

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

Specification

BTEC Specialist qualifications

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Issue 2

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This specification is Issue 2. Key changes are sidelined. We will inform centres of any changes to this issue. The latest issue can be found on the Edexcel website:
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BTEC Specialist qualification titles covered by this specification

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

This qualification has been accredited to the Qualifications and Credit Framework (QCF) and is eligible for public funding as determined by the Department for Education (DfE) under Sections 96 and 97 of the Learning and Skills Act 2000.

The qualification title listed above features in the funding lists published annually by the DfE and the regularly updated website www.education.gov.uk/. The QCF Qualifications Accreditation Number (QAN) should be used by centres when they wish to seek public funding for their learners. Each unit within a qualification will also have a QCF unit code.

The QCF qualification and unit codes will appear on learners' final certification documentation.

The Qualification Accreditation Number for the qualification in this publication is:

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) 500/9579/1

This qualification title will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel.

Welcome to the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

We are delighted to introduce our new qualification, which will be available for teaching from September 2010. This qualification has been revised and conforms with the requirements of the new QCF (Qualifications and Credit Framework).

Focusing on the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) has been developed in the Pharmacy sector to:

- provide education and training for pharmacy employees
- give opportunities for pharmacy employees to achieve a nationally recognised Level 2 vocationally specific qualification
- give full-time learners the opportunity to enter employment in the pharmacy sector or to progress to vocational qualifications such as the Edexcel BTEC Level 3 Diploma in Pharmaceutical Science
- give learners the opportunity to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life.

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) qualification has been designed for those wishing to work in a pharmacy setting, either in the community or in a non-community setting. The qualification may be taken as a stand-alone qualification or, when taken in conjunction with the Edexcel Level 2 NVQ Certificate in Pharmacy Service Skills (QCF), will contribute to the Level 2 Apprenticeship in Pharmacy as specified by the Sector Skills Council, Skills for Health. Learners could also progress to the Edexcel BTEC Level 3 Diploma in Pharmaceutical Science (QCF).

Straightforward to implement, teach and assess

Implementing BTECs couldn't be easier. They are designed to easily fit into your curriculum and can be studied independently or alongside existing qualifications, to suit the interests and aspirations of learners. The clarity of assessment makes grading learner attainment simpler.

Engaging for everyone

Learners of all abilities flourish when they can apply their own knowledge, skills and enthusiasm to a subject. BTEC qualifications make explicit the link between theoretical learning and the world of work by giving learners the opportunity to apply their research, skills and knowledge to work-related contexts and case studies. These applied and practical BTEC approaches give all learners the impetus they need to achieve and the skills they require for workplace or education progression.

Recognition

BTECs are understood and recognised by a large number of organisations in a wide range of sectors. BTEC qualifications are developed with key industry representatives and Sector Skills Councils (SSC) to ensure that they meet employer and learner needs — in this case, the Skills for Health SSC. Many industry and professional bodies offer successful BTEC learners exemptions for their own accredited qualifications.

All you need to get started

To help you off to a flying start, we've developed an enhanced specification that gives you all the information you need to start teaching BTEC. This includes:

- a framework of equivalencies, so you can see how this qualification compares with other Edexcel vocational qualifications
- information on rules of combination, structures and quality assurance, so you can deliver the qualification with confidence
- explanations of the content's relationship with the learning outcomes
- guidance on assessment, and what the learner must produce to achieve the unit.

Don't forget that we're always here to offer curriculum and qualification updates, local training and network opportunities, advice, guidance and support.

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What are BTEC Level 2 Specialist qualifications?

BTEC Specialist qualifications are qualifications at Entry Level to Level 3 in the Qualifications and Credit Framework (QCF) and are designed to provide specialist work-related qualifications in a range of sectors. They give learners the knowledge, understanding and skills that they need to prepare for employment. The qualifications also provide career development opportunities for those already in work. Consequently they provide a course of study for full-time or part-time learners in schools, colleges and training centres.

BTEC Specialist qualifications provide much of the underpinning knowledge and understanding for the National Occupational Standards for the sector, where these are appropriate. They are supported by the relevant Standards Setting Body (SSB) or Sector Skills Council (SSC). A number of BTEC Specialist qualifications are recognised as the knowledge components of Apprenticeships Frameworks. BTEC Specialist qualifications provide much of the underpinning knowledge and understanding for the National Occupational Standards for the sector, where these are appropriate. They are supported by the relevant Standards Setting Body (SSB) or Sector Skills Council (SSC). A number of BTEC Specialist qualifications are recognised as the knowledge components of Apprenticeships Frameworks. They attract achievement and attainment table points that equate to similar-sized general qualifications.

On successful completion of a BTEC Specialist qualification, learners can progress to or within employment and/or continue their study in the same, or related vocational area.

Care needs to be exercised when registering learners as the titling conventions and titles for the revised QCF versions of the BTEC Level 2 Firsts and BTEC Level 3 Nationals have changed.

The QCF is a framework which awards credit for qualifications and units and aims to present qualifications in a way that is easy to understand and measure. It enables learners to gain qualifications at their own pace along flexible routes.

There are three sizes of qualification in the QCF:

- Award (1 to 12 credits)
- Certificate (13 to 36 credits)
- Diploma (37 credits and above).

Every unit and qualification in the framework will have a credit value.

The credit value of a unit specifies the number of credits that will be awarded to a learner who has achieved the learning outcomes of the unit.

The credit value of a unit is based on:

- one credit for those learning outcomes achievable in 10 hours of learning
- learning time – defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria.

The credit value of the unit will remain constant in all contexts, regardless of the assessment method used for the qualification(s) to which it contributes.

Learning time should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place.

Edexcel BTEC Level 2 Certificate

The Edexcel BTEC Level 2 Certificate offers an engaging programme for those who are clear about the vocational area they want to learn more about. These learners may wish to extend their programme through the study of a related GCSE, a complementary NVQ or other related vocational or personal and social development qualification. These learning programmes can be developed to allow learners to study complementary qualifications without duplication of content.

For adult learners, the Edexcel BTEC Level 2 Certificate can extend their knowledge and understanding of work in a particular sector. It is a suitable qualification for those wishing to change career or move into a particular area of employment following a career break.

Key features of the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) has been developed to give learners the opportunity to:

- engage in learning that is relevant to them and which will provide opportunities to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life
- achieve a nationally recognised Level 2 vocationally-related qualification
- progress to employment in a particular vocational sector
- progress to related general and/or vocational qualifications.

National Occupational Standards

Where relevant, Edexcel BTEC Level 2 qualifications are designed to provide some of the underpinning knowledge and understanding for the National Occupational Standards (NOS), as well as developing practical skills in preparation for work and possible achievement of NVQs in due course. NOS form the basis of National Vocational Qualifications (NVQs). Edexcel BTEC Level 2 (QCF) qualifications do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context.

Each unit in the specification identifies links to elements of the NOS in *Annexe C*.

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) relates to the following NOS:

PHARM 01:	Assist with the provision of a pharmacy service to meet individual needs
ENTO HSS1:	Make sure your own actions reduce risks to health and safety
HSC Unit 241:	Contribute to the effectiveness of teams
PHARM 05:	Assist in the sale of medicines and products
PHARM 07:	Receive prescriptions from individuals
PHARM 09:	Assemble prescribed items
PHARM 12:	Order pharmaceutical stock
PHARM 13:	Receive pharmaceutical stock
PHARM 14:	Maintain pharmaceutical stock
PHARM 15:	Issue pharmaceutical stock
PHARM 16:	Assist in the manufacture and assembly of medicinal products
PHARM 18:	Prepare aseptic products
PHARM 21:	Prepare documentation, materials and other items for the preparation of aseptic products
PHARM 22:	Assist in the preparation of documentation, materials and other items for manufacture and assembly of medicinal products
PHARM 27:	Undertake an in-process accuracy check of assembled prescribed items prior to the final accuracy check
PHARM 32:	Assist in the issuing of prescribed items

Rules of combination

The rules of combination specify the credits that need to be achieved, through the completion of particular units, for the qualification to be awarded. All accredited qualifications within the QCF have rules of combination.

Rules of combination for the Edexcel BTEC Level 2 qualification

When combining units for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF), it is the centre's responsibility to ensure that the following rules of combination are adhered to.

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

- 1 Qualification credit value: a minimum of 30 credits.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 30 credits.
- 3 All credits must be achieved from the units listed in this specification.

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) is a 30-credit and 180-guided-learning-hour (GLH) qualification that consists of three mandatory units **plus** optional units that provide for a combined total of 30 credits.

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)			
Unit	Mandatory units	Credit	Level
1	Communicating with Pharmacy Customers	5	2
2	Law, Regulation, Health and Safety in Pharmacy	5	2
3	Working in the Pharmacy Team	5	2
Unit	Optional units		
4	Ordering and Issuing Stock in the Pharmacy	5	2
5	Receiving, Storing and Maintaining Stock in the Pharmacy	5	2
6	Preparing for and Manufacture of Aseptic Products	5	2
7	Assisting in the Preparation, Manufacture and Assembly of Medicinal Products	5	2
8	Selling Over the Counter Medicines in the Pharmacy	5	2
9	Processing a Prescription	5	2
10	Assemble Prescriptions Safely	5	2

Assessment

Guidance

The purpose of assessment is to ensure that effective learning has taken place to give learners the opportunity to:

- meet the standard determined by the assessment and grading criteria and
- achieve the learning outcomes.

All the assignments created by centres should be reliable and fit for purpose, and should be built on the unit assessment and grading criteria. Assessment tasks and activities should enable learners to produce valid, sufficient and reliable evidence that relates directly to the specified criteria. Centres should enable learners to produce evidence in a variety of different forms, including performance observation, presentations and posters, along with projects, or time-constrained assessments.

Centres are encouraged to emphasise the practical application of the assessment and grading criteria, providing a realistic scenario for learners to adopt, and making maximum use of practical activities. The creation of assignments that are fit for purpose is vital to achievement and their importance cannot be over-emphasised.

The assessment and grading criteria must be clearly indicated in the assignments briefs. This gives learners focus and helps with internal verification and standardisation processes. It will also help to ensure that learner feedback is specific to the assessment criteria.

When designing assignments briefs, centres are encouraged to identify common topics and themes. A central feature of vocational assessment is that it allows for assessment to be:

- current, ie to reflect the most recent developments and issues
- local, ie to reflect the employment context of the delivering centre
- flexible to reflect learner needs, ie at a time and in a way that matches the learner's requirements so that they can demonstrate achievement.

Unit grading

All units within this qualification are internally assessed. The qualification is criterion referenced, based on the achievement of all the specified learning outcomes.

Each unit within the qualification has specified assessment criteria and grading criteria which must be used. A summative unit grade can be awarded at pass, merit or distinction:

- to achieve a 'pass' a learner must have successfully completed **all** the pass criteria
- to achieve a 'merit' a learner must **additionally** have successfully completed **all** the merit criteria as well as the pass criteria
- to achieve a 'distinction' a learner must **additionally** have successfully completed **all** the distinction criteria as well as the merit and pass criteria.

Overall qualification achievement

Learners who achieve the minimum eligible credit value specified by the rule of combination will achieve the qualification at pass grade, ie the qualification overall is not graded and is either pass or fail.

In the Edexcel BTEC Level 2 Specialist qualifications each unit has a credit value which specifies the number of credits that will be awarded to a learner who has achieved the learning outcomes of the unit. This has been based on:

- one credit for those learning outcomes achievable in 10 hours of learning time
- learning time being defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria
- the credit value of the unit remaining constant regardless of the method of assessment used or the qualification to which it contributes.

Quality assurance of centres

Edexcel BTEC Level 2 qualifications provide a flexible structure for learners enabling programmes of varying credits and combining different levels. For the purposes of quality assurance, all individual qualifications and units are considered as a whole.

Centres delivering the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) must be committed to ensuring the quality of the units and qualifications they deliver, through effective standardisation of assessors and verification of assessor decisions. Centre quality assurance and assessment is monitored and guaranteed by Edexcel.

The Edexcel quality assurance processes will involve:

- centre approval for those centres not already recognised as a centre for BTEC qualifications
- approval for the Edexcel BTEC Level 2 qualifications and units
- **compulsory** Edexcel-provided training and standardisation for internal verifiers and assessors leading to the accreditation of lead internal verifiers via the OSCA system
- quality review of the centre verification practice
- centre risk assessment by Edexcel of overarching processes and quality standards
- remedial training and/or assessment sampling for centres identified through standardisation or risk assessment activities as having inadequate quality, assessment or internal verification processes.

Approval

Centres are required to declare their commitment to ensuring the quality of the programme of learning and providing appropriate assessment opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

Centres already holding BTEC approval are able to gain qualification approval online. New centres must complete a centre approval application.

Quality Assurance Guidance

Details of quality assurance for the Edexcel BTEC Entry to Level 3 qualifications are set out in a centre guidance which is published annually on our website (www.edexcel.com).

Programme design and delivery

Mode of delivery

Edexcel does not normally define the mode of delivery for Edexcel BTEC Entry to Level 3 qualifications. Centres are free to offer the qualifications using any mode of delivery (such as full-time, part-time, evening only, distance learning) that meets their learners' needs. Whichever mode of delivery is used, centres must ensure that learners have appropriate access to the resources identified in the specification and to the subject specialists delivering the units. This is particularly important for learners studying for the qualification through open or distance learning.

Learners studying for the qualification on a part-time basis bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors. The use of assessment evidence drawn from learners' work environments should be encouraged. Those planning the programme should aim to enhance the vocational nature of the qualification by:

- liaising with employers to ensure a course relevant to learners' specific needs
- accessing and using non-confidential data and documents from learners' workplaces
- including sponsoring employers in the delivery of the programme and, where appropriate, in the assessment
- linking with company-based/workplace training programmes
- making full use of the variety of experience of work and life that learners bring to the programme.

Resources

Edexcel BTEC Level 2 qualifications are designed to give learners an understanding of the skills needed for specific vocational sectors. Physical resources need to support the delivery of the programme and the assessment of the learning outcomes, and should therefore normally be of industry standard. Staff delivering programmes and conducting the assessments should be familiar with current practice and standards in the sector concerned. Centres will need to meet any specific resource requirements to gain approval from Edexcel.

Where specific resources are required these have been indicated in individual units in the *Essential resources* sections.

Centres should note that the General Pharmaceutical Council have set out requirements for staff delivery qualifications for trainee pharmacy technicians and pharmacy assistants. Further information is available from the General Pharmaceutical Council website: www.pharmacyregulation.org

Delivery approach

It is important that centres develop an approach to teaching and learning that supports the vocational nature of Edexcel BTEC Level 2 qualifications and the mode of delivery. Specifications give a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors and assessors need to ensure that appropriate links are made between theory and practical application and that the knowledge base is applied to the sector. This requires the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activity within the sector. Maximum use should be made of learners' experience

Additional and specialist learning

Additional and Specialist Learning (ASL) consists of accredited qualifications at the same level as, or one level above a 14-19 Diploma course of study, which have been approved under Section 96 of the Learning and Skills Act 2000. The ASL may include BTEC qualifications which are also available to learners not following a 14-19 Diploma course of study.

ASL qualifications are listed on the 14-19 Diploma Catalogue which is available on the Register of Regulated Qualifications (www.ofqual.gov.uk). The catalogue will expand over time as more qualifications are accredited and approved.

Centres undertaking, or preparing to undertake, ASL should refer regularly to the Edexcel website for information regarding additions and the 14-19 Diploma Catalogue for the latest information.

Functional Skills

Edexcel Level 2 BTEC Specialist qualifications give learners opportunities to develop and apply Functional Skills. Functional Skills are, however, not required to be achieved as part of the BTEC Specialist qualification(s) rules of combination. Functional Skills are also offered as stand-alone qualifications.

Access and recruitment

Edexcel's policy regarding access to its qualifications is that:

- they should be available to everyone who is capable of reaching the required standards
- they should be free from any barriers that restrict access and progression
- there should be equal opportunities for all wishing to access the qualifications.

Centres are required to recruit learners to BTEC qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about

the qualifications and that the qualification will meet their needs. Centres should take appropriate steps to assess each applicant's potential and make a professional judgement about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Edexcel's policy on learners with particular requirements.

Centres will need to review the entry profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to a higher level qualification.

Restrictions on learner entry

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) is accredited on the QCF for learners aged 16 and above.

In particular sectors, the restrictions on learner entry might also relate to any physical or legal barriers, for example people working in health, care or education are likely to be subject to police checks.

Access arrangements and special considerations

Edexcel's policy on access arrangements and special considerations for BTEC and Edexcel NVQ qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 1995 Disability Discrimination Act and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence.

Further details are given in the policy document *Access Arrangements and Special Considerations for BTEC and Edexcel NVQ Qualifications*, which can be found on the Edexcel website (www.edexcel.com). This policy replaces the previous Edexcel policy (Assessment of Vocationally Related Qualifications: Regulations and Guidance Relating to Learners with Special Requirements, 2002) concerning learners with particular requirements.

Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Edexcel encourages centres to recognise learners' previous achievements and experiences whether at work, home and at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be sufficient, reliable and valid.

Unit format

All units in the Edexcel BTEC Level 2 Specialist qualifications have a standard format. The unit format is designed to give guidance on the requirements of the qualification for learners, tutors, assessors and those responsible for monitoring national standards.

Each unit has the following sections.

Unit title

The unit title is accredited on the QCF and this form of words will appear on the learner's Notification of Performance (NOP).

Unit code

Each unit is assigned a QCF unit code that appears with the unit title on the National Database of Accredited Qualifications.

QCF level

All units and qualifications within the QCF will have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry Level to Level 8. The level of the unit has been informed by the QCF level descriptors and, where appropriate, the NOS and/or other sector/professional benchmarks.

Credit value

All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.

Guided learning hours

Guided learning hours are defined as all the times when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.

Unit aim

The aim provides a clear summary of the purpose of the unit and is a succinct statement that summarises the learning outcomes of the unit.

Unit introduction

The unit introduction gives the reader an appreciation of the unit in the vocational setting of the qualification, as well as highlighting the focus of the unit. It gives the reader a snapshot of the unit and the key knowledge, skills and understanding gained while studying the unit. The unit introduction also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

Learning outcomes

The learning outcomes of a unit set out what a learner is expected to know, understand or be able to do as the result of a process of learning.

Assessment and grading criteria

The assessment and grading criteria of a unit specify the standard a learner is expected to meet to demonstrate that a learning outcome, or set of learning outcomes, has been achieved. The learning outcomes and assessment and grading criteria clearly articulate the learning achievement for which the credit will be awarded at the level assigned to the unit.

Unit content

The unit content identifies the breadth of knowledge, skills and understanding needed to design and deliver a programme of learning to achieve each of the learning outcomes. This is informed by the underpinning knowledge and understanding requirements of the related National Occupational Standards (NOS), where relevant. The content provides the range of subject material for the programme of learning and specifies the skills, knowledge and understanding required for achievement of the unit.

Each learning outcome is stated in full and then the key phrases or concepts related to that learning outcome are listed in *italics* followed by the subsequent range of related topics.

Relationship between content and assessment and grading criteria

The learner should have the opportunity to cover all of the unit content.

It is not a requirement of the unit specification that all of the content is assessed. However, the indicative content will need to be covered in a programme of learning in order for learners to be able to meet the standard determined in the assessment and grading criteria.

Content structure and terminology

The information below shows the unit content is structured and gives the terminology used to explain the different components within the content.

- Learning outcome: this is shown in **bold** at the beginning of each section of content.
- *Italicised sub-heading*: it contains a key phrase or concept. This is content which must be covered in the delivery of the unit. Colons mark the end of an italicised sub-heading.

- Elements of content: the elements are in plain text and amplify the sub-heading. The elements must be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of content which must be covered in the delivery of the unit.
- 'eg' is a list of examples, used for indicative amplification of an element (that is, the content specified in this amplification could be covered or could be replaced by other, similar material).

Essential guidance for tutors

This section gives tutors additional guidance and amplification to aid understanding and a consistent level of delivery and assessment. It is divided into the following sections.

- *Delivery* – explains the content's relationship to the learning outcomes and offers guidance about possible approaches to delivery. This section is based on the more usual delivery modes but is not intended to rule out alternative approaches.
- *Assessment and grading* – gives amplification about the nature and type of evidence that learners need to produce in order to achieve the unit. This section should be read in conjunction with the assessment and grading criteria.
- *Essential resources* – identifies any specialist resources needed to allow learners to generate the evidence required for each unit. The centre will be asked to ensure that any requirements are in place when it seeks approval from Edexcel to offer the qualification.
- *Employer engagement and vocational contexts* – specific advice for units where work experience and employer engagement is recommended or required for learners
- *Indicative resource materials* – gives a list of learner resource material that benchmarks the level of study.
- *Delivery of personal, learning and thinking skills* – identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit, as well as further opportunities to develop a range of PLTS through various approaches to teaching and learning.
- *Functional Skills* – identifies the opportunities to develop a range of Functional Skills (level 2) through various approaches to teaching and learning.

Units

Unit 1:	Communicating with Pharmacy Customers	17
Unit 2:	Law, Regulation, Health and Safety in Pharmacy	35
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Unit 1: Communicating with Pharmacy Customers

Unit code: H/601/7774

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit will ensure that the learner will have the necessary knowledge and understanding to be able to communicate effectively with pharmacy customers.

Unit introduction

This unit will help learners gain the knowledge they need in order to develop communication skills to interact effectively with pharmacy customers. The unit is intended to help learners understand how different methods of communication identify and meet the needs of a range of individuals. Learners are introduced to different questions and questioning techniques used when communicating with pharmacy customers. The unit highlights different resources and formats available to assist in the provision of information and advice.

The unit aims to help learners grasp the importance of using standard operating procedures (SOPs) and working within the limits of their own role. They will learn to identify roles and responsibilities of staff when dealing with customers and how they contribute to pharmacy customer service.

Learning outcomes

On completion of this unit a learner should:

- 1 Understand the importance of effective communications with pharmacy customers
- 2 Understand the importance of identifying pharmacy customers' needs
- 3 Know how to meet pharmacy customers' needs
- 4 Know how to work within the limitations of their role.

