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**Initial Assessment of prior learning/needs**

This form must be completed **by the apprentice** and sent to the Programme Leader/Admissions Tutor. This information is required by the University establish learning needs and eligibility for funding as per ESFA.

Proof of prior certificated learning will be required in the form of **your original certificates.** You will be advised by the programme team as to when these will be required.

**Name:**

**Are you currently undertaking any other forms of study: Yes/No**

If yes please give details including source of funding and expected end date.

**Details of previous formal learning:**

If you have completed formal learning at the **same level** (or higher) as any part of the apprenticeship you have applied for please list all units/modules taken below. **All** previous learning must be listed, whether it is directly relevant to the apprenticeship you have applied for or not:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date(s) of study period** | **Name of course or Units/module(s) studied** | **Name of Institution** | **Awarding body** | **Mark/grade Credit number and academic level** |
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**Evidence seen? Yes/No**

If you have previously registered on a programme at the University of Hertfordshire and discontinued, please state your reason for discontinuing below:

**Mathematics and English**

Please list your Mathematics and English qualifications in the table below (GCSE or [equivalent](https://www.gov.uk/government/publications/qualifications-getting-approval-for-funding)). If qualifications are pending, please note this and identify the date you are expected to be notified of results.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Date** | **Qualification** | **Awarding body** | **Grade/ mark achieved** |
| **Mathematics** |  |  |  |  |
| **English** |  |  |  |  |

**Evidence seen? Yes/No**

**Course concerns:**

Please identify any concerns you may have at this time regarding the apprenticeship you are applying for in the box below (e.g. time management, study skills, expectations). The Programme Leader/Admissions Tutor will arrange a meeting to discuss them with you.

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**Please review the information you have been given about the apprenticeship programme before answering the following questions.**

What do you understand about the apprenticeship you have been identified to undertake and the assessment procedures involved? Please write your response in the box below (max 150 words

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Why do you think you are suitable for this qualification? Please write your response in the box below (max 150 words)

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**Details of prior informal learning.**

Do you already have informal learning through experience at work that you think might overlap with some of the learning on this apprenticeship?

**NB:** It is important to think about this carefully as you only register as an apprentice for learning which is new. Your employer can then use their funding (levy) to pay for it.

Please look at the brief information for each of the modules and answer as best you can as to whether you have prior learning, some overlap, not sure or none. You may find it useful to go through this with your employer.

