



Course Addendum: Changes to 2020/21 Teaching In Response to Covid-19

Whilst we hope to deliver as much activity on-campus as possible, the government’s guidance and social distancing measures will inform how much teaching we can deliver face-to-face in the 2020/21 academic year. Working to government guidelines we have adapted the delivery of our courses to a model of blending learning, which consists of a mix of online and on-campus activities. We are equipped to move between blended learning to fully online, or face-to-face, as the Covid-19 situation evolves.

The learning outcomes of your course remain the same but there are changes to its delivery, assessment and structure, as set out in the Changes section of this document. The subsequent pages of this document contain the original teaching and learning schedule of this course, for your reference.

24th July 2020

Course Details

Course Title(s)	BSc (Hons) Forensic Science
Course Code(s)	1163
Course Director	Clive Steele
Shared Modules?	No

Changes to sequencing of modules:

No change required	The are no changes to the sequencing of any modules on the forensic science degree
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Changes to the mode of delivery and course composition

Year/Level/Module	Changes to delivery mode	Changes contact hours (%)	
		Current	New
L4 Semester 1	The following changes are made to the delivery of the modules at L4 , in S1: Face to face lectures are replaced by synchronous online lecture sessions and supplemented synchronous tutorials and asynchronous online support materials such as lecture videos, back ground reading , pre-laboratory exercises and post-laboratory written reports, video topics, online seminars and drop-in sessions. Laboratory classes will be conducted in compliance with LSBU social distancing regulations. This will involve		

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<p>L5 Semester 1</p>	<p>The following changes are made to the delivery of the modules at L5, in S1: Face to face lectures are replaced by synchronous online lecture sessions and supplemented synchronous tutorials and asynchronous online support materials such as lecture videos, back ground reading , pre-laboratory exercises and post-laboratory written reports, video topics, online seminars and drop-in sessions. Laboratory classes will be conducted in compliance with LSBU social distancing regulations. This will involve smaller groups (as detailed by the LSBU social distancing policy for each laboratory location). Laboratories will be run over two semesters for Measurement Science and Marks and Traces.</p>			
<p>Module specific changes L5:</p> <p>ASC_5_417 Forensic Biology</p>	<p>Lectures will now be delivered online instead of in the classroom as a synchronous activity. Laboratory practical sessions will take place at the University in compliance with social distancing regulations, with students wearing enhanced PPE. Examinations will take place online using the 24-hour release model.</p>	<p>Lecture (online) Laboratory (onsite) Self-directed online sessions:</p>	<p>50% 40% 10%</p>	<p>40% 35% 25%</p>

<p>ASC_5_418 Measurement Science and Instrumentation in Forensic Analysis</p>	<p>Lectures will now be delivered online instead of in the classroom as a synchronous activity. Calculations and use of spreadsheets will be conducted online as an asynchronous activity. Examinations will take place online using the 24-hour release model.</p>	<p>Lecture (online) Laboratory (onsite) Self-directed online sessions:</p>	<p>20% 40% 40%</p>	<p>20% 40% 40%</p>
<p>ASC_5_422 Criminal Law</p>	<p>Lectures, seminars and tutorials will now be delivered online instead of in the classroom as a synchronous activity. Drop-in sessions will be provided as an alternative to office hours. Examinations will take place online using the 24-hour release model.</p>	<p>Lecture (online) Seminar (online) Self-directed sessions (online) Drop-in sessions (online)</p>	<p>40% 10% 40% 10%</p>	<p>40% 10% 40% 10%</p>

<p>L6 Semester 1</p>	<p>The following changes are made to the delivery of the modules at L6, in S1: Face to face lectures are replaced by synchronous online lecture sessions and supplemented synchronous tutorials and asynchronous online support materials such as lecture videos, back ground reading , pre-laboratory exercises and post-laboratory written reports, video topics, online seminars and drop-in sessions. Laboratory classes will be conducted in compliance with LSBU social distancing regulations. This will involve smaller groups (as detailed by the LSBU social distancing policy for each laboratory location).</p> <p>Experiment based research projects will go ahead as normal again observing social distancing regulations, with a digital booking system for booking laboratory space and analytical equipment. Drop-in sessions for project will be held online as a substitute for office hours and poster and PowerPoint presentations will be held online.</p>			
<p>Module specific changes L6:</p> <p>ASC_6_467 Research Project</p>	<p>For advanced topics (an integral part of the research project taken in semester 1), lectures will now be delivered online instead of in the classroom as a synchronous activity. Individual project experimentation will take place in the laboratories as usual in line with social distancing and surface cleaning protocols and enhanced PPE. Risk</p>	<p>Lecture (online) Laboratory (onsite) Self-directed online sessions:</p>	<p>20% 40% 40%</p>	<p>20% 40% 40%</p>

<p>ASC_6_466 Biological Evidence</p>	<p>assessments will include COVID-19 related information. Progress meetings with supervisors will be scheduled by Microsoft Teams.</p> <p>A series of online tutorials will be uploaded onto Moodle, relating to referencing, writing a dissertation report, journal critiquing and data analysis workshops.</p> <p>Lectures will now be delivered online instead of in the classroom as a synchronous activity. Laboratory practical sessions will take place on-site observing the social distancing requirements and using enhanced PPE. Office hours will be replaced by Microsoft Teams drop-in sessions. Asynchronous activities will comprise of recorded presentations and directed private study using online resources.</p> <p>Examinations will take place online using the 24-hour release model.</p>	<p>Lecture Laboratory (onsite) Self-directed Online tutorial/drop-in sessions:</p>	<p>50% 40% 10%</p>	<p>40% 40% 20%</p>
<p>ASC_6_427 Incident Investigation</p>	<p>Lectures will now be delivered online instead of in the classroom as a synchronous activity. Project work will be supervised online via scheduled drop-in sessions. The course will also feature a collection of National Geographic videos which will form part of the asynchronous activity. The course will have a summative assessment as an online examination released over a period of 24 hours.</p>	<p>Lecture (online, synchronous) Seminar (online) Self-directed sessions (online, asynchronous) Drop in sessions (online)</p>	<p>40% 10% 40% 10%</p>	<p>40% 10% 40% 10%</p>