Unit content

1 Understand the importance of effective communications with pharmacy customers

Communication: use of questions eg 2WHAM questioning techniques, open and closed questions; listening, explaining, reflecting; verbal communication; non-verbal communication; positive and negative body language; confidentiality when communicating; sensitivity; different methods of communication eg face-to-face, telephone, written, electronic, paper

Barriers to communication: physical barriers; environmental barriers eg noise, hearing impairment, sight impairment; emotional barriers eg individual perceptions, anger, fear

Customers: internal; external

Customer complaints: complaints about services; complaints about products; standard operating procedures for complaints; conflict management; recognising and minimising potential conflict eg correct way to deal with angry or upset customers

2 Understand the importance of identifying pharmacy customers' needs

Individuals: those with special requirements eg hearing impairment, visual impairment, language difficulties; those with some idea of their need; those with no idea of their need; patients' representatives

Individuals' needs: requests for information, advice, assistance, named products, healthcare advice

Identifying needs: use of questions and questioning techniques eg open and closed questions; techniques used to check individuals' understanding of what has been communicated eg clarifying, summarising

3 Know how to meet pharmacy customers' needs

Information sources: resources eg SOPs, BNF, electronic resources, patient information leaflets

Patient information: waiting time; keeping customers informed of any delays

Workplace policies and procedures: customer complaint procedures; local policies and procedures

4 Know how to work within the limitations of their role

Roles and Responsibilities of staff: pharmacist, pharmacy support staff, other colleagues; legal and ethical responsibilities; protocols, SOPs, complaints procedures, local policies, confidentiality, staff training requirements

Referral to appropriate authority: pharmacist, manager, supervisor, other healthcare professional

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the key features of effective communication with pharmacy customers [IE2]	M1 compare different methods of communication	D1 assess different barriers to communication
P2 describe how to use verbal communication within a pharmacy setting		
P3 describe how to use non-verbal communication within a pharmacy setting [IE2]	M2 explain how body language has an effect on communication	
P4 describe the possible consequences of poor communication pharmacy customers [IE5]		
P5 describe techniques managing potential conflict within a pharmacy setting [IE1, IE3, TW1, TW2, TW4, EP1, EP5, EP6]		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P6 describe what actions to take when dealing with complaints [IE1, IE3, TW1, TW2, TW3, TW4, TW5, EP1, EP4]	M3 discuss potential situations that may lead to complaints	D2 explain methods used to maintain and measure customer satisfaction
P7 describe how to identify pharmacy customers' needs [IE1, IE2, IE3, SM7]	M4 explain how to choose appropriate questions and question techniques to identify needs of customers	D3 evaluate different questions and techniques used to identify customer needs
P8 describe different types of pharmacy customers' needs [IE1, IE2, IE3]		
P9 explain the importance of correctly recognising pharmacy customers' needs [IE1, IE4]	M5 explain how to check customers' understanding of information provided	D4 assess the importance of checking customers' understanding
P10 list information sources or advice available to meet pharmacy customers' needs	M6 describe how to use different sources of information available to meet customers' needs	D5 assess the use of different sources of information available to meet customers' needs
P11 describe how to check that pharmacy customers' needs have been met [IE6, TW2, SM7]	M7 discuss how to maintain relationships with colleagues and customers	
P12 explain the roles and responsibilities of staff when dealing with pharmacy customers	M8 compare the different roles and responsibilities of members of the pharmacy team when dealing with customers	D6 evaluate different situations requiring referral to an appropriate authority.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P13 describe which requests should be referred to the pharmacist or other senior persons [IE1, IE3, IE4, EP1, TW4]	M9 discuss how to refer to the pharmacist or other senior person and the information that they would require	
P14 describe when complaints should be referred to a relevant authority, in line with organisational policy. [IE4, IE1, IE6, TW5]	M10 explain how to resolve complaints in line with organisational policies.	

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain the underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team to allow them to receive advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures (SOPs) and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out in both the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will become aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Explore verbal and non-verbal communication and different methods of communication through use of tutorials, videos, role play or workbook exercises.</p> <p>Explore barriers to communication, recognising conflict and conflict management through role play and simulated exercises.</p> <p>How to deal with customer complaints (tutorial or workbook exercise).</p> <p>Assignment 1: How to Communicate Effectively with Pharmacy Customers (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, D1, D2, D3, D4, D5, D6)</p>
<p>Learning outcome 2</p> <p>Discuss questions and techniques used to identify needs of customers (eg by means of tutorials, role play, workbooks, case studies).</p> <p>Workshop on how to check customers' understanding of the information provided.</p>
<p>Learning outcome 3</p> <p>Tutorials, workbook and research supported by self study on how to identify resources available to provide information to individuals.</p> <p>Tutorials, workbooks, research supported by self study on how to use relevant resources effectively.</p> <p>Assignment 2: How to Meet Customers' Needs Through Effective Communication (P7, P8, P9, P10, P11, M4, M5, M6, D5, D6)</p>
<p>Learning outcome 4</p> <p>Tutorial, workbook exercise or case study on working within the limits of own role.</p> <p>Tutorial, workbook exercise or case study on when to refer to the appropriate authority.</p> <p>Tutorial, workbook exercise or case study on the use of standard operating procedures when communicating with customers.</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

Most of the evidence from this unit will be generated from a series of assignments that encompass the grading criteria for all learning outcomes, although separate assignments could be used for merit and distinction criteria. There may be opportunities for learners to use evidence from work experience to prove knowledge criteria have been met. Holistic assessment should be used where appropriate and evidence could be gathered from assignments in other units within the qualification framework. Tutors should ensure that suitable assignment guidance is provided, indicating the requirements for assessment criteria. Accredited Prior Learning (APL) could be provided for learners who have recently completed a Medicine Counter Assistant qualification meeting the professional minimum requirements.

For P1, P2 and P3, learners need to explain the uses of verbal and non-verbal communication. They should be aware of the different methods of verbal and non-verbal communication and how and when to use them effectively.

M1 requires learners to extend their knowledge demonstrated for P1 and P2 by comparing the use of different methods of communication. This includes different formats that could be used, such as face-to-face or written.

Role play and case studies could provide suitable evidence for P1, P2, P3 and M1 and could be linked to other pass criteria to form an assignment allowing holistic assessment across learning outcomes.

For P4, learners need to describe the possible consequences of poor communication. Workplace assessment, case studies and test questions could be used as evidence.

To achieve M2, learners should extend their knowledge demonstrated in P1 by explaining how body language affects communication and how to use this to interpret customers' feelings. This could be demonstrated through an extension to assignments used to cover P1, P2, P3 and M1.

For D1, learners will demonstrate awareness of the different barriers to communication and show knowledge of the difference between physical and emotional barriers. Questions, case studies or written assignments could be used as evidence. This could be assessed concomitantly with evidence presented for M2.

To achieve P5, learners need to describe different techniques for managing conflict. They could use evidence from assignments covering P4 and M2, using real-life or simulated situations.

M3 requires learners to extend their knowledge by considering situations that may lead to complaints. Evidence from assignments, including case studies to cover P4, P5 and M3, could provide evidence.

For P6, learners need to describe the action they would take when dealing with complaints. This could be demonstrated through case studies or workplace assessment.

For D2, learners are required to explain different methods used to maintain and measure customer satisfaction. A separate written assignment could be used to provide additional evidence for P6 and M3.

To achieve P7, P8 and P9, learners are required to know the different individual customer needs that they may be presented with, how they can identify these and why it is important to recognise these needs. Questions in the workplace or case studies could be used to provide evidence.

M4 follows on from P7, P8 and P9. To achieve M4, learners are required to explain how they would choose appropriate questions or questioning techniques to identify the individual needs of customers. Holistic assessment could be used for M4, using the evidence from assignments for P7, P8 and P9.

For M5, learners need to be able to use the knowledge demonstrated in P7, P8 and P9 to explain how to check customers' understanding of information required. This could be assessed using evidence that covers earlier pass and merit criteria.

For D3, learners are required to evaluate different questions and techniques. This could be demonstrated through evidence from assignments for P7, P8 and P9 but could also be linked in with other distinction criteria that require learners to think about how to evaluate communication (as in D2).

For P10, learners are required to know the different sources of advice and information available to meet individual needs. This could be demonstrated through workplace assessment.

For D4, learners are required to assess the importance of checking customers' understanding of what has been communicated to them and the potential consequences of information not being understood by customers.

For M6, learners need to demonstrate how and why to use the different sources of information. This could be assessed through questioning, written examples or workplace assessment.

For D5, learners should apply the knowledge demonstrated in P10 and M6 in order to assess the use of different sources of information. This will require them to discuss when to use different sources of information or, alternatively, present their evidence through workplace assessment or case studies.

For P11, learners need to describe how to check whether a pharmacy customer's needs have been met. This could link with evidence produced for M5.

For M7, learners are required to present evidence that they understand how relationships with colleagues and customers are maintained. This could be linked to evidence for criteria related to conflict management, complaints and maintaining and measuring customer satisfaction.

For P12, learners are required to provide an explanation of the roles and responsibilities of staff when dealing with customers. This includes the generic responsibility of confidentiality. The explanation should also cover individual roles.

For M8, learners are required to extend the knowledge demonstrated through P12 in being able to compare individual roles and responsibilities of all members of the pharmacy team. Written assignments could be used or test questions and workplace evidence.

For P13, learners are required to provide evidence that they can describe which types of requests should be referred to the pharmacist or other senior persons. This could be assessed through previous evidence using real life or simulated situations.

For M9, learners need to discuss how to refer the requests identified in P13.

For D6, learners should evaluate and compare different situations requiring referral to an appropriate authority. This will require evidence reflecting a variety of different situations that the learners may be presented with, and assessment could be supported by additional questions or discussions with a workplace assessor or tutor.

To achieve P14, learners are required to describe the different types of complaints that would need to be referred to an appropriate authority and consider those that they might be able to deal with themselves. This could link to the evidence presented for P6.

For M10, learners need to explain how complaints referenced for evidence for P14 could be resolved using organisational policies and procedures. Evidence could be linked to assignments used for P14.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3 P4, P5, P6, P7 M1, M3, M4, M10 D4, D6 P8, P9, M2, M3, M4, M5 P10, P11, P12, P13, P14, M6, M8, M9, M10, D4, D5, D6 D2, D3, M7 D1, M2	How to Communicate Effectively with Pharmacy Customers	Use a variety of real-life or simulated situations/case studies, eg: Describe how to deal with a customer who is angry. <ul style="list-style-type: none"> What signs indicated to you that the customer was angry? What questions did you ask the customer in order to understand their needs? Why did you choose those questions? How did you ask them? What answers did the customer give? What was their need? Did you need to refer the customer to an appropriate person (as identified in your SOPs)? If so, who was the appropriate person and why was it necessary to refer the customer? 	Workplace evidence. Simulated exercise. Case study. Test questions. Written assignment. Written assignment. Short questions.

Criteria covered	Assignment title	Scenario	Assessment method
		<ul style="list-style-type: none"> How did you ensure that the customer was kept fully informed of your actions and why is it important to do this? What was the agreed outcome or what information did you give the customer? How did you know that the customer was satisfied with your service? Why is this important? Did you make an appropriate record of your actions in line with SOPs? <p>List three actions you took to avoid escalating the customer's anger.</p> <p>The customer was complaining about a service provided by the pharmacy.</p> <ul style="list-style-type: none"> Complete the complaints form Send a memo detailing actions require from relevant colleagues Choose the appropriate format and respond to the customer with the outcome <p>Design a form to be used by customers that will assist in the evaluation of communication by the pharmacy team.</p> <p>Assess the different physical and emotional barriers to communication.</p>	

Criteria covered	Assignment title	Scenario	Assessment method
P7, M4 P8, P9, P10, P11 M5, M6 D5	How to Meet Customers' Needs Through Effective Communication	<p>Use or real-life or simulated situations/case studies, eg:</p> <p>You are dealing with a customer who needs advice and written information about healthcare.</p> <ul style="list-style-type: none"> What information did the customer need? How did you recognise their needs? What questions did you ask the customer and what answers did they give? What resources did you use to meet the needs of the customer and why did you choose those resources? What written advice or information did you give to the customer in relation to their need? How did you know that the customer was satisfied with the information? Describe how you maintained courtesy and confidentiality towards the customer at all times. 	<p>Workplace evidence.</p> <p>Simulated exercise.</p> <p>Case study.</p>

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 5: Action and Uses of Medicines
Unit 13: Community Pharmacy Practice
Unit 14: Professional Development in Pharmacy
Unit 15: Communicating in Pharmacy
Unit 18: Pharmacy Law, Ethics And Practice

Level 2
Unit 1: Communicating with Pharmacy Customers
Unit 3: Working in the Pharmacy Team
Unit 8: Selling Over the Counter Medicines in the Pharmacy

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learner's workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

British National Formulary (Pharmaceutical Press, 2010) ISBN 9780853699279

Royal Pharmaceutical Society — *Medicines, Ethics and Practice*
(Pharmaceutical Press, current, published annually in July)

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.chemistanddruggist.co.uk	Chemist and Druggist
www.dh.gov.uk	Department of Health
www.emc.vhn.net	Electronic data sheet compendium
www.isdscotland.org	The Prescription Pricing Authority (Scotland)
www.medicines.org.uk	Medicines Guides
www.nice.org.uk	National Institute for Clinical Excellence
www.npc.co.uk	National Prescribing Centre
www.ppa.org.uk	The Prescription Pricing Authority
www.psnc.org.uk	Pharmaceutical Services Negotiating Committee
www.rpharms.com	Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	[IE1, IE2, IE3, IE4, IE5,] analysing individual needs and explaining how to communicate appropriately [IE6] managing conflict and dealing with complaints
Team workers	[TW1, TW2, TW3, TW4, TW5] communicating as part of a team [TW1, TW2, TW3, TW4, TW5] showing they know when to refer queries and complaints
Self-managers	[SM7] interacting with customers using sensitivity and building and maintaining customer relationships
Effective participators	[EP1] communicating as part of a team [EP4] able to refer queries and complaints [EP6] able to recognise and manage potential conflict.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE2] preparing and researching information for assignments
Creative thinkers	[IE2] asking questions during tutorials or in the workplace
Reflective learners	[RL3] reviewing progress with tutors and mentors
Self-managers	[SM3] organising and planning assignments and self study
Effective participators	[EP1] discussing issues with tutors and colleagues during tutorials.

Functional Skills – Level 2

Skill	When learners are ...
ICT – Using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using the internet to carry out research completing blended learning assignments word processing assignments/homework
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using a computer to produce individual learning plans using workplace systems which contain confidential information
Manage information storage to enable efficient retrieval	storing assignments electronically in files and folders
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	researching online data to assist with assignments
Select information from a variety of sources to meet requirements of a complex task	developing an understanding of the appropriate websites to use for research
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	collating various information and files appropriately for use in their work for this unit
Use appropriate software to meet the requirements of a complex data-handling task	using electronic data to produce text and tables, images and numbers in assignments or in self study
Use communications software to meet requirements of a complex task	using ICT to communicate and network with colleagues and tutors
Combine and present information in ways that are fit for purpose and audience	choosing appropriate tools to present assignments presenting information in formats requested in assignments
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	discussing how documents and presentations could be improved

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	<p>participating in discussions with mentors, tutors and colleagues</p> <p>communicating with customers and colleagues</p> <p>providing information and advice on products and healthcare</p>
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading text provided by tutors using a variety of delivery methods
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing reports and assignments.

Unit 2: Law, Regulation, Health and Safety in Pharmacy

Unit code: M/601/7776

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit will ensure that the learner will have the necessary knowledge and understanding to be able to carry out their pharmacy job role lawfully and safely.

Unit introduction

In order to practice safely and legally, it is crucial for pharmacy assistants and support staff to understand the law relating to pharmacy and the place of pharmacy within the NHS, the community, the private sector and industry. This has become even more important as pharmacy assistants and support staff assume greater responsibility and autonomy.

This unit provides the necessary knowledge and application to practice within the law and regulatory framework so that future practitioners are able to work safely, whilst acknowledging their responsibilities to patients, the public and other healthcare workers.

Learners will gain an understanding of the laws relating to, or affecting, the practice of pharmacy in the UK. Laws relating to medicines, controlled drugs and dangerous substances are covered in depth. Learners will be encouraged to relate their knowledge to their workplace to further their understanding.

Learners will also gain an understanding of the legislation relating to health and safety and pharmacy staff's responsibilities for health and safety. Learners will relate their knowledge to their workplace and will identify good, safe working practices.

Learning outcomes

On completion of this unit a learner should:

- 1 Understand the main laws relating to the delivery of a pharmacy service
- 2 Know the requirements of a pharmacy workplace health and safety
- 3 Understand the hazards and risks within the pharmacy workplace
- 4 Know how to respond to pharmacy workplace hazards and risks.

Unit content

1 Understand the main laws relating to the delivery of a pharmacy service

Current pharmacy legislation: Medicines Act - classification of medicines (POM, P, GSL), retail pharmacy businesses, regulations applying to pharmacies for the sale of medicines, registration of pharmacy premises; Misuse of Drugs Act and associated controlled drug legislation, classes of drugs, needle exchange, treatment of addicts; Poisons Act; veterinary regulations; denatured alcohol

Current pharmacy professional regulation: General Pharmaceutical Council (GPhC); standards of practice; Registered Pharmacy Business; Registration of pharmacists and pharmacy technicians; responsible pharmacist

Pharmacy staff and their roles: pharmacists; pharmacy technicians; pharmacy assistants; other healthcare professionals

2 Know the requirements of a pharmacy workplace health and safety

Current Legislation: The Health and Safety at Work Act; Manual Handling Operations; Health and Safety (Display Screen Equipment) Regulations; organisational statutory and mandatory training including infection control, fire safety, hand hygiene

Working practices: organisational codes of conduct and behaviour; all the activities, procedures, use of materials, substances or equipment and working techniques used in carrying out a work or job-related task; procedures for reporting hazards and unsafe working practices

Workplace procedures: an organisation's procedures, method statements, safe systems of work, guidelines and processes on how to behave and perform tasks in the workplace; different types of instructions eg instructions covering the use of safe working methods and equipment, the safe use of hazardous substances, smoking, eating, drinking and drugs; what to do in the event of an emergency; personal presentation

3 Understand the hazards and risks within the pharmacy workplace

Current legislation: COSHH; CHIP regulations; safety data sheets

Working practices: risk assessment; workplace standard operating procedures

Workplace procedures: organisational fire alarms and drills; major incident procedures; security policy

4 Know how to respond to pharmacy workplace hazards and risks

Current legislation: RIDDOR

Workplace procedures: organisational procedures for reporting incidences and accidents

Responsible person/people: the person or people in the organisation to whom any health, safety and welfare issues or hazards should be reported

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 outline the main pharmacy services legislation	M1 relate workplace activities to legislation requirements	D1 review workplace policies against pharmacy legislation
P2 define the key differences in the legal requirements for the different classes of medicines		
P3 describe roles, responsibilities and legal duties of the staff responsible for the pharmacy workplace		
P4 describe the impact of legislation on the pharmacy workplace [IE 4]	M2 compare different roles, responsibilities and legal duties of pharmacy staff	D2 review the pharmacy team's responsibilities
P5 identify the responsibilities and legal duties for health and safety by law for the pharmacy workplace and their own job role		
P6 describe the safe working practices that should be followed in the pharmacy workplace	M3 discuss how personal presentation and behaviour is linked to safe working practices	D3 explain examples of safe working practices in the workplace

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P7 explain why personal presentation is important in maintaining health and safety in the pharmacy workplace [RL4]		
P8 describe how personal behaviour contributes to health and safety of staff and customers in the pharmacy workplace [RL4, CT2]		
P9 define the terms 'hazards' and 'risks'	M4 match risks to potential hazards	D4 perform a risk assessment on an area of pharmacy
P10 identify the hazards which exist in the pharmacy workplace [IE4]		
P11 name the risks to the environment which may be present in the pharmacy workplace and/or job role		
P12 describe how to minimise risks [CT5]	M5 discuss the best ways to minimise risks	D5 devise an action plan from the risk assessment performed
P13 explain the importance of remaining alert to the presence of hazards in the pharmacy workplace		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P14 outline the extent and responsibility of their role in controlling risks in the pharmacy workplace	M6 describe the workplace health and safety procedures	D6 review the workplace health and safety procedures.
P15 identify which risks and hazards must be referred		
P16 outline the workplace instructions for managing risks that they are not able to deal with	M7 match workplace roles to health and safety responsibilities.	
P17 name the responsible people to whom health and safety matters should be reported		
P18 describe where and when to get additional health and safety assistance		
P19 describe how to safely use common equipment and materials in the pharmacy workplace according to manufacturers' and suppliers' instructions.		

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Learners should have access within their workplace to sufficient variety of activity in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures (SOPs) and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out both in the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them to develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will be aware of the health and safety requirements and quality assurance procedures needed to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
Learning outcome 1 Introduction to the legislation and laws associated with pharmacy. Tutorials and workbook activities to investigate roles and responsibilities. Discuss current professional pharmacy regulation. Learners research roles and responsibilities in workplace.
Learning outcome 2 Introduction to safe working practices in the pharmacy. Discuss codes of conduct and behaviour. Discuss workplace procedures for health and safety. Learners research workplace policies. Assignment 1: Legislation (P1, P2, P3, P4, P5, P6, P7, P8, P14, P15, P16, P17, P18, P19, M1, M2, M3, M6, M7, D1, D2, D3)
Learning outcome 3 Discuss hazards and risks. Introduction to legislation such as COSHH. Introduction to risk assessments. Tutor to show examples of risk assessments. Learners research for risk assessment of workplace. Group discussion on outcome of risk assessments.
Learning outcome 4 Introduction to current legislation such as RIDDOR. Tutorials, discussions, use of workbooks and/or workplace experience to investigate roles within the pharmacy and responsibilities under HASWA. Discuss the referral processes. Discuss unsafe working practices and how to deal with them. Assignment 2: Risk Assessment (P9, P10, P11, P12, P13, P17, M4, M5, D4, D5, D6)
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

P1 requires learners to be able to outline the main pharmacy legislation and should include a basic understanding of the Medicines Act.

For P2, learners need to define the differences in the legal classifications of medicines including POM, P and GSL. This can be built on the knowledge evidenced for P1 and could be evidenced by test questions on different drugs and how they are classified according to the Medicines Act.

For P3, learners need to describe the responsibilities of those in charge of a pharmacy. This will include the responsible pharmacist as well as health and safety responsibilities. This could be evidenced by the learner completing tables of different roles and responsibilities.

P4 requires learners to describe the impact of legislation on the pharmacy workplace and could be evidenced by work-based assessments.

P5 requires learners to identify their responsibilities and legal duties for health and safety and should include any workplace policies and procedures as well as the Health and Safety at Work Act. This could be evidenced, for example, by examination and explanation of a job description.

P6 requires learners to describe the safe working practices that should be followed in a pharmacy. This could be evidenced by the use of a witness testimony observing the learner working safely in the workplace.

For P7, learners need to explain why personal presentation is important with regard to health and safety.

P8 requires learners to be able to describe how personal behaviour contributes to health and safety. This should include professional requirements such as codes of conduct as well as workplace policies and procedures on behaviour in the pharmacy.

P9 requires learners to be able to define the terms 'hazard' and 'risk' and could be evidenced by test questions.

