MODULE DESCRIPTOR

Module Title	Scientific Skills
Course Title	BSc Sports Coaching and Analysis BSc Sport and Exercise Science
School	☒ ASC ☐ ACI ☐ BEA ☐ BUS ☐ ENG ☐ HSC ☐ LSS
Division	Human Sciences
Parent Course (if applicable)	
Level	4
Module Code *(showing level)*	ASC_4_402
JACS Code (completed by the QA)	
Credit Value	20 credit points
Student Study Hours	Contact hours: 42 Student managed learning hours: 158 Placement hours: N/A
Pre-requisite Learning	N/A
Co-requisites	N/A
Excluded combinations	N/A
Module co-ordinator	Name: Dr John Seeley Email: seeleyj@lsbu.ac.uk
Short Description (max. 100 words)	This module will provide a foundation for student study of science at undergraduate level. The basis for the module will be the context, planning and execution of experimental work, along with analysis and presentation of experimental data. A substantial component of study will involve activities in effective written communication and the writing of laboratory reports in particular.
Aims	The aims of this module are to develop student awareness and skills in relation to: • effective experimental work at university level; • mathematical and IT techniques required for participation in their course; • effective written communication.
Learning Outcomes (4 to 6 outcomes in total)	Knowledge and Understanding: Ethics and safety issues related to experimental study

	Intellectual Skills: Attention to detail Practical Skills: Record keeping Basic spreadsheeting Transferable Skills: Finding and citing source materials through electronic search
Employability	In addition to skills required for employment in science, this module develops two skill sets that are highly valued by employers, namely those of written communication and of calculation and spreadsheeting.
Teaching and learning pattern	Contact hours includes the following: (please click on the checkboxes as appropriate) ☐ Lectures ☐ Group Work: ☐ Seminars ☐ Tutorial: ☐ Laboratory ☐ Workshops ☐ Practical ☐ VLE Activities
Indicative content	Laboratory work: Safety and ethics issues Foundation skills for the physiology laboratory Calculation: Introduction to Excel Simple calculations (e.g. percentages, ratios); precision; use and manipulation of equations; units of measurement Length; area; volume Quantity; concentration Graphing Elementary statistics Written communication: Information search Referencing sources Principles of written communication Academic writing Technical aspects of writing A proportion of these sessions will be taught in conjunction with library staff.
Assessment method (Please give details – of components, weightings, sequence of components, final component)	Formative assessment: Summative work will be preceded by tutorials in which personal tutors provide advice on first drafts of student work. Not only will this provide guidance to students on the conventions and expectations associated with academic work at university level, it will serve to foster relations between students and their tutors in relation to both academic and pastoral concerns. Summative assessment: *Coursework 1 (50%):* Written communication skills An assessment of the student's ability to communicate in writing, referenced and completed to conventional scientific and literary standards and based, at least in part, on material that the student has located via electronic search.

	Coursework 2 (50%): Laboratory skills An assessment of the student's ability to complete a report, including presentation of calculations and graphs, to conventional scientific standards.
Mode of resit assessment (if applicable)	Formative assessment: As above Summative assessment: As above
Indicative Sources *(Reading lists)*	Background materials: 1. Crème, P and Lea, MR, *Writing at University* (2008; 3rd ed.), Oxford University Press. 2. Northedge, A, Thomas, J, Land, A and Peasgood, A, *The Sciences Good Study Guide* (1997), Open University Press. 3. Reed, R, Holmes, D, Weyers, J and Jones, A, *Practical Skills in Biomolecular Sciences* (2016; 5th ed.), Pearson. 4. Reed, MB, *Core Maths for the Biosciences* (2011), Oxford University Press.
Other Learning Resources	1. The Online Writing Lab, Purdue University (25.06.18), https://owl.english.purdue.edu/ 2. The Writing Center, University of North Carolina (25.06.18), https://writingcenter.unc.edu/