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| **(Name of Apprenticeship) Programme Lead/Admissions tutor to populate** | | **Do you already have this learning?** |
| **Module title** | **Learning outcomes**  **(KU - Knowledge and Understanding), (SA - Skills and Attributes)** |
| Cell and Microbiology (Apprenticeship)  4LMS0205 | KU1 - describe the relationship between structure and function of prokaryotic and eukaryotic cells and the origin of  the cellular components. | Choose an item. |
| KU2 - explain the fundamental importance of genetic information and gene expression. | Choose an item. |
| KU3 - describe key features and growth characteristics of eukaryotic cells. | Choose an item. |
| KU4 - evaluate how the structure and products of microbes can cause disease in plants and animals, as well as their use in industry and public health. | Choose an item. |
| SA1 - locate and communicate information within the context of cell biology and microbial disease of humans. | Choose an item. |
| SA2 - identify microbes using classification keys and tables. | Choose an item. |
| Human Physiology with Pharmacology (Apprenticeship)  4LMS0206 | KU1 - gain an appreciation of human anatomy and identify the gross structure of selected organ systems and  tissues. | Choose an item. |
| KU2 - appreciate normal cellular microscopic appearance of commonly investigated tissues. | Choose an item. |
| KU3 - describe a range of physiological processes at cell, tissue, organ and organism level (for humans). | Choose an item. |
| KU4 - identify the mechanisms involved in the regulation of body functions and appreciate the integrative aspects of  body function. | Choose an item. |
| KU5 - evaluate drug action in terms of interaction with receptors, their use as research tools and for treatment and  the fate of a medicine after it is administered to humans. | Choose an item. |
| SA1 - collect and communicate physiological information. | Choose an item. |
| SA2 - solve problems in physiological experimentation. | Choose an item. |
| SA3 - interpret and explain a range of physiological data. | Choose an item. |
| Molecular Biology and Genetics (Apprenticeship)  4LMS0207 | KU1 - explain the principles behind genetic inheritance and gene variation. | Choose an item. |
|  | KU2 - describe at a fundamental level how gene expression may be regulated. | Choose an item. |
|  | KU3 - describe the molecular biological techniques used to analyse nucleic acids and discuss their application in  clinical and industrial settings. | Choose an item. |
|  | SA1 - explain and interpret genetic and molecular data.  SA2 - use computer based technologies to examine genetic inheritance patterns. | Choose an item. |
| Practical and Professional Skills (Apprenticeship)  4LMS0208 | KU1 - describe the application of basic techniques in chemical and biological investigations. | Choose an item. |
| KU2 - interpret scientific data appropriate for level 4 students. | Choose an item. |
| KU3 - use appropriate calculations and statistics in the planning and analysis of biological experiments. | Choose an item. |
| KU4 - demonstrate an understanding of how the NHS Constitution, Good Scientific Practice (GSP) and Health and  Care Professions Council (HCPC) Standards are used to support person-centred care. | Choose an item. |
| KU5 - evaluate legislation/ policies/regulations relating to health and safety at work, equality and diversity and  confidentiality of patients. | Choose an item. |
| SA1 - work safely, accurately and professionally in the laboratory environment demonstrating honesty, integrity and  competence in core laboratory scientific methodologies. | Choose an item. |
| SA2 - find and collate key information in scientific literature and understand the importance of referencing in  Science. | Choose an item. |
| SA3 - communicate the results of basic scientific experiments and clinical data. | Choose an item. |
| SA4 - demonstrate team working skills through participation in a group based exercise. | Choose an item. |
| SA5 - critically reflect on the value of technical and personal and professional skills evidencing response to  appraisal/feedback and consider how this enhances personal development and the quality of patient care. | Choose an item. |
| Chemistry for the Biological Sciences (Apprenticeship)  4LMS0209 | KU1 - Identify functional groups and their relationship to chemical behaviour. | Choose an item. |
| KU2 - Understand the principles to apply physical chemistry concepts to biological systems. | Choose an item. |
| KU3 - Understand how molecular structure and shape affect biological processes. | Choose an item. |
| KU4 - Describe techniques for characterisation and separation of biological molecules. | Choose an item. |
| SA1 - Use computer software and molecular models to represent chemical structure. | Choose an item. |
| SA2 - Perform relevant calculations relating to concentration, equilibrium, pH and buffers. | Choose an item. |
| SA4 - Use chemical concepts to explain the structure and behaviour of biological molecules. | Choose an item. |
| Core Biochemistry (Apprenticeship) | KU1 - describe the structure of key macromolecules and their relevance to their function in cells and organisms. | Choose an item. |
| KU2 - describe the main catabolic and anabolic pathways and develop knowledge of their relationship to health and  disease. | Choose an item. |
| KU3 - describe the basis of energy production and utilisation in metabolic processes. | Choose an item. |
