Access to HE Diploma Specification & Assessment Framework

Diploma Title:

Medicine and Medical Sciences

Learning Aim:	40015749
Approved:	16 May 2024
Validation dates:	01 August 2024 - 31 July 2029
Date of next review:	September 2028

Purpose and aim of the Access to HE Diploma

The Access to HE Diploma is intended to prepare people without traditional entry qualifications for degree level study at university. It may also be used by people wishing to make a career change or who have been out of formal education for a significant time to gain the knowledge, skills and confidence required for direct progression to employment or further study. The Access to HE Diploma is regulated by QAA and widely recognised as a progression route by universities across the UK.

Target Group

The Access Diploma is open to all learners but is designed to be accessible for individuals who, because of their socio-economic or personal circumstances, may not have been able to consider progression to degree level study. The Access Diploma therefore provides a second chance for individuals who, for whatever reason, were not able to take full advantage of their formal secondary education.

About the qualification

The Diploma Specification for Medicine and Medical Sciences enables centres to choose from a variety of units in biology, chemistry, physics, and maths making the combination appropriate for their learners. *If you wish to offer the QAA approved Medicine Subject Descriptor diploma, please see our Access to HE Diploma (Medicine).*

The progression routes[1] from this Diploma could include, but are not limited to, degrees in medicine, chemistry, chemical engineering, physics, biomedical science, pharmacy, marine biology, dental therapy, dental hygiene, etc.

Specification Rules

All LASER Diplomas are made up of 45 graded credits (sections A, B, C below) and 15 ungraded credits (section D). The policy for the LASER Access to HE Diploma Specification & Assessment Framework is available at Validated_Diploma_Specifications or by contacting the Access Office.

Section	Minimum Credits	Graded/Ungraded	Modules	Notes
A	30	Graded	Biology, chemistry, maths, physics	
B	9 or 15	Graded	Additional units from group A or relevant psychology or other units listed	Number of credits dependent on choice of graded or ungraded IAS
C	6	Graded or Ungraded	IAS Medicine or IAS Science	MANDATORY UNIT
D	9 or 15	Ungraded	Study Skills units or selected ungraded options from sections A and/or B	Study Skills units can be at level 2 or 3 Number of credits dependent on choice of graded or ungraded IAS

[1] Suggested progression routes have been taken from provider feedback and HE consultation, they may be subject to change and further review and do not indicate any guarantee of progression in these fields. LASER would always recommend students ensure the diploma they wish to enrol on is appropriate for their future progression.

Unit Choices: SUBJECT GROUP A

30 graded credits to be selected from the modules listed below, these units are chosen as specific to the subject of the named Diploma and are all at level 3. Barred combinations as shown as either/or choices or noted within the tables below.

Biology				
Credits	**Title**			
3	Energy for healthcare			
3	Biochemistry for healthcare	**or**	3	Biochemistry
3	Cells, tissues and organs for healthcare	**or**	3	Cell biology
3	Digestion and the liver for healthcare	**or**	3	Nutrition and digestion
3	Homeostasis for healthcare	**or**	3	Mammalian control systems
3	The musculoskeletal system for healthcare	**or**	3	Musculoskeletal system
3	Blood, circulation and gaseous exchange for healthcare	**or**	3	Cardiopulmonary system
3	Disease and body defence	**or**	3	Microbiology and immunity
3	Reproductive biology for healthcare	**or**	3	Reproduction and inheritance*
3	Mendelian and applied genetics for healthcare	**or**		

**Reproduction and inheritance cannot be taken with <u>either</u> Reproductive biology for healthcare <u>or</u> Mendelian and applied genetics due to content overlap.*

Additional non-Healthcare specific biology	
3	Biodiversity
3	Cellular Structures, Processes and Replication *Barred combination: Cell Biology or Cells, tissues & organs for healthcare*
3	Evolution and Ecology
3	Genetics
3	Microbiology *Barred combination: Microbiology and immunity*
3	Medical Biochemistry

Chemistry	
Credits	**Title**
3	Body Chemistry
3	Drugs and Food Additives
3	Equilibria Acids and Buffers
3	Fundamentals of Chemistry
3	Medical Chemistry
3	Organic Chemistry
3	Organic Reaction Mechanisms
3	Pharmacology for Healthcare
3	Periodic Table, Ionisation Energies and Redox
3	Reaction Kinetics and Energetics
3	Separation and Analysis
3	Structure and Bonding

