

**Letter of support for International Baccalaureate Sports, Exercise and Health Science qualifications  
submitted for funding approval July 2023.**

The purpose of this letter of support is to provide evidence of the university’s recognition of the value of this qualification in preparing learners for transition to higher education courses in the subject, or a related area. This is a requirement of the Department for Education’s approval process for the funding of Alternative Academic Qualifications (AAQ).

This letter of support is in relation to the following qualifications

- IBO Level 3 Certificate in HL Sports, Exercise and Health Science (AAQ)
- IBO Level 3 Certificate in SL Sports, Exercise and Health Science (AAQ)

**IBO Level 3 Certificate in HL Sports, Exercise and Health Science (AAQ)**

- a) We recognise this qualification specifically as meeting subject entry requirements for courses such as: Sport and Exercise Science BSc, Sport and Exercise for Health BSc, Sports Therapy and Rehabilitation BSc, for which A-level Physical Education also is a requirement.
- b) We recognise this qualification for entry onto many of our related courses.

The IBO Level 3 Certificate in HL Sports, Exercise and Health Science (AAQ) is uniquely positioned for entry onto our suite of Sports and Exercise Science degrees:

- BSc (Hons) Sport and Exercise Science
- BSc (Hons) Sport and Exercise Science with Sport Management
- BSc (Hons) Sport and Exercise for Health
- BSc (Hons) Sport and Exercise for Health with Sport Management
- BSc (Hons) Sports Therapy and Rehabilitation

As for most universities, many of our programmes do not have pre-requisite subjects and a range of subjects can provide a sound academic preparation for our degrees. However, the IBO Level 3 Certificate in SL Sport Exercise and Health Science (AAQ) provides sound academic preparation for applicants wishing to pursue a degree in Sports and Exercise Science.

The university has for many years accepted the IBO Level 3 Certificate in HL Sports, Exercise and Health Science for entry in these courses, either as part of the IB Diploma Programme or as a separate qualification equivalent to A Level, or as part of the IB Career-related programme. The University uses the following equivalence scale to compare the IBO Level 3 Certificate in HL Sports, Exercise and Health Science to A level:

IBO Level 3 Certificate in HL Sports, Exercise and Health Science (AAQ) grade	A Level grade
7	A*
6	A
5	B
4	C

We have found that the grades achieved by applicants holding the IBO Level 3 Certificate in HL Sports, Exercise and Health Science are an accurate guide to potential achievement in undergraduate courses at the university and are an effective part of the selection process.

“Students offering a combination of IB certificates and other qualifications, such as A levels, Advanced Placement Tests or the International Baccalaureate Career-related Programme (IBCP), will also be considered on their individual merits and should contact the Recruitment and Admissions Office for additional guidance.”

The IBO Level 3 certificate in HL Sports, Exercise and Health Science (AAQ) provides a firm foundation in the principles of human biology, physiology, nutrition, biomechanics and psychology allowing candidates to progress successfully to undergraduate courses where a knowledge of these subjects is a pre-requisite. The qualification content covers subject content which includes:

#### **Exercise physiology and nutrition of the human body**

- Inter-system communication: nervous and endocrine systems
- Maintaining homeostasis
- The cardiovascular and respiratory systems
- Water and electrolyte balance
- Fuelling for health and performance
- Energy systems - phosphagen, glycolytic and oxidative systems
- Maximal oxygen consumption (VO<sub>2</sub> max).
- HL Excess Post-exercise Oxygen Consumption (EPOC)
- Qualities of training and the benefits of being active.
- HL Fatigue and recovery

#### **Biomechanics**

- Anatomical position, planes and movement in planes and rotation along axes.
- HL Anthropometry
- Structure and function of connective tissues and joints and muscular function to create movement and stability
- HL The sliding filament theory
- Levers in movement and sport
- Forces, motion and movement
- Analysis of linear and angular motion using Newton's laws of motion.
- HL Momentum in collisions; friction, work
- The path of a projectile through air is determined by different factors and forces.
- HL Conditions affecting the external forces acting on an object. Forces, buoyancy, lift and drag acting on a body as it moves through a fluid. Bernoulli's principle and the Magnus effect.
- Movement analysis and its applications
- Causes of injury and susceptibility to injury
- Acute and cumulative trauma
- HL Chronic or overuse injuries relationship to technique
- Methods of lowering the risk of injury.
- Injury treatment and healing
- Treatment of concussion