Changes to assessment strategy

No change required	All examinations have equivalent on-line alternatives (e.g. 24hr window to complete an unseen examination paper). There is no change to the overarching assessment strategy.	
Module code and name	Changes to weightings of assessment	
	Current	New

Additional information

Any additional information
Labs will be delivered in groups/bubbles of 8-10 students. This is at 2m separation. Office hours have been replaced by Microsoft Teams drop-in sessions. Poster presentations and project viva presentations will now take place in small groups, via Microsoft Teams.

Original Course Specification

For reference, the following pages contain the original teaching and learning schedule of this course, prior to the changes implemented in response to Covid-19.

A. Course Information																													
Final award title(s)	BSc (Hons) Forensic Science																												
Intermediate exit award title(s)	BSc Forensic Science Dip/Cert HE Forensic Science																												
UCAS Code		Course Code(s)	Full-time: 1163																										
	London South Bank University																												
School	<input checked="" type="checkbox"/> ASC <input type="checkbox"/> ACI <input type="checkbox"/> BEA <input type="checkbox"/> BUS <input type="checkbox"/> ENG <input type="checkbox"/> HSC <input type="checkbox"/> LSS																												
Division	Human Sciences																												
Course Director	Clive Steele																												
Delivery site(s) for course(s)	<input checked="" type="checkbox"/> Southwark <input type="checkbox"/> Havering <input type="checkbox"/> Other: please specify																												
Mode(s) of delivery	<input checked="" type="checkbox"/> Full time <input type="checkbox"/> Part time <input type="checkbox"/> other please specify																												
Length of course/start and finish dates	<table border="1"> <thead> <tr> <th>Mode</th> <th>Length years</th> <th>Start - month</th> <th>Finish - month</th> <th></th> </tr> </thead> <tbody> <tr> <td>Full time</td> <td>3 Years</td> <td>September</td> <td>July</td> <td></td> </tr> <tr> <td>Full time with placement/ sandwich year</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Part time</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Part time with Placement/ sandwich year</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Mode	Length years	Start - month	Finish - month		Full time	3 Years	September	July		Full time with placement/ sandwich year					Part time					Part time with Placement/ sandwich year				
Mode	Length years	Start - month	Finish - month																										
Full time	3 Years	September	July																										
Full time with placement/ sandwich year																													
Part time																													
Part time with Placement/ sandwich year																													
Is this course generally suitable for students on a Tier 4 visa?	Please complete the International Office questionnaire Yes Students are advised that the structure/nature of the course is suitable for those on a Tier 4 visa but other factors will be taken into account before a CAS number is allocated.																												
Approval dates:	Course(s) validated / Subject to validation	2017																											
	Course specification last updated and signed off	September 2019																											
Professional, Statutory & Regulatory Body accreditation	The Chartered Society of Forensic Sciences																												

Reference points:	Internal	Corporate Strategy 2015-2020 Academic Quality and Enhancement Manual School Strategy LSBU Academic Regulations
	External	QAA Quality Code for Higher Education 2013 Framework for Higher Education Qualifications Subject Benchmark Statements (Dated) PSRB Competitions and Markets Authority SEEC Level Descriptors 2016

B. Course Aims and Features

Distinctive features of course	<p>Forensic science is the application of scientific techniques to the investigation of crime with the presentation of scientific evidence in a court of law. By its very nature, it is multidisciplinary, covering biological, chemical and physical sciences, as well as law. Students are taught the principles of investigative science and the interpretation of experimental results from subjects as diverse as weapons technology, DNA analysis, scenes of crime investigation, forensic indicators, and explosion and fire. This course is both challenging and fascinating. It covers the main themes of crime scene investigation, the scientific analysis of evidence retrieved, and interpretation of these experimental results. The study of theory is matched by practical work and at each level there is the opportunity for students to carry out their own investigation through case study and project work, culminating in a final year project that will draw on their scientific knowledge and allow them to demonstrate their analytical and communication skills. Students' art of delivering and communicating their results as a forensic expert is developed by mock courtroom sessions during the course.</p>
Course Aims	<p>This course is intended for A-level or equivalent science students wishing to obtain a degree in Forensic Science and employment in professions associated with forensic science. London South Bank University was the sixth HEI to offer this course in the UK. The first cohort started in October 1999. Since its inception, the course has had considerable success in placing students in forensic-related employment or other relevant occupations, such as graduate teaching courses in science and medical graduate training courses. The undergraduate course has a total population of approximately 150 students with 20-25 available places on the postgraduate course.</p> <p>The BSc (Hons) Forensic Science aims to:</p> <ol style="list-style-type: none"> 1. Provide a structured teaching and learning experience that combines a sound theoretical and practical grounding in forensic science with research-based investigation of current issues in the field. 2. Provide a knowledge and skill base consistent with employment opportunities in the specialist area of forensic science and other related disciplines. 3. Provide a degree level course consistent with the development of general scientific practical laboratory skills and quantitative analysis, so producing a graduate with a recognisable skills base for a range of employment opportunities outside of the forensic field. 4. Promote analytical, critical and lateral thinking and contextualise these processes with respect to the forensic discipline. 5. Engender an honest and rational approach to investigative science. 6. Provide students with an understanding of the legal framework and the role of forensic science in a government inquiry and a criminal prosecution.