For P10, learners need to identify hazards in their workplace. This could be evidenced by a 'walk and talk' with a witness or assessor.

For P11, learners need to identify risks in their workplace and job role. This could be evidenced by a 'walk and talk' with a witness or assessor when collecting evidence for P10.

P12 requires learners to describe ways to minimise the risks identified in P11.

For P13, need to explain the importance of remaining alert to hazards in the workplace. This could be evidenced by a written report.

P14 requires learners to outline their responsibility in controlling risks at work. Learners should show they know when to refer and who to refer to.

P15 requires learners to reflect on the answers in P14 and identify which risks and hazards must be referred on.

For P16, learners need to outline the workplace policies and procedures for managing risks they are not able to deal with. This could be evidenced by a written reflection on the workplace policies and procedures.

For P17, learners need to name the responsible person to whom they should report all health and safety matters.

For P18, learners need to describe where they could get additional assistance on health and safety matters. Learners should demonstrate an awareness of workplace policies and the referral process beyond their line manager.

P19 requires learners to identify common equipment and describe how to safely use it. This could be evidenced in the workplace by a witness testimony of the learner using equipment according to manufacturers' instructions.

M1 requires learners to relate workplace activities to legislation requirements and could be evidenced by identifying activities and investigating the legislation supporting them.

To achieve M2, learners are required to compare the different job roles within pharmacy in relation to their responsibilities and legal duties. This should include reference to the responsible pharmacist.

M3 requires learners to relate personal presentation and behaviour to safe working practices. Learners should show that they understand the link between personal presentation and behaviour and safe working practices. This could be evidenced by learners being asked to comment on examples of poor presentation and behaviour and to discuss the possible consequences.

M4 requires learners to match risks to potential hazards. This could be evidenced by identification of risks from P11 and a discussion on what the potential hazard could be.

To achieve M5, learners need to discuss the most effective ways of minimising risks. It should be evident from their discussion that they are aware that some ways of minimising risks might be more effective or appropriate than others.

M6 requires learners to describe workplace health and safety procedures. This could be evidenced by a written assignment reflecting on the workplace procedures.

M7 requires learners to match workplace roles to health and safety responsibilities and could be evidenced by learners completing tables of different roles and identifying their responsibilities.

D1 requires learners to review their workplace policies against the legislation described in P1 and M1. This could be evidenced by learners producing a report.

D2 requires learners to review their pharmacy team's legal responsibilities.

For D3, learners are required to explain examples of safe working practices in their workplace. This could be evidenced by the learner writing a reflective account on a safe practice in their workplace and why they feel it meets the criteria.

D4 requires learners to perform a risk assessment on an area of their workplace such as the dispensary or stores.

D5 requires learners to devise an action plan from D4.

D6 requires learners to review their workplace health and safety procedures. This could be evidenced by the learner producing a report.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P4, P5, P6, P7, P8, P14, P15, P16, P17, P18, P19, M1, M2, M3, M6, M7, D1, D2, D3	Legislation	You have been asked by your manager to produce a training package for new staff to inform them about health and safety legislation, your workplace policies and staff responsibilities for health and safety in the pharmacy.	Presentation. Handout notes.
P9, P10, P11, P12, P13, P17, M4, M5, D4, D5, D6	Risk Assessment	You have been asked to perform a risk assessment on one area of your workplace. Undertake the assessment and identify any risks; produce a report with an action plan for the responsible person for health and safety.	Risk assessment. Report and action plan.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 14: Professional Development in Pharmacy
Unit 16: Dispensing and Supply of Medicines
Unit 18: Pharmacy Law, Ethics and Practice

Level 2
Unit 8: Selling Over the Counter Medicines in the Pharmacy
Unit 9: Processing a Prescription

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learner's workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

Applebe G E and Wingfield J — *Pharmacy Law and Ethics, Eighth Edition* (Pharmaceutical Press, 2005) ISBN 0853696047

Merrill J and Fisher J — *Pharmacy Law and Practice, Fourth Edition* (Blackwell Science, 2006) ISBN 0444522018

Royal Pharmaceutical Society — *Medicines, Ethics and Practice* (Pharmaceutical Press, current, published annually in July)

Journals

British National Formulary (Pharmaceutical Press, 2010) ISBN 9780853699279

Royal Pharmaceutical Society — *Medicines, Ethics and Practice* (Pharmaceutical Press, current, published annually in July)

Websites

www.aptuk.org.uk	Association of Pharmacy Technicians
www.dh.gov.uk	Department of Health
www.hse.gov.uk	Health and Safety Executive
www.mhra.gov.uk	Medicines and Healthcare Products Regulatory Agency
www.nhs.uk	National Health Service
www.pjonline.com	Pharmaceutical Journal Online
www.rpharms.com	Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	[IE4] researching the roles and responsibilities of staff in the workplace to find out which hazards exist in the workplace
Creative thinkers	[CT2] exploring how their personal behaviour contributes to health and safety [CT5] looking for solutions to minimise risks
Reflective learners	[RL4] assessing how their personal behaviour and presentation contributes to health and safety.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Team workers	[TW5] providing constructive feedback and support in the action plan from the risk assessment
Self-managers	[SM5] organising time and resources completing a risk assessment
Effective participators	[EP5] presenting a case for action from the risk assessment.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT to produce assignment work
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload aware of keeping their password safe and not disclosing it to others able to identify a fault and know the procedure to report it
Manage information storage to enable efficient retrieval	saving information and assignment work in a folder
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information from a variety of sources
Select information from a variety of sources to meet requirements of a complex task	accessing policies and procedures on servers
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating documentation
Use appropriate software to meet the requirements of a complex data-handling task	creating a single document that has all the information for their work
Use communications software to meet requirements of a complex task	using email or electronic portfolio to send centre-produced work to their own address creating a contact list
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	discussing how the documents can be improved

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	taking part in discussions
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing their assignments.

Unit 3: Working in the Pharmacy Team

Unit code: T/601/7777

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit will ensure that the learner will have the necessary knowledge and understanding to be able to function as a productive member of the pharmacy team.

Unit introduction

This unit considers teamwork within the pharmacy environment. In order to practice safely and legally it is crucial for pharmacy assistants and support staff to understand the law relating to pharmacy and the place of pharmacy within the NHS, the community, the private sector and industry. This has become even more important as pharmacy assistants and support staff assume greater responsibility and autonomy.

This unit gives learners the knowledge and application to practice within the legal and regulatory framework so that they are able to work safely, whilst acknowledging their responsibilities to patients, the public and other healthcare workers.

Learners will gain an understanding of the legal and ethical requirements relating to, or affecting, the practice of pharmacy in the UK. Learners will also gain an understanding of the principles that underpin effective teamworking. Finally, learners are given an opportunity to understand their strengths and weaknesses in relation to working effectively within their team and how it can contribute to the effectiveness of the pharmacy as a whole.

Learning outcomes

On completion of this unit a learner should:

- 1 Know the legal and ethical requirements relevant to work within the pharmacy team
- 2 Understand the principles that underpin effective teamwork
- 3 Know own strengths and weaknesses as part of a pharmacy team.

Unit content

1 Know the legal and ethical requirements relevant to work within the Pharmacy team

Codes of practice and conduct: Code of Ethics for Pharmacists and Pharmacy Technicians; Code of Conduct for pre-registration trainee Pharmacy Technicians; Code of Conduct for pre-registration Pharmacists; Code of conduct for Pharmacists

Current legislation: Data Protection Act; Freedom of Information Act; Disability Discrimination Act; Equal Opportunities Act; Human Rights Act

Organisational procedures: standard operating procedures (SOPs); organisational policies and procedures relating to disciplinary procedures, grievance procedures, complaints procedures, appraisal and performance review procedures

2 Understand the principles that underpin effective teamwork

Individual styles of interaction: team styles models eg Belbin's team styles, Myer-Briggs model

3 Know own strengths and weaknesses as part of a pharmacy team

Strengths and weaknesses: strengths, weaknesses, opportunities and threats, (SWOT) analysis, personal strengths, personal weaknesses, self-awareness, team SWOT analysis

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 identify the codes of practice and conduct that provide standards and guidance to pharmacy team members [IE4]	M1 explain why it is important to adhere to professional codes of conduct and organisational policies and procedures	D1 review organisational policies against professional codes of conduct and current legislation
P2 describe current legislation and organisational procedures relating to accessing records, storage and retrieval of information (including data protection) and teamworking [IE4]		
P3 describe how to apply organisational policies and procedures to individual services and to relationships within the pharmacy team		
P4 state why it is important to adhere to organisational procedures at all times		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P5 outline legislation and organisational procedures on equality, diversity, discrimination and rights when working in a team	M2 explain why pharmacy practice needs to be in line with the legislation and organisational policies and procedures relating to pharmacy	
P6 state the key features of effective teamwork for a pharmacy team		
P7 explain how individual styles of interaction impact on teamwork [CT1]		
P8 describe the potential impact of poor teamwork in a pharmacy team: <ul style="list-style-type: none"> • on staff • on the customer • on the organisation [CT1]	M3 explain why there is a need for a complaints procedure	D2 evaluate your organisation's complaints procedure
P9 describe techniques for overcoming problems when interacting with the pharmacy team	M4 reflect on how effectively own team works together	D3 discuss ways in which own team could work together more effectively
P10 explain the organisation's policy and procedure for handling complaints		
P11 work within the limits of own competence and authority		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P12 identify own strengths and weaknesses as an individual pharmacy worker [RL1]	M5 perform a personal SWOT analysis	D4 perform a team SWOT analysis identifying areas where the team could improve
P13 identify own strengths and weaknesses as a pharmacy team member [RL1]		
P14 outline team-related development and learning opportunities available [RL1]		

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain the underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures (SOPs) and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out in both the training laboratory and the work environment before starting any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will be aware of the health and safety requirements and quality assurance procedures needed to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
Learning outcome 1 Introduction to the legislation and laws associated with pharmacy. Tutorials and use of workbooks to investigate roles and responsibilities. Discuss current professional pharmacy regulations. Discuss codes of conduct and behaviour. Learners research roles and responsibilities in workplace. Assignment 1: Legislation in Pharmacy (P1, P2, P4, P5, P10, P11, M1, M2, M3, D1, D2)
Learning outcome 2 Introduction to customer service. Discuss complaints procedures. Tutorials and use of workbooks experience to investigate roles and responsibilities. Learners research customer service problems in the workplace.
Learning outcome 3 Introduction to the principles of teamwork. Group discussion on styles of interaction. Personal study time and research.
Learning outcome 4 Introduction to self-awareness. Discussion of SWOT analysis. Learners to research team styles in the workplace. Personal study time and research. Assignment 2: Teamworking and SWOT Analysis (P3, P6, P7, P8, P9, P12, P13, P14, M4, M5, D3, D4)
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

For P1, learners need to list the codes of practice, conduct and organisational policies that inform the standards to which pharmacy staff are required to work. This could be evidenced by learners producing a flowchart or table identifying the relevant professional, organisational policies and procedures.

For P2, learners need to describe current legislation and organisational procedures relating to working in a pharmacy. This could be evidenced with P1 by means of a flowchart or table detailing current legislation and procedures.

For P3, learners need to describe how organisational policies and procedures for individual services are used within the team. This could be combined with the evidence for P4 by learners producing a diagram, a poster, written assignment or answering test questions.

For P4, learners need to state why it is important to adhere to organisational procedures. This could be combined with evidence for P3.

For P5, learners are required to outline rights relating to equality, diversity and discrimination. This could be evidenced by learners producing a poster, a written assignment or answering test questions.

For P6, learners need to state the key features of effective teamwork for pharmacy and this could be evidenced as part of an assignment for P5.

For P7, learners need to explain individual styles of interaction and how they might affect teamworking. This could be evidenced by a professional discussion or a personal statement. Learners should provide reasons and/or evidence to support their explanation.

For P8, learners need to describe the potential impact of poor teamwork on a variety of roles. This could be evidenced using case studies or role play.

For P9, learners need to describe techniques that could be used in order to overcome problems encountered with team members. This could be evidenced with P8 and P9 through a professional discussion or a personal statement.

For P10, learners need to explain their organisation's complaints procedure. This could be evidenced by role play of a complaint being received or by means of a flow chart or table.

For P11, learners are required to show they know how to work within the limits of their competence and responsibility. This could be evidenced by learners reading the relevant SOPs and producing a table of responsibilities, a personal statement or participating in a professional discussion.

For P12, learners should list their strengths and weaknesses as an individual pharmacy worker. This could be evidenced by learners producing a personal SWOT analysis.

For P13, learners need to list their strengths and weaknesses as a pharmacy team worker. This could be evidenced with P12 by learners producing a team SWOT analysis.

For P14, learners need to outline available team-related development and learning opportunities. This could be evidenced by learners producing a written report or an explanation on the SWOT analysis carried out in P12 and P13.

For M1, learners need to explain why it is important to adhere to professional codes of conduct and organisational policies and procedures. This could be evidenced with P1, P2, P3 and D1 by producing a flowchart or a table supported by further explanation.

For M2, learners should explain why pharmacy practice needs to be in line with the legislation and organisational policies and procedures relating to pharmacy. This can be evidenced with P4, P5 and P6 by learners producing a diagram with an explanation or a written assignment.

For M3, learners should explain why there is a need for a complaints procedure. This could be combined with evidence for P7 and D2, whereby learners produce a table supported by further explanation or written assignment.

For M4, learners are required to comment on whether or not their team works effectively together. This could be evidenced with P8, P9, P10, P11 and D3 by means of a professional discussion or a personal statement.

For M5, learners should perform a SWOT analysis identifying strengths and weaknesses. This can be evidenced with P12, P13, P14 and D4, with further explanation provided in a written assignment.

For D1, learners should review organisational policies against professional codes of conduct and current legislation. This could be evidenced with P1, P2, P3 and M1 via a flowchart or table with a written assignment.

For D2, learners should evaluate their organisation's complaints procedure. This could be evidenced with P8 and M3; the learner could produce a table with further explanation or a written assignment.

For D3, learners are required to discuss ways in which their team could work together more effectively. This could be evidenced with P8, P9, P10, P11 and M4 through a professional discussion or a personal statement.

For D4, learners need to perform a team SWOT analysis identifying team strengths and weaknesses. This could be evidenced with P12, P13, P14 and M5, supported by further explanation.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P4, P5, P10, P11, M1, M2, M3, D1, D2	Legislation in Pharmacy	You have been asked by a colleague to give a talk to student nurses on the legislation, professional codes of conduct and organisational procedures relating to the practice of pharmacy.	Written assignment or Presentation and handout notes. Observation record.
P3, P6, P7, P8, P9, P12, P13, P14, M4, M5, D3, D4	Teamworking and SWOT Analysis	You have been asked by your line manager to produce a SWOT analysis to enable the identification of training opportunities in the workplace.	Written report. Action plan.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 14: Professional Development in Pharmacy
Unit 15: Communicating in Pharmacy
Unit 16: Dispensing and Supply of Medicines
Unit 18: Pharmacy Law, Ethics and Practice

Level 2
Unit 1: Communicating with Pharmacy Customers
Unit 2: Law, Regulation, Health and Safety in Pharmacy
Unit 8: Selling Over the Counter Medicines in the Pharmacy
Unit 9: Processing a Prescription

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learner's workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

Applebe G E, Wingfield J — *Pharmacy Law and Ethics, Eighth Edition* (Pharmaceutical Press, 2005) ISBN 0853696047

Furnham A, Taylor J — *Learning at Work: Excellent Practice from Best Theory* (Palgrave Macmillan, 2005) ISBN 1403945748

Merrill J, Fisher J — *Pharmacy Law and Practice, Fourth Edition* (Blackwell Science, 2006) ISBN 0444522018

Royal Pharmaceutical Society — *Medicines, Ethics and Practice* (Pharmaceutical Press, current, published annually in July)

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.aptuk.org

Association of Pharmacy Technicians

www.nhs.uk

National Health Service

www.pjonline.com

Pharmaceutical Journal Online

www.rpharms.com

Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	[IE4] analysing current codes of practice, conduct, legislation and organisational policies that provide standards and guidance to pharmacy team members
Creative thinkers	[CT1] exploring possibilities for contributing towards maintaining individual satisfaction, loyalty and confidence in the organisation [CT1] discussing problems and suggesting ways in which their team can improve
Reflective learners	[RL1] assessing themselves and others by performing a SWOT analysis and identifying areas for improvement
Team workers	[TW5] taking responsibility to perform a team SWOT analysis
Self-managers	[SM3] managing their time to research and work on assignments
Effective participators	[EP3, EP4] assessing themselves and others by performing a SWOT analysis and identifying areas for improvement.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE2] planning and carrying out research for assessments
Team workers	[TW5] taking responsibility, showing confidence in themselves and their contributions when working within a pharmacy team to complete a task
Self-managers	[SM3] organising their time, resources and prioritising actions for assessments.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT to produce assignment work
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload aware of keeping their password safe and not disclosing it to others able to identify a fault and know the procedure to report it
Manage information storage to enable efficient retrieval	saving information and assignment work in a folder
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information from a variety of sources
Select information from a variety of sources to meet requirements of a complex task	accessing policies and procedures on servers
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating documentation
Use appropriate software to meet the requirements of a complex data-handling task	creating a single document that has all the information for their work
Use communications software to meet requirements of a complex task	using email or electronic portfolio to send centre-produced work to their own address creating a contact list
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	discussing how the documents can be improved

Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	taking part in discussions giving a presentation
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	producing an action plan producing reports producing a flow chart detailing codes of practice and standards in pharmacy.

Unit 4: Ordering and Issuing Stock in the Pharmacy

Unit code: A/601/7781

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit provides learners with knowledge of the importance of efficient, safe stock management when ordering and issuing stock.

Unit introduction

This unit deals with how to order and issue stock correctly and identify the action to be taken for urgent needs and requests of stock. Learners will become accustomed to the various packaging, labelling and transportation requirements of stock.

Learners are also introduced to the laws and legal requirements associated with the ordering and issuing of stock and the roles and responsibilities of staff. Learners will also develop their knowledge of product recall processes and sources of stock.

Learning outcomes

On completion of this unit a learner should:

- 1 Understand pharmacy stock and its control
- 2 Know how to order pharmacy stock
- 3 Know how to issue pharmacy stock
- 4 Understand pharmacy stock records.

Unit content

1 Understand pharmacy stock and its control

Limitations: roles and responsibilities; referral process; appropriate person(s)

Policies: purpose; standard operating procedures (SOPs); national and local guidelines; ethical and legal requirements; Control of Substances Hazardous to Health (COSHH); waste policy

Drug alerts: company recall; Medicines and Healthcare Products Regulatory Agency (MHRA) recall; purpose; shared information; role and responsibilities

Formulations: types of formulations eg hard capsules, tablets, sub-cutaneous injection, ointments, creams, suspensions, suppositories, eye drops

2 Know how to order pharmacy stock

Sources of stock: suppliers; wholesalers; contract; emergency supply; hospitals; delivery services

Good stock management: brand and generic names; quantity of stock; shelf life; storage conditions; seasonal variations

3 Know how to issue pharmacy stock

Special packaging: purpose; containers; labelling; types of transport used; refrigeration; cool chain; security

Stock not fit for purpose: unavailable; expired; contaminated; damaged; drug recall or drug alert

4 Understand pharmacy stock records

Records: purpose; type of records; function of records; parameters set for ordering stock; input and retrieval of stock data; use of computer systems; back up systems; paper and electronic records

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 explain current procedures for dealing with stock	M1 explain the importance of following stock control procedures	D1 review the procedures for ordering and issuing stock
P2 explain the roles and responsibilities of staff for stock control	M2 compare the different roles involved in stock control	
P3 list different types of drug formulations within pharmacy stock	M3 describe the different routes of administration	D2 select formulations for different routes of administration
P4 discuss the 'products recall' process [CT2]	M4 discuss circumstances in which products may be recalled	D3 explain own responsibilities for dealing with a products recall
P5 describe the difference between branded and generic medicines	M5 identify different branded and generic medicines	D4 order medicines correctly
P6 describe the pharmacy order process	M6 compare ordering systems	D5 explain the importance of ordering stock correctly
P7 name sources of stock	M7 discuss sources of stock	
P8 describe how to respond to an urgent need for stock [IE1]	M8 discuss the action taken when stock is not available	
P9 describe the pharmacy stock issuing process	M9 discuss destinations of stock	D6 explain the importance of issuing stock correctly

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P10 describe how to respond to an urgent stock request		D7 discuss products which requires special transportation
P11 name packaging required for specific products	M10 select the correct labels for containers	
P12 state the action taken where stock is not fit for purpose	M11 describe stock which is not fit for purpose	
P13 describe the systems used to maintain stock records	M12 discuss the requirements of stock records.	D8 review the stock records system.
P14 explain how the computer is used for stock control purposes.		

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities, as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out both in the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will be aware of the health and safety requirements and quality assurance procedures needed to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Introduction to the procedures and laws relating to stock and how they affect roles and responsibilities of staff with regard to ordering and issuing stock.</p> <p>Discuss current procedures for dealing with stock.</p> <p>Discuss the different roles and the learner's own role, including their limits.</p> <p>Introduction to stock: generic and brand names, formulation, routes of administration, strengths, and quantities.</p> <p>Observation of learner to identify correct stock.</p> <p>Introduction to product recalls.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the procedure and responsibilities in dealing with product recalls.</p> <p>Personal study time and research.</p> <p>Assignment 1: Procedures (P1, P2, P4, M1, M2, M4, D1, D3)</p>
<p>Learning outcome 2</p> <p>Introduction to the ordering of stock and sources of stock.</p> <p>Tutorials and use of workbooks to investigate the process of receipt of stock and the importance of receiving stock correctly.</p> <p>Learners to identify sources of stock in their workplace.</p> <p>Observation of learner ordering stock correctly.</p> <p>Discuss how to respond to an urgent need for stock and the action to be taken when stock is unavailable.</p> <p>Personal study time and research.</p> <p>Assignment 2: Ordering Stock (P3, P5, P6, P7, P8, M3, M5, M6, M7, M8, D2, D4, D5)</p>

Topic and suggested assignments/activities and/assessment
<p>Learning outcome 3</p> <p>Introduction to the issuing of stock.</p> <p>Discuss the pharmacy stock-issuing process and the importance of issuing stock correctly.</p> <p>Observation of learner issuing stock correctly.</p> <p>Discuss response required for urgent stock requests.</p> <p>Introduction to the term 'fit for purpose', giving examples.</p> <p>Discuss examples of stock not fit for purpose and action needed when stock is unavailable.</p> <p>Introduction to packaging and transportation requirements.</p> <p>Discuss packaging and labelling requirements.</p> <p>Discuss transportation requirements.</p> <p>Observation of learner identifying correct packaging, labelling and transportation requirements of stock.</p> <p>Personal study time and research.</p> <p>Assignment 3: Issuing Stock (P9, P10, P11, P12, M9, M10, M11, D6, D7)</p>
<p>Learning outcome 4</p> <p>Introduction to stock records.</p> <p>Learners to provide examples of stock records used in their workplace for discussion.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the requirements of a stock record system.</p> <p>Personal study time and research.</p> <p>Assignment 4: Stock Records (P13, P14, M12, D8)</p>
Review of unit and programme of assignments.

