the learner in a unit – patients/investigations/equipment/modalities etc.)
Phase	An indication of type of unit within a learning guide i.e. rotation, specialist or elective

Practical Skill	A cognitive, psychomotor, physical or communicative ability that supports performance of required role.
Programme	The package of learning, teaching assessment and quality assurance leading to an award.
Specialism	A focused area of practice within a theme of healthcare science.
Theme	A cluster of related specialisms within a division of healthcare science.
Work based learning	Learning that takes place in a real work setting and involves the application of academic learning to real work activities
Work Performance	The requirements of satisfactory and consistent demonstration of competence in specified functions for a work role.
Work place	A real work setting in which the learner can apply learning.