	<ol style="list-style-type: none"> 7. Inspire the confidence required for intellectual independence, teamwork, responsibility, originality and the development of the reflective practitioner through training and support. 8. Produce students who have experience in proposing, planning, executing and reviewing scientific work in the office and the laboratory. 9. Develop the students' ability to plan and review forensic casework and independently analyse forensic exhibits, while explaining the concepts used in the examination of these exhibits and evaluating the significance of evidential results. 10. Develop the students' ability to communicate their scientific work effectively, both orally and in written form.
Course Learning Outcomes	<p>a) Students will have knowledge and understanding of:</p> <p>A1 The investigative process from crime scene to court. A2 Incident investigation and analysis. A3 The physical and chemical basis for understanding the nature and behaviour of materials. A4 The biological basis for understanding human identification and the effects of toxicity (drugs, combustion products) on the human condition. A5 The legal context of forensic science and its use in the provision and/or interpretation of evidence. A6 Laboratory techniques and instrumentation in investigative science. A7 The roles of forensic personnel and the role of an expert witness in the presentation of unbiased testimony for court. A8 Research methods (including use of IT).</p> <p>b) Students will develop their intellectual skills such that they are able to:</p> <p>B1 Formulate and express problems in the forensic domain. B2 Perform laboratory analysis of materials to ascertain their identity, quantity or behaviour, expressing the results and deriving appropriate, unbiased conclusions. B3 Perform and appreciate numerical calculations used in the analysis of forensic data and understand the role of statistical methods, calibration procedures and quality control. B4 Gather information from multiple sources, interpret it and express it in a manner which demonstrates understanding and articulates the thought processes of the student in relation to the subject being studied. B5 Work as a team member appreciating the role of each individual within the group. B6 Communicate ideas, arguments and results in a clear and articulate manner from a rational and objective viewpoint. B7 Appreciate the role of probability in comparative analysis. Perform calculations which show the extent of individualisation of a match. B8 Evaluate the evidential significance of laboratory results using the Case Assessment and Interpretation (CAI) model.</p> <p>c) Students will acquire and develop practical skills such that they are able to:</p> <p>C1 Work safely in a laboratory environment.</p>

- C2 Carry out a range of analytical procedures relating to chemical, physical and biological examination of materials.
- C3 Protect a crime scene and extract and record exhibits of evidential value.
- C4 Independently analyse forensic exhibits.
- C5 Construct scientific reports and statements of witness for court.
- C6 Present scientific information using a range of media and mock court set-up.
- C7 Follow accurately detailed instructions of laboratory procedures as seen for the first time.
- C8 Apply procedures, methods and principles to a forensic examination.

d) Students will acquire and develop transferrable skills such that they are able to:

- D1 Work independently and as part of a team when necessary.
- D2 Communicate knowledge and ideas effectively to layman and expert audiences.
- D3 Plan and prioritise tasks, manage time efficiently.
- D4 Review and evaluate previous work objectively.
- D5 Develop and demonstrate the capacity to learn new concepts and skills.
- D6 Present scientific work orally and using layman's terms.
- D7 Plan strategies for lifelong learning.
- D8 Execute literacy and numeracy tasks in the scientific realm.
- D9 Apply a range of analytical techniques to other scientific disciplines.

C. Teaching and Learning Strategy

Outcomes A1 and A2 encompass the two main themes for the course: A1 is the pivotal theme for the course – ‘crime scene to court’ and is addressed throughout the course; A2 investigates the variation encountered within the discipline and is addressed in the final year of the course, through teaching and practical work. A3 and A4 are acquired through teaching and coursework and laboratory investigation, A5 through lectures, seminar work and trial experience and simulations, A6 through laboratory work in most modules, A7 through demonstration and role play, and A8 is developed in most modules to a certain extent and refined as the students enter into their final year and undertake their research project. Outcomes B1, B2 and B3 will be addressed in lectures and laboratory practicals throughout the course. B4 is integrated into all modules taught but most notably those which involve coursework assignments and in the Research Methods module which leads students into their final year independent research project. The foundations for B5 will also be laid in laboratory work and also in project work. B6 is developed progressively throughout the course and takes the form of seminar discussions, project presentations and mock courtroom exercises, culminating in the final year research project presentation. B7 features in taught modules in the second year but is specifically addressed in the case assessment and interpretation module in the final year, together with B8. Outcome C1 will be covered formally in lectures and the culture developed within all laboratory sessions. C2 theory will be developed in lectures and put in to practice during laboratory sessions. Reflection on procedures will be brought about through the analysis of experimental results. C3 will develop with experience within the practical sessions. C4 will be addressed in lectures and laboratory sessions and practical assignments as will outcome C7. C5 will be achieved through lectures and coursework. C6 will be developed throughout the course and applied in the final year research project. Outcomes D1 and D2 will be addressed in lectures, but developed considerably in practical sessions and coursework. D3 will be addressed throughout the course as students have to plan and prioritise their assignments, but will also be acknowledged in lectures and the laboratory sessions. D4 will be addressed in lectures, practical's and coursework and D5 will be addressed throughout all aspects of the course. D6 will be addressed in lectures, practical's and coursework. D7 will be encouraged through lectures, especially guest and careers lectures. D8 will be instilled through lectures and

practical sessions. D9 will be addressed in practical laboratory sessions and through the research projects.

