

Level 3 Diploma in Healthcare Science (Anatomical Pathology Technology)

January 2020

Guided Learning Hours (GLH) 363 hours
Total Qualification Time (TQT) 615 hours

Ofqual Qualification Number: 603/3969/X

Description

This Level 3 Diploma is designed for those wishing to become Assistant Anatomical Pathology Technologists. The qualification consists of five knowledge units and five competency units and meets the requirements of the Modernising Scientific Careers (MSC) and Practitioner Training Programmes. The competency units are undertaken in the workplace, so the qualification is only suitable for those employed as trainee Anatomical Pathology Technologists.

The qualification recognises the unique role performed by Anatomical Pathology Technologists as part of the Life Science workforce, specifically their place of work being a mortuary rather than a laboratory and their need to interact with bereaved members of the public.

The objective of the qualification is to equip candidates with the knowledge and skills to assist with a standard *post mortem* examination, arrange a viewing of the body by relatives and friends of the deceased and perform routine administrative tasks.

This qualification is the first step in a career pathway for Anatomical Pathology Technologists. Successful learners can progress to the RSPH Level 4 Diploma in Healthcare Science (Anatomical Pathology Technology), followed by a Foundation Degree in Anatomical Pathology and a BSc in Healthcare Science (Anatomical Pathology Technology).

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Unit APT3.1: Human anatomy and physiology for anatomical pathology technologists

Guided learning: 68 hours

Total Unit time: 118 hours

Unit Level: 3

Unit reference number: J/505/2412

Summary of Learning Outcomes:

To achieve this unit a candidate must:

1 Understand the anatomical structure of the human body, by being able to meet the following assessment criteria:

- 1.1 Describe the anatomical structure and identifiable features of the urogenital system of the human body
- 1.2 Describe the anatomical structure and identifiable features of the alimentary, exocrine and endocrine systems of the human body
- 1.3 Describe the anatomical structure and identifiable features of the cardiovascular, lymphatic and respiratory systems of the human body
- 1.4 Describe the anatomical structure and identifiable features of the musculo-skeletal system of the human body
- 1.5 Describe the anatomical structure and identifiable features of the central nervous system of the human body.

2 Understand the physiology of anatomical systems in the human body, by being able to meet the following assessment criteria:

- 2.1 Explain the physiology of the urogenital system of the human body
- 2.2 Explain the physiology of the alimentary, exocrine and endocrine systems of the human body
- 2.3 Explain the physiology of the cardiovascular, lymphatic and respiratory systems of the human body
- 2.4 Explain the physiology of the musculo-skeletal system of the human body
- 2.5 Explain the physiology of the central nervous system of the human body.

Content:

1 Anatomical structure of the human body

- 1.1 *Anatomy of the human urogenital system:* Gross anatomical features of the male and female urogenital system including blood and nerve supply; anatomy of key structures to include kidneys, ureters, bladder and reproductive organs.
- 1.2 *Anatomy of the human alimentary, exocrine and endocrine systems:* Gross anatomical features; the alimentary canal from mouth to anus; liver; endocrine glands to include pituitary, thyroid, parathyroids, adrenals, ovaries and testes; exocrine system to include salivary glands and pancreas.
- 1.3 *Anatomy of the human cardiovascular, lymphatic and respiratory systems:* Anatomical structure and identifiable features of the cardiovascular, lymphatic and respiratory system to include the major vessels of the body, arteries and veins; anatomy of the heart to include chambers, valves conducting vessels and blood supply; anatomy of the lungs and pleural cavities to include the trachea and naso-pharynx; anatomy of the lymphatic system to include lymphatic drainage, spleen and lymph nodes.
- 1.4 *Anatomy of the human musculo-skeletal system:* Anatomical structure and identifiable features of the musculo-skeletal system to include bones, ligaments, tendons and joints; skeletal, smooth and cardiac muscle.
- 1.5 *Anatomy of the human central nervous system:* Anatomical structure and identifiable features of the central nervous system to include the surface anatomy of the brain, brain stem and spinal cord; meninges, cranial nerves and blood supply to the brain.

2 Physiology of anatomical systems in the human body

Although this section has been broken down into systems it is accepted that all systems are interdependent and all contribute to the well being and function of the body as a whole. Organs such as the pancreas and liver may play a role in more than one system.

- 2.1 *Physiology of the human urogenital system:* physiology to include role in homeostasis (fluid and electrolyte balance, maintenance of blood pressure) and reproduction.
- 2.2 *Physiology of the human alimentary canal, exocrine and endocrine systems:* physiology of the alimentary canal to include motility, secretion, regulation, digestion and excretion; function of exocrine and endocrine tissues to include sweat glands, salivary glands and pancreas; affect of exocrine and endocrine glands on the alimentary canal; affect of exocrine and endocrine glands on other body systems.

- 2.3 *Physiology of the human cardiovascular, lymphatic and respiratory systems:* circulation of blood and lymph around the body; movement of blood through arteries and veins; movement of lymph through the lymphatic system; heartbeat and flow of blood through the heart; ventilation and gaseous exchange; affect of the autonomic nervous system.
- 2.4 *Physiology of the human musculo-skeletal system:* Mechanics of movement; muscle contraction and its regulation; bone types and function; role of the skeleton.
- 2.5 *Physiology of the human central nervous system:* transmission of a nerve impulse; movement across a synapse; reflex arc; autonomic nervous system.

Assessment:

This unit may be assessed by one or more of the following:

Course work

Task based controlled assessment

Written examination

Unit APT3.2: Governance and administration of mortuary practices

Guided learning: 42 hours

Total Unit time: 62 hours

Unit Level: 3

Unit reference number: Y/505/2415

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Understand the importance of consent and confidentiality relating to mortuary practices, by being able to meet the following assessment criteria:**
 - 1.1 Identify mortuary practices and situations for which consent is required
 - 1.2 Identify mortuary practices and situations for which confidentiality is required
 - 1.3 Explain the reasons why consent and confidentiality may be required.

