BASES Accreditation
Guidance notes on how to evaluate the acceptability of undergraduate and postgraduate degrees

1. Accreditation competency statements *1. Scientific knowledge and 2. Technical Skills* are achieved by an UG and a PG degree. These provide the evidence to confirm relevant knowledge, skills and understanding.

2. Within UK Higher Education there is not a single, national curriculum for sport and exercise science. Many degrees (typically titled BSc (Hons) Sport and Exercise Science or similar) will cover common ground. But there are also a wide variety of awards which are not centered in sport & exercise science although show elements of overlap (e.g. BSc Sports Studies). Furthermore, many universities offer specialist pathways or combined programmes so a student may have taken only a proportion of a degree in Sport and Exercise Science. There are around 1600 named degree courses in "Sport" at over 150 universities and colleges. There are 668 named degree courses indexed under "Sports Science" at 99 universities and colleges[1]

3. The BASES Undergraduate Endorsement Scheme (BUES) provides a description of the components of a degree in sport & exercise science.

   Key point 1: A BUES endorsed degree is automatically taken as demonstrating the required knowledge base without any further need for evidence

4. There is no BUES equivalent at a postgraduate level although the Association intends to develop such a scheme.

5. The accreditation requirement to have both an UG and a PG degree ensures a base of knowledge and understanding across the range of topics that make up the body of sport & exercise science, along with specialist study in one or more areas resulting from final year UG option choices, a dissertation and/or specialist masters modules.

6. The Association has chosen not restrict its accreditation scheme only to those students who have taken a BASES BUES-endorsed degree. The Association does this in light of reasonableness; recognition that there are varied pathways into a profession which are not always linear; wariness about even attempting to define precisely a curriculum in a rapidly developing science subject; developing a competency-based rather then a knowledge-based scheme; and appreciation of the variation in how degrees are structured and content is organised in universities around the U.K.

7. A standardised list of content would be one method to assess non-BUES degrees. However, the number of universities and colleges providing education, the variety of degrees, the wide range of potential subject topics, and the continuing development of new knowledge and understanding, would require an extremely lengthy list of content. If we take, for example, the key index terms of three standard undergraduate texts (in physiology, biomechanics, and

[1] Data from UCAS search December 2009

physiology) it is easy to identify over 200 primary chunks of knowledge. Add to this the 1,600 named degree courses and it becomes readily apparent that it would be impossible to imagine an approach whereby individual applications for accreditation had the content of every module aligned with a standard list and match/not match identified.

8. Instead, the parameters of the existing BUES scheme are taken as the benchmark.

9. The basic parameters are:
    a. An undergraduate degree comprises of 3,600 hours of student learning[2]
    b. A postgraduate degree comprises 1,800 hours of student learning
    c. BUES equivalence requires demonstration of:
        - A minimum of 360 hours of discipline-specific learning in *each* of the three core disciplinary areas: biomechanics, physiology, psychology
        - A minimum of 1,800 hours learning in the domain of the science of sport exercise
        - A minimum of 180 hours exposing the student to the inter-disciplinary nature of the study of sport and exercise science
        - A minimum of 150 hours of laboratory experience
        - A minimum of 180 hours of study in research methods
        - A significant piece of independent study in the form of a research project

    Key point 2. Where an applicant's UG and PG degree courses combined demonstrate coverage shown in 9c then that is taken as covering the knowledge base, just as a BUES degree. Where an applicant's undergraduate and postgraduate degree do not provide an adequate coverage of the sport and exercise science knowledge base then deficiencies may be redeemed by further study.

    Key point 3. Filling the hours described above MUST be through activities related to sport and exercise science. *For example: Whilst it is reasonable to see that a biology degree research methods course would provide relevant knowledge and understanding, laboratory experience of invertebrate physiology could not be counted towards the laboratory experience hours.*

10. Depending on how many hours are missing, further study can comprise of any appropriate learning that is at degree level or above such as university modules, workshops run by BASES or a similar professional body, short courses etc. The applicant is required to submit a description of planned learning for approval as part of the S.E. process. Due allowance is made for personal study and a ratio of 1 hour taught contact to 4 hours personal study is allowed e.g. 7 hour one-day workshop can count as 35 hours total study.