D. Assessment

Assessment methods are specified in each module guide. Surface learning is assessed formally by both seen and unseen examinations. Deep learning is examined using various coursework pieces, including case studies, essays and case file preparations. Practical skills are examined in the laboratory environment in terms of the quality of students' measurements. Students will also undergo courtroom examinations and project presentations and vivas, which will examine students' ability to process their knowledge under pressure. The course largely comprises modules with mixed assessment techniques: coursework, seen and unseen written examination, oral presentation and laboratory work together with mock court room exercises. The culmination of assessment of intellectual skills lies in the final year research project and its presentation in oral and thesis form. The range of assessments is fully integrated into the course providing both a mechanism for development of ideas and learning skills as well as a means of assessment. Practical skills are largely assessed in the laboratory environment through observation within the laboratory and production of a written report on the work carried out, accurately recording information together with any inferences that the data generates, in addition to maintenance of detailed case files. Students will examine mock crime scenes and carry out laboratory analyses under staff supervision. Assessment will include provision of a statement of witness for court. Assessments are outlined within the module guides. Students will execute various coursework pieces in groups and others individually. Students will also be assessed on how they work in a team in the crime scene exercise and divide the lab work in order to meet the deadlines. Communication will be an essential quality to fulfil the task and will also be important in the courtroom tasks. Previous work will be reviewed in lectures and students will be assessed on their ability to critically review past work in coursework.

E. Academic Regulations

The University's Academic Regulations apply for this course. Any course specific protocols will be identified here.

F. Entry Requirements

In order to be considered for entry to the course applicants would normally need to have 240 UCAS points from the following qualifications:

Level 4

Five GCSE passes, at grade C or above, including Mathematics and English and two Science A-level passes, one of which must be in a core science subject (biology, physics, chemistry). A level mathematics or statistics would be counted as a science A level.

Equivalent qualifications include:

- BTEC National Diploma/Certificate in Science, Applied Science, Forensic Science or Medical science.
- Advanced GNVQ in Science, Applied Science, Forensic Science or Medical Science
- Successful completion of an approved Science Access or Foundation year.
- Other qualifications or experiential learning judged to be equivalent. Applications in this class will be considered in accordance with the University policy on APL and APEL.

A good standard of mathematics is required, which can be demonstrated by GCSE Grade A*- C or mathematics coverage within other advanced qualifications.

We welcome mature applicants with other qualifications and/or relevant experiential learning judged to be equivalent. Past achievement can be assessed and considered for Credit for Prior Learning.

Overseas entrants are required to have European and overseas qualifications deemed to be equivalent to the above qualifications by the National Academic Information Centre for the UK, with ILETS level 6.0.

Direct entry to Level 5

Students with the knowledge and skills equivalent to the required outcomes for Level 4 of a science degree course will be encouraged to make direct entry to Level 5. Such knowledge and skills should be commensurate with those identified in the guidelines on levels and learning outcomes produced by the South East of England Consortium for Credit Accumulation and Transfer (SEEC/CAT, May 1996).

G. Course structure(s)

Course overview

The undergraduate Forensic Science degree is offered as a single Honours degree. The degree is delivered by the human science division of the School of Applied Science. The degree integrates knowledge from a number of subject disciplines principally, chemistry, biology, physics, law and engineering. spans different subject areas and is mainly delivered by academic staff within the University but does benefit from lectures from forensic practitioners facilitated through the Forensic Science module. These usually comprise keynote lectures but are integrated as part of the formal lecture course.

The degree is full-time only and is taken over three calendar years. There is no sandwich mode. The course is based on the standard University model for a full-time undergraduate course. Lecturing/lab hours range typically between 16 and 24 hours per week dependent upon laboratory practical schedules.

BSc (Hons) Forensic Science – **Full time**

	Semester 1		Semester 2	
Level 4	Introduction to Forensic Science (compulsory)	20	Core and Materials Science (compulsory)	20
	Fundamentals of Measurement and Instrumentation (compulsory)	20	Introduction to Law for Forensic Scientists (compulsory)	20
	Scientific Skills (compulsory)	20	Biology of the Cell (compulsory)	20
Level 5	Measurement and Instrumentation in Forensic Science (compulsory)	20	Marks and Traces (compulsory)	20
	Criminal Law for Forensic Scientists (compulsory)	20	Research Methods (compulsory)	20

H. Course Modules

[Provide information on:

- core and optional modules;
- the circumstances when optional modules may not run; and
- how and when students will be informed if optional modules are changed]

Module Code	Module Title	Level	Semester	Credit value	Assessment
ASC-4-413	Introduction to Forensic Science	4	1	20	CW1, CW2
ASC-4-412	Fundamentals of Measurement and Instrumentation	4	1	20	CW1, CW2
ASC-4-402	Scientific Skills	4	1	20	CW1, CW2
ASC-4-415	Core and Materials Science	4	2	20	CW1, EX1
ASC-4-413	Introduction to Law for Forensic Scientists	4	2	20	CW1,CW2
ASC-4-406	Biology of the Cell	4	2	20	CW1,CW2
ASC-5-418	Measurement and Instrumentation in Forensic Analysis	5	1+2	20	CW1,EX1
ASC-5-422	Criminal Law for Forensic Scientists	5	1	20	CW1
ASC-5-421	Marks and Traces	5	1+2	20	CW1,EX1
ASC-5-417	Forensic Biology	5	1	20	CW1,EX1
ASC-5-437	Research Methods	5		20	
ASC-5-423	Explosion, fire and firearms	5	S2	20	CW1,EX1
ASC-6-466	Biological Evidence	6	1	20	CW1+EX1
ASC-6-465	Case Assessment and Interpretation	6	2	20	CW1
ASC-6-458	Law of Evidence for Forensic Scientists	6	2	20	CW1,CW2
	Research Project (including Advanced Topics)	6	1+2	20	CW1,CW2,CW3
ASC-6-427	Incident Investigation	6	20	20	CW1,EX1

I. Timetable information

[indicate:

Provide as much information as possible,

- when students can expect to receive a confirmed timetable for study commitments; and
- if there is a teaching-free afternoon set aside for e.g. sporting/cultural activities.
- Don't specify a day(s) when teaching will take place if it may be changed.
- Prospective students should be kept informed of any changes.]
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Timetables will be provided to students via Moodle sites as soon as possible before the start of each semester.