#### **Sports psychology and motor learning**

- Understanding personality

- HL Social learning theory and personality change
- Mental toughness
- HL The theory of the “self-fulfilling prophecy”; Positive outcomes of mental toughness ; Attribution theory
- Motor learning processes
- The psychological refractory period.
- Transfer of learning
- Proficient execution of specific skills and attentional focus.
- Achievement motivation and Need Achievement

Additionally, the qualification develops the key skills necessary for students to access undergraduate Sport and Exercise Sciences BSc and other undergraduate science courses:

- Experimental techniques
- The use of appropriate technology to collect, analyse and model data
- The use of mathematics

In our undergraduate courses we expect our students to take an inquiring approach to their studies. The IBO Level 3 Certificate in HL Sports, Exercise and Health Science (AAQ) qualification supports this aspect through its inquiry process through which candidates demonstrate independent thinking, initiative, and insight through the following:

- Exploring and designing
- Collecting and processing data
- Concluding and evaluating

### **IBO Level 3 Certificate in SL Sports, Exercise and Health Science (AAQ)**

- a) We recognise this qualification for entry onto our related courses.
- b) Applicants holding the IBO Level 3 Certificate in SL or HL Sports, Exercise and Health Science (AAQ) meet the ‘required subject’ entry requirements for our Sport and Exercise Science degrees.

The university welcomes applicants holding the IBO Level 3 SL certificate in Sports, Exercise and Health Science (AAQ) as it provides breadth to an applicant’s studies and provides a complementary qualification alongside other IBO HL courses, or other qualifications enabling applicants to prepare for courses such as Sport and Exercise Science BSc, Sports Therapy and Rehabilitation BSc, Psychology BSc by providing them with the fundamental knowledge and understanding of exercise physiology and nutrition of the human body, biomechanics and sports psychology which supports progression to these courses. We value the skills and knowledge that students with this qualification bring.

The IBO Level 3 Certificate in SL Sports, Exercise and Health Science (AAQ) provides a firm foundation in the principles of sports, exercise and health science allowing candidates to progress successfully to undergraduate courses where a knowledge of these is desirable. The course content includes the following areas which support progression to undergraduate courses:

#### **Exercise physiology and nutrition of the human body**

- Inter-system communication: nervous and endocrine systems
- Maintaining homeostasis
- The cardiovascular and respiratory systems

- Water and electrolyte balance
- Fuelling for health and performance
- Energy systems - phosphagen, glycolytic and oxidative systems
- Maximal oxygen consumption (VO<sub>2</sub> max).
- Qualities of training and the benefits of being active.

### **Biomechanics**

- Anatomical position, planes and movement in planes and rotation along axes.
- Structure and function of connective tissues and joints and muscular function to create movement and stability
- Levers in movement and sport
- Forces, motion and movement
- Analysis of linear and angular motion using Newton's laws of motion.
- The path of a projectile through air is determined by different factors and forces.
- Movement analysis and its applications
- Causes of injury and susceptibility to injury
- Acute and cumulative trauma
- Methods of lowering the risk of injury.
- Injury treatment and healing
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### **Sports psychology and motor learning**

- Understanding personality
- Mental toughness
- Motor learning processes
- The psychological refractory period.
- Transfer of learning
- Proficient execution of specific skills and attentional focus.
- Achievement motivation and Need Achievement

Additionally, the qualification develops the key skills necessary for students to access undergraduate Sports, Exercise and Health Science and other undergraduate science courses:

- Experimental techniques
- The use of appropriate technology to collect data
- The use of mathematics

In our undergraduate courses we expect our students to take an inquiring approach to their studies. The IBO level 3 certificate in SL Sports, Exercise and Health Science (AAQ) supports this aspect through its inquiry process which includes:

- Exploring and designing
- Collecting and processing data
- Concluding and evaluating

Yours Sincerely,

**Ami Solomon**

Head of Admissions

31/07/2023