11. At least two-thirds of the hours for each of the eight components in 9c. must arise from a taught and assessed course. See psychology example below

    Key point 4. If the deficiency is substantial then it is likely that the deficiency cannot be redeemed by accumulating small amounts of CPD. It may require an entire course

[2] Normally equating to 360 credits or 10 hours of learning per credit

to redeem (e.g. a MSc in Sport & Exercise Science) or a number of university taught modules. Whilst the accreditation scheme should be inviting, it is not the place of the scheme to either accommodate or to drop standards to allow a quick route into sport and exercise science for an individual who comes forward with a non-related or highly specialised degree. See example below

12. It might be felt that an approach which takes a fairly board brush to interpreting degrees risks letting through applicants with critical holes in their knowledge base. There are several reasons to be re-assured this will not be the case:

    - Most applicants come from a sport & exercise science background and it is relatively easy to evidence a clear and obvious education in sport and exercise science over the UG and PG experience as a whole.
    - The educational qualification is just one piece of evidence amongst many, in an entire portfolio, to demonstrate competence across 10 domains.
    - The supervised experience process links an applicant with an experienced practitioner within a programme of self-development and self-awareness, giving every opportunity for knowledge gaps to be identified and filled
    - Accreditation requires the application of knowledge. The 500 hours of applied experience will expose any knowledge gaps to be filled.

Applicant type A

BUES undergraduate degree plus any masters degree in a relevant subject
ACCEPT with no need to look at transcript

Applicant type B

Non-BUES single-honours undergraduate degree titled BSc Sport & Exercise Science or close analogue, plus a MSc in Sport & Exercise Science

- Require candidate to submit transcripts from both degrees.
- Estimate learning hours in accordance with the checklist below
- If total adds up ACCEPT. Or identify gaps and require applicant to seek CPD learning hours
- This package of degrees is likely to fulfill the criteria and be suitable to enter supervised experience or gain accreditation without further work.

Applicant type C

Non-BUES single honours degree in an allied subject (e.g. BA Sports Studies) or a joint honours degree of which sport and exercise science is a part, plus a MSc in Sport & Exercise Science

- Require candidate to submit transcripts from both degrees
- Estimate learning hours in accordance to the checklist below with a particular care to seek evidence of adequate single disciplinary study in each of the three core disciplinary areas and a total of at least 1,800 hours of sport and exercise science study
- If adds up then ACCEPT. Or identify gaps and require applicant to seek CPD learning hours

- This package of degrees is likely to fulfill the criteria and be suitable to enter supervised experience or gain accreditation without further work.

Applicant type D

Non-BUES single honours degree in an allied subject (e.g. BA Sports Studies) or a joint honours degree of which sport and exercise science is a part plus a uni-discplinary MSc (e.g. MSc Sport Psychology)

- Require candidate to submit transcripts from both degrees
- Estimate learning hours in accordance to the checklist below with a particular care to seek evidence of adequate single disciplinary study in each of the three core disciplinary areas and a total of at least 1,800 hours of sport and exercise science study
- This package of degrees is unlikely to fulfill the criteria and be suitable to enter supervised experience or gain accreditation without significant further work. Identify gaps and require applicant to seek extensive CPD or undertake a generic masters.

PLUGGING THE GAPS

Applications are judged by a panel. If an applicant does not fully fulfill the basic knowledge/understanding requirements, but does have some elements of these, gaps by be filled by CPD.

A) The 8 basic parameters are as indicated section 9c.
B) Some people will have only an UG degree. Some will have both an UG and a PG degree. The PG is likely to be more specialized and might be uni-discplinary. Or the reverse might be the case. Furthermore, the PG degree is evidencing not only more knowledge/understanding but also a depth of study, greater independence, more sophisticated research, etc. Our identification of gaps should therefore consider the degrees together. We therefore add a ninth parameter to the list – masters level study in a relevant subject.

Example one: Undergraduate physiotherapy degree and a masters in sport psychology

Plugging the gaps checklist

	Hours required	**Undergraduate**	**Postgraduate**	**Hours of additional work required**
Biomechanics	360	180	0	180
Physiology	360	180	0	180
Psychology	360	180	1500	0
Inter-disciplinary studies	180	0	0	180
Laboratory	150	0	0	150

experience				
Research methods	180	100	200	0
Independent study	Major project. 200 hours plus	400	400	0
Masters in a relevant subject	Completed degree		Yes	

Note 1: Hours must be in sport or exercise related study
Note 2. Hours may be evidenced by UG or PG study
Note 3: A relevant subject for a masters must be sport or exercise related. This might be broad (e.g. MSc Sport & Exercise Science) or specialist (e.g. MSc Sport Psychology)

Conclusion:
This is close to being too far away for gaps to be plugged without undertaking another degree. The MSc in Sport Psychology fulfills the masters level study and the psychological aspects, but the UG degree provides inadequate coverage of the range of material and the technical aspects. The physiotherapy degree is taken as providing 50% of the core subjects but only 50% because of the limited exercise component. Additional study should focus on the physiology and biomechanics of sport & exercise science and include at least 150 hours of hands-on laboratory experience. It could be obtained in several ways such as taking individual masters degree modules in sport & exercise science, seeking a placement experience at a sports science laboratory, undertaking CPD courses, taking individual UG degree modules etc.