| KU4 - appreciate the principles of kinetics and how these relate to the control of metabolic processes in the cell. | Choose an item. |
| SA1 - apply an understanding of metabolism to problems of biochemical relevance. | Choose an item. |
| SA2 - relate experimental data to kinetic theory. | Choose an item. |
| SA3 - evaluate protein databases and use specific software to explore protein structure. | Choose an item. |
| Genes and Genomes (Apprenticeship)  5LMS0128 | KU1 - appreciate the organisation and control of gene expression. | Choose an item. |
| KU2 - explain the principles of eukaryotic genetics. | Choose an item. |
| KU3 - understand the organisation and evolution of eukaryotic genomes. | Choose an item. |
| KU4 - analyse and evaluate the relevance of genetics to population structure and dynamics. | Choose an item. |
| KU5 - evaluate the importance of genetics and genomics in a medical context. | Choose an item. |
| SA1 - perform experiments in the field of molecular biology and interpret a range of experimental data. | Choose an item. |
| SA2 - seek and communicate information within the context of eukaryotic molecular biology, genetics, genomics  and bioinformatics. | Choose an item. |
| SA3 - evaluate whole genome relative to target specific approaches for research in genetics and molecular biology. | Choose an item. |
| Principles of Immunology (Apprenticeship)  5LMS0129 | KU1 - describe the main components of natural and adaptive immunity and explain the processes involved in  generating an effective immune response. | Choose an item. |
| KU2 - explain the immunopathology of inflammatory disease. | Choose an item. |
| KU3 - demonstrate knowledge of microbial:host interactions and their importance in vaccine design. | Choose an item. |
| SA1 - perform selected immunological techniques. | Choose an item. |
| SA2 - analyse and interpret immunological laboratory data. | Choose an item. |
| SA3 - effectively communicate by taking into account information drawn from a range of sources. | Choose an item. |
| Cell and Molecular Biology (Apprenticeship)  5LMS0130 | KU1 - develop an understanding of the relationship between protein structure and function. | Choose an item. |
| KU2 - analyse and evaluate how proteins affect cell behaviour. | Choose an item. |
| KU3 - gain understanding of the major signalling pathways which underlie how cells communicate with each other  and which affect cellular behaviour. | Choose an item. |
| KU4 - understand the relationship between cell shape and cell function. | Choose an item. |
| K5 - understand the cellular and molecular regulation of cell division and cell cycle regulation. | Choose an item. |
| SA1 - perform experiments in the field of molecular biology and interpret a range of experimental data. | Choose an item. |
| SA2 - effectively communicate by taking into account information within the context of molecular biology. | Choose an item. |
| SA3 - apply technology in the use of computers and laboratory equipment. | Choose an item. |
| Cytology and Histopathology  (Apprenticeship)  5LMS0131 | KU1 - describe and explain how common human disease processes have an effect at the functional, cellular,  tissue, organ and system levels of organisation and explain their clinical presentation. | Choose an item. |
| KU2 - comprehend the principles, practice, quality assurance and application of methods for retrieval, preservation,  preparation and analysis of cells, tissues and organs for cellular pathology testing. | Choose an item. |
| KU3 - understand preparation, staining and analysis of biological samples for cellular pathology testing and explain  the rationale of histochemistry, immunocytochemistry and special stains. | Choose an item. |
| KU4 - evaluate the roles and responsibilities of healthcare professionals in the health service and in the cellular  pathology services. | Choose an item. |
| SA1 - demonstrate a range of key pathological processes through the use of laboratory experiments using safe and  precise technical skills. | Choose an item. |
| SA2 - prepare, stain and investigate biological specimens for cellular pathology investigation and identify the normal  and abnormal macroscopic, cellular and sub-cellular appearance and morphological changes in a range  commonly investigated tissues. | Choose an item. |
| SA3 - appreciate the legal and ethical boundaries of cellular pathology. | Choose an item. |
| SA4 - Analyse, evaluate and present clinical data appropriately and demonstrate a logical and systematic  approach to problem solving. | Choose an item. |
| Blood Sciences (Apprenticeship)  5LMS0132 | KU1 - Evaluate underpinning knowledge of biochemical pathways and relate this to changes that occur when they  are disrupted in disease. | Choose an item. |
| KU2 - Demonstrate a detailed understanding of the pathophysiology and range of laboratory investigations linked to blood cell disorders, and blood coagulation. | Choose an item. |
| KU3 - Explain the use of different biological specimens, collection tubes and reference ranges in the clinical  laboratory. | Choose an item. |
| KU4 - Discuss good blood transfusion practice by demonstrating knowledge of blood group systems and the  importance of compatibility testing, provision of blood products and regulation in blood transfusion science. | Choose an item. |
| SA1 - Effectively analyse and interpret scientific and clinical data both in the laboratory and for case studies and  demonstrate the ability to keep a good laboratory logbook. | Choose an item. |