Typical contact hours for each week will range from 9 to 15 hours depending on the level of study and the modules that run in a semester. Modules that have laboratory sessions will normally have more contact time in a week than those without.

Each module is timetabled for 1x3hour block in a week (except those with laboratory sessions).

Classes are never scheduled on a Wednesday afternoon, so students can take part in sports activities.

J. Costs and financial support

Course related costs

- provide information about other course-related costs (explain what is and what is not included in the tuition fees, e.g. such additional expenses as cost of books or other learning materials, specialist equipment, uniforms, clothing required for work placements, field trips, bench fees).

Additional expenses that may be incurred by a student in this course include the cost of text books, Professional Body and journal subscriptions. Uniforms and clothing may also be required to be purchased for placement activities. Any extracurricular courses that a student wished to take that are NOT provided and supported financially by the University will also be an additional cost to the student.

Tuition fees/financial support/accommodation and living costs

- Information on tuition fees/financial support can be found by clicking on the following link - <http://www.lsbu.ac.uk/courses/undergraduate/fees-and-funding> or
- <http://www.lsbu.ac.uk/courses/postgraduate/fees-and-funding>
- Information on living costs and accommodation can be found by clicking the following link- <https://my.lsbu.ac.uk/my/portal/Student-Life-Centre/International-Students/Starting-at-LSBU/#expenses>

List of Appendices

Appendix A: Curriculum Map

Appendix B: Educational Framework (undergraduate courses)

Appendix C: Terminology

Appendix A: Curriculum Map

This map provides a design aid to help course teams identify where course outcomes are being developed, taught and assessed within the course. It also provides a checklist for quality assurance purposes and may be used in validation, accreditation and external examining processes. Making the learning outcomes explicit will also help students to monitor their own learning and development as the course progresses.

LEARNING OUTCOMES	Level 4 Module titles					
	Introduction to Forensic Science	Scientific Skills	Fundamentals of Measurement and Instrumentation	Introduction to Law for Forensic Science	Core and Materials Science	Free Elective (Biology of the Cell)
A 1	T,D			T,D,A	D	T,D
A 2						
A 3			T,D		T,D,A	
A4					T,D,A	T,D,A
A5				T,D		D
A6		T,D,A	T,D,A		T,D,A	
A7	T,D			T,D		D
A8		T,D,A	T,D			D
B 1				D		D
B 2		T,D,A	T,D,A		T,D,A	
B 3			T,D,A		T,D,A	
B 4	T,D,A		T,D,A	D	T,D,A	T,D,A
B5	D	D	D		D	T,D,A
B6	T,D,A	D	D	D	D	T,D,A
B7	D					
B8						

C1		D	D		D	
C2		T,D,A	T,D,A		T,D,A	
C3						D
C4	D					
C5	D				T,D,A	
C6		T,D,A		T,D,A		
C7		T,D	T,D		T,D,A	
C8	D					D
D1	D	D	D	D	D	D
D2	D,A		D	T,D	D	T,D,A
D3		D	D	D	D	D
D4	D	D	D	D	D	
D5	D	D,A	T,D,A	T,D,A	D	
D6	D		D	D		
D7	D			D		D
D8	T,D,A	D	T,D,A	T,D,A	T,D,A	T,D,A
D9		D	T,D,A		T,D	D
Level 5 Module titles						
LEARNING OUTCOMES	Measurement and Instrumentation in Forensic Analysis	Criminal Law for Forensic Scientists	Forensic Biology	Marks and Traces	Research Methods	Free Elective (Explosion and Fire)
A 1		T,D,A	T,D	T,D,A	D	T,D
A 2		D	D			D
A 3	T,D,A			D		D

A4			T,D,A			
A5		T,D,A				
A6	T,D,A			T,D,A		T,D,A
A7	D		D	T,D,A		D
A8	T,D		D	T,D	T,D,A	D
B 1	T,D		T,D,A	T,D,A	T,D,A	T,D,A
B 2	T,D,A			T,D,A	T,D,A	T,D,A
B 3	T,D,A		D	D	T,D,A	T,D,A
B 4	D	T,D,A	T,D	D	T,D,A	T,D,A
B5	D	D	D	T,D,A		T,D
B6	D	T,D,A	D	T,D	T,D,A	D
B7			D	T,D,A	T,D,A	D
B8		D		T,D,A		D
C1	T,D		D	D		T,D
C2	T,D,A		D	T,D,A	T,D,A	T,D,A
C3				T,D,A		
C4	D		D	T,D,A		
C 5				T,D,A		
C 6			D	T,D,A		
C7	T,D		D	T,D,A		T,D,A
C8			D	T,D,A	D	D
D1	D	D	D	D		D
D2		D	D	D	T,D,A	D
D3	D	D	D	D	T,D	D
D4		T,D,A	D	D	T,D,A	T,D

D5				T,D,A	D	
D6				T,D	D	
D7				D	D	D
D8	T,D,A	D		T,D	T,D,A	T,D,A
D9	D		D	T,D	T,D	T,D,A

Appendix B: Embedding the Educational Framework for Undergraduate Courses

The Educational Framework at London South Bank University is a set of principles for curriculum design and the wider student experience that articulate our commitment to the

highest standards of academic knowledge and understanding applied to the challenges of the wider world.