Example two: Undergraduate degree in general psychology and a masters in sport psychology

Plugging the gaps checklist

	Hours required	**Undergraduate**	**Postgraduate**	**Hours of additional work required**
Biomechanics	360	0	0	360
Physiology	360	0	0	360
Psychology	360	3000	1600	0
Inter-disciplinary studies	180	0	0	180
Laboratory experience	150	0	0	150
Research methods	180	250	350	0
Independent study	Major project. 200 hours plus	300 but not relevant subject	300	0
Masters in a relevant subject	Completed degree		Yes	

Note 1: Hours must be in sport or exercise related study

Note 2. Hours may be evidenced by UG or PG study or other forms of experience but with at least two-thirds arising from taught and assessed courses
Note 3: A relevant subject for a masters must be sport or exercise related. This might be broad (e.g. MSc Sport & Exercise Science) or specialist (e.g. MSc Sport Psychology

Conclusion:
The background in psychology fulfills the requirement for psychology, research, independent study and science. But the application lacks physiology, biomechanics, laboratory experience and inter-disciplinary study along with the limited education in the application of knowledge to sport. This applicant would need to take a number of university modules as well as other forms of CPD. Alternatively, the applicant might take an undergraduate degree in Sport & Exercise Science or a general masters degree in sport and exercise science

Example three: Undergraduate joint honours degree in Sports Science and English. MSc in health and exercise.

Plugging the gaps checklist

	Hours required	**Undergraduate**	**Postgraduate**	**Hours of additional work required**
Biomechanics	360	180	0	180
Physiology	360	180	100	80
Psychology	360	180	200	0
Inter-disciplinary studies	180	90	200	0
Laboratory experience	150	50	20	80
Research methods	180	90	100	0
Independent study	Major project. 200 hours plus	0	400	0
Masters in a relevant subject	Completed degree		yes	

Note 1: Hours must be in sport or exercise related study
Note 2. Hours may be evidenced by UG or PG study
Note 3: A relevant subject for a masters must be sport or exercise related. This might be broad (e.g. MSc Sport & Exercise Science) or specialist (e.g. MSc Sport Psychology

Conclusion:

The half-degree at UG level just isn't enough. The focused nature of the PG degree redeems some gaps but not all. Needs to undertake appropriate CPD activities.

Laboratory experience template

It is a requirement that applicants have undertaken 150 hours of personal laboratory experience. This may be accumulated from work in biomechanics, physiology and psychology. This requirement is covered by the BUES scheme, and applicants with a BUES degree do not need to submit further evidence. Non-BUES applicants are required to submit a list of personal practical experiences using the following format.

Subject area	**Module and level**	**Topic (s)**	**Hours**
Biomechanics			
Physiology			
Psychology			

An example of a partially completed template

Subject area	Module and level	Topic (s)	Hours
Biomechanics	Intro. To biomech. L4	Force plate, muscle strength, video analysis	16
	Biomechs L5	Impulse, angular momentum, stability, EMG, accelerometry, gait analysis.	20
	Functional anatomy L4	Anatomical landmarks, joints, movement	6
	Etc.	Etc.	
Physiology	Into to phys L4	ECG, blood pressure, lung function, indirect calorimetry, VO2 max	20
	Nutrition L6	Carbohydrate loading including VO2, RER, blood glucose	12
	Sports performance L7	Lactate threshold,	12

		efficiency, anaerobic power, muscle assessment techniques	
	Etc.	Etc.	
Psychology	Psychological foundations L4	Introduction to motor skills measurement techniques	4
	Sport and motor performance L5	Practical measurement of expertise and skill	6
	Motor skills L6	Motor control and learning	5
	Etc.	Etc.	

Gaining the Hours of Additional Work Required

At least two-thirds of hours from each area must be gained through validated and assessed Higher Education (or equivalent) educational courses. For guidance, 1 HE credit is usually equivalent to 10 hours.

Where an applicant has obtained **more than** 240 hours in a discipline through their undergraduate and postgraduate degrees, it is allowable for the hours required to be gained through other means such as workshops run by BASES or other similar professional bodies, short courses, shadowing etc.

Where an applicant has obtained **less than** 240 hours in a discipline through their undergraduate and postgraduate degrees, the hours required must include formal education i.e. university modules that are assessed (a minimum of 240 hours must come from taught and assessed modules). Level 4 and level 5 HNC/HND modules are permissible. Applicants must ensure that they have some level 6 knowledge or above gained in a sport and exercise science related discipline, which will be evident from a sport and exercise science related undergraduate or postgraduate degree.

Applicants are required to submit a description of planned learning for approval as part of the S.E. process. Due allowance is made for personal study and a ratio of 1 hour taught contact to 4 hours personal study is allowed e.g. 7 hour one-day workshop can count as 35 hours total study.