Physics	
Credits	**Title**
3	Electricity
3	Electromagnetism
3	Fields
3	Mechanics and Kinematics
3	Medical Physics 1
3	Medical Physics 2
3	Nuclear and Particle Physics
3	Optics and Waves
3	Physical Properties of Materials
3	Physics for Radiography: Diagnostic Nuclear Medicine
3	Physics for Radiography: Radiation
3	Physics for Radiography: Therapeutic Nuclear Medicine
3	Thermal Properties of Matter
3	Units, Energy and Motion
Maths	
Credits	**Title**
3	Algebra
3	Arithmetic
3	Calculus
3	Collecting, Presenting and Using Statistics
3	General Mathematics
3	Introduction to Mathematics for Scientists
3	Statistics
3	The Nature and Applications of Statistics
3	Trigonometry
General Science	
Credits	**Title**
3	Introduction to Science and the Scientific Method
3	Scientific Communication

Unit Choices: SUBJECT GROUP B

9 or 15 graded credits (depending on choice of graded or ungraded IAS unit from Group C) to be selected from either the modules listed in Group A and/or from the additional modules offered below, these units are related to the subject of the named Diploma or will complement learning. These units are all at level 3.

Psychology

Credits	Title
3	Bio-Psychology
3	Child Development
3	Cognitive Psychology
3	Forensic Psychology
3	Introduction to Psychology
3	Neuro-Psychology
3	Psychology and Mental Health
3	Psychology and Therapy
3	Psychology of Early Socialisation
3	Psychology of Health
3	Research Methods in Psychology
3	Social Psychology

Other units

Credits	Title
3	Developing Clinical Skills
3	Understanding Epidemiology
3	Understanding the Patient Journey

Independent Academic Study: IAS GROUP C

6 credits are achieved from the appropriate Independent Academic Study unit (IAS) for the Diploma title. This unit is at level 3 and can be offered as graded or ungraded (but not both) within a centre's Rules of Combination.

Independent Academic Study	
Credits	**Title**
6	Independent Academic Study (Medicine) or Independent Academic Study (Science)

Ungraded Units: GROUP D

15 or 9 ungraded credits (depending on choice of graded or ungraded IAS unit from Group C) are selected from the modules listed in Group D. These units are generally at level 3 but some study skills units may be available at level 2.

Other Medical/Professional Behaviours		
If the highlighted ungraded options in this module are chosen, this will limit the study skills units to those in the corresponding highlighting – please contact the Head of Access for further information.		
Level	**Credits**	**Title**
3	3	The Application of Physics to Medicine
3	3	Doctor-Patient Relationship
3	3	Health Studies for Medicine
3	3	Use and Comprehension of Numerical Data for Medicine
3	6	Study Skills for Medicine
3	3	Professional Behaviours for Medical Practitioners (QAA approved unit)

Applied Study Skills

Level	Credits	Title
3	3	Academic Communication Skills
3	3	Critical Thinking
3	3	Data Analysis using IT
3	3	Essential Digital Skills for Students
3	3	Giving a Presentation to an Audience
3	3	Note Taking and Note Making
3	3	Preparing for and Taking Written Exams
2 or 3	3	Skills for Study: Essay Writing
2 or 3	3	Skills for Study: Research
2 or 3	3	Skills for Study: Writing
2 or 3	3	Using ICT for Study

Personal Reflection & Development

Level	Credits	Title
3	3	Citizenship: Rights and Responsibilities for UK Professions
3	3	Cultural Diversity and Professional Practice
3	3	Mental Health and Self-Care Whilst Studying
3	3	Personal Organisation and Time Management
3	3	Reviewing and Planning for the Future

General English

Level	Credits	Title
2	3	English Language Skills
3	3	Studying Literature
3	3	Communication – Reading and Writing
3	3	Communication – Speaking and Listening

General Maths

Level	Credits	Title
2	3	Understanding Maths
3	3	Application of Number - Calculation
3	3	Application of Number – Data Interpretation
3	6	Introductory Mathematics for HE
3	3	Practical Mathematics for Healthcare

Ungraded Academic Subject Content (all at level 3)

Units cannot be included within a centre's Rules of Combination as both graded and ungraded, but centres can choose to offer some academic subject units as ungraded versions. These must be identified as part of the course approval and will apply to all cohorts on this diploma title within a centre. If a centre wishes to include other units in Groups A or B as ungraded content, this will need to be requested for consideration by the AVA, giving valid reasons for inclusion, as part of course approval.