- 2 Know the documentation requirements for *post mortem* examination consent and subsequent procedures, by being able to meet the following assessment criteria:**
 - 2.1 Describe documentation required for *post mortem* examinations
 - 2.2 Describe documentation and procedural requirements for death certification
 - 2.3 Describe documentation and procedural requirements for disposal of the deceased.

- 3 Understand the requirements of professional practice for anatomical pathology technologists, by being able to meet the following assessment criteria:**
 - 3.1 Outline the requirements of the appropriate codes of conduct for anatomical pathology technologists
 - 3.2 Explain the scope of practice for anatomical pathology technologists
 - 3.3 State why the scope of practice should not be exceeded.

- 4 Know the role of statutory bodies in the governance and administration of mortuary practices, by being able to meet the following assessment criteria:**
 - 4.1 Identify the statutory bodies that have a role in the governance and administration of mortuary practices
 - 4.2 State the role that each statutory body has in the governance and administration of mortuary practices.

Content:

1 Understand the importance of consent and confidentiality relating to mortuary practices

- 1.1 *Practices and situations for which consent is required:* Identify practices and situations for which consent is a legal or procedural requirement or governed by a code of practice.
- 1.2 *Practices and situations for which confidentiality is required:* Identify practices and situations for which confidentiality is a legal or procedural requirement or governed by a code of practice.
- 1.3 *Reasons why consent and confidentiality may be required:* Commonly accepted reasoning behind confidentiality and why informed consent is important; legal requirements; codes of practice; legal and contractual requirements to maintain confidentiality and obtain consent.

2 Know the documentation requirements for *post mortem* examination consent and subsequent procedures

- 2.1 *Documentation required for post mortem examinations:* Recognised *post mortem* examination consent and/or authorisation forms which are in common use; requirements for completion, retention and storage of documentation.
- 2.2 *Documentation and procedural requirements for death certification:* The coroners system, the procurator fiscal and the legal issues surrounding the issue of a medical certificate of cause of death; requirements for completion, retention and storage of documentation; identification of post holders who can issue a death certificate.
- 2.3 *Documentation and procedural requirements for disposal of the deceased:* Documentation required for burial and/or cremation within the United Kingdom; for movement of a body across a national border or to another coroner's jurisdiction; for repatriation of a body to Europe and beyond: Procedural requirements for the above. Requirements for burial at sea.

3 Understand the requirements of professional practice for anatomical pathology technologists

- 3.1 *Requirements of appropriate codes of conduct:* Requirements of codes of conduct of professional bodies and relevant employers.
- 3.2 *Scope of practice for anatomical pathology technologists:* Scope of practice as defined by professional bodies, relevant employers and any legislative requirements.
- 3.3 *Why scope of practice should not be exceeded:* Legal, professional and employer restrictions on exceeding scope of practice; individual and

employer liability.

4 Know the role of statutory bodies in the governance and administration of mortuary practices

4.1 *Statutory bodies:* Statutory bodies that have a role in the governance and administration of mortuary practices.

4.2 *Role of statutory bodies:* Role in the governance and administration of mortuary practices of the coroner / procurator fiscal, the Human Tissue Authority and pan European Union bodies.

Assessment:

This unit may be assessed by one or more of the following:

Course work

Task based controlled assessment

Written examination

Unit APT3.3: Health and safety in the mortuary

Guided learning: 47 hours

Total Unit time: 57 hours

Unit Level: 3

Unit reference number: D/505/2416

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Understand employer and employee responsibilities for health and safety in the mortuary, by being able to meet the following assessment criteria:**
 - 1.1 Outline the main legal framework and laws relating to health and safety at work
 - 1.2 Explain the responsibilities of employers with respect to health and safety at work
 - 1.3 Explain the responsibilities of employees with respect to health and safety at work.

- 2 Understand the hazards and risks of a mortuary to individuals and the environment, by being able to meet the following assessment criteria:**
 - 2.1 Explain the risks and effects of biological hazards in a mortuary
 - 2.2 Explain the risks and effects of chemical hazards in a mortuary
 - 2.3 Explain the risks and effects of physical and radiological hazards in a mortuary.

- 3 Understand how to produce a risk assessment, by being able to meet the following assessment criteria:**
 - 3.1 Identify work activities in the mortuary that may require a risk assessment
 - 3.2 Explain control measures for common biological, chemical and physical hazards likely to be encountered in a mortuary
 - 3.3 Outline the steps needed to be taken to complete a risk assessment
 - 3.4 Explain the principle of the hierarchy of control by the use of suitable examples.

- 4 Know emergency procedures in the event of an accident or incident, by being able to meet the following assessment criteria:**
 - 4.1 Describe immediate actions that should be taken in the event of an accident, fire or other emergency
 - 4.2 Outline procedures for reporting, recording and investigating accidents, incidents, near misses and ill-health.

Content:

1 Understand employer and employee responsibilities for health and safety in the mortuary

- 1.1 *Legal framework:* Requirements of Health and Safety at Work etc Act 1974, to include section 2 (safe plant and safe systems of work; safe handling, storage and transport of articles and substances; necessary information, instruction, training and supervision; safe place of work, with safe access and egress; safe working environment with adequate welfare facilities; requirement for a health and safety policy and consultation with employees), section 3 (requirement for employers to ensure as far as is reasonably practicable, the health and safety of others), section 7 (requirement for employees to take reasonable care of themselves and others and to co-operate with their employer), section 8 (offence to recklessly or intentionally interfere with or misuse anything provided in the interests of health and safety) and sections 37 and 38 (personal prosecution of managers); requirements of the following regulations and orders:

Management of Health and Safety at Work Regulations 1999
Control of Substances Hazardous to Health Regulations 2002
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
Workplace (Health, Safety and Welfare) Regulations 1992
Work at Height Regulations 2005
Health and Safety (Safety Signs and Signals) Regulations 1996
Provision and Use of Work Equipment Regulations 1998
Lifting Operations and Lifting Equipment Regulations 1998
Health and Safety (Display Screen Equipment) Regulations 1992
Regulatory Reform (Fire Safety) Order 2005 / Fire (Scotland) Act 2005
Electricity at Work Regulations 1989
The control of Noise at work Regulations 2005.
Ionising Radiation Regulations 2017

Role and legal standing of approved codes of practice and guidance.