The Educational Framework reflects our status as University of the Year for Graduate Employment awarded by *The Times and The Sunday Times Good University Guide 2018* and builds on our 125 year history as a civic university committed to fostering social mobility through employability and enterprise, enabling our students to translate academic achievement into career success.

There are four key characteristics of LSBU's distinctive approach to the undergraduate curriculum and student experience:

- Develop students' professional and vocational skills through application in industry-standard facilities
- Develop our students' graduate attributes, self-awareness and behaviours aligned to our EPIIC values
- Integrate opportunities for students to develop their confidence, skills and networks into the curriculum
- Foster close relationships with employers, industry, and Professional, Statutory and Regulatory Bodies that underpin our provision (including the opportunity for placements, internships and professional opportunities)

The dimensions of the Educational Framework for curriculum design are:

- **informed by employer and industry** needs as well as professional, statutory and regulatory body requirements
- **embedded learning development** for all students to scaffold their learning through the curriculum taking into account the specific writing and thinking requirements of the discipline/profession
- **high impact pedagogies** that enable the development of student professional and vocational learning through application in industry-standard or authentic workplace contexts
- **inclusive teaching, learning and assessment** that enables all students to access and engage the course
- **assessment for learning** that provides timely and formative feedback

All courses should be designed to support these five dimensions of the Educational Framework. Successful embedding of the Educational Framework requires a systematic approach to course design and delivery that conceptualises the student experience of the curriculum as a whole rather than at modular level and promotes the progressive development of understanding over the entire course. It also builds on a well-established evidence base across the sector for the pedagogic and assessment experiences that contribute to high quality learning.

This appendix to the course specification document enables course teams to evidence how their courses meet minimum expectations, at what level where appropriate, as the basis for embedding the Educational Framework in all undergraduate provision at LSBU.

Dimension of the Educational Framework	Minimum expectations and rationale	How this is achieved in the course
Curricula informed by employer and industry need	<p><u>Outcomes focus and professional/employer links</u> All LSBU courses will evidence the involvement of external stakeholders in the curriculum design process as well as plan for the participation of employers and/or alumni through guest lectures or Q&A sessions, employer panels, employer-generated case studies or other input of expertise into the delivery of the course provide students with access to current workplace examples and role models. Students should have access to employers and/or alumni in at least one module at level 4.</p>	<p>The course is mapped to the requirements for Accreditation by the Chartered Society of Forensic Sciences. The course is accredited in all three areas of professional activity which cover crime scene investigation, laboratory analysis and interpretation of evidence.</p> <p>All students in their first year are encouraged to become student members of the chartered society of forensic sciences and participate in the societies student programme of conferences.</p> <p>The course includes a range of guest lecturers from professionals and alumni and there are opportunities for personal development through a range of certified short courses run by external collaborators.</p>
Embedded learning development	<p><u>Support for transition and academic preparedness</u> At least two modules at level 4 should include embedded learning development in the curriculum to support student understanding of, and familiarity with, disciplinary ways of thinking and practising (e.g. analytical thinking, academic writing, critical reading, reflection). Where possible, learning development will be normally integrated into content modules rather than as standalone modules. Other level 4 modules should reference and reinforce the learning development to aid in the transfer of learning.</p>	<p>This is embedded throughout the course and implemented in a variety of ways including laboratory analysis and reports, role play activities, workshops, group tutorials and blended learning. Individual students are supported through the personal tutorial system.</p>

<p>High impact pedagogies</p>	<p><u>Group-based learning experiences</u> The capacity to work effectively in teams enhances learning through working with peers and develops student outcomes, including communication, networking and respect for diversity of perspectives relevant to professionalism and inclusivity. At least one module at level 4 should include an opportunity for group working. Group-based learning can also be linked to assessment at level 4 if appropriate. Consideration should be given to how students are allocated to groups to foster experience of diverse perspectives and values.</p>	<p>Virtually all laboratory work takes place in small teams and individuals are made to form new teams depending on the module. Virtually all modules contain laboratory work. Group work is also encouraged through workshop activity. Team building activities are held throughout the academic year.</p>
<p>Inclusive teaching, learning and assessment</p>	<p><u>Accessible materials, resources and activities</u> All course materials and resources, including course guides, PowerPoint presentations, handouts and Moodle should be provided in an accessible format. For example, font type and size, layout and colour as well as captioning or transcripts for audio-visual materials. Consideration should also be given to accessibility and the availability of alternative formats for reading lists.</p>	<p>Module Moodle sites provide students with access to a range of materials and resources. All students enrolled on a module will have access to the Moodle site and all module materials.</p>
<p>Assessment for learning</p>	<p><u>Assessment and feedback to support attainment, progression and retention</u> Assessment is recognised as a critical point for at risk students as well as integral to the learning of all students. Formative feedback is essential during transition into university. All first semester modules at level 4 should include a formative or low-stakes summative assessment (e.g. low weighted in final outcome for the module) to provide an early opportunity for students to check progress and receive prompt and useable feedback that can feed-forward into future learning and assessment. Assessment and feedback communicates high expectations and develops a commitment to excellence.</p>	<p>The assessment and feedback programme in Forensic Science is highly integrated with both formative and summative assessment. Feedback is given through moodle and through the seminar, workshop , group and individual tutorials. All students receive written feedback in an electronic form via the moodle coursework submission system. Access to verbal feedback during laboratory work is an important feature of the course and this extends to report preparation.</p>