| SA2 - Begin to use critical appraisal skills in the assessment of the quality and content of scientific and clinical  data. | Choose an item. |
| SA3 - Demonstrate effective communication of scientific data and concepts and in a logical and systematic  manner. | Choose an item. |
| SA4 - Demonstrate an understanding and experience of methods and techniques used in routine clinical  biochemistry, core and specialized haematology and blood transfusion science. | Choose an item. |
| SA5 - Demonstrate professionalism and adherence to good laboratory practice including conforming to health and  safety requirements specific to the handling of human blood. | Choose an item. |
| Research and Professional Skills (Apprenticeship)  5LMS0133 | KU1 - analyse and evaluate different sources of scientific information (literature, field data, laboratory data,  questionnaire based surveys, etc) that contribute to existing knowledge on a selected topic. | Choose an item. |
| KU2 - explain how Scientific Methodology (Philosophy) and the selection of appropriate methods for analysis  informs research so as to address the hypotheses/questions/problems/issues associated with a selected topic effectively. | Choose an item. |
| KU3 - describe the professional and regulatory role of the Institute of Biomedical Science (IBMS) and Health and  Care Professions Council (HCPC) respectively and identify and explain the HCPC standards to be met by completion of the IBMS training portfolio for the Certificate of Competency. | Choose an item. |
| KU4 - assess the use of Standard Operating Procedures, Protocols and Guidelines in a diagnostic laboratory and  explain the importance of quality in a diagnostic laboratory. | Choose an item. |
| KU5 - identify and apply the skills, responsibilities and relevant standards required of a working scientist including  safe, professional and ethical scientific practice. | Choose an item. |
| SA1 - design experiments, conduct quantitative and statistical analyses, critically interpret data within the context  of published material and appreciate quality assurance in ensuring integrity of research data. | Choose an item. |
| SA2 - produce a research proposal including a rationale, aims and objectives, a review of literature appropriate to  the subject area and demonstrate the correct use and citation of references. | Choose an item. |
| SA3 - undertake reflective practice referring to professional guidelines/literature and the importance of developing  and maintaining professional partnerships with patients and healthcare professionals. | Choose an item. |
| SA4 - demonstrate competencies in fundamental pathology laboratory skills and appropriate procedures for sample  handling, basic equipment use, aspects of quality assurance, core diagnostic test performance and result  interpretation. | Choose an item. |
| SA5 - evaluate personal and professional skills and graduate attributes related to their study, employability and  Continuing Professional Development (CPD). | Choose an item. |
| Microbiology of Disease (Apprenticeship)  5LMS0134 | KU1 - evaluate the features of bacteria, fungi , viruses and parasites associated with their ability to cause human  disease. | Choose an item. |
| KU2 - analyse and evaluate the methods used to distinguish between different microbes in diagnostic microbiology. | Choose an item. |
| KU3 - assess the role of epidemiological methods and infection control in preventing or minimising the effects of  microbial disease. | Choose an item. |
| SA1 - select and undertake microbiological techniques to isolate and grow a range of medically important bacterial  and fungal genera. | Choose an item. |
| SA2 - select and use key identification techniques to distinguish between different bacteria and fungi in the  laboratory. | Choose an item. |
| SA3 - undertake methods used to measure antibiotic susceptibility. | Choose an item. |
| Cellular and Molecular Pathology (Apprenticeship)  6LMS0178 | KU1 - critically review the genetics and development of selected diseases including cancer. | Choose an item. |
| KU2 - explain the molecular, biochemical, cellular and physiological changes associated with selected diseases  including cancer. | Choose an item. |
| KU3 - critically discuss, and explain with examples, cellular and molecular pathology methods to support the diagnosis, management and treatment of common clinical disorders. | Choose an item. |
| SA1 – identify pathological tissues based on changes at the morphological, biochemical and molecular level. | Choose an item. |
| SA2 - apply cellular and molecular methods and illustrate their value/role in diagnosis, treatment and management  of selected diseases/clinical outcome. | Choose an item. |
| SA3 - demonstrate a logical and systematic approach to problem solving including the appropriate manipulation,  analysis and presentation of clinical data. | Choose an item. |
| SA4 - demonstrate effective interpersonal skills in the presentation of data | Choose an item. |
| SA5 - demonstrate critical appraisal skills in the assessment of the quality of scientific and clinical data. | Choose an item. |
| Clinical Biochemistry and Immunology (Apprenticeship)  6LMS0179 | KU1 - critically discuss the basis of biochemical methods used in investigating disease. | Choose an item. |
| KU2 - explain the biochemical principles underlying the study of disease. | Choose an item. |