- 1.2 *Responsibilities of employers:* Responsibility of employers to comply with health & safety legislation, to include safe-guarding the H&S at work of employees, non-employees and visitors, consulting with employees, provision of personal protective equipment, suitable and sufficient training, first aid facilities, welfare facilities and health and safety policies where required; ensuring safe systems of work are in place and risk assessments are carried out as appropriate.
- 1.3 *Responsibilities of employees:* Responsibility of employees to comply with health and safety legislation with regard to the health and safety of themselves and others; need to co-operate with the employer by reporting any health and safety issues (such as faulty equipment, hazards, missing guards) accidents and near misses or ill-health; responsibility to correctly use PPE and report any defective or missing personal protective equipment; responsibility to follow the health and safety procedures laid down by their employer; need to ensure their

personal behaviour does not put themselves or others at risk.

2 Understand the hazards and risks of a mortuary to individuals and the environment

2.1 *Risks and effects of biological hazards:* Identification of biological hazards in the mortuary; classification of biological hazards; effect of biological hazards to the individual and the environment.

2.2 *Risks and effects of chemical hazards:* Identification of chemical hazards in the mortuary; risk from chemical hazards; effect of chemical hazards to the individual and the environment.

2.3 *Risks and effects of physical and radiological hazards:* Identification of physical and radiological hazards in the mortuary; classification of physical hazards; effect of physical hazards to the individual and the environment.

3 Understand how to produce a risk assessment

3.1 *Identify work activities that may require a risk assessment:* Methods for identifying exposure to hazards when carrying out different work activities; risk of harm from these hazards; risk rating strategies.

3.2 *Control measures:* Control measures required for the different classes of biological hazards; control of chemical hazards; control of physical hazards; control measures for preventing harm to the individual and the environment; the hierarchy of control; use of personal protective equipment.

3.3 *Risk assessments:* The 'five steps' to risk assessment; identify the hazard, decide who might be harmed, evaluate the risk and decide on precautions, record and implement findings, review and update; use of risk assessments; risk registers.

3.4 *Hierarchy of control:* Elimination, substitution, engineering controls, administrative controls, use of personal protective equipment; examples of the application of the hierarchy of control in a mortuary setting.

4 Know emergency procedures in the event of an accident or incident

4.1 *Immediate actions in the event of an accident, fire or other emergency:* First aiders and appointed persons; summoning aid; location of emergency equipment such as emergency showers, eye wash stations, first aid kits and fire extinguishers; when and how to use fire fighting equipment; fire alarms and escape routes; evacuation procedures; fire marshals; muster points.

4.2 *Procedures for reporting, recording and investigating accidents,*

incidents, near misses and ill-health: Reasons for investigating accidents, incidents and near misses; structured approach; appropriate terminology; when and who to investigate; information gathering – physical, written and verbal; information analysis; examination of risk control measures; action plan; SMART objectives; implementation programme; RIDDOR.

Assessment:

This unit may be assessed by one or more of the following:

Course work

Task based controlled assessment

Written examination

Unit APT3.4: Microbiology and infection control for anatomical pathology technologists

Guided learning: 40 hours

Total Unit time: 65 hours

Unit Level: 3

Unit reference number: K/505/2418

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Understand the structure and life cycles of bacteria, fungi and viruses of relevance to human health, by being able to meet the following assessment criteria:**
 - 1.1 Describe the structure of bacteria, fungi and viruses
 - 1.2 Describe how bacteria, fungi and viruses grow and multiply
 - 1.3 Explain the conditions necessary for the optimal growth and multiplication of bacteria and fungi
 - 1.4 Outline the life-cycles of bacteria, fungi and viruses that are representative of those commonly encountered in a mortuary setting.

- 2 Understand the structure and life cycles of protozoa of relevance to human health, by being able to meet the following assessment criteria:**
 - 2.1 List three common examples of protozoa capable of causing disease in humans
 - 2.2 Explain how protozoa can infect and spread between humans.

- 3 Understand the principles of infection control, by being able to meet the following assessment criteria:**
 - 3.1 Outline how infestations may develop in a mortuary setting
 - 3.2 Outline how microorganisms can spread between individuals
 - 3.3 Explain how poor mortuary practice can increase the risk of infection and spread of disease
 - 3.4 Explain how good mortuary practice can reduce the risk of infection.

Content:

1 Understand the structure and life cycles of bacteria, fungi and viruses of relevance to human health

- 1.1 *Structure of bacteria, fungi and viruses:* Bacterial structure to include cell wall, cell membrane, cytoplasm, arrangement of nuclear material, flagella, pili and capsule; bacterial shapes; fungal structure to include structure of yeasts and representative hyphal fungus such as aspergillus; viral structure to include arrangement of nucleic acid, protein coat and envelope; dimensions of representative bacteria, fungi and viruses.
- 1.2 *Growth and multiplication:* Binary fission of bacteria; germination from spores; bacterial growth curves; multiplication of yeasts by fission or budding; fungal growth, spore formation and germination; multiplication of viruses inside living cells to include retroviruses.
- 1.3 *Conditions for optimal growth:* Nutritional, pH, water and temperature requirements of bacteria and fungi.
- 1.4 *Life cycles of bacteria, fungi and viruses:* Life-cycle of sporing and non-sporing bacteria; yeast life cycle; life cycle of mycelial fungi; viral life cycle to include entry into cells, production of viral nucleic acid and proteins, assembly and cell lysis. To cover hepatitis B, hepatitis C, HIV, influenza, *Candida albicans*, *Clostridium difficile*, norovirus, aspergillus, influenza and retroviruses.