Assessment and grading

At this level most learners will require considerable support with their assessments.

Some learners will be coming back to study after a break or having had an unsuccessful experience in their earlier education. Some learners may be in the 'return to learn' category. For some, English will not be their first language.

All these factors need to be taken into consideration both in the design of work and in the assessment of these learners.

All learners are entitled to initial guidance in planning their work, but the level of assistance required should be taken into account when their work is assessed.

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment

method, the assessor's observation record must clearly document learners' achievements.

For P1, learners need to explain current procedures for dealing with stock. This could be evidenced by learners completing a flowchart or written assignment. The explanation should cover standard operating procedures and the legal requirements for ordering and issuing stock.

For P2, learners need to explain the roles and responsibilities of staff for stock control. This could be evidenced by learners completing a table or checklist.

For P3, learners need to list different types of drug formulations. This could be evidenced by learners completing tables which list the different drug formulations.

For P4, learners are required to discuss the products recall process. This could be evidenced by learners discussing the process with their assessor. The discussion should be documented.

For P5, learners need to describe the difference between branded and generic medicines. This could be evidenced by learners completing a table which identifies brand names and generic names.

For P6, learners need to describe the pharmacy order process. This could be evidenced by learners completing a checklist. The description should cover the steps taken to complete a pharmacy order, correctly following current procedures.

For P7, learners are required to name sources of stock. This could be evidenced by learners identifying sources of stock in their workplace and verbally informing their assessor. This could be documented.

For P8, learners need to describe how to respond to an urgent need for stock. This could be evidenced by learners completing test questions or short answer questions.

For P9, learners are required to describe the pharmacy stock-issuing process. This could be evidenced by learners completing a checklist. The description should cover the steps taken to complete a pharmacy issue, correctly following current procedures.

For P10, learners need to describe how to respond to an urgent stock request. This could be evidenced by learners completing test questions or short answer questions.

For P11, learners need to name packaging required for specific products. This could be evidenced by learners completing a table, identifying packaging for specific products.

For P12, learners need to state the action taken where stock is not fit for purpose. This could be evidenced by learners completing test questions or short answer questions.

For P13, learners need to describe the systems used to maintain stock records. This could be evidenced by learners completing test questions or short answer questions.

For P14, learners are required to explain how the computer is used for stock control purposes. This could be evidenced by learners completing test questions or short answer questions.

For M1, learners need to explain the importance of following these procedures. This could be evidenced by learners completing a written assignment. The explanation should show clear understanding of why it is important to follow standard operating procedures and legislation when ordering and issuing stock.

For M2, learners should compare the different roles involved in stock control. This could be evidenced by learners completing a table. The table can be used to compare the responsibilities of different staff for ordering and issuing stock.

For M3, learners should describe the different routes of administration. This could be evidenced by learners completing a table or diagram which is supported by evidence of their comments about the different routes of administration.

For M4, learners are required to discuss circumstances in which products may be recalled. This could be evidenced by learners completing a table or checklist which is supported by further discussion with a tutor, or by means of a written assignment.

M5 requires learners to identify different brand and generic medicines. This could be evidenced by learners completing a table, which includes brand and generic names.

For M6, learners are required to compare ordering systems. This could be evidenced by learners completing a table, including disadvantages and advantages.

To achieve M7, learners should discuss sources of stock. This could be evidenced by a written assignment.

For M8, learners need to discuss the action taken when stock is not available. This could be evidenced by learners completing a diagram which is supported by additional information.

For M9, learners are required to discuss destinations of stock. This could be evidenced by learners completing a table or checklist which is supported by further explanation, or by means of a written assignment.

For M10, learners should select the correct labels for containers. This could be evidenced by learners in the workplace using witness testimonies.

For M11, learners should describe stock which is not fit for purpose. This could be evidenced in the workplace using witness testimonies or by the assessor providing straightforward examples which learners could comment on.

For M12, learners should discuss the requirements of stock records. This could be evidenced by learners discussing the process with their assessor. The discussion should be documented.

For D1, learners should review the procedures for ordering and issuing stock within the pharmacy. This could be evidenced by learners completing a written assignment on a procedure for issuing or ordering stock. The tutor could decide on the procedure to be reviewed by learners. The procedure should be straightforward.

For D2, learners are required to select formulations for different routes of administration. This could be evidenced by learners completing a table or diagram.

To achieve D3, learners should explain their responsibilities for dealing with a products recall. This could be evidenced by learners completing a written assignment or in the workplace using witness testimonies.

For D4, learners should demonstrate that they know how to order medicines correctly. This could be evidenced in the workplace using witness testimonies.

For D5, learners are required to explain the importance of ordering stock correctly. This could be evidenced by learners completing a written assignment.

For D6, learners need to explain the importance of issuing stock correctly. This could be evidenced by learners completing a written assignment. The explanation should include the implications of issuing stock incorrectly.

For D7, learners should discuss products which require special transportation. This could be evidenced in the workplace using witness testimonies or by the assessor providing straightforward examples which learners could comment on.

For D8, learners are required to review the stock records system. This could be evidenced by learners completing a written assignment. The tutor may give learners an example of a stock record system. The example should be straightforward.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P4, M1, M2, M4, D1, D3	Procedures	You have been asked to write a report on the stock procedures and roles and responsibilities of staff for stock control.	Written work. Questions and answers. Table.
P3, P5, P6, P7, P8, M3, M5, M6, M7, M8, D2, D4, D5	Ordering Stock	You have been asked to produce training notes to help new starters order stock correctly.	Handout notes. Diagrams. Checklist. 'What if' scenarios.
P9, P10, P11, P12, M9, M10, M11, D6, D7	Issuing Stock	You have been asked to devise an easy-to-follow checklist for staff to use when issuing stock. This must include how to identify stock not fit for purpose and what to when stock is not available.	Written work. Pictures. Case studies. Checklist.
P13, P14, M12, D8	Stock Records	You have been asked to design the perfect stock records system.	Written work. Case studies. Checklist.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 18: Pharmacy Law, Ethics and Practice
Level 2
Unit 2: Law, Regulation, Health and Safety in Pharmacy
Unit 3: Working in the Pharmacy Team
Unit 5: Receiving, Storing and Maintaining Stock in the Pharmacy

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learner's workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable learners to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

British National Formulary (Pharmaceutical Press, 2010) ISBN 9780853699279

Royal Pharmaceutical Society — *Medicines, Ethics and Practice*
(Pharmaceutical Press, current, published annually in July)

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.mhra.gov.uk

Medicines and Healthcare Products
Regulatory Agency

www.pjonline.com

Pharmaceutical Journal Online

www.rpharms.com

Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	[IE1] asking questions during discussion to extend their thinking on the drug recall process or alternative sources for products
Creative thinkers	[CT2] identifying questions to answer and problems to resolve when describing how to respond to an urgent need for stock.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE2] planning and carrying out research for assessments [IE4] reviewing procedures and record systems
Creative thinkers	[CT1] reviewing procedures and record systems
Reflective learners	[RL6] communicating their learning in relevant ways for different audiences during discussions [RL1] assessing themselves and others when describing roles and responsibilities of staff
Team workers	[TW5] taking responsibility, showing confidence in themselves and their contributions when working within a pharmacy team to complete a task
Self-managers	[SM3] organising their time and resources and prioritising actions for assessments.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT systems to produce stock records using ICT systems to order and issue stock
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload describing stock systems used aware of keeping their password safe and not disclosing it to others able to identify a fault and know the procedure to report it
Manage information storage to enable efficient retrieval	saving stock information records in accordance with procedures
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information and examples from pharmacy ICT systems obtaining information from identified websites
Select information from a variety of sources to meet requirements of a complex task	
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating stock records issuing and ordering stock documents
Use appropriate software to meet the requirements of a complex data-handling task	creating stock records issuing and ordering stock documents creating a written assignment
Use communications software to meet requirements of a complex task	dealing with stock records and documents using email or electronic portfolio
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	reviewing the records procedure

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	issuing, ordering and calculating stock requirements, including quantities to give when there is a problem
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	participating in discussions with assessors, witnesses and colleagues in the workplace
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources reading stock records and documents reading procedures
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing assignment work and providing short answers producing stock records.

Unit 5: Receiving, Storing and Maintaining Stock in the Pharmacy

Unit code: T/601/7553

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit provides learners with knowledge of the importance of efficient, safe stock management when receiving, storing and maintaining stock.

Unit introduction

This unit will give learners the knowledge required to receive, store and maintain stock correctly and identify discrepancies. Learners will become accustomed to the various storage requirements and conditions, including the maintenance of these conditions.

This unit highlights the importance of laws and legal requirements associated with receipt, storage and maintenance of stock and the roles and responsibilities of staff.

Learning outcomes

On completion of this unit a learner should:

- 1 Understand pharmacy stock
- 2 Know how to receive and store pharmacy stock
- 3 Know how to maintain pharmacy stock.

Unit content

1 Understand pharmacy stock

Limitations: roles and responsibilities; referral process; appropriate person

Policies: purpose; standard operating procedures; national and local guidelines; ethical and legal requirements; Control of Substances Hazardous to Health (COSHH); waste policy

Drug alerts: company recall; Medicines and Healthcare Products Regulatory Agency (MHRA) recall; purpose; shared information; role and responsibilities

Formulations: types of formulations eg hard capsules, tablets, sub-cutaneous injection, ointments, creams, suspensions, suppositories, eye drops

2 Know how to receive and store pharmacy stock

Sources of stock: suppliers; wholesalers; contract; emergency supply; hospitals; delivery services

Discrepancies: incorrect drug strength; formulation; quantity; order; expired; damaged; drug alert; contaminated

3 Know how to maintain pharmacy stock

Records: purpose; type of records; function of records; input and retrieval of stock data; use of computer systems; back-up systems; paper and electronic records

Safe storage requirements: location; refrigeration; isolated; ventilated; secure; tidy

Good stock management: brand and generic names; stock rotation; shelf life; checking expiry dates of stock, quantity of stock; seasonal variations

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 explain current procedures for dealing with stock	M1 explain the importance of following these procedures	D1 review the procedures for stock control
P2 explain the roles and responsibilities of staff for stock control	M2 explain why it is important that staff carry out their stock control roles in a consistent and accurate way	
P3 list different product formulations	M3 compare the different routes of administration	D2 match the formulation to the route of administration
P4 discuss the products recall process [CT2]	M4 explain why products may be recalled	D3 explain the different responsibilities of staff dealing with a products recall
P5 describe the difference between branded and generic medicines	M5 match the brand name to the generic name	D4 select the correct product
P6 describe the pharmacy stock receipt process	M6 summarise the records used in the receipt of stock	D5 explain the importance of receiving stock correctly
P7 name sources of stock	M7 categorise sources of stock	
P8 describe how to deal with discrepancies [IE1]	M8 discuss the different types of stock discrepancies	
P9 list different stock locations	M9 select the correct storage locations	D6 explain the importance of good stock management.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P10 describe the systems used to maintain stock	M10 explain the importance of maintaining stock records	
P11 state the importance of maintaining correct storage conditions.	M11 identify safe storage requirements for stock.	

PLTS: This summary references where applicable, in square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain the underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out in both the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will be aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Introduction to the procedures and laws relating to stock and how they affect roles and responsibilities of staff with regard to receiving, storing and maintaining stock in the pharmacy.</p> <p>Discuss current procedures for dealing with stock.</p> <p>Discuss the different roles and the learner's role, including their limits.</p> <p>Introduction to stock: generic and brand names, formulation, routes of administration, strengths and quantities.</p> <p>Observation of learner to identify correct stock.</p> <p>Introduction to product recalls.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the procedure and responsibilities when dealing with product recalls.</p> <p>Personal study time and research.</p> <p>Assignment 1: Procedures (P1, P2, P4, M1, M2, M4, D1, D3)</p> <p>Assignment 2: Stock (P3, P5, M3, M5, D2, D4)</p>
<p>Learning outcome 2</p> <p>Introduction to the receipt of stock and sources of stock.</p> <p>Discuss the receipt of stock process and the importance of receiving stock correctly.</p> <p>Learners to identify sources of stock in their workplace.</p> <p>Observation of learner receiving stock correctly and identifying discrepancies.</p> <p>Introduction to stock locations.</p> <p>Observation of learner identifying correct stock locations.</p> <p>Personal study time and research.</p> <p>Assignment 3: Receive Stock (P6, P7, P8, M6, M7, M8, D5)</p>

Topic and suggested assignments/activities and/assessment
<p>Learning outcome 3</p> <p>Introduction to the storage and maintenance of stock and locations.</p> <p>Discuss different storage conditions and the importance of maintaining stock and storage conditions.</p> <p>Introduction to systems used to maintain stock.</p> <p>Discuss stock records.</p> <p>Discuss the principles for good stock management.</p> <p>Personal study time and research.</p> <p>Assignment 4: Maintenance of Stock (P9, P10, P11, M9, M10, M11, D6)</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

For P1, learners need to explain current procedures for dealing with stock. This could be evidenced by learners completing a written assignment. The explanation should cover standard operating procedures and the legal requirements for receiving, storing and maintaining stock.

For P2, learners are required to explain the roles and responsibilities of staff for stock control. This could be evidenced by learners completing a table explaining the responsibilities of different staff in their workplace who deal with receiving, storing and maintaining stock.

For P3, learners need to list different product formulations. This could be evidenced by learners completing a table or checklist.

For P4, learners need to discuss the product recall process. This could be evidenced by learners discussing the process with their assessor. This could be documented.

For P5, learners are required to describe the difference between branded and generic medicines. This could be evidenced by learners completing a table, identifying brand names and generic names.

For P6, learners need to describe the pharmacy stock receipt process. This could be evidenced by learners completing a checklist on the steps taken to complete the receipt process.

P7 requires learners to name sources of stock. This could be evidenced by learners identifying sources of stock in their workplace and verbally informing their assessor. This could be documented.

For P8, learners need to describe how to deal with discrepancies. This could be evidenced by learners completing test questions or short answer questions or by

the assessor giving the learner straightforward examples of discrepancies and the learner explaining how they would deal with each discrepancy.

For P9, learners are required to list different stock locations. This could be evidenced by learners completing a plan of their workplace identifying stock locations.

For P10, learners need to describe the systems used to maintain stock. This could be evidenced by learners completing a written assignment describing systems in their workplace to ensure correct stock levels and correct storage conditions are maintained.

For P11, learners are required to state the importance of maintaining correct storage conditions. This could be evidenced by learners completing test questions, short answer questions or 'what if' scenarios.

M1 requires learners to explain the importance of following the procedures explained in P1. This could be evidenced by learners completing short answer questions on the receipt, storage and maintenance of stock procedures.

For M2, learners are required to explain why it is important that staff carry out their stock control responsibilities in a consistent and accurate way. This could be evidenced by learners completing a written assignment on the importance of different roles involved in receipt, storage and maintenance of stock.

For M3, learners need to compare the different routes of administration. This could be evidenced by learners completing a table or diagram.

For M4, learners need to explain why products may be recalled. This could be evidenced by discussion with the assessor in the workplace. The discussion could be documented.

For M5, learners should match the brand name to the generic name. This could be evidenced by learners completing a table which includes brand and generic names.

For M6, learners are required to summarise the records used in the receipt of stock. This could be evidenced by learners producing records used in the workplace for the receipt of stock and discussing them with their assessor.

For M7, learners need to categorise sources of stock. This could be evidenced by learners completing a table including category headings with their workplace's sources of stock.

M8 requires learners to discuss the different types of stock discrepancies. This could be evidenced by learners completing a written assignment or table, or in the workplace using witness testimonies.

For M9, learners should select the correct storage locations. This could be evidenced by learners in the workplace using witness testimonies.

For M10, learners should explain the importance of maintaining stock records. This could be evidenced by learners producing records used in the workplace for the receipt of stock and then discussing them with their assessor.

For M11, learners are required to identify safe storage requirements for stock. This could be evidenced by learners in the workplace using witness testimonies.

To achieve D1, learners should review the procedures for stock control. This could be evidenced by learners completing a written assignment on a procedure for stock control in their workplace or by the tutor giving learners an example of a stock receipt or storage procedure and asking them to review it. The example should be straightforward.

For D2, learners are required to match the formulation to the route of administration. This could be evidenced by learners completing a table or diagram.

D3 requires learners to explain the different responsibilities of staff dealing with a products recall. This could be evidenced by learners completing short answer questions or in the workplace using witness testimonies.

For D4, learners should select the correct product. This could be evidenced by learners in the workplace using witness testimonies or from a simulation set by the tutor.

To achieve D5, learners need to explain the importance of receiving stock correctly. This could be evidenced by learners completing a written assignment or answering questions.

D6 requires learners to explain the importance of good stock management. This could be evidenced by learners completing a written assignment or answering questions.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P4, M1, M2, M4, D1, D3	Procedures	You have been asked to write a report on the stock procedures and roles and responsibilities of staff for stock control.	Written work. Tables. Checklist. Diagrams.
P3, P5, M3, M5, D2, D4	Stock	You have been asked to devise a checklist and table to help new starters select the correct stock.	Written work. Checklist. Table. Diagrams.
P6, P7, P8, M6, M7, M8, D5	Receive Stock	You have been asked to write a procedure for the receipt of stock.	Written assignment. Checklist. Observation statements.
P9, P10, P11, M9, M10, M11, D6	Maintenance of Stock	You have been asked to produce an easy-to-follow handout outlining the maintenance and storage of stock.	Handout notes. Written assignment. Diagram. Pictures. Checklist/table.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 18: Pharmacy Law, Ethics and Practice
Level 2
Unit 2: Law, Regulation, Health and Safety in Pharmacy
Unit 3: Working in the Pharmacy Team
Unit 4: Ordering and Issuing stock in the Pharmacy

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learners' workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

British National Formulary (Pharmaceutical Press, 2010) ISBN 9780853699279

Royal Pharmaceutical Society — *Medicines, Ethics and Practice*
(Pharmaceutical Press, current, published annually in July)

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.mhra.gov.uk

Medicines and Healthcare Products
Regulatory Agency

www.pjonline.com

Pharmaceutical Journal Online

www.rpharms.com

Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The following table identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit:

Skill	When learners are ...
Creative thinkers	[CT2] asking questions during discussion to extend their thinking on the drug recall process
Reflective learners	[RL1] assessing themselves and others when describing roles and responsibilities of staff
Independent enquirers	[IE1] identifying questions to answer and problems to resolve when dealing with discrepancies.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE2] planning and carrying out research for assessments [IE4] reviewing procedures and record systems
Creative thinkers	[CT1] reviewing procedures and record systems
Team workers	[TW5] taking responsibility, showing confidence in themselves and their contributions when working within a pharmacy team to complete a task
Reflective learners	[RL1] assessing themselves and others, when describing roles and responsibilities of staff [RL6] communicating their learning in relevant ways for different audiences during discussions
Self-managers	[SM3] organising their time, resources and prioritising actions for assessments.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT systems to produce stock records using ICT systems to receive and maintain stock describing and reviewing stock systems used
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload able to identify a fault and know the procedure to report it aware of keeping their password safe and not disclosing it to others
Manage information storage to enable efficient retrieval	saving stock information records in accordance with procedures
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information and examples from pharmacy ICT systems
Select information from a variety of sources to meet requirements of a complex task	obtaining information from identified websites
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating stock records receiving and maintaining stock documents
Use appropriate software to meet the requirements of a complex data-handling task	creating stock records receiving and maintaining stock documents creating a written assignment
Use communications software to meet requirements of a complex task	working with stock records and documents using email or electronic portfolio
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	reviewing the records procedure

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	calculating stock during stock checks receiving stock and resolving discrepancies
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	participating in discussions with assessors, witnesses and colleagues in the workplace
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources reading stock records and documents reading procedures
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing assignment work and providing short answers producing stock records.

Unit 6: Preparing for and Manufacture of Aseptic Products

Unit code: A/601/7781

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

The unit will help the learner develop the necessary knowledge and understanding to be able to work safely in an aseptic unit.

Unit introduction

This unit covers the understanding of principles and processes needed to assist in the preparation prior to making pharmaceutical products. These products could be batched or named patient aseptic preparations.

Learners are introduced to the laws and legal requirements associated with manufacturing aseptic products and how these legal requirements affect their roles in aseptic processing. The requirements for packaging, documentation and storage are all considered. Learners will look at the environmental factors relating to aseptics and how to monitor them.

Learning outcomes

On completion of this unit a learner should:

- 1 Know the legislation, policies and good practice relevant to aseptics
- 2 Know the requirements for environmental and personal hygiene in the aseptic unit
- 3 Know the processes used for manufacture and preparation of aseptic products
- 4 Know about the requirements for packaging, documentation and storage.

Unit content

1 Know the legislation, policies and good practice relevant to aseptics

Current legislation: Rules and Guidance for Pharmaceutical Manufacturers and Distributors; Medicines Act; Aseptic Dispensing for NHS patients; Quality Assurance of Aseptic Services; current health and safety policies; current COSHH policies

Organisational procedures: local standard operating procedures (SOPs)

2 Know the requirements for environmental and personal hygiene in the aseptic unit

Current legislation: Rules and Guidance for Pharmaceutical Manufacturers and Distributors; Aseptic Dispensing for NHS Patients; Quality Assurance of Aseptic Services

Organisational legislation: local standard operating procedures

3 Know the processes used for manufacture and preparation of aseptic products

Current legislation: Rules and Guidance for Pharmaceutical Manufacturers and Distributors; Aseptic Dispensing for NHS patients; Quality Assurance of Aseptic Services

Organisational legislation: local standard operating procedures (SOPs)

4 Know about the requirements for packaging, documentation and storage

Current legislation: Rules and Guidance for Pharmaceutical Manufacturers and Distributors; Medicines Act; Aseptic Dispensing for NHS patients; Quality Assurance of Aseptic Services; current health and safety policies; current COSHH policies

Organisational procedures: local standard operating procedures (SOPs)

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 list the current legislation related to aseptic processes	M1 describe current legislation related to aseptic processing	D1 review the aseptic policies
P2 state how good manufacturing practice applies to aseptic processes		
P3 state the importance of standard operating procedures in aseptic processes		
P4 explain the difference between batch manufacture and dispensing for an individual patient	M2 compare the differences of each type of aseptic process	D2 discuss the legislation requirements for each type of aseptic process
P5 explain the importance of knowing the limits of own role	M3 discuss the different roles in aseptic processing	
P6 describe the importance of knowing who to report to		
P7 list the different types of environmental areas used for the manufacture of aseptic products	M4 match aseptic areas to processes	D3 discuss the legislation requirements for each type of aseptic area

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P8 name sources of contamination	M5 describe how contamination occurs from these sources	D4 discuss the consequences of contamination from different sources
P9 describe the personal hygiene requirements in aseptic processes	M6 describe ways to reduce contamination	
P10 explain the need for maintaining the aseptic environment [CT2, IE2]		
P11 describe the common materials used in aseptic processes	M7 match materials to aseptic processes	
P12 describe common aseptic processes [CT2, IE2]	M8 describe uses of different aseptic processes	D5 discuss examples of different aseptic processes
P13 state the processes for the safe handling and disposal of hazardous waste		
P14 outline the packaging and labelling requirements for aseptic products [RL1]	M9 summarise the requirements of packaging and labelling	D6 discuss examples of different packaging and labelling
P15 identify documents used in the aseptic processes	M10 summarise the requirements of documents used in aseptics	D7 discuss examples of different documents used in aseptics
P16 outline the importance of maintaining correct storage conditions. [RL1]	M11 describe examples of different storage conditions for different products.	D8 compare different storage conditions for different products.