High impact pedagogies	<p><u>Research and enquiry experiences</u> Opportunities for students to undertake small-scale independent enquiry enable students to understand how knowledge is generated and tested in the discipline as well as prepare them to engage in enquiry as a highly sought after outcome of university study. In preparation for an undergraduate dissertation at level 6, courses should provide opportunities for students to develop research skills at level 4 and 5 and should engage with open-ended problems with appropriate support. Research opportunities should build student autonomy and are likely to encourage creativity and problem-solving. Dissemination of student research outcomes, for example via posters, presentations and reports with peer review, should also be considered.</p>	<p>Extensive laboratory work and project work enable students to build up personal enquiry skills and time management in preparation for the research project. Many of the second year modules are focussed on building these skills such as Research Methods, Explosion, Fire and Firearms, Marks and Traces, Measurement and Instrumentation in forensic analysis.</p>
Curricula informed by employer and industry need / Assessment for learning	<p><u>Authentic learning and assessment tasks</u> Live briefs, projects or equivalent authentic workplace learning experiences and/or assessments enable students, for example, to engage with external clients, develop their understanding through situated and experiential learning in real or simulated workplace contexts and deliver outputs to an agreed specification and deadline. Engagement with live briefs creates the opportunity for the development of student outcomes including excellence, professionalism, integrity and creativity. A live brief is likely to develop research and enquiry skills and can be linked to assessment if appropriate.</p>	<p>All laboratory classes are run in a manner which parallels operation in commercial organisations even down to the use of contemporaneous note taking. Court exercises and trial observations allow students an authentic experience of real life situations. A crime scene flat is used to simulate a real life forensic investigation simulating evidence retrieval techniques which would be used in real life. External experts are brought into the University allowing students to access at first hand experts in their field ranging from senior investigating officers to home office pathologists.</p>
Inclusive teaching, learning and assessment	<p><u>Course content and teaching methods acknowledge the diversity of the student cohort</u> An inclusive curriculum incorporates images, examples, case studies and</p>	<p>Great care is taken to make the syllabus as inclusive as possible. Gender equality, religion, cultural heritage are addressed in a sensitive manner particularly</p>

	<p>other resources from a broad range of cultural and social views reflecting diversity of the student cohort in terms of, for example, gender, ethnicity, sexuality, religious belief, socio-economic background etc. This commitment to inclusivity enables students to recognise themselves and their experiences in the curriculum as well as foster understanding of other viewpoints and identities.</p>	<p>when considering offender behaviour, the analysis of biological evidence and drug toxicology. The degree course is designed to cater for a wide spectrum of abilities with appropriate teaching and learning techniques by using appropriate scaffolding.</p>
<p>Curricula informed by employer and industry need</p>	<p>Work-based learning Opportunities for learning that is relevant to future employment or undertaken in a workplace setting are fundamental to developing student applied knowledge as well as developing work-relevant student outcomes such as networking, professionalism and integrity. Work-based learning can take the form of work experience, internships or placements as well as, for example, case studies, simulations and role-play in industry-standards settings as relevant to the course. Work-based learning can be linked to assessment if appropriate.</p>	<p>Extensive laboratory work carried out during the degree course is a core activity. Every effort is made to make sure that this learning experience is consistent with laboratory work in a work place environment. Simulations and role play activities are an important feature of the course particularly in relation to the interpretation and presentation of evidence in a court. Opportunities exist within the course structure for work experience.</p>
<p>Embedded learning development</p>	<p><u>Writing in the disciplines: Alternative formats</u> The development of student awareness, understanding and mastery of the specific thinking and communication practices in the discipline is fundamental to applied subject knowledge. This involves explicitly defining the features of disciplinary thinking and practices, finding opportunities to scaffold student attempts to adopt these ways of thinking and practising and providing opportunities to receive formative feedback on this. A writing in the disciplines approach recognises that writing is not a discrete representation of knowledge but integral to the process of knowing and understanding in the discipline. It is expected that assessment utilises formats that are</p>	<p>All academic exercises and assessments are in line with the requirements of the Chartered Society of Forensic Sciences. There is an even balance of report writing, laboratory work and examination in various forms throughout the course. Project work, case files, calculation exercises, oral presentations are all part of the assessment methodology aimed at producing a well-rounded student capable of critical thinking and self-management. The final year experimental research project is designed to bring all these elements together culminating in a thesis, oral examination and poster presentation.</p>

	recognisable and applicable to those working in the profession. For example, project report, presentation, poster, lab or field report, journal or professional article, position paper, case report, handbook, exhibition guide.	
High impact pedagogies	<p><u>Multi-disciplinary, interdisciplinary or interprofessional group-based learning experiences</u></p> <p>Building on experience of group working at level 4, at level 5 students should be provided with the opportunity to work and manage more complex tasks in groups that work across traditional disciplinary and professional boundaries and reflecting interprofessional work-place settings. Learning in multi- or interdisciplinary groups creates the opportunity for the development of student outcomes including inclusivity, communication and networking.</p>	Forensic science is by its nature a multidisciplinary subject. Physics, chemistry, biology, maths and law are all developed during the course and the interplay between these core disciplines to produce a forensic approach is focussed on and developed throughout the three years of the degree course. Modules such as Law of evidence, Incident Investigation, Marks and Traces serve to unify these disciplines in relation to the crime scene to court approach.
Assessment for learning	<p><u>Variation of assessment</u></p> <p>An inclusive approach to curriculum recognises diversity and seeks to create a learning environment that enables equal opportunities for learning for all students and does not give those with a particular prior qualification (e.g. A-level or BTEC) an advantage or disadvantage. An holistic assessment strategy should provide opportunities for all students to be able to demonstrate achievement of learning outcomes in different ways throughout the course. This may be by offering alternate assessment tasks at the same assessment point, for example either a written or oral assessment, or by offering a range of different assessment tasks across the curriculum.</p>	A range of assessment techniques are used including project work, role play, essay writing, laboratory analysis, problem based learning, group presentations, oral vivas and both unseen and seen written examinations in a balanced portfolio give students a truly holistic assessment methodology. This is intimately linked to current theories in teaching and learning.
Curricula informed by employer and industry need	<p><u>Career management skills</u></p> <p>Courses should provide support for the development of career management skills that enable student to be familiar with and understand relevant industries or professions, be able to build on work-related learning opportunities,</p>	Through the personal tutoring system students are able to discuss career management skills with academic staff. There is career support available via the University Student Centre that