2 Understand the structure and life cycles of protozoa of relevance to human health

- 2.1 *Examples of protozoa:* Examples of protozoa capable of causing disease in humans such as *Toxoplasma*, *Entamoeba* and *Plasmodium*.
- 2.2 *How protozoa can infect and spread between humans:* Infection by ingestion and injection; examples of protozoa that exhibit these modes of infection; importance of vectors; role of infected food and water.

3 Understand the principles of infection control

- 3.1 *How infestations may develop in a mortuary setting:* Development of insect and maggot infestations from bodies brought into the mortuary from the community; where infestations may develop; how poor mortuary practice may aid the introduction and development of infestations.
- 3.2 *Spread of organisms:* Infection routes including contact, ingestion, inhalation, and inoculation; importance of aerosols, vectors and fomites; sources and reservoirs of infection.
- 3.3 *How poor mortuary practice can increase the risk of infection and*

spread of disease: Insufficient or inadequate cleaning; use of contaminated equipment; poor waste disposal; poor personal hygiene of staff; practices that cause aerosol formation; practices that cause cross-contamination.

- 3.4 *How good mortuary practice can reduce the risk of infection:* Use of cleaning schedules and microbiological testing; planned waste removal; use of sealed bins; methods for reducing cross-contamination and aerosol formation.

Assessment:

This unit may be assessed by one or more of the following:

Course work

Task based controlled assessment

Written examination

Unit APT3.5: Principles of effective communication for anatomical pathology technologists

Guided Learning: 26 hours

Total Unit time: 31 hours

Unit Level: 3

Unit reference number: M/505/2419

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Understand how anatomical pathology technologists should communicate with other relevant persons when carrying out their duties, by being able to meet the following assessment criteria:**
 - 1.1 Identify barriers to communication between anatomical pathology technologists and other relevant persons that may affect understanding and strategies for overcoming these
 - 1.2 Identify the communication skills that are effective in communicating with other relevant persons
 - 1.3 Explain the importance of effective communication between anatomical pathology technologists and other relevant persons.

- 2 Understand how anatomical pathology technologists should communicate with relatives, friends and carers of the deceased, by being able to meet the following assessment criteria:**
 - 2.1 Identify the communication skills that are effective in communicating with relatives, friends and carers of the deceased
 - 2.2 Identify barriers to communication and strategies for overcoming these
 - 2.3 Explain the importance of effective communication.

Content:

1 Understand how anatomical pathology technologists should communicate with other relevant persons when carrying out their duties

- 1.1 *Barriers to communication:* How language, technical language, age, ethnicity, culture, gender, religious beliefs and socio-economic status can act as a barrier to communication; importance of environment in which communication occurs; use and observation of non-verbal communication; methods and strategies for overcoming barriers to communication.
- 1.2 *Communication skills:* Verbal and non-verbal communication skills; importance of vocabulary used, tone, speed and level of voice when communicating.
- 1.3 *Importance of effective communication:* Reasons why anatomical pathology technologists would need to communicate with other relevant persons; how ineffective communication may result in relay of incorrect information or incorrect / inappropriate instructions being acted on; possible effects of miscommunication.

2 Understand how anatomical pathology technologists should communicate with relatives, friends and carers of the deceased

- 2.1 *Communication with relatives, friends and carers:* Style, pace, tone and level of language required for effective communication with relatives, friends and carers of the deceased; use of appropriate non-verbal communication; importance of environment when communicating; need for sensitivity and empathy.
- 2.2 *Barriers to communication:* How language, technical language, age, ethnicity, culture, gender, religious beliefs and socio-economic status can act as a barrier to communication; effect of shock and distress; presence of a number of individuals; strategies for communicating effectively and sensitively with distressed relatives, friends and carers.
- 2.3 *Importance of effective communication:* Need to provide all relevant persons with the information required to enable them to make an informed choice or reach an informed decision; effect on reducing distress.

Assessment:

This unit may be assessed by one or more of the following:

Course work

Task based controlled assessment

Written examination

Unit APT3.6 Preparation and operation of a mortuary

Guided learning: 30 hours

Total Unit time: 58 hours

Unit Level: 3

Unit reference number: M/505/2422

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Be able to carry out cleaning and disinfection of surfaces and equipment, by being able to meet the following assessment criteria:**
 - 1.1 Prepare cleaning and disinfectant solutions
 - 1.2 Follow standard operating procedure in the cleaning and disinfection of surfaces
 - 1.3 Use appropriate techniques to disinfect or sterilise equipment
 - 1.4 Ensure disinfected and sterilised equipment is protected from contamination until required

- 2 Be able to store mortuary equipment and materials, by being able to meet the following assessment criteria:**
 - 2.1 Follow standard operating procedures for the storage of equipment and materials
 - 2.2 Retrieve equipment and materials from storage as requested.

- 3 Be able to store and retrieve records, by being able to meet the following assessment criteria:**
 - 3.1 Follow standard operating procedures for the storage of records
 - 3.2 Follow standard operating procedures for the retrieval of records
 - 3.3 Ensure records are only accessed by authorised staff.

- 4 Be able to record and carry out appropriate maintenance of mortuary equipment, by being able to meet the following assessment criteria:**
 - 4.1 Carry out routine maintenance of mortuary equipment
 - 4.2 Record relevant details of equipment maintenance

- 5 Be able to receive and release the deceased, by being able to meet the following assessment criteria:**
 - 5.1 Follow standard operating procedures for the receipt and release of the deceased.

6 Understand the importance of infection control and record management in the operation of a mortuary, by being able to meet the following assessment criteria:

- 6.1 Explain the reasons for cleaning, disinfecting and sterilising equipment and surfaces in the mortuary.
- 6.2 State why information governance is important in a mortuary.