PLTS: This summary references where applicable, in square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out both in the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will become aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments
<p>Learning outcome 1</p> <p>Introduction to the legislation associated with aseptic processing.</p> <p>Discuss the legislation used in aseptic processing.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the roles and responsibilities.</p> <p>Introduction to the differences between aseptic processes.</p> <p>Learners research different processes.</p> <p>Assignment 1: Legislation (P1, P2, P3, P5, P6, M1, M3, D1)</p> <p>Assignment 2: Processes (P4, M2, D2)</p>
<p>Learning outcome 2</p> <p>Introduction to different environments.</p> <p>Discuss environmental requirements.</p> <p>Introduction to sources of contamination.</p> <p>Discuss contamination.</p> <p>Learners research sources of contamination.</p> <p>Assignment 3: Environmental Factors (P7, P8, P9, P10, M4, M5, M6, D3, D4)</p>
<p>Learning outcome 3</p> <p>Introduction to aseptic processes.</p> <p>Discuss materials used in aseptic processes.</p> <p>Demonstrate common aseptic processes.</p> <p>Discuss waste disposal.</p> <p>Assignment 4: Aseptic Processes (P11, P12, P13, M7, M8, D5)</p>
<p>Learning outcome 4</p> <p>Introduction to packaging, labelling and documentation.</p> <p>Learner given examples of packaging, labels and documents.</p> <p>Learner to research packaging, labels and documents.</p> <p>Discuss storage conditions.</p> <p>Assignment 5: Documentation (P14, P15, M9, M10, D6, D7)</p> <p>Assignment 6: Storage (P16, M11, D9)</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

P1 requires learners to list current legislation related to aseptics which should include the 'orange guide'. This could be evidenced by completion of tables or short answer questions.

For P2, learners need to state how good manufacturing practice (GMP) applies to aseptics. This could be evidenced by test questions.

P3 requires learners to consider the importance of procedures in aseptics.

For P4, learners need to explain the difference between batch manufacturing and individual patient dispensing. This could be evidenced by test questions covering the different situations.

For P5, learners need to explain the importance of knowing the limits of their own role and should include an explanation of when to refer and who to refer to. This could be evidenced by the learner completing and commenting on tables of roles and responsibilities within the aseptic unit.

P6 requires learners to build on P5 by describing the importance of knowing who to report to.

P7 requires learners to identify different types of environmental areas in aseptics. This could be evidenced by a diagram of an aseptic unit, identifying different areas.

For P8, learners need to name some common sources of contamination and should include those from people as well as environmental issues. This could be evidenced by learners verbally identifying potential sources of contamination, which could be documented by the assessor on a checklist.

P9 requires learners to show knowledge of their personal hygiene requirements in aseptics. This could be evidenced in the workplace using a witness statement or by means of test questions or short answer questions.

To achieve P10, learners need to explain the need for maintaining the aseptic environment. This could be evidenced by test questions.

P11 requires learners to describe the common materials used in aseptic processing.

For P12, learners are required to describe common aseptic processes such as reconstitution, air-exchange and over-labelling. This could be evidenced by test questions covering different processes.

For P13, learners need to state the processes for safe handling of hazardous materials. This could be evidenced in the workplace using a witness statement or by means of test questions or short answer questions.

P14 requires learners to outline the packaging and labelling requirements for pharmacy aseptic items.

For P15, learners need to identify documents that are used in the aseptic process. The documents identified should include worksheets and environmental records.

P16 requires learners to outline the importance of maintaining the correct storage conditions. This could be evidenced in the workplace using a witness statement or by means of test questions or short answer questions.

For M1, learners need to describe the current legislation identified in P1.

For M2, learners are required to compare each type of aseptic process described in P12.

For M3, learners are required to discuss the different roles in aseptic processing, showing awareness of legislation requirements for roles identified from P1 and M1.

For M4, learners need to match aseptic areas to different processes. This could be evidenced by adding the relevant additional information for M4 to the diagram produced for P7.

For M5, learners need to describe how contamination occurs from the different sources named in P8.

For M6, learners are required to describe ways to reduce the contamination identified in P8 and M5.

M7 requires learners to match materials to aseptic processes. This could be evidenced by means of test questions.

For M8, learners need to refer to the different types of aseptic processes identified in P12. To achieve M8, learners should describe when each type of process is used.

For M9, learners should summarise the requirements of packaging and labelling in aseptics. This could be evidenced by means of short answer questions with supporting examples.

For M10, learners are required to summarise the requirements of documents listed in P15. This could be evidenced by short answer questions with document examples.

For M11, learners should describe examples of different storage conditions for raw materials and finished products within the aseptic unit. This could be evidenced by completion of tables of different storage areas, supported by relevant comments.

For D1, learners should review the aseptic policies. This could be evidenced by a written assignment reviewing workplace policies.

For D2, learners are required to discuss legislation requirements for aseptic processes. This could be evidenced by a written assignment.

For D3, learners should discuss legislation requirements for aseptic areas. This could be evidenced by a written assignment with diagrams.

For D4, learners are required to discuss the consequences of contamination from different sources referred to in P8 and M5.

D5 requires learners to discuss examples of the different aseptic processes identified in M8. This could be evidenced in the workplace using a witness statement or by simulation.

For D6, learners should discuss examples of different packaging and labels used in aseptics. This could be evidenced in the workplace using a witness statement or by means of a written assignment with diagrams.

For D7, learners should discuss examples of different documents used in aseptics. This could be evidenced in the workplace using a witness statement or by means of a written assignment with diagrams.

For D8, learners should compare different storage conditions for different products. This could be linked to M11 and evidenced by completion of tables of different storage areas.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P5, P6, M1, M3, D1	Legislation	You are working for the quality department. Write a report on your workplace and the legislation governing it.	Written assignment. Report writing.
P4, M2, D2	Processes	You are asked to produce an information leaflet on aseptics for use by new aseptic staff.	Leaflet production. Written assignment.
P7, P8, P9, P10, M4, M5, M6, D3, D4	Environmental Factors	You are designing a new aseptic unit. Draw a plan of the new unit and identify possible contaminants.	Illustrations with explanations. Written assignment.
P11, P12, P13, M7, M8, D5	Aseptic Processes	You are asked to produce an information leaflet on aseptics for use with patients. Design a leaflet to give patients information on the services aseptics offer patients.	Leaflet production. Written assignment.
P14, P15, M9, M10, D6, D7	Documentation	You are working for a computer company and have been asked to design a new aseptic worksheet.	Worksheet production. Written assignment.

Criteria covered	Assignment title	Scenario	Assessment method
P16, M11, D8, D9	Storage	You are asked to design a new stores department for housing aseptic products. Draw a plan of the storage areas.	Illustrations with explanations. Written assignment.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 2
Unit 2: Law, Regulation, Health and Safety in Pharmacy
Unit 7: Assisting in the Preparation, Manufacture and Assembly of Medicinal Products

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learners' workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

Beaney A M — *Quality Assurance of Aseptic Preparation Services*
(Pharmaceutical Press, 2005) ISBN 0853696152

Medicines Control Agency — *Rules and Guidance for Pharmaceutical Manufacturers and Distributors* (The Stationery Office, 2007) ISBN 0853697191

Sharp J — *Quality in the Manufacture of Medicines and Other Healthcare Products* –
(Pharmaceutical Press, 2000) ISBN 0853694311

Winfield A J and Richards R M E — *Pharmaceutical Practice, Third Edition*
(Churchill Livingstone, 2003) ISBN 044305729X

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.hse.gov.uk	Health and Safety Executive
www.mhra.gov.uk	Medicines and Healthcare Products Regulatory Agency
www.pjonline.com	<i>Pharmaceutical Journal</i> Online
www.rpharms.com	Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The following table identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit:

Skill	When learners are ...
Independent enquirers	[IE2] asking questions on aseptic environments and processes
Creative thinkers	[CT2] asking questions to extend their understanding of aseptic environments and processes
Reflective learners	[RL1] researching workplace packaging, labels and documents.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE3] evaluating information given in assignments
Self-managers	[SM3] organising their time and resources when carrying out assignments.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT to produce assignment work using ICT to produce aseptic documentation
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload aware of keeping their password safe and not disclosing it to others able to identify a fault and know the procedure to report it
Manage information storage to enable efficient retrieval	saving information and assignment work in a folder
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information from a variety of sources
Select information from a variety of sources to meet requirements of a complex task	
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating documentation
Use appropriate software to meet the requirements of a complex data-handling task	creating a single document that contains all the information for their work
Use communications software to meet requirements of a complex task	using email or electronic portfolio to send centre-produced work to their own address creating a contact list
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	discussing how the documents can be improved

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	taking part in discussions
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing their assignments.

Unit 7: Assisting in the Preparation, Manufacture and Assembly of Medicinal Products

Unit code: R/601/9164

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

The aim of this unit is to provide the learner with the knowledge to understand the processes and procedures required for assisting in pharmacy manufacturing.

Unit introduction

This unit enables learners to gain the knowledge required for assisting in the assembly of batch medicinal products.

This includes current legislation, policy and good practice relating to batch manufacture, including manufacture for stock and individual patients. Specific health-related information for preparing the environment and the operator is also covered.

The unit introduces learners to the processes, equipment and materials used in the preparation of medicinal products, including packaging and labelling requirements and the maintenance of records and documentation.

Learning outcomes

On completion of this unit a learner should:

- 1 Know the legislation, policies and good practice relevant to medicines manufacture
- 2 Know the requirements for environmental and personal hygiene
- 3 Know about the materials and processes used in medicines manufacture
- 4 Know about the requirements for packaging, labelling and documentation.

Unit content

1 Know the legislation, policies and good practice relevant to medicines manufacture

Legislation: basic principles of quality assurance; application of legislation to working procedures and practice; GMP; SOP; documentation

Manufacture for stock: requirements for licensed manufacturing

Manufacture for individual patients: requirements for manufacture for individual patients; requirements for dispensing for individual patients

2 Know the requirements for environmental and personal hygiene

Environmental hygiene: hygiene requirements for the maintenance of a controlled environment used in medicines manufacture

Personal hygiene: hygiene requirements in accordance with SOPs for personnel assisting in medicines manufacture

3 Know about the materials and processes used in medicines manufacture

Materials: various materials used in medicines manufacture, their quality and the standards applying to the materials eg water, raw materials

Equipment: autoclaves; stills; pumps; isolators; laminar flow cabinets

Processes: processes used in the manufacture of medicines including mixing, filling and sealing equipment

4 Know about the requirements for packaging, labelling and documentation

Packaging: packaging components used for manufactured medicines

Labelling: labelling requirements; labelling equipment used for manufacture and dispensed medicines

Records and documentation: documentation for working procedures; batch worksheets and associated documents for recording manufacture; storage, distribution and transport

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 list the current legislation related to pharmacy manufacturing	M1 explain how current legislation applies to pharmacy manufacturing	D1 describe the legislation requirements for manufacture, comparing individual with batches
P2 state how good manufacturing practice applies to pharmacy manufacturing		
P3 state the importance of standard operating procedures in pharmacy manufacturing	M2 discuss, using a standard operating procedure document, the main points that apply to pharmacy manufacturing	
P4 describe the difference between batch manufacture and dispensing for an individual patient [IE1]	M3 using a named batch-manufactured product and a dispensed medicine for an individual patient, discuss the difference in the procedures for production of these medicines	
P5 state the importance of knowing the limits of your role and knowing to whom matters are reported [TW1, RL4]		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P6 list the different types of environmental areas used for the manufacturing of medicines	M4 describe a selected environmental area used for medicines manufacture	
P7 name sources of contamination	M5 explain why the sources of contamination identified in P7 are important in the manufacturing of medicines	D2 explain how the contamination relates to different sources
P8 describe personal hygiene requirements in pharmacy manufacture [IE1]		
P9 describe the need for maintaining the medicines manufacturing environment [CT2]		
P10 describe the common materials used in medicines manufacturing		
P11 describe the common processes used in medicines manufacturing		
P12 outline the packaging and labelling requirements for manufactured medicinal products	M6 produce a suitable label for a named manufactured medicine.	D3 discuss how the labelling requirements apply to a suitably labelled, named manufactured product.
P13 identify documents used in the medicines manufacturing process.		

PLTS: This summary references where applicable, in square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out both in the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will become aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Introduction to the basic principles of quality assurance.</p> <p>Explain 'good pharmaceutical manufacturing practice'.</p> <p>Discuss the application of legislation to working procedures and practice.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate standard operating procedures.</p> <p>Explain and discuss a variety of legislation relevant to medicines manufacture.</p> <p>Explain manufacture for stock.</p> <p>Explain manufacture for individual patients.</p> <p>Assignment 1: Legislation, Policies and Good Practice Relevant to Medicines Manufacture (P1, P2, P3, P4, P5, M1, M2, M3, D1)</p>
<p>Learning outcome 2</p> <p>Explain environmental and personal hygiene.</p> <p>Discuss the maintenance of controlled environments.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the hygiene requirements for personnel in accordance with SOPs.</p> <p>Assignment 2: Environmental and Personal Hygiene (P6, P7, P8, P9, M4, M5, D2)</p>
<p>Learning outcome 3</p> <p>Explain the materials and equipment used in medicines manufacture.</p> <p>Explain and discuss the processes used to manufacture medicines.</p> <p>Assignment 3: Materials, Equipment and Processes Used in Medicines Manufacture (P10, P11)</p>
<p>Learning outcome 4</p> <p>Explain the components required to package medicines.</p> <p>Explain and discuss the labelling requirements for manufactured and dispensed medicines.</p> <p>Explain and consider the records and documents used for manufactured medicines.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the storage, distribution and transport of manufactured medicines.</p> <p>Assignment 4: Packaging, Labelling and Documentation for Manufactured Medicines (P12, P13, M6, D3)</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

For P1, learners need to list the current legislation relating to pharmacy manufacturing. This could be evidenced by learners completing tables which list the various components of legislation.

For P2, learners are required to state how good manufacturing practice applies to pharmacy manufacturing. This could be evidenced by a written assignment.

For P3, learners are required to state the importance of SOPs in pharmacy manufacturing. This could be evidenced by a written assignment.

For P4, learners need to describe the difference between batch manufacture and individual patient dispensing. This could be evidenced by learners completing a table showing the differences between the two.

For P5, learners are required to state the importance of knowing the limits of their role and knowing to whom matters are reported. This could be evidenced by learners in the workplace using witness statement or by means of a written assignment.

For P6, learners need to list the different types of environmental areas used in medicines manufacture. This could be evidenced by learners completing a table or diagram.

For P7, learners are required to name sources of contamination. This could be evidenced by means of a table. Alternatively, learners could name sources of contamination and verbally inform their assessor. This could be documented.

For P8, learners are required to describe personal hygiene requirements in pharmacy manufacture. This could be evidenced by means of a diagram, poster or checklist.

For P9, learners need to describe the need for maintaining the environment used for medicines manufacture. This could be evidenced by learners completing a written assignment.

For P10, learners need to describe the common materials used in the manufacture of medicines. This could be evidenced by learners completing a written assignment.

For P11, learners need to describe the common processes used in the manufacture of medicines. This could be evidenced by learners completing a checklist on the steps taken in the various processes. Learners' comments could be added to the checklist.

For P12, learners need to outline the packaging and labelling requirements for manufactured medicinal products. This could be evidenced by learners completing a table or checklist.

For P13, learners need to identify documents used in the medicines manufacturing process. This could be evidenced by learners completing a table, or by witness statement, test questions or short answer questions.

For M1, learners should explain how current legislation applies to pharmacy manufacturing. This could be evidenced by a written assignment with diagrams.

For M2, learners should discuss, using a SOP document, the main points that apply to pharmacy manufacturing. This could be evidenced by a written assignment or a documented discussion with a tutor.

For M3, learners should discuss, using a named batch-manufactured product and a dispensed medicine for an individual patient, the difference in the procedures for production of these medicines. This could be evidenced by a written assignment or a documented discussion with a tutor.

For M4, learners should describe a selected environmental area used for medicines manufacture. This could be evidenced by a diagram of a selected environmental area used for medicines manufacture, which the learner has labelled and described appropriately.

For M5, learners should explain why the sources of contamination are important in the manufacturing of medicines. This could be evidenced by means of a written assignment or by learners discussing sources of contamination with their assessor. The discussion should be documented.

For M6, learners are required to produce a suitable label for a named manufactured medicine.

For D1, learners should describe the legislation requirements for manufacture, comparing individual with batches. This could be evidenced by learners completing a diagram or table.

For D2, learners need to explain how contamination relates to different sources. This could be evidenced by learners completing a written assignment.

For D3, learners should discuss how the labelling requirements apply to a suitably labelled named manufactured product. This could be evidenced in the workplace using witness testimonies or by the assessor providing a straightforward example which learners could comment on.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P4, P5, M1, M2, M3, D1	Legislation, Policies and Good Practice Relevant to Medicines Manufacture	Your pharmacy production manager has asked you to explain to a new member of staff the legislation and good manufacturing practices that apply to medicines manufacture .	Presentation or written report.
P6, P7, P8, P9, M4, M5, D2	Environmental and Personal Hygiene	Your pharmacy production manager has asked you to brief a new member of staff about the different environmental areas used in medicines manufacture and how they are maintained to prevent contamination, including personal hygiene of operators.	Presentation or written report.
P10, P11	Materials, Equipment and Processes Used in Medicines Manufacture	You are expecting a visitor to the pharmacy manufacturing unit. Write a briefing note for the visitor on the materials, equipment and processes used in the manufacture of medicines.	Written report.

Criteria covered	Assignment title	Scenario	Assessment method
P12, P13, M6, D3	Packaging, Labelling and Documentation for Manufactured Medicines	Identify the documents used in medicines manufacturing and produce a label to show to a new staff member.	Written report. Production of label.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 2
Unit 2: Law, Regulation and Health and Safety in Pharmacy
Unit 3: Working in the Pharmacy Team
Unit 6: Preparing for and Manufacture of Aseptic Products

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learners' workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

Applebe G and Wingfield J – *Dale and Applebe's Pharmacy Law and Ethics, Ninth Edition* (Pharmaceutical Press, 2009) ISBN 9780853698272

Aulton M E – *Pharmaceutics: The design and manufacture of medicines, Third Edition* (Churchill Livingstone, 2007) ISBN 9780443101083

Rules and Guidance for Pharmaceutical Manufacturers and Distributors 2007 – the Orange Guide (Pharmaceutical Press, 2007) ISBN 9780853697190

Winfield A J, Rees J and Smith I – *Pharmaceutical Practice, Fourth Edition* (Churchill Livingstone, 2009) ISBN 9780443069062

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.mhra.gov.uk	Medicines and Healthcare Products Regulatory Agency
www.nhs.uk	National Health Service

Delivery of personal, learning and thinking skills

The following table identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit:

Skill	When learners are ...
Independent enquirers	[IE1] identifying the differences between batch manufacture and dispensing for an individual patient [IE1] identifying requirements for personal hygiene
Creative thinkers	[CT2] asking questions to identify the maintenance of the medicines manufacturing environment
Reflective learners	[RL4] inviting feedback and reacting positively to praise, setbacks and criticism regarding their role in pharmacy manufacturing
Team workers	[TW1] collaborating with others to work towards common goals by understanding their role in medicines manufacture.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE3] exploring issues, events or problems from different perspectives in the pharmacy
Creative thinkers	[CT2] asking questions to extend their thinking with the integration of skills and knowledge obtained in the pharmacy and their educational course
Reflective learners	[RL4] reviewing their progress both in the pharmacy and in their educational course
Team workers	[TW1] collaborating with others, both in the pharmacy and in their educational course, to work towards common goals
Self-managers	[SM2] working towards goals, showing initiative, commitment and perseverance, both in the pharmacy and in their educational course.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	carrying out internet searches word processing documents to meet assignment requirements
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	explaining the need for safe practices when using the computer explaining the need for security when using the computer
Manage information storage to enable efficient retrieval	saving information collected for assignments in folders and files
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	using the internet to find information selecting worksheets
Select information from a variety of sources to meet requirements of a complex task	using appropriate data for producing worksheets composing and printing product labels
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	
Use appropriate software to meet the requirements of a complex data-handling task	entering data relevant to the product formula
Use communications software to meet requirements of a complex task	communicating electronically with the pharmacy team collecting information relevant to product manufacture
Combine and present information in ways that are fit for purpose and audience	presenting information in the relevant format for product production
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	discussing how documents and presentations could be improved

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	showing their understanding of basic calculations relating to pharmacy manufacture
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	asking pertinent questions communicating with the pharmacy team
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	understanding worksheets and other documentation relating to medicines manufacture
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing assignments.

Unit 8: Selling Over the Counter Medicines in the Pharmacy

Unit code: H/601/9167

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit provides the knowledge required to assist with the sale of over the counter medicines and the provision of information and advice on symptoms, products and healthcare.

Unit introduction

This unit will help equip learners with the knowledge required to work effectively and safely on the medicine counter. Learners will consider the importance and impact of their role within the healthcare environment.

The unit identifies use of standard operating procedures (SOPs) and the importance of learners working within the limits of their own role. Learners will consider how local policy and legislation identify the roles and responsibilities of the pharmacist and all members of the healthcare team. They will also learn to identify the uses and side effects of the active ingredient in common non-prescription medicines, helping them to choose suitable products to sell to individuals or refer to the pharmacist.

Learners will gain an understanding of how questions and techniques can be used to meet the different needs of individuals presenting with a variety of symptoms and requests. They will learn how to use resources to provide advice and information to individuals and how to choose the most appropriate information.