| KU3 - relate the biochemical evidence for disease to the pathophysiology and clinical presentation of disease. | Choose an item. |
| KU4 - critically discuss the immunological processes giving rise to clinical disorders. | Choose an item. |
| KU5 - explain the relationship between laboratory findings and the underlying immunopathology of selected  disorders. | Choose an item. |
| SA1 - discuss the relationship between biochemical markers and disease pathophysiology. | Choose an item. |
| SA2 - apply quality management principles to the determination and interpretation of biochemical and  immunological data. | Choose an item. |
| SA3 - critically evaluate biochemical and immunological data relevant to the diagnosis of disease. | Choose an item. |
| Clinical Microbiology (Apprenticeship)  6LMS0180 | KU1 - compare and contrast the mechanisms of infection of a range of different bacterial, viral, fungal and parasitic  pathogens. | Choose an item. |
| KU2 - critically evaluate the tests used for identification of a range of different bacterial and viral pathogens. | Choose an item. |
| KU3 - explain the issues associated with the laboratory investigation of parasitic and fungal diseases. | Choose an item. |
| KU4 - assess the problems associated antibiotic resistance and its spread within microbial populations. | Choose an item. |
| SA1 - analyse and identify microbial pathogens to species level and to individual strains where appropriate. | Choose an item. |
| SA2 - critically discuss the problems associated with laboratory diagnosis of infectious diseases. | Choose an item. |
| Bioscience Research Project  (Apprenticeship)  6LMS0181 | KU1 - relate the principles of research methodology to a research investigation. | Choose an item. |
| KU2 - demonstrate a systematic understanding of a problem to be addressed in a research investigation. | Choose an item. |
| KU3 - formulate and design experiments to test hypotheses. | Choose an item. |
| KU4 - critically analyse and interpret information gathered for their project from the work of others (scientific  literature) and their own work (for example: experimental laboratory results; results from questionnaires etc). | Choose an item. |
| KU5 - draw conclusions in the context of the hypothesis being tested. | Choose an item. |
| SA1 - evaluate current research and the scientific literature on a selected topic. | Choose an item. |
| SA2 - demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning  and implementing tasks. | Choose an item. |
| SA3 - apply appropriate techniques to a research investigation and evaluate methodologies and experimental  designs. | Choose an item. |
| SA4 - identify and critically apply an appropriate means of analysis of data. | Choose an item. |
| SA5 -demonstrate effective information handling and present a bibliography of cited references. | Choose an item. |
| Applied and Integrated Biomedical Science (Apprenticeship)  6LMS0182 | KU1 - understand and apply knowledge of the Healthcare Science Practitioner apprenticeship standards related to  person care and professional practice, personal and professional development, health, safety and security,  quality, technical scientific services, clinical care, audit/service improvement, research and innovation, and  leadership to successfully pass the End Point Assessment. | Choose an item. |
| KU2 - critically discuss disease examples showing how multiple laboratory disciplines are involved in patient care  and the importance of Biomedical Scientists communicating effectively across pathology specialities. | Choose an item. |
| KU3 - critically discuss ethical issues which impact on the advances of biomedical science. | Choose an item. |
| KU4 - explain underpinning principles of specific assays appropriate to the chosen speciality in accordance with  associated quality parameters and health and safety considerations. | Choose an item. |
| KU5 - complete the collection of evidence for the e-Portfolio by undertaking theoretical tasks, practical competencies, and reflective practice to undertake the professional discussion component of the EPA. | Choose an item. |
| SA1 - successfully pass the End Point Assessment by demonstrating skills expected of a Healthcare Science  Practitioner related to person care and professional practice, personal and professional development, health,  safety and security, quality, technical scientific services, clinical care, audit/service improvement, research and  innovation, and leadership whilst working to standards of GSP/HCPC expected of a healthcare environment. | Choose an item. |
| SA2 - demonstrate competence for performing diagnostic laboratory investigations by adhering to the associated  standard operating procedures, health and safety requirements and equipment instructions. | Choose an item. |
| SA3 - critically reflect on problem solving encountered in practical and theoretical situations to enhance  professional development and autonomy. | Choose an item. |
| SA4 - be able to interpret experimental/clinical data appropriately. | Choose an item. |
| SA5 - use effective and professional written and oral communication and approach | Choose an item. |

I confirm that the information given in this form is true, complete and accurate and no information requested, or other material information has been omitted.

**Print name:…………………………………………..**

**Signature:………………………………………………**

**Date:………………………………………………………**

**Copy to be sent to student record.**