Content:

1 Be able to carry out cleaning and disinfection of surfaces and equipment

- 1.1 *Prepare cleaning and disinfectant solutions:* Standard operating procedures are followed in the preparation of solutions; solutions are prepared to the required concentration and in the required volumes.
- 1.2 *Cleaning and disinfection of surfaces:* Standard operating procedures are followed during the cleaning and disinfection of surfaces.
- 1.3 *Disinfection or sterilisation of equipment:* Disinfection and sterilisation materials and equipment are used appropriately and correctly.
- 1.4 *Protect disinfected or sterilised equipment from contamination:* Equipment appropriately stored and handled.

2 Be able to store mortuary equipment and materials

- 2.1 *Storage procedures for equipment and materials:* Standard operating procedures for storage of equipment and materials are adhered to.
- 2.2 *Retrieval of equipment:* Material is retrieved from storage on request and within suitable time frames.

3 Be able to store and retrieve records

- 3.1 *Storage procedures for records:* Standard operating procedures for storage of records are adhered to.
- 3.2 *Retrieval of records:* Records are retrieved from storage on request and within suitable time frames; standard operating procedures are complied with.
- 3.3 *Information governance procedures:* Only appropriately authorised staff are allowed access to records; identity / authorisation of staff wishing to access records is checked; advice sought from managers as appropriate.

4 Be able to record and carry out appropriate maintenance of mortuary equipment

- 4.1 *Routine maintenance of equipment:* Equipment is checked at intervals and maintained appropriately in accordance with standard operating procedures.
- 4.2 *Record details of equipment maintenance:* Standard operating procedures for recording details of equipment maintenance are followed correctly.

5 Be able to receive and release the deceased

- 5.1 *Receipt and release of the deceased:* Standard operating procedures for receipt and release are adhered to.

6 Understand the importance of infection control and record management in the operation of a mortuary

- 6.1 *Reasons for cleaning, disinfecting and sterilising equipment and surfaces:* Infection control and prevention of contamination and cross-contamination
- 6.2 *Importance of information governance:* Reasons for document and record control and information governance procedures.

Assessment:

This is a competency unit. Evidence for attainment of the Learning Outcomes must come from assessment in the work environment during the learner's normal work activity. Evidence obtained by simulation is not permitted.

Suitable evidence for attainment of the learning outcomes could include:

Observation in the workplace
Witness statements
Professional discussion
Work journals or diaries

Evidence for attainment of the knowledge and understanding associated with this unit should come from oral questioning of the learner at the time of assessment of the competence of the learner.

Unit APT3.7 Prepare for *post mortem* examinations

Guided learning: 24 hours

Total Unit time: 58 hours

Unit Level: 3

Unit reference number: F/505/2425

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Be able to prepare a deceased person for a *post mortem* examination, by being able to meet the following assessment criteria:**
 - 1.1 Assess risks to self and others that the deceased may present prior to preparing the body for *post mortem* examination
 - 1.2 Establish the identity of the deceased
 - 1.3 Ensure information relating to the deceased is made available to the pathologist
 - 1.4 Prepare the deceased for *post mortem* examination according to relevant guidelines

- 2 Be able to prepare the mortuary for *post mortem* examinations, by being able to meet the following assessment criteria:**
 - 2.1 Identify materials required for the *post mortem* examination
 - 2.2 Prepare materials required for the future assessment of any samples taken during *post mortem* examination
 - 2.3 Ensure equipment required for the *post mortem* examination is available and ready for use
 - 2.4 Ensure equipment necessary for the recording of *post mortem* examination data is available and ready for use

- 3 Understand the risks to self and others if adequate preparations are not made for a *post mortem* examination, by being able to meet the following assessment criteria:**
 - 3.1 Explain the risks of infection from the body of the deceased during a *post mortem* examination and how proper preparation can minimise these risks
 - 3.2 Explain the health and safety risks due to materials and equipment used during a *post mortem* examination.

Content:

- 1 Be able to prepare a deceased person for *post mortem* examination**
 - 1.1 *Assess risks:* Risk assessments are complied with, including those for ergonomics, infection and chemical risk, to give a detailed assessment using the information available.
 - 1.2 *Identity of deceased:* Identity of the deceased is confirmed; standard operating procedures are followed in the event that the deceased is unidentified to ensure that the deceased can be differentiated from all others.
 - 1.3 *Information made available:* Appropriate action is taken to ensure the pathologist and any other members of the *post mortem* examination team are made aware of all relevant information concerning the deceased; especially that which may have a bearing on the *post mortem* examination and its conduct.
 - 1.4 *Preparation of the deceased for post mortem examination:* the deceased is prepared for *post mortem* examination according to relevant guidelines, standard operating procedures and in accordance with any instructions or consent.

- 2 Be able to prepare the mortuary for *post mortem* examinations**
 - 2.1 *Identify materials:* Materials required for the *post mortem* examination are identified; account is taken of any specific requirements; material includes instruments, containers and personal protective equipment.
 - 2.2 *Prepare materials:* Materials required for the future processing of specimens are prepared prior to the *post mortem* examination; administrative paperwork is available and completed appropriately.
 - 2.3 *Make equipment available:* Equipment required for the *post mortem* examination is available and ready for use; equipment is checked to ensure it is operational and compliant with legislative requirements.
 - 2.4 *Equipment for recording data:* Equipment required for recording *post mortem* examination data is made available and checked to ensure it is ready for use.

- 3 Understand the risks to self and others if adequate preparations are not made for a *post mortem* examination**
 - 3.1 *Risks of infection:* Risks of infection due to pathogenic microorganisms present on and in the body of the deceased; risk of spread of microorganisms and outline of methods for minimising these risks.
 - 3.2 *Health and safety risks:* Risks to health and safety due to chemicals and equipment used during *post mortem* examinations; methods for reducing these risks to acceptable levels.

Assessment:

This is a competency unit. Evidence for attainment of the Learning Outcomes must come from assessment in the work environment during the learner's normal work activity. Evidence obtained by simulation is not permitted.

Suitable evidence for attainment of the learning outcomes could include:

Observation in the workplace
Witness statements
Professional discussion
Work journals or diaries

Evidence for attainment of the knowledge and understanding associated with this unit should come from oral questioning of the learner at the time of assessment of the competence of the learner.