	<p>understand the role of self-appraisal and planning for lifelong learning in career development, develop resilience and manage the career building process. This should be designed to inform the development of excellence and professionalism.</p>	<p>staff can refer students too/students can access independently. Staff also aim to raise awareness of the skills and competencies required of forensic scientists again in the three areas of accreditation: Crime scene investigation Laboratory analysis Interpretation of evidence. Several extracurricular courses are run to improve student employability such as blood pattern analysis, fire investigation and forensic entomology.</p>
<p>Curricula informed by employer and industry need / Assessment for learning / High impact pedagogies</p>	<p><u>Capstone project/dissertation</u> The level 6 project or dissertation is a critical point for the integration and synthesis of knowledge and skills from across the course. It also provides an important transition into employment if the assessment is authentic, industry-facing or client-driven. It is recommended that this is a capstone experience, bringing together all learning across the course and creates the opportunity for the development of student outcomes including professionalism, integrity and creativity.</p>	<p>The final year project requires the integration of a range of learning experiences that are initiated at L4, developed at L5 and advanced at L6. The project titles available to students are link to the research activities of staff. This offers students an opportunity to engage in contemporary research investigations to carry out a focused or interdisciplinary project that draws on the knowledge, skills and competencies they have developed during their study.</p>

Appendix C: Terminology

[Please provide a selection of definitions according to your own course and context to help prospective students who may not be familiar with terms used in higher education. Some examples are listed below]

awarding body	a UK higher education provider (typically a university) with the power to award higher education qualifications such as degrees
bursary	a financial award made to students to support their studies; sometimes used interchangeably with 'scholarship'
collaborative provision	a formal arrangement between a degree-awarding body and a partner organisation, allowing for the latter to provide higher education on behalf of the former
compulsory module	a module that students are required to take
contact hours	the time allocated to direct contact between a student and a member of staff through, for example, timetabled lectures, seminars and tutorials
coursework	student work that contributes towards the final result but is not assessed by written examination
current students	students enrolled on a course who have not yet completed their studies or been awarded their qualification
delivery organisation	an organisation that delivers learning opportunities on behalf of a degree-awarding body
distance-learning course	a course of study that does not involve face-to-face contact between students and tutors
extracurricular	activities undertaken by students outside their studies
feedback (on assessment)	advice to students following their completion of a piece of assessed or examined work
formative assessment	a type of assessment designed to help students learn more effectively, to progress in their studies and to prepare for summative assessment; formative assessment does not contribute to the final mark, grade or class of degree awarded to students

higher education provider	organisations that deliver higher education
independent learning	learning that occurs outside the classroom that might include preparation for scheduled sessions, follow-up work, wider reading or practice, completion of assessment tasks, or revision
intensity of study	the time taken to complete a part-time course compared to the equivalent full-time version: for example, half-time study would equate to 0.5 intensity of study
lecture	a presentation or talk on a particular topic; in general lectures involve larger groups of students than seminars and tutorials
learning zone	a flexible student space that supports independent and social learning
material information	information students need to make an informed decision, such as about what and where to study
mode of study	different ways of studying, such as full-time, part-time, e-learning or work-based learning
modular course	a course delivered using modules
module	a self-contained, formally structured unit of study, with a coherent and explicit set of learning outcomes and assessment criteria; some providers use the word 'course' or 'course unit' to refer to individual modules
national teaching fellowship	a national award for individuals who have made an outstanding impact on student learning and the teaching profession
navigability (of websites)	the ease with which users can obtain the information they require from a website
optional module	a module or course unit that students choose to take
performance (examinations)	a type of examination used in performance-based subjects such as drama and music
professional body	an organisation that oversees the activities of a particular profession and represents the interests of its members
prospective student	those applying or considering applying for any programme, at any level and employing any mode of study, with a higher education provider

regulated course	a course that is regulated by a regulatory body
regulatory body	an organisation recognised by government as being responsible for the regulation or approval of a particular range of issues and activities
scholarship	a type of bursary that recognises academic achievement and potential, and which is sometimes used interchangeably with 'bursary'
semester	either of the parts of an academic year that is divided into two for purposes of teaching and assessment (in contrast to division into terms)
seminar	seminars generally involve smaller numbers than lectures and enable students to engage in discussion of a particular topic and/or to explore it in more detail than might be covered in a lecture
summative assessment	formal assessment of students' work, contributing to the final result
term	any of the parts of an academic year that is divided into three or more for purposes of teaching and assessment (in contrast to division into semesters)
total study time	the total time required to study a module, unit or course, including all class contact, independent learning, revision and assessment
tutorial	one-to-one or small group supervision, feedback or detailed discussion on a particular topic or project
work/study placement	a planned period of experience outside the institution (for example, in a workplace or at another higher education institution) to help students develop particular skills, knowledge or understanding as part of their course
workload	see 'total study time'
written examination	a question or set of questions relating to a particular area of study to which candidates write answers usually (but not always) under timed conditions