Learning outcomes

On completion of this unit a learner should:

- 1 Know about appropriate questions and techniques to obtain information from individuals
- 2 Know how to choose suitable medicinal products to sell over the counter
- 3 Know how to provide information and advice to individuals
- 4 Understand local policy, legislation and good practice for the sale of medicines.

Unit content

1 Know about appropriate questions and techniques to obtain information from individuals

Questioning techniques: 2WHAM and/or alternatives; open questions; closed questions

Individuals: those with special requirements; those with no idea of their needs; those with a clear idea of their needs; customer's representative; those presenting with symptoms

Requests: advice on symptoms; named products; healthcare advice eg dietary, smoking cessation

2 Know how to choose suitable medicinal products to sell over the counter

Commonly used non-prescription medicines: products available for various areas including coughs and colds, indigestion and heartburn, constipation and diarrhoea, pain, hay fever, skin, dental, women's health, men's health

Classes of medicines: General Sales Medicines (GSM); Pharmacy (P); Prescription Only Medicines (POM), products available in different pack sizes

Up-to-date knowledge: product knowledge including new products; legislation including POM to P switches

3 Know how to provide information and advice to individuals

Resources: standard operating procedures, protocols, MIMS, BNF, suppliers'/manufacturers' information, healthcare leaflets

Different formats: oral; written eg patient information leaflets; electronic

Individuals: those with special requirements; those with no idea of their needs; those with a clear idea of their needs; customer's representative; those presenting with symptoms

Information about products: uses, recommended doses, contra- indications, side effects

Healthcare advice: smoking cessation, dietary advice; health promotion activities and services

4 Understand local policy, legislation and good practice for the sale of medicines

When to refer: request for product or advice outside limits of learner's authority; sale of medicines to the elderly, children, pregnant women; requests for medicines with the same or similar active ingredients; requests for regular quantities of medicines liable to abuse or misuse

Legal and ethical responsibilities: when medicines may not be sold; confidentiality; protocols

Local policy: minor ailment schemes, head lice policy, patient group directions

Standard Operating Procedures: pharmacy protocol; Responsible Pharmacist; staff training requirements

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe when to use the questions in the 2WHAM protocol and when alternatives might be appropriate [IE1, IE2, IE4, IE5, IE6]	M1 interpret individual needs using information obtained by appropriate questions	D1 compare the use of different questions and techniques
P2 describe how to assess individual needs using questioning techniques appropriate to a pharmacy setting [IE1, IE2, IE4, IE5, IE6, SM7, EP1]		
P3 state uses, side effects and contra-indications for active ingredients in a range of commonly used non-prescription medicines	M2 describe information that should be given to individuals when selling a range of different commonly used non-prescription items	D2 following SOPs, recommend suitable commonly used non-prescription items
P4 describe the difference between the classes of medicines	M3 describe how the different classes of medicines affect an OTC sale	D3 assess how changes to classes of medicines affect the sale of OTC medicines
P5 describe reasons why it may not be possible to sell some products to the customer	M4 describe OTC products that may be liable to misuse or abuse	D4 compare the differences between misuse and abuse of OTC medicines

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P6 describe how product knowledge can be kept up to date	M5 describe resources that can be used to ensure that product knowledge remains up to date	
P7 explain why it is important to keep product knowledge up to date		
P8 list the common resources available to assist in the provision of advice on medicines and products	M6 describe the use of different resources used to assist in the provision of advice on medicines and products	D5 compare different resources and formats used to provide information and advice on medicines and products
P9 identify when to use different formats of information available to meet the needs of a range of individuals [RL6, EP1]		
P10 identify when and how to refer to the appropriate authority [RL6, TW3, SM7 EP1]	M7 explain the importance of referral to appropriate authorities	
P11 explain the legal and ethical responsibilities of the pharmacist and other members of the pharmacy team, including self [TW3]	M8 compare different roles and responsibilities of the pharmacist and other members of the pharmacy team	D6 assess the importance of the use of SOPs when selling OTC medicines.
P12 state the pharmacy protocol or standard operating procedure.	M9 describe how the pharmacy protocol is used by pharmacy staff.	

PLTS: This summary references where applicable, in square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team to allow them to have advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out in both the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will become aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet with patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Tutorials and/or workbook assignments on questions used in 2WHAM, open and closed questions, how to use questions and techniques, choosing appropriate questions and techniques to assess individual needs.</p> <p>Tutorials and/or workbook assignments on different types of requests, including requests for named products.</p> <p>Workplace experience, simulated exercises and/or quizzes that enable practice of the use of questions and techniques to be used when providing information and advice.</p> <p>Assignment 1: How to Obtain Relevant Information to Meet Individual Customer Needs at the Medicine Counter (P1, P2, P10, M1, M3, M7, D1, D2)</p>
<p>Learning outcome 2</p> <p>Use of tutorials, workbooks, self study or research to investigate the uses, side effects and contraindications for active ingredients in commonly used non-prescription items.</p> <p>Use of tutorials, workbooks, self study or research to investigate different classes of medicines, changes to classes/POM to P switches, different pack sizes of same product, importance of keeping product knowledge up to date and potential misuse and abuse of over the counter (OTC) medicines.</p> <p>Workplace situation or simulate exercises and/or quizzes for revision of product knowledge.</p> <p>Assignment 2: Choosing Appropriate Non-Prescription Medicines to Sell OTC (P3, P4, P5, P6, P7, M2, M3, M4, M5, D3)</p>
<p>Learning outcome 3</p> <p>Research/self study, use of workbooks and workplace experience to investigate the use of different resources used and formats available to assist in the provision of advice and information to individuals presenting with a variety of requests.</p> <p>Assignment 3: Providing Information and Advice to Individuals at the Medicine Counter (P7, P9, P11, M6, D5)</p>

Topic and suggested assignments/activities and/assessment
<p>Learning outcome 4</p> <p>Tutorials, use of workbooks and workplace experience to investigate the roles and responsibilities of the pharmacist and support staff relating to the selling of OTC medicines and the provision of information and advice.</p> <p>Tutorials, use of workbooks and workplace experience to investigate legal and ethical responsibilities as well as extended roles and services.</p> <p>Assignment 4: The responsibilities of the Pharmacy Team When Selling OTC Medicines (P11, P12, M3, M9, D6)</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

Most of the evidence from this unit will be generated from a series of assignments that encompass the grading criteria for all learning outcomes, although separate assignments could be used for merit and distinction criteria. There may be opportunities for learners to use evidence from work experience as evidence of knowledge criteria being met. Holistic assessment should be used where appropriate and evidence could be gathered from assignments in other units within the qualification framework. Tutors should ensure that suitable assignment guidance is provided, indicating the requirements for assessment criteria. Accredited Prior Learning (APL) could be provided for learners who have recently completed a Medicine Counter Assistant qualification meeting the professional minimum requirements.

For P1, learners are required to describe the questions used in the 2WHAM protocol and also when alternative questioning may be appropriate. They should know why these questions are asked and how to use them to identify individual needs. Workplace assessment or case studies could be used to provide evidence.

For M1, learners should be able to use knowledge from P1 to interpret information provided by individuals.

For P2, learners need to describe how they would assess individual needs using different questioning techniques. They should show that they know why different techniques are used when assessing individual needs. Assignments used for P1 could be expanded to provide evidence for P2.

For D1, learners should be able to demonstrate further understanding of questions and techniques and be able to compare their use in real-life or simulated situations. Reflective accounts based on evidence for previous criteria in this learning outcome could be used as evidence. Alternatively, a separate assignment could be used.

For P3, learners need to state the uses, side effects and contra-indications for active ingredients in a range of non-prescription medicines that may be sold for common complaints and symptoms. Assignments, whether written or simulated scenarios, may use generic or brand names in order to assess that the learner can identify the active ingredients in commonly used products.

For M2, learners should be able to use the knowledge from P3 and consider the information that would be required by the patient when they are issued the product. The same assignment used for P3 could provide evidence for M2.

For D2, learners should build on knowledge demonstrated for P3 and M2 to be able to recommend suitable products in line with an organisation's policies and procedures. Evidence could be presented through workplace assessment.

For P4, learners are required to describe the difference between GSL, P and POM medicines. They should be able to identify products in different classes. Assessment through test questions could be used as evidence.

For M3, learners should describe how the different classes of medicines affect the sale of OTC products. For example, they should be able to identify that products containing the same ingredients, but contained in different pack sizes, may not be the same class of medicine. Learners could produce charts or tables to show the categorising of products as evidence for M3.

D3 builds on the evidence demonstrated for M3. To achieve D3, learners should be able to assess situations such as POM to P switches and variables in pack sizes that affect the class of medicine and how this relates to practice. This could be linked to P6 and M5, where learners are required consider how to keep knowledge up to date.

For P5, learners need to describe reasons why products may not be sold. This may be due to variable packs sizes, pharmacist supervision, same active ingredients, contraindications, potential misuse or abuse. Evidence may link to P10 where the learner is required to demonstrate that they know how to refer.

For M4, learners should be able to recognise and describe products identified in P5. This could be evidenced by learners producing a chart or a table.

For D4, learners should know the difference between misuse and abuse, in addition to the knowledge demonstrated for P5 and M4. This could be assessed using questioning or observations in the workplace or through a written assignment or questions.

For P6, learners need to recognise the importance of keeping their knowledge up to date and indicate how they intend to do this in the future. This could include reference to POM to P switches and could therefore be evidenced in the evidence that covers M5.

M5 requires learners to demonstrate how they would update their knowledge when required, for example in relation to new products or products that have become available OTC. Written evidence describing recently available new products could be used.

For P7, learners are required to explain the importance of keeping up to date with product knowledge. This could link to assignments for P6.

For P8, learners need to know the resources available for them to use when assisting in the provision of advice on medicines and products. Learners should be able to list different resources. Assessment for P8 could include learners demonstrating how they would use the resources and in what circumstances. If so, the evidence presented for P8 could provide opportunities to cover M6 and D5.

For M6, learners are required to further describe the use of different resources. This could be part of a workplace assessment or simulated exercise.

For D5, learners need to consider the difference between various resources and their uses, and know how to select appropriate resources. This may be evidenced through assessment of M6 or through additional questions by the tutor.

For P9, learners need to identify different formats of information and how this contributes to meeting the needs of a range of individuals. Case studies could be used or workplace assessment that identifies written and spoken skills. This could be assessed as part of earlier assignments involving the provision of information and advice.

For P10, learners need to identify when and how to refer to the appropriate authority. Learners should also be able to identify the information that is required by the authority when referring. Evidence for this may link to P11, P12, M8 and M9.

For M7, learners should not only know when and how to refer (as demonstrated in P10) but why they are doing so and the importance of this. This could be evidenced through assessment of case studies, through questions or by means of workplace evidence.

For P11, learners need to show their understanding of the legal and ethical responsibilities of the pharmacy team as a whole (for example, confidentiality). Learners should also be able to explain the different legal responsibilities between roles. This could be assessed holistically as part of the assignments relating to meeting individual needs through questions and techniques.

For P12, learners are required to define the pharmacy protocol or standard operating procedures. This could be referenced in evidence for earlier assignments or through test questions.

For M8, learners are required to demonstrate that they can compare the legal and ethical roles and responsibilities of all members of the pharmacy team. This could be a separate written assignment, however understanding may have been demonstrated through assessment in other learning outcomes. Learners could be asked to produce a chart or diagram detailing the referral process and staff involved.

For M9, learners are required to describe how the pharmacy protocol or SOP is used. This may be evidenced through earlier assignments or could be part of a written assignment used to cover M8.

For D6, learners should extend knowledge from M8 and M9 and be able to assess the importance of following SOPs when selling OTC medicines. This may include explanations of different situations that require adherence to SOPs, ie the pharmacy protocol.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P10, M1, M3, M7, D1, D2	How to Obtain Relevant Information to Meet Individual Customer Needs at the Medicine Counter	<p>Case study – example</p> <p>A businessman aged 55 years wants something for a congested nose and a sore throat. He needs to go to an important meeting at work.</p> <ul style="list-style-type: none"> List the questions you would ask and why you would ask them. State how you would ask the questions and why. Describe different questions and techniques that you would use when (a) you are asked for a specific product and (b) when you receive a request from a customer representative. <p>Use the following answers to the 2WHAM questions to state if:</p> <p>EITHER a referral to the pharmacist is required (explain why)</p> <p>OR no referral is required.</p> <p>Recommend a suitable OTC product to sell</p> <p>W an elderly lady W constipation H For two days A Nothing tried M Blood pressure tablets.</p>	<p>Case study.</p> <p>Workplace assessment or simulated exercise.</p> <p>Case study.</p> <p>Workplace assessment or simulated exercise.</p>

Criteria covered	Assignment title	Scenario	Assessment method
P3, P4, P5, P6, P7, M2, M3, M4, M5, D3	Choosing Appropriate Non-prescription Medicines to Sell OTC	<p>For a range of products:</p> <ul style="list-style-type: none"> list some common side effects who the product is unsuitable for the dose for a child of 12 years patient advice points to be used when issuing <p>Choose a recent POM to P switch and explain how you obtained the relevant product knowledge required for your role on the medicine counter.</p>	<p>Written assignment or workplace assessment.</p> <p>Written assignment or professional discussion.</p>
P7, P9, P11, M6, D5	Providing Information and Advice to Individuals at the Medicine Counter	<p>You are dealing with a customer who needs advice and written information about healthcare eg this could include smoking cessation, dietary advice.</p> <ul style="list-style-type: none"> What information did the customer need? What questions did you ask the customer and what answers did they give? What resources did you use to meet the needs of the individual and why did you choose them? What written advice or information did you give to the customer in relation to their need? How did you know that the customer was satisfied with the information? Describe how you maintained courtesy and confidentiality towards the customer at all times. 	

Criteria covered	Assignment title	Scenario	Assessment method
P11, P12, M3, M9 D6	The Responsibilities of the Pharmacy Team when Selling OTC Medicines	<p>Produce a chart detailing the roles of all members of the pharmacy team involved in the sale of OTC medicines. The chart could be used when training a new member of the pharmacy team.</p> <p>Include:</p> <ul style="list-style-type: none"> • their title • their role • their responsibilities <p>During lunchtime, your pharmacist is out and a customer requests a P product. Explain the information you would give and describe the action you would take.</p>	<p>Written assignment.</p> <p>Written assignment or case study.</p>

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 5: Action and Uses of Medicines
Unit 13: Community Pharmacy Practice
Unit 15: Communicating in Pharmacy
Unit 18: Pharmacy Law, Ethics And Practice
Level 2
Unit 1: Communicating with Pharmacy Customers

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learner's workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

Applebe G E and Wingfield J — *Pharmacy Law and Ethics*, Eighth Edition (Pharmaceutical Press, 2005) ISBN 0853696047

Merrill J and Fisher J — *Pharmacy Law and Practice*, Fourth Edition (Blackwell Science, 2006) ISBN 0444522018

Royal Pharmaceutical Society — *Medicines, Ethics and Practice* (Pharmaceutical Press, current, published annually in July)

Journals

MIMS (Monthly Index of Medical Specialities) (Haymarket Group, published monthly)

Websites

www.chemistanddruggist.co.uk	Chemist and Druggist
www.responsiblepharmacist.org	Responsible Pharmacist
www.rpharms.com	Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The following table identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit:

Skill	When learners are ...
Independent enquirers	[IE1, IE2, IE4, IE5, IE6] asking questions of customers to obtain relevant information required to meet their individual needs
Reflective learners	[R6] providing information and advice on products and healthcare
Team workers	[TW3] considering relevant action to take in terms of referral to an appropriate authority
Self-managers	[SM7] interacting with customers using sensitivity and building and maintaining customer relationships
Effective participators	[EP1] evaluating information provided by customers and referring when appropriate.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE1, IE2] preparing and researching information for assignments
Creative thinkers	[CT2] asking questions during tutorials or in the workplace
Reflective learners	[R2, R3, R4] reviewing progress with tutors and mentors
Self-managers	[SM2, SM3, SM5] organising and planning assignments and self study
Effective participators	[EP1] discussing issues with tutors and colleagues during tutorials.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using the internet to conduct research completing blended learning assignments word processing assignments or homework dealing with simple workplace IT problems
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using a computer to produce individual learning plans
Manage information storage to enable efficient retrieval	storing assignments in files and folders using workplace systems containing confidential information
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	researching online data to help with assignments
Select information from a variety of sources to meet requirements of a complex task	developing an understanding of appropriate websites to use for research
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	collating information and filing their work in this unit appropriately
Use appropriate software to meet the requirements of a complex data-handling task	using electronic data to produce text and tables, images and numbers in assignments or in self study
Use communications software to meet requirements of a complex task	using ICT to communicate and network with colleagues and tutors
Combine and present information in ways that are fit for purpose and audience	choosing appropriate tools to present assignments presenting information in formats requested in assignments
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	discussing how documents and presentations could be improved

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	
Identify the situation or problems and identify the mathematical methods needed to solve them	
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	<p>participating in discussions with mentors, tutors and colleagues</p> <p>communicating with customers and colleagues</p> <p>providing information and advice on products and healthcare</p>
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading text provided by tutors using a variety of delivery methods
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing reports and assignments.

Unit 9: Processing a Prescription

Unit code: F/601/7555

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit provides learners with knowledge of processing prescriptions.

Unit introduction

The unit enables learners to process a variety of prescriptions in a safe environment and to become accustomed to the various items of equipment used in dispensing.

Learners are introduced to the laws and legal requirements associated with processing prescriptions and how they affect the role staff have in dispensing.

Learners will consider different patient requirements and how to select the correct equipment. Learners will find out why pharmacy records are maintained and how to maintain them. They will also learn about the requirements of dispensary computer systems and how they are used in providing a dispensing record.

Learning outcomes

On completion of this unit a learner should:

- 1 Know the procedures for receiving and processing prescriptions
- 2 Know the procedures for issuing prescriptions
- 3 Understand why pharmacy records are maintained and how to maintain them.

Unit content

1 Know the procedures for receiving and processing prescriptions

Limitations: roles and responsibilities; referral process

Policies: purpose; standard operating procedures; national and local guidelines; ethical and legal requirements; clinical trial policies; prescription charge legislation across the UK; exemptions

Prescribers: general practitioners; pharmacist prescribers; veterinary; dental; nursing prescribers; patient group directions

Prescriptions: types of prescription eg FP10, discharge, outpatient, clinical trials, dental, veterinary; details required on prescriptions

Payment methods (if required in your region): exemptions; refunds; prepayment certificates

2 Know the procedures for issuing prescriptions

Limitations: roles and responsibilities; referral process

Policies: purpose; standard operating procedures; national and local guidelines; ethical and legal requirements; clinical trial policies; prescription charge legislation across the UK; exemptions

Containers: uses; types of container eg click loc caps, patient own packs; materials used; original packs

Equipment: consumables eg oral syringes, patient information leaflets, spacers devices

Special needs: medication formulation; container types; interactions; contra-indications; referral

Issuing: information to identify patients or their representatives; usage; storage; maintenance of devices; possible side effects; route of administration; patient information leaflet; additional instruction leaflets

3 Understand why pharmacy records are maintained and how to maintain them

Dispensary records: purpose; type of records; function of records; patient identification; use of computer systems; paper and electronic records

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the roles and responsibilities of staff for receiving prescriptions [IE2]	M1 describe the different roles in dispensing	D1 review dispensing policies
P2 describe the procedures for receiving prescriptions	M2 compare the differences of each type of prescriber	
P3 list the different types of prescriptions	M3 explain different types of prescriptions	D2 discuss the legal requirements for prescriptions
P4 list the transactions involved in processing prescriptions	M4 accurately relate prescription charges to different patients	D3 discuss the legal requirements for exemptions
P5 describe the roles and responsibilities of staff for issuing prescriptions [IE2]	M5 match patient needs to available equipment	
P6 describe the procedures for issuing prescriptions	M6 describe additional materials used in issuing prescriptions	D4 select products for different routes of administration
P7 list consumables that may be issued with prescriptions		
P8 explain the importance of maintaining pharmacy records	M7 describe the requirements of dispensary records.	D5 discuss examples of dispensary computer records.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P9 discuss how pharmacy records can be maintained using a computer. [CT2]		

PLTS: This summary references where applicable, in square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team for advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out in both the training laboratory and the work environment before starting any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will become aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet with patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Introduction to the law associated with processing prescriptions.</p> <p>Discuss the policies used in the processing of prescriptions.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate roles and responsibilities.</p> <p>Introduction to the different types of prescribers.</p> <p>Discuss the different types of prescriptions.</p> <p>Personal study time and research.</p> <p>Assignment 1: Roles and Responsibilities (P1, P5, M1, M5, D1, D3)</p> <p>Assignment 2: Prescriptions (P2, P3, P4, M2, M3, M4, D2)</p>
<p>Learning outcome 2</p> <p>Introduction to the legal requirements for dispensing.</p> <p>Discuss the payments methods for prescription charges.</p> <p>Discuss the types of containers and the equipment used in dispensing.</p> <p>Discuss information given to patients.</p> <p>Introduction to the techniques used in processing prescriptions.</p> <p>Discuss patient special needs.</p> <p>Introduction to selecting equipment for processing prescriptions.</p> <p>Learners carry out selecting equipment.</p> <p>Demonstrate issuing prescriptions.</p> <p>Learners to carry out issuing prescriptions.</p> <p>Assignment 3: Issuing Prescriptions (P6, P7, M6, D4)</p>
<p>Learning outcome 3</p> <p>Introduction to how records are maintained.</p> <p>Discuss different types of patient records.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the use of computerised record systems.</p> <p>Learners carry out selection of equipment.</p> <p>Assignment 4: Records (P8, P9, M7, D5)</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

For P1, learners need to describe the different roles in receiving prescriptions and the responsibilities within those roles. This could be evidenced by completing tables showing different roles or a check sheet of responsibilities.

For P2, learners need to describe the procedures for receiving prescriptions.

For P3, learners are required to list the different types of prescriptions that are used. This should include all types of prescriptions, not just ones seen in their workplace.

P4 requires learners to list the different transactions that are involved in processing pharmacy prescriptions and should include taking payments and exemptions. This could be evidenced by test or short answer questions. If the learner's home country no longer requires payment, they should be aware of the regions that do require payment.

For P5, learners are required to describe the different roles in issuing prescriptions and the responsibilities within those roles. This could be evidenced by completing tables showing different roles or by means of a check sheet of responsibilities.

For P6, learners need to describe the procedures for issuing prescriptions to patients. This could be evidenced by test questions or short answer questions.

For P7, learners need to list consumables that may be issued with prescriptions. This could be evidenced by showing learners a selection of consumables such as oral syringes, patient information leaflets and measures. Learners could verbally identify each consumable, which could be documented by the assessor in a check list.