Unit APT3.8: Assist with *post mortem* examinations

Guided learning: 44 hours

Total Unit time: 78 hours

Unit Level: 3

Unit reference number: K/505/2838

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Be able to carry out an external examination of a deceased person, by being able to meet the following assessment criteria:**
 - 1.1 Identify from external examination of the deceased gross pathological features that may be related to the cause of death
 - 1.2 Record marks and injuries on the deceased using correct terminology.

- 2 Be able to carry out evisceration and dissection of a deceased person under the direction of supervisory staff, by being able to meet the following assessment criteria:**
 - 2.1 Remove the major organs from the deceased to include:
 - Heart and great vessels
 - Lungs
 - Liver
 - Spleen
 - Brain
 - 2.2 Remove the major structures from the deceased to include:
 - Gastro-intestinal tract
 - Genito-urinary tract

- 3 Be able to carry out an examination of dissected organs and structures, by being able to meet the following assessment criteria:**
 - 3.1 Identify any gross pathological features of human organs and structures that may be related to the cause of death
 - 3.2 Record relevant measurements and weights of organs and structures.

- 4 Be able to carry out reconstruction of a deceased person following post-mortem examination, by being able to meet the following assessment criteria:**
 - 4.1 Reconstruct the deceased person following post mortem examination
 - 4.2 Suture relevant incisions in the deceased person
 - 4.3 Ensure the deceased person is suitable for viewing by relatives, friends and carers.

- 5 Be able to carry out procedures for tissue retrieval under the direction of supervisory staff, by being able to meet the following assessment criteria:**
 - 5.1 Prepare tissue and organ samples for further analysis
 - 5.2 Retrieve tissues from a deceased person for donation or scientific research
 - 5.3 Comply with relevant legislation during tissue retrieval
 - 5.4 Maintain accurate records of tissue retained for analysis or scientific research
 - 5.5 Comply with local tissue retention and disposal standard operating procedures.

- 6 Understand health and safety, infection control, communication and record keeping requirements for *post mortem* examinations, by being able to meet the following assessment criteria:**
 - 6.1 Explain why infection control is important during *post mortem* examinations
 - 6.2 Explain why health and safety is important during *post mortem* examinations
 - 6.3 State the reasons for accurate recording of information and maintenance of records during post mortem examinations
 - 6.4 Explain why clear communication between team members is important during post mortem examinations.

Content:

1 Be able to carry out an external examination of a deceased person

- 1.1 *Pathological features that may be related to the cause of death:* Differentiate between pre and post mortem injury and the changes which occur after death; gross pathologies likely to be the cause of death.
- 1.2 *Record marks and injuries:* Appropriate format for recording observations; terminology based on the anatomical position and accepted medical language; gender based comments appropriate to the examination; recent and healed injuries including medical interventions and associated marks on the deceased; distinguishing marks and features.

2 Be able to carry out evisceration and dissection of a deceased person under the direction of supervisory staff

- 2.1 *Remove major organs:* Removal by separate organ groups (Ghon) or in one block (Letulle); adaptation of dissection technique depending on pathology, trauma or authorisation as required.
- 2.2 *Remove major structures:* Removal in one block or as separate components of the structure; adaptation of dissection technique depending on pathology, trauma or authorisation as required.

3 Be able to carry out an examination of dissected organs and structures

- 3.1 *Identify gross pathological features:* Pathological features of human organs and structures that may be related to the cause of death which are visible to the naked eye.
- 3.2 *Record relevant measurements and weights:* Appropriate recording format used; correct units; normal parameters for organs and structures; recording of measurements that are indicative of abnormal pathology.

4 Be able to carry out reconstruction of a deceased person following post-mortem examination

- 4.1 *Reconstruct deceased person:* Use of reconstruction techniques such as suturing, gluing and stapling.
- 4.2 *Suturing relevant incisions:* Use of suturing to provide a reconstruction suitable for viewing.

- 4.3 *Ensure deceased person is suitable for viewing:* Use of materials such as cotton wool in order to give natural contours and shape to a deceased in order for relatives to view; use of other techniques to enhance the presentation of the deceased such as suturing.
- 5 Be able to carry out procedures for tissue retrieval under the direction of supervisory staff**
- 5.1 *Prepare tissue and organ samples:* Use of different fixatives and procedures for storage of tissue.
- 5.2 *Retrieve tissues:* Standard operating procedures are followed in the use of tissue retrieval techniques and appropriate incisions.
- 5.3 *Comply with legislation:* Ensure that tissue retrieval and standard operating procedures are compliant with the Human Tissue Authority and/or the relevant Human Tissue Act(s); use of third party agreements
- 5.4 *Maintain accurate records:* Records of tissue retained for analysis or scientific research is auditable, transparent and complies with legislation.
- 5.5 *Comply with local tissue retention and disposal standard operating procedures:* Standard operating procedures regarding tissue retention and disposal which is compliant with the relevant HTA licence, Legal procedures and Human Tissue Act(s).
- 6 Understand health and safety, infection control, communication and record keeping requirements for *post mortem* examinations,**
- 6.1 *Importance of infection control:* Pathogenic microorganisms likely to be present during a *post mortem* examination; risk of spread of pathogenic microorganisms and contraction of disease.
- 6.2 *Importance of health and safety:* Health and safety hazards likely to be present during *post mortem* examination; risk to self and others during *post mortem* examinations; methods for reducing risks to acceptable levels.
- 6.3 *Reasons for accurate recording of information and maintenance of records during a post mortem examination:* Importance of and use of records taken during *post mortem* examinations.
- 6.4 *Importance of communication:* Why clear communication is important between members of the *post mortem* team during an examination.

Assessment:

This is a competency unit. Evidence for attainment of the Learning Outcomes must come from assessment in the work environment during the learner's normal work activity. Evidence obtained by simulation is not permitted.