Credits	Title			
Ungraded Biology				
3	Blood, circulation and gaseous exchange for healthcare			
3	Cells, tissues and organs for healthcare	**or**	3	Cell biology

3	Genetics
3	Homeostasis for healthcare
3	Mendelian and applied genetics for healthcare
3	Microbiology and immunity *Barred combination: Microbiology*
3	Musculoskeletal system
3	Reproductive biology for healthcare
Ungraded Chemistry	
3	Body Chemistry
3	Fundamentals of Chemistry
3	Organic Chemistry
3	Organic Reaction Mechanisms
3	Separation and Analysis
Ungraded Physics	
3	Electricity
3	Electromagnetism and Waves
3	Mechanics, Energy and Matter
3	Physical Properties of Materials
3	Units, Energy and Motion
Ungraded Maths	
3	Algebra
3	Arithmetic
3	Collecting, Presenting and Using Statistics
3	General Mathematics
3	Introduction to Mathematics for Scientists
3	Statistics
3	The Nature and Applications of Statistics
3	Trigonometry
Ungraded General Science	
3	Introduction to Science and the Scientific Method
3	Scientific Communication
3	Practical Science Skills
Ungraded Psychology	
3	Introduction to Psychology
3	Cognitive Psychology
3	Psychology of Early Socialisation
3	Research Methods in Psychology
Ungraded Other units	
3	Developing Clinical Skills

Diploma Assessment Framework

All LASER validated Access to HE programmes must include a **Diploma Assessment Plan** as a part of their validation/revalidation process and the plans will be required to be updated and available for review as part of the yearly External Quality Assurance cycle. In identifying assessment models, practitioners should also give due consideration to the requirements of the LASER Guidance on the Use of AI to ensure the veracity of assessments as measures of student achievement.

The policy for the LASER Access to HE Diploma Specification & Assessment Framework is available via Validated Diploma Specifications or by contacting the Access Office.

Required Assessment Models:

Assessment Model[2]	Suggested Weighted Frequency of Use	Comments
Examination	High / Moderate / Low	*Required by LASER Examination Policy and identified as a commonly used assessment model within HE.* The LASER Examination Policy requires all LASER validated Diploma Titles to contain at least **three** opportunities for students to experience appropriate forms of 'summative' examination which contribute to the final assessment and grade of the unit. Unless there is a compelling reason, **no diploma should contain more than six examinations**. The full policy can be viewed here: Access Policies.
Project / Report	High / Moderate / Low	*An assessment model often employed in terms of HE provision. This will involve the student independently researching and reporting on a given area and will likely be included as an assessment model in each subject area within combined Sciences.*
Laboratory / Practical	High / Moderate / Low	*A frequently used model of assessment appropriate for many progression routes.*
Experiment	High / Moderate / Low	*Very high frequency of use in HE. Students should have frequent experience of this form of assessment. Maybe appropriately used to test the application of skills and knowledge in a practical setting. This model overlaps and may be combined with Laboratory / Practical work.*
Essay	High / Moderate / Low	*A very common assessment model which allows for testing knowledge and understanding of relevant theory. Commonly used in HE.*

[2] Definitions of the meanings of given **Assessment Models** are contained within Annex One of the LASER Access to HE Diploma Specification & Assessment Framework.

Recommended Assessment Models:

Recommended Assessment Model	Possible Weighting	Comments
Presentation	Strongly Recommended / Recommended / Suggested	*May be used to assess student knowledge and understanding of a given topic or to assess independent practical/ investigative work via the presentation of results.*
Case Study	Strongly Recommended / Recommended / Suggested	*May be appropriate to areas where there is a requirement for application of knowledge. In Science it may be used to assess student understanding of Scientific developments within given areas.*
Workbook	Strongly Recommended / Recommended / Suggested	*May be used in relation to any unit.*