For P8, learners need to explain the importance of maintaining up-to-date patient records within the pharmacy.

For P9, learners need to discuss how the records in P8 can be maintained using a computer. This could be evidenced by learners producing evidence of records they have produced and discussing each document with the assessor, which could be documented.

For M1, learners need to describe the different roles, identified in P1, along with any other roles involved in dispensing. This could be evidenced by learners completing tables with information on the different roles in dispensing.

For M2, learners should compare differences between prescribers.

For M3, learners are required to explain different types of prescriptions and should include as many from those identified in P3 as are available in their workplace. This could be evidenced in the workplace using a witness statement.

For M4, learners should accurately relate prescription charges to different patients, including when exemptions are appropriate. If charges are no longer required in the learner's home country, learners should be aware of how the law has changed to render the charges non-applicable in their home country. This could be evidenced in the workplace using a witness statement or test or short answer questions.

For M5, learners are required to match patient needs to available equipment, for example oral liquids for babies should be given with an oral syringe. This could be evidenced in the workplace using a witness statement or through test questions or short answer questions.

For M6, learners need to describe additional materials used in issuing prescriptions which should include consumable items and additional information. This could be evidenced by an illustrated report or leaflet with examples of materials.

M7 requires learners to describe the requirements of dispensary records. This could be evidenced by a report to describe requirements on generic records given by the assessor. All records given as examples should be straightforward.

For D1, learners need to review their workplace dispensing policies. This could be evidenced by producing a report.

For D2, learners should discuss the legal requirements for prescriptions. This could be evidenced by a written assignment such as a report or poster with examples of different prescriptions from the workplace.

For D3, learners should discuss the legal requirements for exemptions identified in M4. This could be evidenced by a written assignment such as a report or poster with examples of different exemptions from the workplace.

D4 requires learners to select products used for different routes of administration. This could be evidenced in the workplace using a witness statement of different products dispensed correctly for the appropriate route of administration.

D5 requires learners to discuss examples of dispensary computer records identified in M7. This could be evidenced in the workplace using a witness statement with examples of records created by learners.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P5, M1, M5, D1, D3	Roles and Responsibilities	You have been asked by a local careers advisor to produce notes for learners on the role of different staff working in a pharmacy dispensary. The notes will be used for a careers event.	Written assignment or report/poster with supporting notes.

Criteria covered	Assignment title	Scenario	Assessment method
P2, P3, P4, M2, M3, M4, D2	Prescriptions	You have been asked to produce a training document for new staff on receiving prescriptions.	Written assignment/report/training document.
P6, P7, M6, D4	Issuing Prescriptions	You have been asked to produce a leaflet for patients to explain how to use a variety of consumable items.	Leaflet.
P8, P9, M7, D5	Records	You have been asked to design the ideal pharmacy computer records system. Your design will be used to help software developers in developing the IT requirements for a pharmacy computer system.	Written assignment or illustrated report.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 15: Dispensing and Supply of Medicines
Unit 18: Pharmacy Law, Ethics and Practice
Level 2
Unit 1: Communicating with Pharmacy Customers
Unit 2: Law, Regulation, Health and Safety in Pharmacy
Unit 10: Assemble Prescriptions Safely

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learners' workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

British National Formulary (Pharmaceutical Press, 2010) ISBN 9780853699279

The Drug Tariff (HMSO, published monthly)

Royal Pharmaceutical Society — *Medicines, Ethics and Practice*
(Pharmaceutical Press, current, published annually in July)

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.mhra.gov.uk	Medicines and Healthcare Products Regulatory Agency
www.pjonline.com	<i>Pharmaceutical Journal</i> Online
www.rpharms.com	Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The following table identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit:

Skill	When learners are ...
Independent enquirers	[IE2] researching different roles and responsibilities of staff for receiving and issuing prescriptions
Creative thinkers	[CT2] asking questions and discussing how pharmacy records can be maintained using a computer system.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Creative thinkers	[CT3] reviewing the pharmacy computer system
Reflective learners	[RL3] reviewing the pharmacy computer system
Team workers	[TW1] working with colleagues to maintain patient records.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT systems to produce dispensary records
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload able to identify a fault and know the procedure to report it
Manage information storage to enable efficient retrieval	saving patient information records in accordance with procedures aware of keeping their password safe and not disclosing it to others
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information and examples from pharmacy ICT systems
Select information from a variety of sources to meet requirements of a complex task	obtaining information from identified websites
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating patient records using email or electronic portfolio to send centre produced work to their own address
Use appropriate software to meet the requirements of a complex data-handling task	creating patient records creating a single document that contains all the information for their work
Use communications software to meet requirements of a complex task	creating a contact list
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	

Skill	When learners are ...
Mathematics – representing	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	calculating prescription charges
Identify the situation or problems and identify the mathematical methods needed to solve them	calculating prescription charges
Choose from a range of mathematics to find solutions	
Mathematics – analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics – interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	providing information to patients being assessed on their communication with customers

Skill	When learners are ...
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	producing a leaflet for patients explaining how to use a variety of consumable items.

Unit 10: Assemble Prescriptions Safely

Unit code: Y/601/7559

QCF Level 2: BTEC Specialist

Credit value: 5

Guided learning hours: 30

Unit aim

This unit aims to provide learners with knowledge and understanding required for assembling prescribed items safely.

Unit introduction

This unit introduces learners to the process of assembling a variety of prescriptions safely. Learners will become accustomed to the various items of equipment and materials required to complete the process.

The unit covers the laws and legal requirements associated with assembling prescribed items and the roles and responsibilities of staff. Learners will develop their knowledge to enable them to complete an in-process check on prescribed items. Learners will also look at dispensing record systems, including error recording. Additionally, they will consider the risks involved in assembling prescriptions and how to reduce them.

Learning outcomes

On completion of this unit a learner should:

- 1 Know the procedures for assembling prescribed items
- 2 Know how to assemble prescribed items
- 3 Understand why records are maintained
- 4 Know how to reduce risks and errors.

Unit content

1 Know the procedures for assembling prescribed items

Limitations: roles and responsibilities; referral process

Policies: purpose; standard operating procedures; national and local guidelines; ethical and legal requirements; labelling requirements; safe handling and storage of hazardous materials

Prescriptions: types of prescription eg FP10, discharge, outpatient, clinical trials, dental, veterinary; details required on prescriptions

Prescribers: general practitioners; pharmacist prescribers; veterinary; dental; nursing prescribers; patient group directions

Types of check: clinical; in-process; final

2 Know how to assemble prescribed items

Assembling: information required; brand and generic names; abbreviations; conventions; route of administration; different strengths; doses and quantities; types of formulations; reconstitution; calculations; patient information leaflet; additional instruction leaflets

Equipment: use; maintenance; measurement; counting and transfer equipment; consumables used eg oral syringes, patient information leaflets, spacers

Containers: uses; types of container eg click loc caps, boxes, amber glass bottles; original pack; materials used

3 Understand why records are maintained

Dispensary records: purpose; type of records; function of records; patient identification; use of computer systems; paper and electronic records including patient medication records (PMRs); error recording

4 Know how to reduce risks and errors

Factors which cause deterioration: environmental conditions; storage conditions; microbial contamination

Sources of contamination: microbial; cross-chemical; physical; environmental; storage conditions

Prevention and corrective action: personal hygiene; safe handling; safe dispensing technique; correct storage conditions; correct container; maintenance of storage conditions; maintenance and cleaning of dispensing equipment; shortened expiries

Errors: types eg near miss incidents; factors which can cause errors; implications of errors; roles and responsibilities; referral process

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the roles and responsibilities of staff for assembling prescriptions	M1 compare the different roles for assembling prescriptions	D1 review the procedures for assembling prescribed items
P2 describe the procedures for assembling prescribed items	M2 explain the importance of following the procedures described in P2	
P3 list the different types of prescriptions	M3 categorise the different types of prescriber	D2 define the legal requirements for prescriptions
P4 list the different types of checks made on prescriptions	M4 explain the need for each type of check	
P5 list the different formulations of medicines	M5 name the routes of administration	D3 match the formulations to the routes of administration
P6 describe different types of dispensing equipment	M6 select the correct type of dispensing equipment	D4 discuss the procedures for measuring and transferring medicines from bulk
P7 accurately perform dispensing calculations	M7 select the correct type of container	
P8 outline the packaging and labelling requirements for assembled items	M8 describe additional materials used for assembling prescriptions	D5 define the legal requirements for labelling

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P9 describe the need for endorsing	M9 explain the importance of recording information accurately	D6 discuss the types of information and activities that must be recorded
P10 explain the importance of maintaining dispensing records		
P11 discuss why patient medication records are used [CT2]		
P12 identify factors which cause deterioration of stock	M10 select the correct storage conditions	D7 explain the importance of maintaining a clean working environment and clean equipment
P13 list the sources of contamination	M11 discuss the importance of personal hygiene	
P14 describe processes used to reduce the risk from hazardous materials	M12 justify the use of protective clothing and equipment	
P15 identify the different causes of errors	M13 describe how errors are recorded.	D8 review how errors are recorded.
P16 list the possible consequences of errors. [IE2]		

PLTS: This summary references where applicable, in square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers RL – reflective learners TW – team workers SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This qualification enables learners who are working in a dispensing or medicines supply environment to gain underpinning knowledge required to support the corresponding competency-based qualification.

Within their workplace learners should have access to a sufficient variety of activities in their day-to-day work to enable them to experience most aspects of pharmacy work. Ideally, learners should have access to a pharmacist and other members of the pharmacy team to allow them to have advice and support during their learning. Learners should be strongly encouraged to work to standard operating procedures and recognise when it is necessary to refer matters to a senior professional.

Tutors delivering this unit have opportunities to use a wide variety of delivery methods. Lectures, practical demonstrations, discussions, seminar presentations, research using the internet and/or library resources and the use of workplace pharmacy experience would all be suitable. Delivery should encourage learners to be enthusiastic about their new profession and motivate them to find out more information and improve their skills through questioning and practice.

Pharmacy workplaces should be monitored regularly in order to ensure the quality of the learning experience. Learners and supervisors should be made aware of the requirements of this unit before any work-related activities take place, so that naturally occurring evidence could be collected at the time. Activities provided for the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) may be linked to and provide evidence for the learner's competency-based qualification, (where the competency-based qualification is being undertaken). Learners should therefore have a portfolio in which to keep a record of activities as this could provide evidence for assessment on either or both qualifications.

Health and safety issues relating to working in a medicines supply environment must be regularly reinforced. Risk assessments must be carried out both in the training laboratory and the work environment before the start of any practical activities.

Where learners are taking this qualification in conjunction with the corresponding competence-based Pharmacy Services qualification, an integrated approach to delivery and assessment will help them develop the required practical skills whilst acquiring underpinning knowledge and confidence in a dispensing and medicines supply environment.

Learners will be aware of the health and safety requirements and quality assurance procedures necessary to ensure patient safety and satisfaction. Visits to clinical environments, other than a pharmacy, to meet patients and other healthcare professionals, would be beneficial at this stage of the learning process.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of assignments.
<p>Learning outcome 1</p> <p>Introduction to the law associated with assembling prescribed items.</p> <p>Discuss the policies and procedures used in assembling prescribed items.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate roles and responsibilities.</p> <p>Introduction to the different types of prescribers and the different types of prescriptions.</p> <p>Introduction to the different types of checks made on prescriptions.</p> <p>Demonstration of an in-process check.</p> <p>Observation of learner performing an in-process check.</p> <p>Personal study time and research.</p>
<p>Learning outcome 2</p> <p>Introduction to the equipment and techniques used to assemble prescribed items.</p> <p>Introduction to prescribed items; generic and brand names, formulations, routes of administration, strengths, doses and quantities.</p> <p>Discuss additional materials and consumables.</p> <p>Discuss the types of containers used to assemble prescribed items.</p> <p>Individual activity – match formulations to routes of administration.</p> <p>Discuss and complete dispensing calculations.</p> <p>Introduction to legal requirements for labelling prescribed items.</p> <p>Observation of learner producing labels for prescribed items.</p> <p>Observation of learner assembling prescribed items.</p> <p>Personal study time and research.</p> <p>Assignment 1: Roles and Responsibilities (P1, P3, P4, M1, M3, M4, D2)</p> <p>Assignment 2: Assembling Prescribed Items (P2, P5, P6, P7, P8, M2, M5, M6, M7, M8, D1, D3, D4, D5)</p>

Topic and suggested assignments/activities and/assessment
<p>Learning outcome 3</p> <p>Introduction to endorsement of prescriptions and the need for endorsing.</p> <p>Observation of learner endorsing a prescription.</p> <p>Introduction to dispensing records.</p> <p>Tutorials, use of workbooks and/or workplace experience to investigate the dispensing records systems.</p> <p>Observation of learner completing a dispensing record.</p> <p>Personal study time and research.</p>
<p>Learning outcome 4</p> <p>Introduction to risks: causes of deterioration, sources of contamination and hazardous materials.</p> <p>Discussion of risks, including corrective and preventative action.</p> <p>Introduction to errors: types, causes and possible consequences.</p> <p>Case studies: types of errors, causes and possible consequences.</p> <p>Discuss the need to record errors.</p> <p>Personal study time and research.</p> <p>Assignment 3: Errors and Dispensing records (P9, P10, P11, P15, P16, M9, M13, D6, D8)</p> <p>Assignment 4: Reduce Risks (P12, P13, P14, M10, M11, M12, D7)</p>
Review of unit and programme of assignments.

Assessment and grading

A variety of assessment methods could be used in this unit to allow learners the opportunity to make use of all delivery resources available. Assignments may be delivered through blended learning programmes and may include the use of test questions and case studies. Where verbal discussion is used as an assessment method, the assessor's observation record must clearly document learners' achievements.

For P1, learners need to describe the roles and responsibilities of staff for assembling prescriptions. This could be evidenced by learners completing a table explaining the responsibilities of different staff who take part in the assembly of prescriptions.

For P2, learners are required to describe the procedures for assembling prescribed items. This could be evidenced by learners completing a written assignment, describing the procedures in their workplace and the legal requirements for assembling prescribed items.

To achieve P3, learners need to list the different types of prescriptions. This could be evidenced by learners verbally identifying different prescriptions, which could be documented by the assessor on a check sheet.

For P4, learners need to list the different types of checks made on prescriptions. This could be evidenced by learners completing a table indicating the different checks and who completes them.

For P5, learners need to list the different formulations of medicines. This could be evidenced by the learner completing a table indicating formulations of medicines.

For P6, learners are required to describe different types of dispensing equipment. This could be evidenced by learners identifying dispensing equipment and discussing its use with the assessor, which could be documented.

For P7, learners need to accurately perform dispensing calculations. This could be evidenced by learners completing dispensing calculations set by the tutor. The dispensing calculations should be straightforward.

For P8, learners need to outline the packaging and labelling requirements for assembled items. This could be evidenced by learners completing short answer questions.

For P9, learners need to describe the need for endorsing. This could be evidenced by learners completing written work containing examples of endorsements or by being given examples of endorsements by the assessor. The examples should be straightforward.

For P10, learners are required to explain the importance of maintaining dispensing records. This could be evidenced by learners producing records they have generated, and discussing with their assessor. The discussion could be documented.

For P11, learners are required to discuss why patient medication records are used. This could be evidenced by learners producing records they have generated, and discussing with their assessor. The discussion could be documented.

For P12, learners need to identify factors which cause deterioration of stock. This could be evidenced by learners completing a table or check list.

For P13, learners are required to list the sources of contamination. This could be evidenced by learners identifying sources of contamination either on a picture or in the workplace with their assessor. This could be documented.

For P14, learners need to describe processes used to reduce the risk from hazardous materials. This could be evidenced by the learner completing test questions or short answer questions.

For P15, learners need to identify the different causes of errors. This could be evidenced by learners completing and documenting a discussion with their assessor.

For P16, learners need to list the possible consequences of errors. This could be evidenced by learners completing a table showing different types of errors.

For M1, learners need to compare the different roles for assembling prescriptions. This could be evidenced by learners completing a table containing information on the different roles.

For M2, learners are required to explain the importance of following procedures for assembling prescribed items. This could be evidenced by learners completing short answer questions or 'what if' scenarios.

For M3, learners are required to categorise the different types of prescriber. This could be evidenced by learners verbally completing a table that includes category headings with the different types of prescriber.

For M4, learners should explain the need for each type of check. This could be evidenced by test questions or short answer questions or completion of a table that includes the different checks made on an assembled prescription.

To achieve M5, learners should name the routes of administration. This could be evidenced by learners completing a diagram or naming routes from their abbreviations.

For M6, learners should select the correct type of dispensing equipment. This could be evidenced in the workplace using a witness statement.

For M7, learners are required to select the correct type of container. This could be evidenced in the workplace using a witness statement.

For M8, learners should describe additional materials used for assembling prescriptions. This could be evidenced in the workplace using a witness statement.

For M9, learners should explain the importance of recording information accurately. This could be evidenced by learners producing records they have generated, and discussing these records with their assessor. The discussion could be documented. This could also be evidenced by means of 'what if' scenarios.

For M10, learners are required to select the correct storage conditions. This could be evidenced in the workplace using a witness statement.

For M11, learners are required to discuss the importance of personal hygiene. This could be evidenced by learners completing a discussion with their assessor. The discussion could be documented.

To achieve M12, learners are required to justify the use of protective clothing and equipment. This could be evidenced by learners completing a table containing a list of protective clothing and equipment and their functions.

M13 requires learners to describe how errors are recorded. This could be evidenced by learners completing an error record. The learner could then describe, in a written report or in discussion with their assessor, how they completed the error record.

For D1, learners should review the procedures for assembling prescribed items. This could be evidenced by learners completing a written assignment reviewing procedures in their workplace or by using an example of a procedure given to them by their assessor. Examples should be straightforward.

D2 requires learners to define the legal requirements for prescriptions. This could be evidenced by learners completing a written assignment containing an example of a prescription.

For D3, learners are required to match the formulations to the routes of administration. This could be evidenced by learners completing a diagram.

For D4, learners should discuss the procedures for measuring and transferring medicines from bulk. This could be evidenced by observation and discussion in the workplace with their assessor or by providing examples of procedures and discussing them. Examples should be straightforward.

D5 requires learners to define the legal requirements for labelling. This could be evidenced by a written assignment containing examples of different labels from the workplace.

To achieve D6, learners should discuss the types of information and activities that must be recorded. This could be evidenced by learners producing records they have generated, and discussing these with their assessor. The discussion could be documented.

For D7, learners are required to explain the importance of maintaining a clean working environment and clean equipment. This could be evidenced by a written assignment with images or by 'what if' scenarios.

D8 requires learners to review how errors are recorded. This could be evidenced by a written assignment reviewing error recording procedures or by the assessor providing an example for the learner to review.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P3, P4, M1, M3, M4, D2	Roles and Responsibilities	You have been asked to provide a handout note for patients on the different roles of pharmacy staff and checks on prescriptions.	Written assignment. Handout. Tables. Checklist. Diagrams.
P2, P5, P6, P7, P8, M2, M5, M6, M7, M8, D1, D3, D4, D5	Assembling Prescribed Items	You have been asked to produce a training document for new staff on assembling prescribed items.	Written assignment. Diagrams. Glossary of terms. Checklist.
P9, P10, P11, P15, P16, M9, M13, D6, D8	Errors and Dispensing Records	You have been asked to provide a handout note to staff outlining the importance of error and dispensing records.	Written work. Handout. Case studies. Checklist.

Criteria covered	Assignment title	Scenario	Assessment method
P12, P13, P14, M10, M11, M12, D7	Reduce Risks	You have been asked to complete a poster to increase staff awareness of risks and how to reduce them. The poster will include contamination sources, deterioration of stock and hazardous materials.	Written work. Poster. Diagrams. Pictures.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the *BTEC Pharmaceutical Science* sector suite. This unit has particular links with:

Level 3
Unit 15: Dispensing and Supply of Medicines
Unit 18: Pharmacy Law, Ethics and Practice
Level 2
Unit 2: Law, Regulation, Health and Safety in Pharmacy
Unit 3: Working in the Pharmacy Team
Unit 9: Processing a Prescription

Essential resources

It is recommended that learners undertaking this unit have access to a registered pharmacist, a registered pharmacy technician, a prescriber, or some other member of the medicines supply team to act as a mentor. Where learners are taking this qualification as well as the corresponding Pharmacy Services competence-based qualification, the person acting as mentor for this qualification would be additional to their competence-based assessor.

Staff delivering this unit should be competent and experienced. Staff delivering pharmacy-specific units should be registered with the General Pharmaceutical Council, but exceptions to this may apply in Northern Ireland. Learners undertaking this qualification should have, at some point, contact with staff who have recent experience of pharmacy practice and show evidence of contact with the profession.

Learners will need access to a library with a range of relevant books, journals and electronic resources for example *Medicines Complete*.

Employer engagement and vocational contexts

Learners undertaking work placements may work in any kind of pharmacy, for example community, hospital, prison, or in any field of medicines supply. The learners' workplace, usually a medicines supply environment, should meet all relevant health and safety legislation. Ideally, learners should have some contact with other members of the wider pharmacy team. Where possible, all learners should visit other related areas of healthcare, for example a doctor's surgery or a ward or department in a hospital, as this will enable them to obtain a balanced overview of how the pharmacy service relates to other healthcare environments.

Indicative resource materials

Textbooks

British National Formulary (Pharmaceutical Press, 2010) ISBN 9780853699279

Royal Pharmaceutical Society — *Medicines, Ethics and Practice*
(Pharmaceutical Press, current, published annually in July)

Journals

Pharmaceutical Journal (Pharmaceutical Press, 2010)

Websites

www.hse.gov.uk/coshh	Health and Safety Executive, Control of Substances Hazardous to Health (COSHH)
www.mhra.gov.uk	Medicines and Healthcare Products Regulatory Agency
www.pjonline.com	<i>Pharmaceutical Journal</i> Online
www.rpharms.com	Royal Pharmaceutical Society

Delivery of personal, learning and thinking skills

The following table identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit:

Skill	When learners are ...
Independent enquirers	[IE2] planning and carrying out research in order to find possible consequences of errors
Creative thinkers	[CT2] asking questions during discussion to extend their thinking.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	[IE2] planning and carrying out research for assessments [IE4] reviewing procedures and record systems
Creative thinkers	[CT1] reviewing procedures and record systems
Team workers	[TW5] taking responsibility, showing confidence in themselves and their contributions when working within a pharmacy team to complete a task
Reflective learners	[RL6] communicating their learning in relevant ways for different audiences during discussions
Self-managers	[SM3] organising their time, resources and prioritising actions for assessments.