Suitable evidence for attainment of the learning outcomes could include:

Observation in the workplace

Witness statements

Professional discussion

Work journals or diaries

Evidence for attainment of the knowledge and understanding associated with this unit should come from oral questioning of the learner at the time of assessment of the competence of the learner.

Unit APT3.9: Viewing of the deceased

Guided Learning: 27 hours

Total Unit time: 61 hours

Unit Level: 3

Unit reference number: A/505/2438

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Be able to prepare a deceased person for viewing , by being able to meet the following assessment criteria:**
 - 1.1 Confirm the identity of the deceased person for viewing
 - 1.2 Check that there are no restrictions on the viewing of the body by relatives, friends and carers, to include restrictions due to disfigurement and risk of infection
 - 1.3 Follow standard operating procedures in preparing the deceased for viewing
 - 1.4 Take account of any religious and/or cultural requirements when preparing the deceased for viewing
 - 1.5 Take appropriate protective measures when preparing the deceased for viewing.

- 2. Be able to provide support to relatives, friends and carers when viewing the deceased, by being able to meet the following assessment criteria:**
 - 2.1 Confirm the identity of relatives, friends and carers prior to allowing the viewing to take place
 - 2.2 Communicate appropriate information in a sensitive manner
 - 2.3 Follow standard operating procedures when conducting the viewing of the deceased
 - 2.4 Advise relatives, friends and carers appropriately with regard to after death procedures
 - 2.5 Refer relatives, friends and carers to additional sources of support and guidance as required.

- 3 Understand why rigorous procedures have been developed for viewing of the deceased, by being able to meet the following assessment criteria:**
 - 3.1 Explain why it is important to check the identity of the deceased, relatives, friends and carers prior to the viewing of a body
 - 3.2 Outline why it is important to take account of any religious or cultural considerations when preparing a body for viewing
 - 3.3 Explain the rationale of any protective measures taken during the preparation of a body for viewing.

Content:

1 Be able to prepare a deceased person for viewing

- 1.1 *Confirm identity:* Identity of deceased person confirmed according to standard operating procedures.
- 1.2 *Check restrictions:* Check if there are any restrictions to the viewing of the body before allowing a viewing; reasons for restrictions to include disfigurement, risk of infection, prior permission required etc; restrictions to include viewing behind glass only, no physical contact, a refusal to view due to legal or family restrictions.
- 1.3 *Preparing the body for viewing:* standard operating procedures followed when preparing the deceased for viewing
- 1.4 *Religious and/or cultural requirements:* Religious and cultural requirements are adhered to when preparing the deceased for viewing.
- 1.5 *Protective measures:* Appropriate protective measures are taken when preparing the deceased for viewing, such as infection control, use of manual handling aids and provision of personal protective equipment.

2 Be able to provide support to relatives, friends and carers when viewing the deceased

- 2.1 *Confirm identity:* Identity of relatives, friends and carers is confirmed before viewing by adherence to standard operating procedures for identifying visitors to the mortuary and their relationship to the deceased.
- 2.2 *Communicate appropriate information:* Information is communicated to relatives, friends and carers of the deceased with sensitivity and empathy.
- 2.3 *Follow standard operating procedures when conducting the viewing of the deceased:* Standard operating procedures are adhered to when conducting viewings of the deceased.
- 2.4 *Advise relatives, friends and carers, appropriately:* Appropriate information is given to relatives, friends and carers with regard to after death procedures; standard operating procedures are adhered to when providing advice and information.
- 2.5 *Refer relatives, friends and carers to additional sources of support:* Relatives, friends and carers of the deceased are referred to additional sources of support and guidance such as NHS, police and outside agencies; bereavement and support agencies locally and nationally; only approved sources are referred to.

3 Understand why rigorous procedures have been developed for viewing of the deceased

- 3.1 *Importance of checking the identity of the deceased, relatives, friends and carers prior to the viewing of a body:* Reasons for having standard operating procedures for confirming the identity of individuals prior to viewing a body.
- 3.2 *Importance of taking account of any religious or cultural considerations when preparing a body for viewing:* Religious and cultural considerations that should be taken into account when preparing a body for viewing; reasons for these.
- 3.3 *Rationale of any protective measures taken during the preparation of a body for viewing:* Consideration of health and safety and infection control issues.

Assessment:

This is a competency unit. Evidence for attainment of the Learning Outcomes must come from assessment in the work environment during the learner's normal work activity. Evidence obtained by simulation is not permitted.

Suitable evidence for attainment of the learning outcomes could include:

Observation in the workplace
Witness statements
Professional discussion
Work journals or diaries

Unit APT3.10 Team working

Guided Learning: 15 hours

Total Unit time: 27 hours

Unit Level: 3

Unit reference number: J/505/2426

Summary of Learning Outcomes:

To achieve this unit a candidate must:

- 1 Be able to participate in planning the work of a team, by being able to meet the following assessment criteria:**
 - 1.1 Describe the roles and contributions of team members to the work of the team
 - 1.2 Identify the aims and objectives of the team
 - 1.3 Plan activities with the team in order to meet the aims and objectives
 - 1.4 Agree timescales for completion of activities

- 2 Be able to carry out own role as part of a team, by being able to meet the following assessment criteria:**
 - 2.1 Organise own work in order to meet agreed aims and objectives on time
 - 2.2 Monitor own progress towards meeting aims and objectives
 - 2.3 Take appropriate action if aims and objectives are unlikely to be met within agreed timescales
 - 2.4 Evaluate own contribution to the work of the team

- 3 Be able to communicate effectively with other team members, by being able to meet the following assessment criteria:**
 - 3.1 Clarify own role and the role of others in meeting the team's aims and objectives
 - 3.2 Inform other team members of own progress towards aims and objectives
 - 3.3 Give advice to team members if requested to enable them to meet their aims and objectives.

- 4 Understand the importance of team work and communication, by being able to meet the following assessment criteria:**
 - 4.1 Explain why team work is important in an organisation
 - 4.2 Explain how effective communication aids the work of a team

Content:

1 Be able to participate in planning the work of a team

- 1.1 *Roles and contributions of team members:* The APT role and those of others involved in your daily duties and the effective operation of the mortuary.
- 1.2 *Aims and objectives of team:* Aims and objectives of the mortuary team identified and described.
- 1.3 *Plan activities:* Routine activities and tasks identified and allocated to team members; dates and times set for infrequent and occasional activities; team members allocated to these tasks and given time and facilities to carry them out.
- 1.4 *Timescales:* Timescales for carrying out activities agreed with team members

2 Be able to carry out own role as part of a team

- 2.1 *Organise own work:* Own work is organised to ensure aims and objectives of work are met within agreed time limits.
- 2.2 *Monitor progress:* Progress monitored by use of diaries, check-lists, work sheets etc.
- 2.3 *Take action:* Action taken in the event that monitoring indicates aims and objectives may not be met within agreed timescales; action could include prioritising tasks, rescheduling timescales, agreeing to a re-allocation of work.
- 2.4 *Evaluate contribution:* Own contribution to the work of the team evaluated; feedback sought from peers and managers as appropriate

3 Be able to communicate effectively with other team members

- 3.1 *Clarify roles:* Clarify own role and that of others by questioning, restating role and obtaining agreement; examining job descriptions, plans of work, standard operating procedures etc
- 3.2 *Inform team members of progress:* Keep colleagues informed of progress via team meetings, use of check-lists, work diaries, work logs etc.
- 3.3 *Give advice:* Advice provided in a positive and supportive manner when sought; colleagues helped to achieve aims and objectives.

4 Understand the importance of team work and communication,

- 4.1 *Importance of team work:* Synergistic effect of working as a team; ability to offer help and support to colleagues; ability to learn from knowledge and experience of others.
- 4.2 *How effective communication aids the work of a team:* Increased effectiveness of team; ensures all members of team know what they are doing; all members of team aware of potential problems.

Assessment:

This is a competency unit. Evidence for attainment of the Learning Outcomes must come from assessment in the work environment during the learner's normal work activity. Evidence obtained by simulation is not permitted.

Suitable evidence for attainment of the learning outcomes could include:

Observation in the workplace
Witness statements
Professional discussion
Work journals or diaries

Learner Guidance:

Recommended Prior Learning:

Learners must have undertaken induction training required by their employer for working in a mortuary.

National Occupational Standards

The qualification has been mapped to the following National Occupational Standards of Skills for Health:

SFHHCS15 Undertake a post mortem examination.

SFHHCS16 Reconstruct the deceased following pathological examination.

SFHCHS219 Perform the viewing of the deceased with relatives and other agencies.

Further details of these National Occupational Standards can be obtained from RSPH Qualifications.

The qualification is also mapped to the following dimensions of the NHS Key Skills Framework:

Communication: Develop and maintain communication with people about difficult matters and/or in difficult situations.

Health, Safety and Security: Promote, monitor and maintain best practice in health, safety and security.

Centre Guidance:

Registration of Candidates:

Candidates must be registered with RSPH and have a candidate number before any work can be submitted to RSPH for external assessment.

Candidate registration forms can be downloaded from the Centre Area of the RSPH website (www.rsph.org.uk).

Assessment Requirements:

The assessment of competency units in this qualification must be by direct observation in the workplace, the use of witness statements and professional interviews. Assessors should have specific knowledge and experience of the role of the anatomical pathology technologist.

Submission of Centre Assessed Work:

Evidence for attainment of the learning outcomes relating to competency units (units APT3.6 – APT3.10) must be centre assessed and externally verified. Assessed evidence should be submitted to RSPH with an *assignment submission form* (available from RSPH when candidates are registered for the qualification) signed by the candidate and a completed *candidate assessment summary form* for each unit of the qualification. Assignment submission forms and candidate assessment summary forms can be downloaded from the Centre Area of the RSPH website (www.rsph.org.uk).

All centre assessed candidate work for the qualification must be completed and submitted to RSPH within two calendar years of registration (the *registration period*). In the event that candidate work does not meet the requirements of the assessment criteria or learning outcomes the candidate has a period of three months in which to repeat the assessment or submit any additional evidence requested, or by the end of the registration period, whichever is the shorter. An additional fee will be charged for the repeat of assessments.

In exceptional circumstances RSPH may extend the registration period for a candidate or cohort of candidates.

Special Assessment Needs:

Centres that have candidates with special assessment needs should consult RSPH's *Reasonable Adjustments and Special Consideration* policy, this is available from RSPH and RSPH's web site (www.rsph.org.uk).

How to apply to offer this qualification:

To become a centre approved to offer this qualification, please complete the 'Centre Application' which you can find on our website in the Qualifications and Training section. If you are already an approved centre, please complete the 'Add an additional qualification form' in the Centre area on the website www.rsph.org.uk. Please ensure that you include details of your internal verification procedures if candidate work will be centre assessed by more than one individual. You will need to attach relevant CVs to this application. Please contact the Qualifications Department at centreapproval@rsph.org.uk if you need any assistance.

Progression

Learners who achieve this qualification can progress to the RSPH Level 4 Diploma in Healthcare Science (Anatomical Pathology Technology).

Recommended Qualifications and Experience of Tutors and Assessors:

RSPH recommends that tutors have teaching experience and a qualification in a relevant subject area. Assessors and internal verifiers for this qualification must meet the requirements of the assessment strategy of Skills for Health.

Suitable qualifications for the RSPH Level 3 Diploma in Healthcare Science (Anatomical Pathology Technology) include:

RSPH Level 4 Diploma in Healthcare Science (Anatomical Pathology Technology)
Honours Degree in a relevant biological subject
Fellowship of the Royal College of Pathologists

Other Information:

All RSPH specifications are subject to review. Any changes to the assessment or learning outcomes will be notified to Centres in advance of their introduction. To check the currency of this version of the specification, please contact the Qualifications Department or consult the RSPH website.

Centres must be registered with RSPH.

Any enquiries about this qualification should be made to:

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