Functional Skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Plan solutions to complex tasks by analysing the necessary stages	using ICT systems to produce dispensary records
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	using electronic portfolios to manage their workload able to identify a fault and know the procedure to report it
Manage information storage to enable efficient retrieval	saving patient information records in accordance with procedures aware of keeping their password safe and not disclosing it to others
ICT – finding and selecting information	
Use appropriate search techniques to locate and select relevant information	collecting information and examples from pharmacy ICT systems
Select information from a variety of sources to meet requirements of a complex task	obtaining information from identified websites
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	creating labels using pharmacy ICT systems creating a written assignment creating patient records
Use appropriate software to meet the requirements of a complex data-handling task	creating patient records
Use communications software to meet requirements of a complex task	using email or electronic portfolio
Combine and present information in ways that are fit for purpose and audience	presenting information from the document as requested in the assignment briefs
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	reviewing the records system

Skill	When learners are ...
Mathematics	
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations	completing dispensing calculations
Identify the situation or problems and identify the mathematical methods needed to solve them	completing dispensing calculations
Choose from a range of mathematics to find solutions	using in-process check of dispensing calculations
Mathematics — analysing	
Apply a range of mathematics to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Mathematics — interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	
Draw conclusions and provide mathematical justifications	
English — Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	participating in discussions with assessors, witnesses and colleagues in the workplace
English — Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	reading information from a range of resources reading prescriptions conducting an in-process check of labels
English — Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	writing assignment work and providing short answers producing patient, dispensing and error records producing labels.

Further information

For further information please call Customer Services on 0844 576 0026 (calls may be recorded for training purposes) or visit our website (www.edexcel.com).

Useful publications

Related information and publications include:

- *Guidance for Centres Offering Edexcel/BTEC QCF Accredited Programmes* (Edexcel, distributed to centres annually)
- Functional skills publications – specifications, tutor support materials and question papers
- *Regulatory arrangements for the Qualification and Credit Framework* (published by Ofqual) August 2008
- the current Edexcel publications catalogue and update catalogue.

Edexcel publications concerning the Quality Assurance System and the internal and external verification of vocationally related programmes can be found on the Edexcel website and in the Edexcel publications catalogue.

NB: Some of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

How to obtain National Occupational Standards

Skills for Health

(Head Office)

2nd Floor

Goldsmiths House

Broad Plain

Bristol BS2 0JP

Telephone: 0117 922 1155

Fax: 0117 925 1800

Email: office@skillsforhealth.org.uk

www.skillsforhealth.org.uk

Professional development and training

Edexcel supports UK and international customers with training related to BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building functional skills into your programme
- building in effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website (www.edexcel.com/training). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

Our customer service numbers are:

BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
The Diploma	0844 576 0028
DiDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

The training we provide:

- is active – ideas are developed and applied
- is designed to be supportive and thought provoking
- builds on best practice.

Our training is underpinned by the LLUK standards for those preparing to teach and for those seeking evidence for their continuing professional development.

Annexe A

The Edexcel BTEC qualification framework for the Pharmacy Services sector

Progression opportunities within the framework

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
5		BTEC Level 5 HND Diploma in Applied Biology (QCF) BTEC Level 4 HND Diploma in Applied Chemistry (QCF)		
4		BTEC Level 4 HNC Diploma in Applied Biology (QCF) BTEC Level 4 HNC Diploma in Applied Chemistry (QCF)		
3	GCSE Sciences: Chemistry, Physics, Biology/Human Perspectives on Science; Psychology	Edexcel BTEC Level 3 Diploma in Pharmaceutical Science (QCF)		Edexcel Level 3 NVQ Diploma in Pharmacy Services Skills (QCF)

Level	General qualifications		BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
2	GCSE Science; Additional Science; Astronomy; Chemistry; Physics; Biology; Psychology	GCSE Science	Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF)		Edexcel Level 2 NVQ Certificate in Pharmacy Services Skills (QCF)
1					
Entry			Foundation Learning Tier (Applied Science)		

Annexe B

Wider curriculum mapping

Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) give learners opportunities to develop an understanding of spiritual, moral, ethical, social and cultural issues as well as an awareness of citizenship, environmental issues, European developments, health and safety considerations and equal opportunities issues.

The Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) makes a positive contribution to wider curricular areas as appropriate.

Spiritual, moral, ethical, social and cultural issues

Throughout the delivery of this qualification learners will have the opportunity to actively participate in different kinds of decision making. They will have to consider fair and unfair situations and explore how to resolve conflict. Working in small groups they will learn how to respect and value others' beliefs, backgrounds and traditions.

The qualification contributes to an understanding of:

- spiritual issues – for example in *Unit 1: Communicating with Pharmacy Customers*, where learners gain an appreciation of why it is important to show respect for diversity, equality and the wellbeing of others.
- moral and ethical issues – for example in *Unit 8: Selling Over the Counter Medicines in the Pharmacy*, where learners consider the impact of individuals' beliefs and values on healthcare and the choice of treatments they can make.
- social and cultural issues – for example in *Unit 8: Selling Over the Counter Medicines in the Pharmacy*, where learners consider sociological, environmental and economic factors which contribute to healthcare.

Citizenship

Learners undertaking the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) will have the opportunity to develop their understanding of citizenship issues, for example in terms of their rights and responsibilities in a pharmacy workplace.

Environmental issues

Developing a responsible attitude towards the care of the environment is an integral part of this qualification. Learners are encouraged to minimise waste and discuss controversial issues. Learners undertaking the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) will have the opportunity to develop their understanding of environmental issues through the experience of the pharmacy workplace in many of the units.

European developments

Much of the content of the qualification applies throughout Europe, even though the delivery is in a UK context.

Health and safety considerations

Health and safety is embedded within many of the units in this qualification. Learners will consider their health and safety at work, how to identify risks and hazards and how to minimise those risks.

Equal opportunities issues

There will be opportunities throughout this qualification to explore different kinds of rights and how these affect both individuals and communities, for example learners will consider their rights at work and the rights of employers and how these rights affect the work community.

Wider curriculum mapping

Level 2

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
Spiritual	✓		✓					✓	✓	
Moral and ethical	✓	✓	✓			✓	✓	✓	✓	✓
Social and cultural	✓		✓					✓	✓	
Citizenship issues	✓		✓			✓	✓	✓	✓	
Environmental issues	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
European developments	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Health and safety considerations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Equal opportunities issues	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Annexe C

National Occupational Standards/mapping with NOS

The grid below maps the knowledge covered in the Edexcel BTEC Level 2 Certificate in Pharmaceutical Science (QCF) against the underpinning knowledge of the Skills for Health National Occupational Standards (NOS).

KEY

- ✓ indicates that the Edexcel BTEC Level 2 Firsts cover all of the underpinning knowledge of the NOS
- # indicates partial coverage of the NOS
- a blank space indicates no coverage of the underpinning knowledge

Units	1	2	3	4	5	6	7	8	9	10
NOS										
PHARM 01: Assist with the provision of a pharmacy service to meet individual needs	✓									
ENTO HSS1: Make sure your own actions reduce risks to health and safety		✓								
HSC Unit 241: Contribute to the effectiveness of teams			✓							
PHARM 05: Assist in the sale of medicines and products								✓		
PHARM 07: Receive prescriptions from individuals									✓	
PHARM 09: Assemble prescribed items										#
PHARM 12: Order pharmaceutical stock				✓						
PHARM 13: Receive pharmaceutical stock					✓					
PHARM 14: Maintain pharmaceutical stock					✓					
PHARM 15: Issue pharmaceutical stock				✓						

Units	1	2	3	4	5	6	7	8	9	10
NOS										
PHARM 16: Assist in the manufacture and assembly of medicinal products							✓			
PHARM 18: Prepare aseptic products						#				
PHARM 21: Prepare documentation, materials and other items for the preparation of aseptic products						#				
PHARM 22: Assist in the preparation of documentation, materials and other items for manufacture and assembly of medicinal products							#			
PHARM 27: Undertake an in-process accuracy check of assembled prescribed items prior to the final accuracy check										#
PHARM 32: Assist in the issuing of prescribed items									✓	

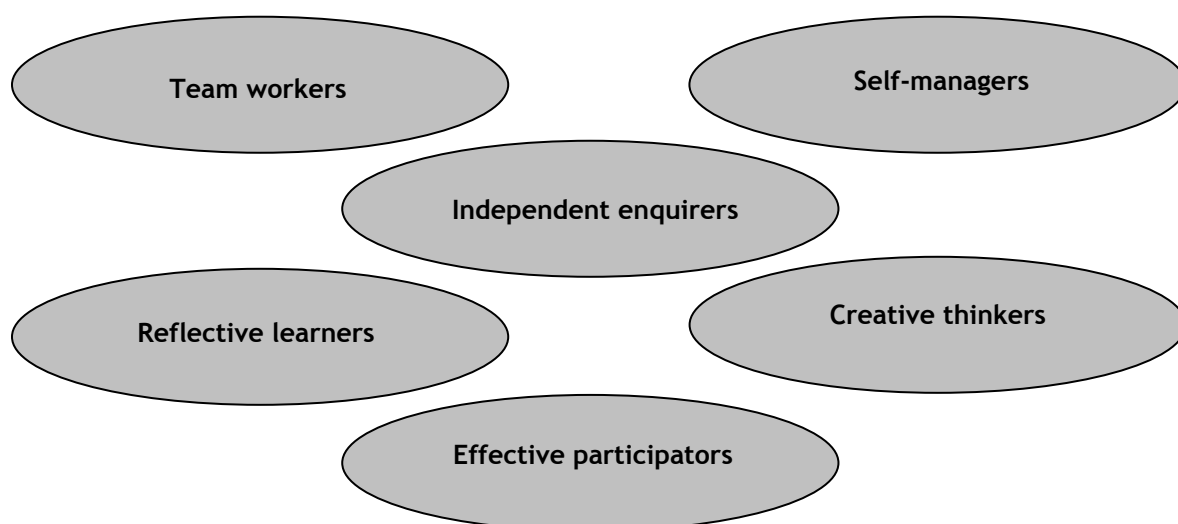
Annexe D

Personal, learning and thinking skills

A FRAMEWORK OF PERSONAL, LEARNING AND THINKING SKILLS 11-19 IN ENGLAND

The framework comprises six groups of skills that, together with the Functional Skills of English, mathematics and ICT, are essential to success in learning, life and work. In essence the framework captures the essential skills of: managing self; managing relationships with others; and managing own learning, performance and work. It is these skills that will enable young people to enter work and adult life confident and capable.

The titles of the six groups of skills are set out below.



For each group there is a focus statement that sums up the range of skills. This is followed by a set of outcome statements that are indicative of the skills, behaviours and personal qualities associated with each group.

Each group is distinctive and coherent. The groups are also inter-connected. Young people are likely to encounter skills from several groups in any one learning experience. For example an independent enquirer would set goals for their research with clear success criteria (reflective learner) and organise and manage their time and resources effectively to achieve these (self-manager). In order to acquire and develop fundamental concepts such as organising oneself, managing change, taking responsibility and perseverance, learners will need to apply skills from all six groups in a wide range of learning contexts 11-19.

The Skills

Independent enquirers

Focus:

Young people process and evaluate information in their investigations, planning what to do and how to go about it. They take informed and well-reasoned decisions, recognising that others have different beliefs and attitudes.

Young people:

- identify questions to answer and problems to resolve
- plan and carry out research, appreciating the consequences of decisions
- explore issues, events or problems from different perspectives
- analyse and evaluate information, judging its relevance and value
- consider the influence of circumstances, beliefs and feelings on decisions and events
- support conclusions, using reasoned arguments and evidence.

Creative thinkers

Focus:

Young people think creatively by generating and exploring ideas, making original connections. They try different ways to tackle a problem, working with others to find imaginative solutions and outcomes that are of value.

Young people:

- generate ideas and explore possibilities
- ask questions to extend their thinking
- connect their own and others' ideas and experiences in inventive ways
- question their own and others' assumptions
- try out alternatives or new solutions and follow ideas through
- adapt ideas as circumstances change.

Reflective learners

Focus:

Young people evaluate their strengths and limitations, setting themselves realistic goals with criteria for success. They monitor their own performance and progress, inviting feedback from others and making changes to further their learning.

Young people:

- assess themselves and others, identifying opportunities and achievements
- set goals with success criteria for their development and work
- review progress, acting on the outcomes
- invite feedback and deal positively with praise, setbacks and criticism
- evaluate experiences and learning to inform future progress
- communicate their learning in relevant ways for different audiences.

Team workers

Focus:

Young people work confidently with others, adapting to different contexts and taking responsibility for their own part. They listen to and take account of different views. They form collaborative relationships, resolving issues to reach agreed outcomes.

Young people:

- collaborate with others to work towards common goals
- reach agreements, managing discussions to achieve results
- adapt behaviour to suit different roles and situations, including leadership roles
- show fairness and consideration to others
- take responsibility, showing confidence in themselves and their contribution
- provide constructive support and feedback to others.

Self-managers

Focus:

Young people organise themselves, showing personal responsibility, initiative, creativity and enterprise with a commitment to learning and self-improvement. They actively embrace change, responding positively to new priorities, coping with challenges and looking for opportunities.

Young people:

- seek out challenges or new responsibilities and show flexibility when priorities change
- work towards goals, showing initiative, commitment and perseverance
- organise time and resources, prioritising actions
- anticipate, take and manage risks
- deal with competing pressures, including personal and work-related demands
- respond positively to change, seeking advice and support when needed
- manage their emotions, and build and maintain relationships.

Effective participators

Focus:

Young people actively engage with issues that affect them and those around them. They play a full part in the life of their school, college, workplace or wider community by taking responsible action to bring improvements for others as well as themselves.

Young people:

- discuss issues of concern, seeking resolution where needed
- present a persuasive case for action
- propose practical ways forward, breaking these down into manageable steps
- identify improvements that would benefit others as well as themselves
- try to influence others, negotiating and balancing diverse views to reach workable solutions
- act as an advocate for views and beliefs that may differ from their own.

PLTS performance indicator (suggested recording sheet)

Name:	Date:				
	Level of success 1 = low, 5 = high				
Independent enquirers					
Identify questions to answer and problems to resolve	1	2	3	4	5
Plan and carry out research, appreciating the consequences of decisions	1	2	3	4	5
Explore issues, events or problems from different perspectives	1	2	3	4	5
Analyse and evaluate information, judging its relevance and value	1	2	3	4	5
Consider the influence of circumstances, beliefs and feelings on decisions and events	1	2	3	4	5
Support conclusions, using reasoned arguments and evidence	1	2	3	4	5
Creative thinkers					
Generate ideas and explore possibilities	1	2	3	4	5
Ask questions to extend their thinking	1	2	3	4	5
Connect their own and others' ideas and experiences in inventive ways	1	2	3	4	5
Question their own and others' assumptions	1	2	3	4	5
Try out alternatives or new solutions and follow ideas through	1	2	3	4	5
Adapt ideas as circumstances change	1	2	3	4	5
Reflective learners					
Assess themselves and others, identifying opportunities and achievements	1	2	3	4	5
Set goals with success criteria for their development and work	1	2	3	4	5
Review progress, acting on the outcomes	1	2	3	4	5
Invite feedback and deal positively with praise, setbacks and criticism	1	2	3	4	5
Evaluate experiences and learning to inform future progress	1	2	3	4	5
Communicate their learning in relevant ways for different audiences	1	2	3	4	5

Team workers						
Collaborate with others to work towards common goals	1	2	3	4	5	
Reach agreements, managing discussions to achieve results	1	2	3	4	5	
Adapt behaviour to suit different roles and situations, including leadership roles	1	2	3	4	5	
Show fairness and consideration to others	1	2	3	4	5	
Take responsibility, showing confidence in themselves and their contribution	1	2	3	4	5	
Provide constructive support and feedback to others	1	2	3	4	5	
Self-managers						
Seek out challenges or new responsibilities and show flexibility when priorities change	1	2	3	4	5	
Work towards goals, showing initiative, commitment and perseverance	1	2	3	4	5	
Organise time and resources, prioritising actions	1	2	3	4	5	
Anticipate, take and manage risks	1	2	3	4	5	
Deal with competing pressures, including personal and work-related demands	1	2	3	4	5	
Respond positively to change, seeking advice and support when needed	1	2	3	4	5	
Manage their emotions, and build and maintain relationships	1	2	3	4	5	
Effective participators						
Discuss issues of concern, seeking resolution where needed	1	2	3	4	5	
Present a persuasive case for action	1	2	3	4	5	
Propose practical ways forward, breaking these down into manageable steps	1	2	3	4	5	
Identify improvements that would benefit others as well as themselves	1	2	3	4	5	
Try to influence others, negotiating and balancing diverse views to reach workable solutions	1	2	3	4	5	
Act as an advocate for views and beliefs that may differ from their own	1	2	3	4	5	

Note to learner: The circled number represents an indication of your PLTS performance so far.

Note to tutor: Indicate the level of success by circling the appropriate number during your feedback with the learner.

Summary of the PLTS coverage throughout the programme

Personal, learning and thinking skills	Unit									
	1	2	3	4	5	6	7	8	9	10
Independent enquirers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Creative thinkers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reflective learners	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Team workers	✓	✓	✓	✓	✓		✓	✓	✓	✓
Self-managers	✓	✓	✓			✓	✓	✓		
Effective participators	✓	✓	✓	✓	✓			✓		✓
✓ – opportunities for development										

Annexe E

Mapping to Level 2 Functional Skills

Level 2	Unit number									
English – Speaking, Listening and Communication	1	2	3	4	5	6	7	8	9	10
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
English – Reading										
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
English – Writing										
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Level 2	Unit number									
Mathematics — representing:	1	2	3	4	5	6	7	8	9	10
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations				✓	✓	✓			✓	✓
Identify the situation or problems and identify the mathematical methods needed to solve them										✓
Choose from a range of mathematics to find solutions										
Mathematics — analysing										
Apply a range of mathematics to find solutions										
Use appropriate checking procedures and evaluate their effectiveness at each stage										
Mathematics — interpreting	1	2	3	4	5	6	7	8	9	10
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations										
Draw conclusions and provide mathematical justifications										

Level 2	Unit number									
ICT – using ICT	1	2	3	4	5	6	7	8	9	10
Plan solutions to complex tasks by analysing the necessary stages	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Manage information storage to enable efficient retrieval	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ICT – finding and selecting information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Use appropriate search techniques to locate and select relevant information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Select information from a variety of sources to meet requirements of a complex task	✓	✓	✓		✓		✓	✓	✓	✓
ICT – developing, presenting and communicating information										
Enter, develop and refine information using appropriate software to meet requirements of a complex task	✓	✓	✓	✓	✓	✓		✓	✓	✓
Use appropriate software to meet the requirements of a complex data-handling task	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Use communications software to meet requirements of a complex task	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Combine and present information in ways that are fit for purpose and audience	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Annexe F

Glossary of accreditation terminology

The following information about this qualification can also be found on the Edexcel website.

Accreditation start/end date	The first/last dates that Edexcel can register learners for a qualification.
Certification end date	The last date on which a certificate may be issued by Edexcel.
Credit value	All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.
Guided Learning Hours (GLH)	Guided learning hours are defined as all the times when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.
Learning Aims Database	Link to the Learning Aims Database, which features detailed funding information by specific learning aim reference.
Learning Aim Reference	Unique reference number given to the qualification by the funding authorities on accreditation.
Level	The level at which the qualification is positioned in the Qualifications and Credit Framework (QCF).
Performance tables	This/these qualifications is/are listed on the Department for Education (DfE) website School and College Achievement and Attainment Tables (SCAAT) as performance indicators for schools and colleges.
Qualifications Accreditation Number (QAN)	Unique reference number given to the qualification by the regulatory authorities on accreditation.
Register of Regulated Qualifications	Link to the entry on the Register of Regulated Qualifications for a particular qualification. This database features detailed accreditation information for the particular qualification.
Section 96	Section 96 is a section of the Learning and Skills Act 2000. This shows for which age ranges the qualification is publicly funded for under-19 learners.

Section 97	Section 97 is a section of the Learning and Skills Act 2000. This shows whether the qualification is publicly funded for learners aged 19 and over.
Title	The accredited title of the qualification.
UCAS points	This/these qualification(s) is/are listed on the Universities and Colleges Admissions Service (UCAS) tariff for those wishing to progress to higher education.

Annexe G

BTEC Specialist and Professional qualifications

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional Qualifications on the QCF	BTEC qualification suites on the QCF
BTEC Level 7 Advanced Professional Qualifications BTEC Advanced Professional Award, Certificate and Diploma	7	BTEC Level 7 Professional Qualifications BTEC Level 7 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 6 Professional Qualifications BTEC Professional Award, Certificate and Diploma	6	BTEC Level 6 Professional Qualifications BTEC Level 6 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 5 Professional Qualifications BTEC Professional Award, Certificate and Diploma	5	BTEC Level 5 Professional Qualifications BTEC Level 5 Award, Certificate, Extended Certificate and Diploma	BTEC Level 5 Higher Nationals BTEC Level 5 HND Diploma
BTEC Level 4 Professional Qualifications BTEC Professional Award, Certificate and Diploma	4	BTEC Level 4 Professional Qualifications BTEC Level 4 Award, Certificate, Extended Certificate and Diploma	BTEC Level 4 Higher Nationals BTEC Level 4 HNC Diploma
BTEC Level 3 Qualifications BTEC Award, Certificate, Extended Certificate and Diploma	3	BTEC Level 3 Specialist Qualifications BTEC Level 3 Award, Certificate, Extended Certificate and Diploma	BTEC Level 3 Nationals BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional Qualifications on the QCF	BTEC qualification suites on the QCF
BTEC Level 2 Qualifications BTEC Award, Certificate, Extended Certificate and Diploma	2	BTEC Level 2 Specialist Qualifications BTEC Level 2 Award, Certificate, Extended Certificate and Diploma	BTEC Level 2 Firsts BTEC Level 2 Certificate, Extended Certificate and Diploma
BTEC Level 1 Qualifications BTEC Award, Certificate, Extended Certificate and Diploma	1	BTEC Level 1 Specialist Qualifications BTEC Level 1 Award, Certificate, Extended Certificate and Diploma	BTEC Level 1 Qualifications BTEC Level 1 Award, Certificate and Diploma (vocational component of Foundation Learning)
	E	BTEC Entry Level Specialist Qualifications BTEC Entry Level Award, Certificate, Extended Certificate and Diploma	BTEC Entry Level Qualifications (E3) BTEC Entry Level 3 Award, Certificate and Diploma (vocational component of Foundation Learning)

NQF = National Qualifications Framework

QCF = Qualifications and Credit Framework

For most qualifications on the **NQF**, the accreditation end date is normally 31 August 2010 or 31 December 2010.

For qualifications on the **QCF**, the accreditation start date is usually 1 September 2010 or 1 January 2011.

QCF qualification sizes	
Award	1-12 credits
Certificate	13-36 credits
Diploma	37+ credits

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